

# **SB5000 Series**

Vehicle Serial Bus Analyzer  
Communication Interface

# U S E R ' S M A N U A L

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Thank you for purchasing the SB5000 Vehicle Serial Bus Analyzer.

This Communication Interface User's Manual describes the functions and commands of the following communication interfaces.

- USB Interface
- Ethernet Interface (Optional)
- GP-IB Interface

To ensure correct use, please read this manual thoroughly before beginning operation.

After reading the manual, keep it in a convenient location for quick reference whenever a question arises during operation.

The following manuals are provided for the SB5000. Please read all of them.

Manual Title	Manual No.	Description
SB5000 Series Vehicle Serial Bus Analyzer User's Manual	IM 701361-01E	Explains all functions and procedures of the SB5000 excluding the communication functions.
SB5000 Series Vehicle Serial Bus Analyzer Communication Interface User's Manual (in CD)	IM 701361-17E	This manual. Explains the communication interface functions of the SB5000.
DL9000 Series Digital Oscilloscope / SB5000 Series Vehicle Serial Bus Analyzer Power Supply Analysis Function User's Manual	IM 701310-61E	Explains the operating procedures of the optional power supply analysis function.

## Notes

- The contents of this manual are subject to change without prior notice as a result of continuing improvements to the instrument's performance and functions.
- Every effort has been made in the preparation of this manual to ensure the accuracy of its contents. However, should you have any questions or find any errors, please contact your nearest YOKOGAWA dealer.
- Copying or reproducing all or any part of the contents of this manual without the permission of Yokogawa Electric Corporation is strictly prohibited.

## USB Interface and Ethernet Interface

- The items below are needed on the PC to use the communication functions via the USB interface.
  - SB5000 Series Library (TMCTL)
  - USB device driver for connecting the PC and the SB5000 series
- The items below are needed on the PC to use the communication functions via the Ethernet interface.
  - SB5000 Series Library (TMCTL)

The library and driver above can be downloaded from the following Web page.

<http://www.yokogawa.com/tm/tm-softdownload.htm>

## Sample Programs

Sample programs can be downloaded from the following Web page.

<http://www.yokogawa.com/tm/tm-softdownload.htm>

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## Revisions

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# How to Use This Manual

## Structure of This Manual

This user's manual consists of the following sections.

**Chapter 1 Overview of the USB Interface**

Describes the functions and specifications of the USB interface.

**Chapter 2 Overview of the Ethernet Interface (Optional)**

Describes the functions and specifications of the Ethernet interface.

**Chapter 3 Overview of the GP-IB Interface**

Describes the functions and specifications of the GP-IB interface.

**Chapter 4 Before Programming**

Describes the syntax used to transmit commands.

**Chapter 5 Command**

Describes all the commands one by one.

**Chapter 6 Status Reports**

Describes the status byte, various registers, and queues.

**Appendix**

Describes reference material such as an ASCII character code table.

## Conventions Used in This Manual

### Safety Markings

The following markings are used in this manual.



Improper handling or use can lead to injury to the user or damage to the instrument. This symbol appears on the instrument to indicate that the user must refer to the user's manual for special instructions. The same symbol appears in the corresponding place in the user's manual to identify those instructions. In the manual, the symbol is used in conjunction with the word "WARNING" or "CAUTION."

### WARNING

Calls attention to actions or conditions that could cause serious or fatal injury to the user, and precautions that can be taken to prevent such occurrences.

### CAUTION

Calls attentions to actions or conditions that could cause light injury to the user or damage to the instrument or user's data, and precautions that can be taken to prevent such occurrences.

### Note

Calls attention to information that is important for proper operation of the instrument.

### Notations Used on Pages Describing Operating Procedures

On pages that describe the operating procedures in Chapter 1 through 3, the following notations are used to distinguish the procedures from their explanations.

### Procedure

This subsection contains the operating procedure used to carry out the function described in the current chapter. All procedures are written with inexperienced users in mind; experienced users may not need to carry out all the steps.

### Explanation

This section describes the setup items and the limitations regarding the procedures.

### Notations Used in the Procedures

#### Panel Keys and Soft keys

Bold characters used in the procedural explanations indicate characters that are marked on the panel keys or the characters of the soft keys or menus displayed on the screen.

#### SHIFT+Panel Key

*SHIFT+key* means you will press the SHIFT key to turn ON the SHIFT key followed by the operation key. The setup menu marked in purple above (or below) the panel key that you pressed appears on the screen.

#### Rotary knob/SET key

*Rotary knob/SET key* indicates selecting or setting parameters and entering values using the rotary knob, the SET key, and other keys. For details on the procedure, see section 4.1 or 4.2 in the *User's Manual IM701361-01E*.

### Unit

k Denotes 1000. Example: 100 kS/s

K Denotes 1024. Example: 459 KB (file data size)

### Symbols Used in the Syntax

The following table indicates symbols that are used in the syntax mainly in chapters 4 and 5. These symbols are referred to as BNF (Backus-Naur Form) symbols. For details on the data, see pages 4-5 and 4-6.

Symbol	Meaning	Example	Example of Input
<>	Defined value	CHANnel<x> <x> = 1 to 4	-> CHANNEL2
{}	Select from values given in {} Exclusive OR	COUPLing {AC DC DC50 GND}	-> COUPLING AC
[]	Can be omitted	TRIGger [:SIMPlE]:SLOPe	-> TRIGger:SLOPe

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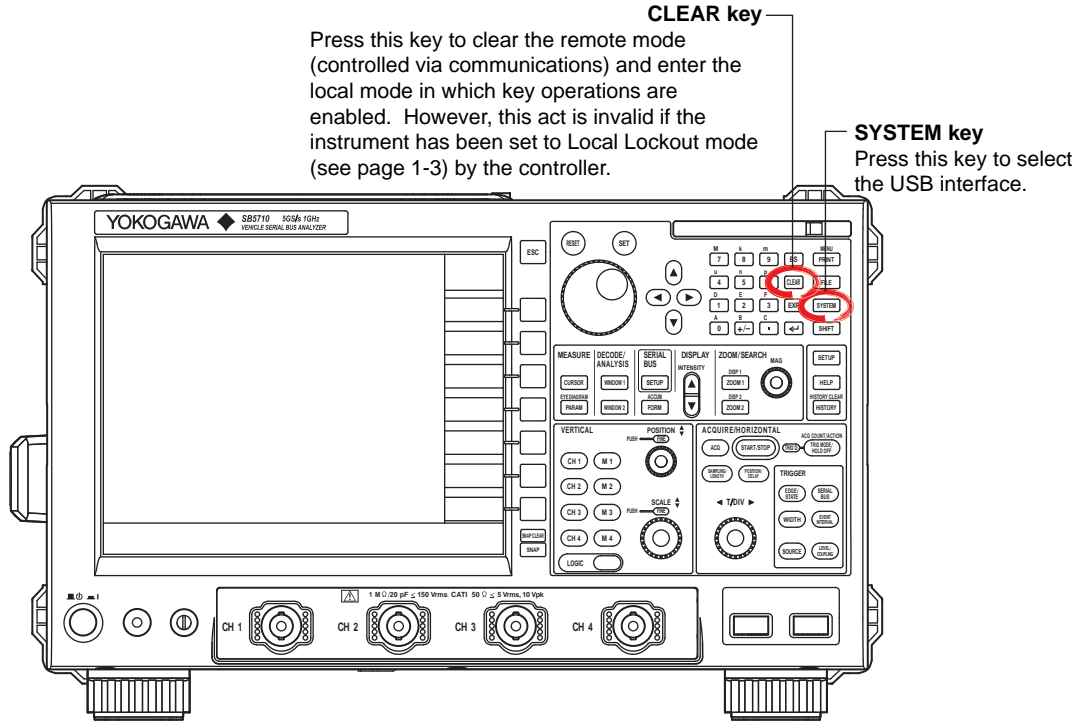
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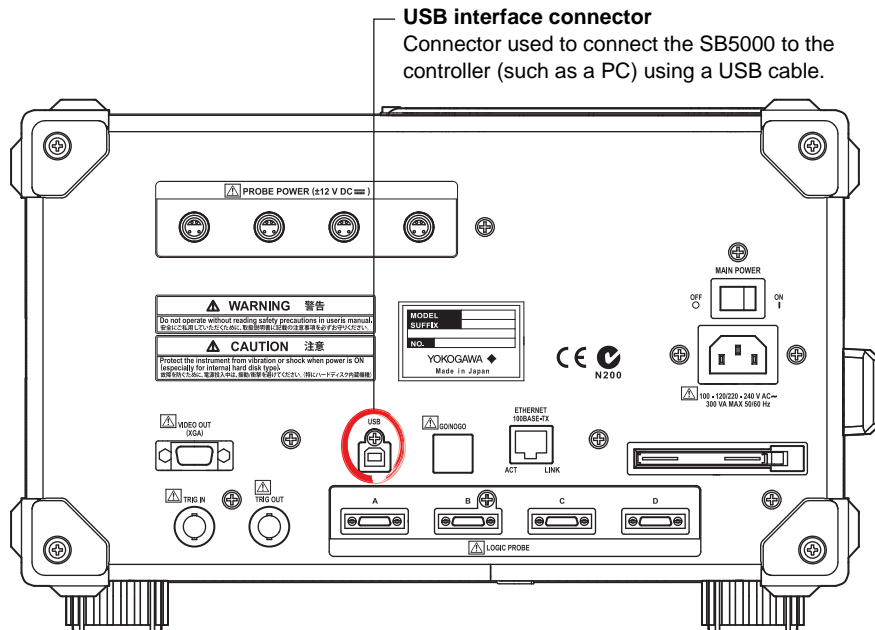


# 1.1 Part Names and Functions

## Front Panel



## Rear Panel



# 1.2 USB Interface Functions and Specifications

## USB Interface Functions

### Reception Function

You can specify the same settings as those specified by front panel key operations. Receives output requests for measured and computed data, setup parameters of the panel, and error codes.

### Transmission Function

Outputs measured and computed data.  
Outputs panel setup parameters and the status byte.  
Outputs error codes that have occurred.

## USB Interface Specifications

Electrical and mechanical specifications: Conforms to USB Rev. 2.0

Connector: Type B connector (receptacle)  
Number of ports: 1  
Power supply: Self-powered  
PC system supported: PC running Windows 2000 or Windows XP with a standard USB port (a separate device driver is needed to connect to a PC).

## Data Rate

Controller: PC (Pentium4 3.4 GHz, USB2.0) and OS (Windows XP Professional SP1)  
Language used: Visual C++

The table below lists the reference response times when outputting waveform data of analog signals.

Number of Data Points	Word Data	ASCII Data
2500	Approx. 51 ms	Approx. 0.469 s
125000	Approx. 193 ms	Approx. 22.766 s
1250000	Approx. 1606 ms	Approx. 224.890 s
2500000	Approx. 3188 ms	Approx. 451.297 s
6250000	Approx. 7841 ms	Approx. 1127.625 s

The table below lists the reference response times when outputting waveform data of logic signals.

Number of Data Points	Word Data	ASCII Data
2500	Approx. 78 ms	Approx. 0.141 s
125000	Approx. 625 ms	Approx. 3.516 s
1250000	Approx. 5547 ms	Approx. 34.531 s
2500000	Approx. 11156 ms	Approx. 69.375 s
6250000	Approx. 27812 ms	Approx. 173.266 s

## Switching between Remote and Local Modes

### When Switching from Local to Remote Mode

If the SB5000 receives a “:COMMunicate:REMOte ON” command from the PC when it is in the local mode, it switches to the remote mode.

- REMOTE is displayed in the center of the upper section of the screen.
- All keys except the **CLEAR** key are disabled.
- Settings entered in local mode are retained even when the SB5000 switches to remote mode.

**When Switching from Remote to Local Mode**

Pressing **CLEAR** in remote mode puts the instrument in local mode. However, this is void when the SB5000 has received a “:COMMunicate:LOCKout ON” command from the PC (local lockout condition). When the SB5000 receives a “:COMMunicate:REMOte OFF” command from the PC, the SB5000 switches to the local mode regardless of the local lock condition.

- REMOTE indication in the center of the upper section of the screen disappears.
- Key operations are enabled.
- Settings entered in remote mode are retained even when the SB5000 switches to local mode.

**Note**

The USB interface cannot be used simultaneously with another interface (Ethernet or GP-IB interface).

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## 1.3 Connection via the USB Interface

### Precautions to Be Taken When Making Connections

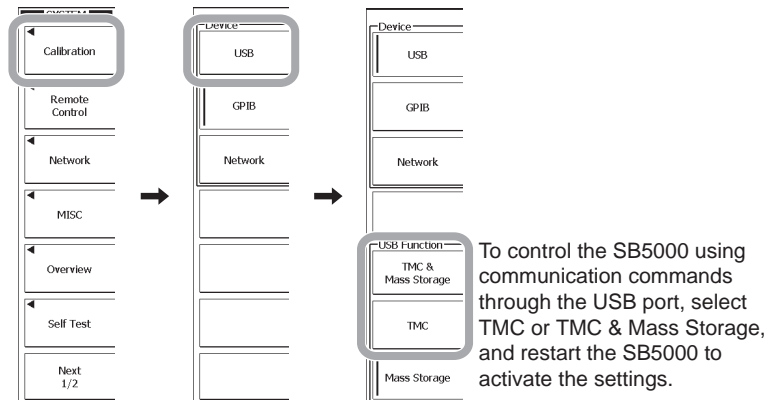
- Connect the USB cable by inserting the connector firmly into the USB connector.
- When connecting multiple devices using USB hubs, connect the SB5000 to the USB hub that is closest to the controller.
- Do not insert the USB cable into the GO/NO-GO output terminal. If you do, the instrument may malfunction.

## 1.4 Setting the SB5000 (USB)

### Procedure

#### Selecting the Communication Interface

1. Press **SYSTEM**.
2. Press the **Remote Control** soft key.
3. Press the **USB** soft key.

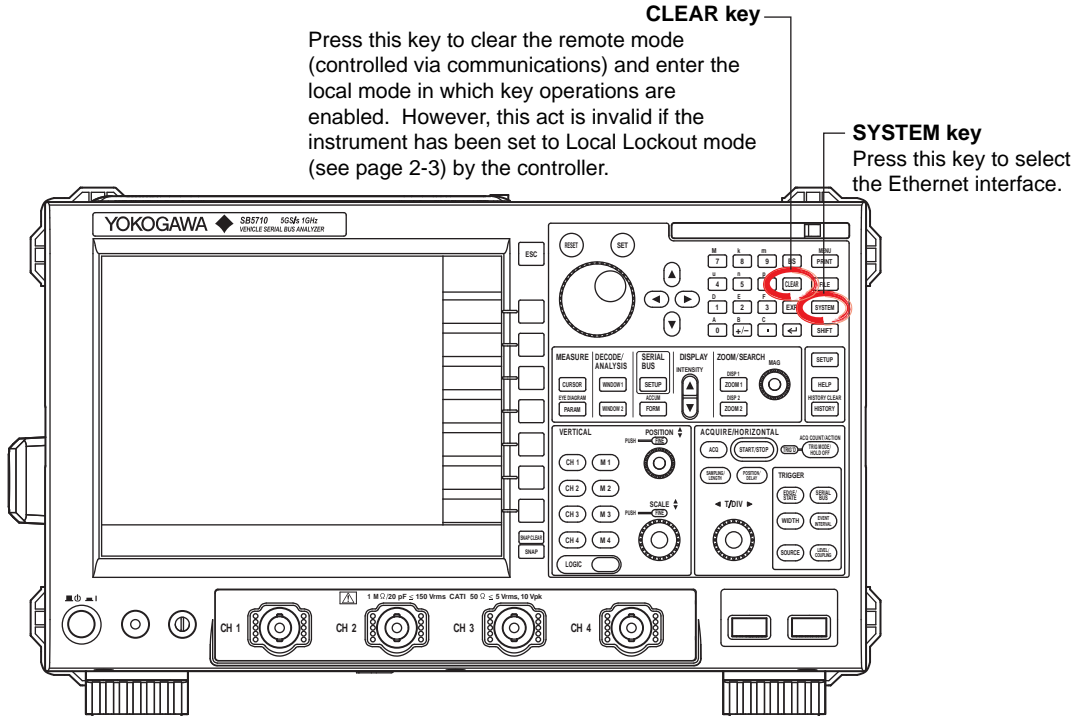


#### Note

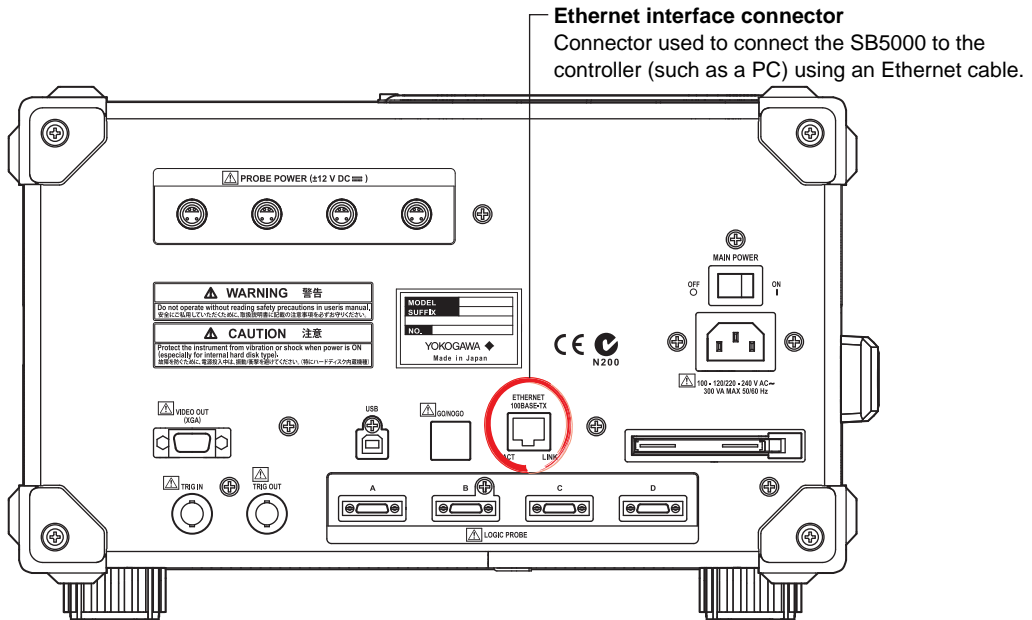
- Only the communication interface selected by Remote Control is enabled. The SB5000 does not accept commands that are transmitted to other unselected communication interfaces.
- To control the SB5000 remotely using communication commands through the USB port, select "TMC" in the menu above, and carry out the procedure below.
  - You must restart the SB5000 to activate the TMC, Mass Storage, or TMC & Mass Storage setting. Wait at least 10 seconds after you turn the power switch OFF, and then turn the switch back ON.
  - Install YOKOGAWA's TMC (Text and Measurement Class) driver into your PC. To obtain YOKOGAWA's USB TMC driver, contact your nearest YOKOGAWA dealer or access the following USB driver page at our Web site and download it.  
<http://www.yokogawa.com/tm/tm-softdownload.htm>
  - Only use the USB TMC driver (or software) provided by YOKOGAWA.
- The SB5000 can be controlled remotely even when TMC & Mass Storage is enabled and the SB5000 is connected to the PC. However, file operation is not possible using communication commands. In addition, file operation is also not possible using the keys on the SB5000. Disconnect the PC or activate the TMC setting and connect the SB5000 to the PC. File operation is also not possible using keys on the SB5000 when the Mass Storage setting is enabled.

# 2.1 Part Names and Functions

## Front Panel



## Rear Panel



## 2.2 Ethernet Interface Functions and Specifications

### Ethernet Interface Functions

#### Reception Function

You can specify the same settings as those specified by front panel key operations. Receives output requests for measured and computed data, setup parameters of the panel, and error codes.

#### Transmission Function

Outputs measured and computed data.  
Outputs panel setup parameters and the status byte.  
Outputs error codes that have occurred.

### Ethernet Interface Specifications

Electrical and mechanical specifications: Conforms to IEEE802.3

Number of simultaneous connections: 1

Port No.: 10001/tcp

### Data Rate

Controller: PC (Pentium4 3.4 GHz) and OS (Windows XP Professional SP1)

Network adapter: Corega FEther PCI-TXL

Language used: Visual C++

The table below lists the reference response times when outputting waveform data of analog signals.

Number of Data Points	Word Data	ASCII Data
2500	Approx. 16ms	Approx. 0.391 s
125000	Approx. 259 ms	Approx. 19.063 s
1250000	Approx. 2313 ms	Approx. 189.812 s
2500000	Approx. 4595 ms	Approx. 379.750 s
6250000	Approx. 10400 ms	Approx. 950.532 s

The table below lists the reference response times when outputting waveform data of logic signals.

Number of Data Points	Word Data	ASCII Data
2500	Approx. 31 ms	Approx. 0.078 s
125000	Approx. 704 ms	Approx. 3.530 s
1250000	Approx. 6768 ms	Approx. 35.327 s
2500000	Approx. 14081 ms	Approx. 70.952 s
6250000	Approx. 34523 ms	Approx. 177.313 s

### Switching between Remote and Local Modes

#### When Switching from Local to Remote Mode

If the SB5000 receives a “:COMMunicate:REMOte ON” command from the PC when it is in the local mode, it switches to the remote mode.

- REMOTE is displayed in the center of the upper section of the screen.
- All keys except the **CLEAR** key are disabled.
- Settings entered in local mode are retained even when the SB5000 switches to remote mode.

### When Switching from Remote to Local Mode

Pressing **CLEAR** in remote mode puts the instrument in local mode. However, this is void when the SB5000 has received a “:COMMunicate:LOCKout ON” command from the PC (local lockout condition). When the SB5000 receives a “:COMMunicate:REMOte OFF” command from the PC, the SB5000 switches to the local mode regardless of the local lock condition.

- REMOTE indication in the center of the upper section of the screen disappears.
- Key operations are enabled.
- Settings entered in remote mode are retained even when the SB5000 switches to local mode.

### **Note**

The Ethernet interface cannot be used simultaneously with another interface (USB or GP-IB interface).

## User Authentication Function

When using the Ethernet interface, a user name and password are required when connecting to the network. If the SB5000 series library (TMCTL) version is 1.40 or later, the password is encrypted with an MD5 algorithm (RSA Data Security, Inc. MD5 Message-Digest Algorithm) and sent to the SB5000.

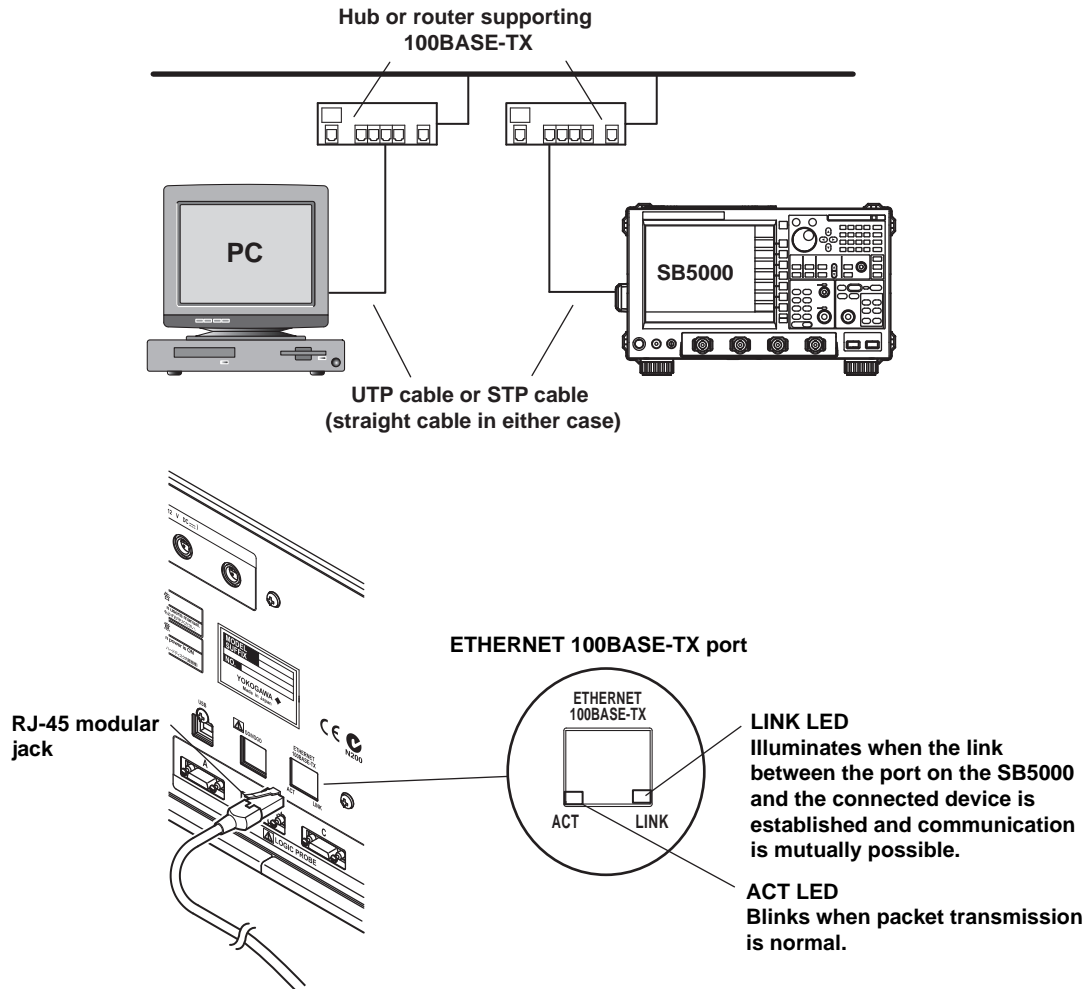
The user name and password are set on the Remote Control setup screen under the SYSTEM menu of the SB5000. For the setup procedure, see section 2.4, “Setting the SB5000 (Network).”



## 2.3 Connecting the Ethernet Interface

### Connection Procedure

Connect a UTP (Unshielded Twisted-Pair) cable or an STP (Shielded Twisted-Pair) cable that is connected to a hub, for example, to the 100BASE-TX port on the rear panel of the SB5000.



### Precautions to Be Taken When Making Connections

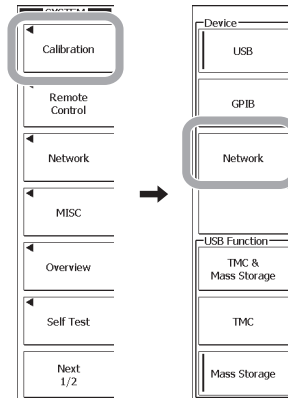
- Be sure to use a straight cable via a hub for the connection between the SB5000 and the PC. Operation is not guaranteed when the SB5000 and the controller are connected one-to-one using a cross cable.
- When using a UTP cable (straight cable), use a cable of category 5.

## 2.4 Setting the SB5000 (Network)

### Procedure

#### Selecting the Communication Interface

1. Press **SYSTEM**.
2. Press the **Remote Control** soft key. The Device menu appears.
3. Press the **Network** soft key.

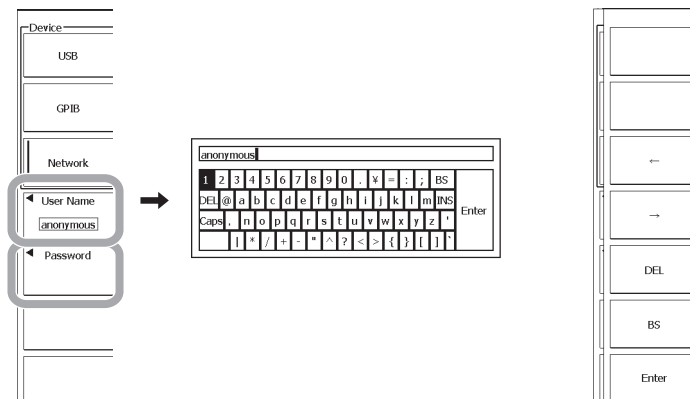


#### Note

Only the communication interface selected by Remote Control is enabled. The SB5000 does not accept commands that are transmitted to other unselected communication interfaces.

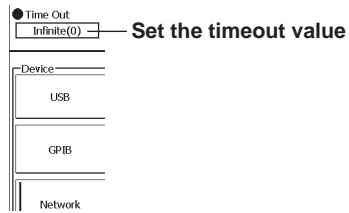
#### User Name and Password

4. Press the **UserName** soft key. A keyboard appears.
5. Enter the user name according to the procedures given in section 4.2 in the *SB5000 User's Manual (IM701361-01E)*.
6. Likewise, enter the password.



### Setting the Timeout Value

7. Set the timeout value using the **rotary knob**.



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### Note

- For details on the keyboard (software keyboard) operation, see section 4.2, “Entering Values and Character Strings” in the *SB5000 User’s Manual (IM701361-01E)*.
  - User name and password are case-sensitive.
- 

### Setting the TCP/IP Parameters

To use the Ethernet interface function, the following TCP/IP settings must be entered.

- IP address
- Subnet mask
- Default gateway

For details on how to enter these parameters, see section 16.2, “Setting the TCP/IP Parameters” in the *SB5000 User’s Manual (IM701361-01E)*.

### Explanation

Enter the following settings when using a controller to set information that can be specified through key operation on the SB5000 or when outputting setting parameters or output waveform data to the controller.

### Setting the User Name and Password

The Ethernet interface has a user verification function. A user name and password for the SB5000 are set in advance.

- **Setting the User Name**  
Enter the user name using up to 30 characters. The default setting is “anonymous.”
- **Setting the Password**  
Enter the password using up to 30 characters.

### Setting the Timeout Value

The connection to the SB5000 is automatically dropped if there is no access to the SB5000 for the specified time.

### Setting the TCP/IP Parameters

For details, see section 16.2, “Setting the TCP/IP Parameters” in the *SB5000 User’s Manual (IM701361-01E)*.

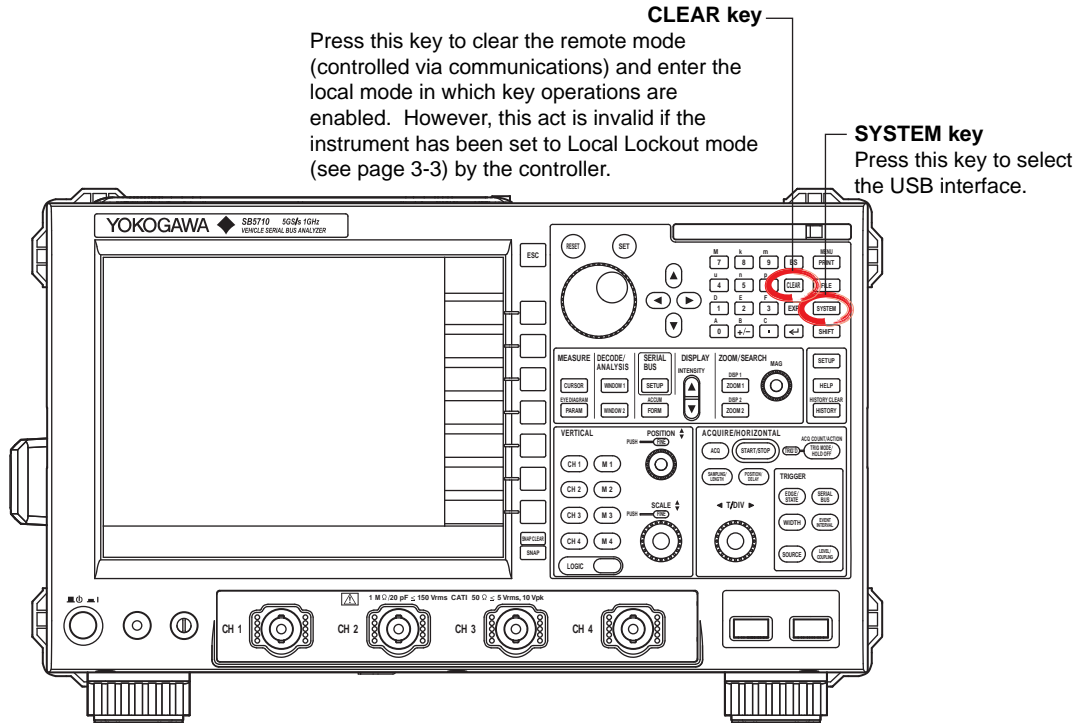
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### Note

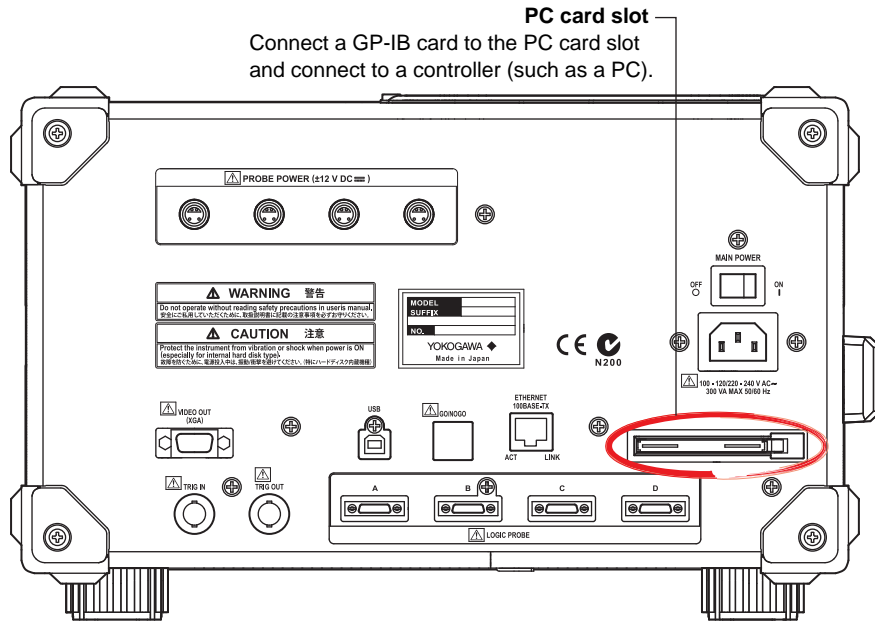
- If the user authentication fails, connection to the SB5000 is dropped.
  - A password is not required if the user name is “anonymous.”
-

# 3.1 Part Names and Functions

## Front Panel



## Rear Panel



## 3.2 Connecting the GP-IB Card

### GP-IB Card

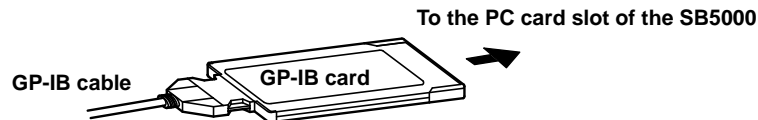
Use the NI PCMCIA-GPIB card by National Instruments.

### GP-IB Cable

Use the GP-IB cable that comes with the GP-IB card.

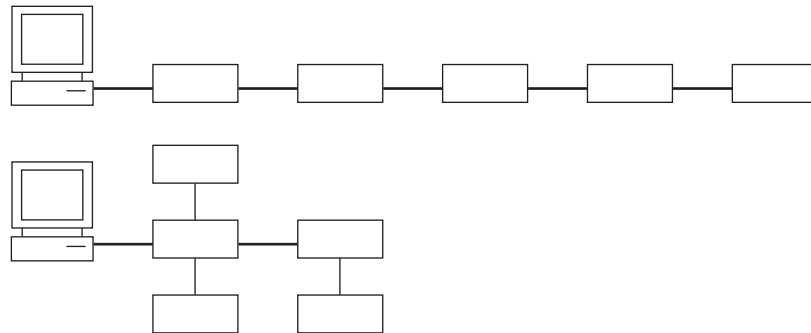
### Connection Procedure

Insert the GP-IB card into the SB5000 PC card slot.



### Precautions to Be Taken When Making Connections

- For the handling of the GP-IB card, see the manual that comes with the GP-IB card.
- Attach the GP-IB correctly with the front face up.
- Connect the GP-IB card to the SB5000 PC card slot first. Then, turn the SB5000 ON.
- Multiple cables can be used to connect multiple devices. However, no more than 15 devices including the controller can be connected on a single bus.
- When connecting multiple devices, each device must have its own unique address.
- Use a cable of length 2 m or less for connecting the devices.
- Make sure the total cable length does not exceed 20 m.
- When communicating, have at least two-thirds of the devices turned ON.
- When connecting multiple devices, connect them in a star or linear configuration (see the figure below). Do not wire them in a loop or parallel configuration.



### CAUTION

When connecting or disconnecting communication cables, make sure to turn OFF the PC and the SB5000. Otherwise, erroneous operation or damage to the internal circuitry may result.

## 3.3 GP-IB Interface Functions

### GP-IB Interface Functions

#### Listener Capability

- All of the information that you can set with the panel keys can be set through the GP-IB interface except for turning ON/OFF the power and setting the communication parameters.
- Receives commands from a controller requesting the output of setup information, waveform data, and other information.
- Also receives status report commands.

#### Talker Capability

Outputs setup information, waveform data, and other information.

#### **Note**

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Listen-only, talk-only, and controller capabilities are not available on the SB5000.

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### Switching between Remote and Local Modes

#### When Switching from Local to Remote Mode

Receiving a REN (Remote Enable) message from the PC when the SB5000 is in the local mode causes the SB5000 to switch to the remote mode.

- REMOTE is displayed in the center of the upper section of the screen.
- All keys except the **CLEAR** key are disabled.
- Settings entered in local mode are retained even when the SB5000 switches to remote mode.

#### When Switching from Remote to Local Mode

Pressing **CLEAR** in remote mode puts the SB5000 in local mode. However, this act is invalid if the SB5000 has been set to Local Lockout mode (see page 3-6) by the controller.

- REMOTE indication in the center of the upper section of the screen disappears.
- Key operations are enabled.
- Settings entered in remote mode are retained even when the SB5000 switches to local mode.

#### **Note**

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The GP-IB interface cannot be used simultaneously with another interfaces (USB or network interfaces).

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## 3.4 GP-IB Interface Specifications

### GP-IB Interface Specifications

Electrical and mechanical specifications:	Conforms to IEEE St'd 488-1978
Functional specifications:	See table below.
Protocol:	Conforms to IEEE St'd 488.2-1992
Code used:	ISO (ASCII) code
Mode:	Addressable mode
Address setting:	The address can be set in the range from 0 to 30 on the GP-IB setting screen that is played using the MISC menu.
Clear remote mode:	Remote mode can be cleared by pressing <b>CLEAR</b> except when the SB5000 has been set to Local Lockout mode by the controller.

#### Functional specifications

Function	Subset Name	Description
Source handshaking	SH1	Full source handshaking capability
Acceptor handshaking	AH1	Full acceptor handshaking capability
Talker	T6	Basic talker capability, serial polling, untalk on MLA (My Listen Address), and no talk-only capability
Listener	L4	Basic listener capability, unlisten on MTA (My Talk Address), and no listen-only capability.
Service request	SR1	Full service request capability
Remote local	RL1	Full remote/local capability
Parallel polling	PP0	No parallel polling capability
Device clear	DC1	Full device clear capability
Device trigger	DT0	No device trigger capability
Controller	C0	No controller capability
Electrical characteristics	E1	Open collector

### Data Rate

Controller: PC (Pentium4 3.4 GHz, USB 2.0), OS (Windows XP Professional SP1)  
 Language used: Visual C++

The table below lists the reference response times when outputting waveform data of analog signals.

Number of Data Points	Word Data	ASCII Data
2500	Approx. 16 ms	Approx. 0.390 s
125000	Approx. 344 ms	Approx. 19.453 s
1250000	Approx. 3172 ms	Approx. 194.516 s
2500000	Approx. 6282 ms	Approx. 389.047 s
6250000	Approx. 15641 ms	Approx. 971.985 s

The table below lists the reference response times when outputting waveform data of logic signals.

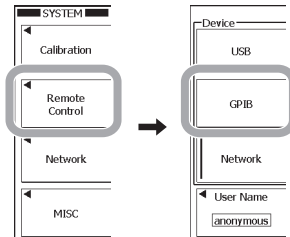
Number of Data Points	Word Data	ASCII Data
2500	Approx. 32 ms	Approx. 0.078 s
125000	Approx. 859 ms	Approx. 3.609 s
1250000	Approx. 8707 ms	Approx. 36.172 s
2500000	Approx. 17365 ms	Approx. 72.500 s
6250000	Approx. 43678 ms	Approx. 182.000 s

## 3.5 Setting the SB5000 (GP-IB)

### Procedure

#### Selecting the Communication Interface

1. Press **SYSTEM**.
2. Press the **Remote Control** soft key to display the Device menu.
3. Press the **GP-IB** soft key.

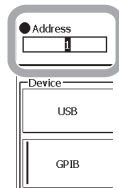


#### Note

Only the communication interface selected by Remote Control is enabled. The SB5000 does not accept commands that are transmitted to other unselected communication interfaces.

#### Setting the Address

4. Turn the **rotary knob** to set the address.



### Explanation

Enter the following settings when using a controller to set information that can be specified through key operation on the SB5000 or when outputting setting parameters or output waveform data to the controller.

#### Setting the Address

Set the address of the SB5000 within the following range for the addressable mode.

0 to 30

Each device that can be connected via GP-IB has a unique address within the GP-IB system. This address is used to distinguish the device from others. Therefore, when you connect the SB5000 to a PC, for example, make sure to assign a unique address to the SB5000.

#### Note

Do not change the address while the controller is communicating with the SB5000 or other devices over the GP-IB.



---

## 3.6 Responses to Interface Messages

### Responses to Interface Messages

#### Responses to a Uni-Line Message

##### **IFC (Interface Clear)**

Clears the talker and listener functions. Stops output if data are being output.

##### **REN (Remote Enable)**

Switches between the remote and local modes.

IDY (Identify) is not supported.

#### Responses to a Multi-Line Message (Address Command)

##### **GTL (Go To Local)**

Switches to the local mode.

##### **SDC (Selected Device Clear)**

- Clears the program message (command) being received and the output queue (see page 6-5).
- \*OPC and \*OPC? commands in execution are void.
- The \*WAI and COMMunicate:WAIT commands are immediately terminated.

PPC (Parallel Poll Configure), GET(Group Execute Trigger), and TCT (Take Control) are not supported.

#### Responses to a Multi-Line Message (Universal Command)

##### **LLO (Local Lockout)**

Disables **CLEAR** on the front panel to prohibit switching to the local mode.

##### **DCL (Device Clear)**

Same operation as the SDC message.

##### **SPE (Serial Poll Enable)**

Sets the talker function on all devices on the bus to serial polling mode. The controller polls the devices in order.

##### **SPD (Serial Poll Disable)**

Clears the serial polling mode of the talker function on all devices on the bus.

PPU (Parallel Poll Unconfigure) is not supported.

### What Are Interface Messages

Interface messages are also referred to as interface commands or bus commands. They are commands that are issued by the controller. They are classified as follows:

#### **Uni-Line Messages**

A single control line is used to transmit uni-line messages. The following three types are available.

- IFC (Interface Clear)
- REN (Remote Enable)
- IDY (Identify)

### Multi-Line Messages

Eight data lines are used to transmit multi-line messages. The messages are classified as follows:

#### Address Commands

These commands are valid when the instrument is designated as a listener or as a talker. The following five types are available.

Commands that are valid on an instrument that is designated as a listener

- GTL (Go To Local)
- SDC (Selected Device Clear)
- PPC (Parallel Poll Configure)
- GET (Group Execute Trigger)

Commands that are valid on an instrument that is designated as a talker

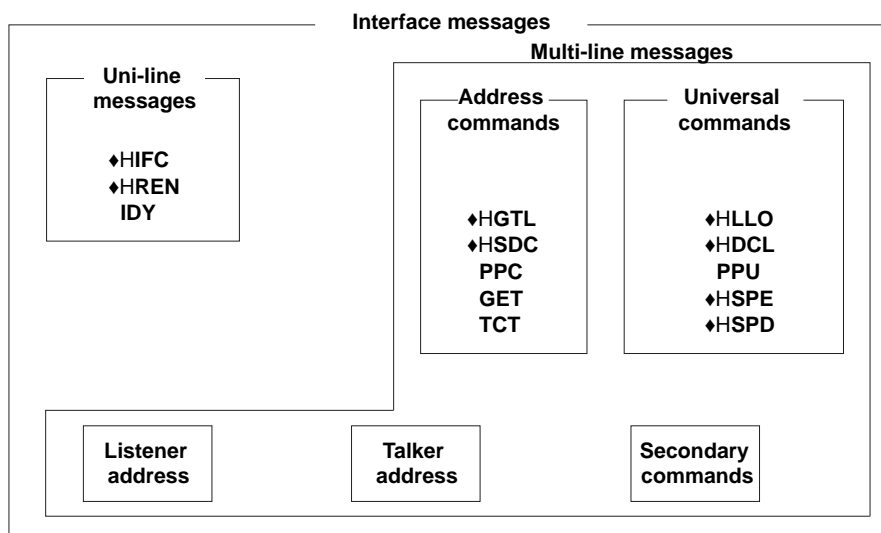
- TCT (Take Control)

#### Universal commands

These commands are valid on all instruments regardless of the listener and talker designations. The following five types are available.

- LLO (Local Lockout)
- DCL (Device Clear)
- PPU (Parallel Poll Unconfigure)
- SPE (Serial Poll Enable)
- SPD (Serial Poll Disable)

In addition, listener address, talker address, and secondary commands are also considered interface messages.



Interface messages that SB5000 supports are indicated with ◆ marks.

### Note

#### The Differences between SDC and DCL

In multi-line messages, SDC messages are those that require talker or listener designation and DCL messages are those that do not require the designation. Therefore, SDC messages are directed at a particular instrument while DCL messages are directed at all instruments on the bus.

# 4.1 Messages

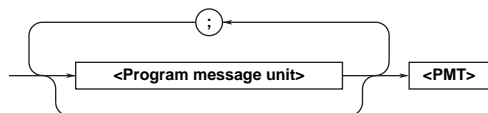
## Messages

Messages are used to exchange information between the controller and the instrument. Messages that are sent from the controller to the instrument are called program messages and messages that are sent back from the instrument to the controller are called response messages.

If a program message contains a message unit that requests a response (a query), the instrument returns a response message upon receiving the program message. A single response message is always returned in response to a single program message.

## Program Messages

The program message format is shown below



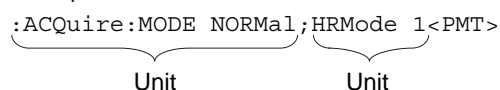
### <Program Message Unit>

A program message consists of zero or more program message units; each unit corresponds to one command. The instrument executes the received commands in order.

Each program message unit is separated by a semicolon (;).

For details regarding the format of the program message unit, see the next section.

Example



### <PMT>

PMT is a program message terminator. The following three types are available.

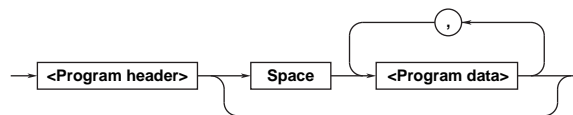
NL (New Line): Same as LF (Line Feed). ASCII code "0AH"

^EOM: The END message as defined by USBTMC (The data byte that is sent simultaneously with the END message is the last data of the program message.)

NL^EOM: NL with an END message added (NL is not included in the program message.)

### Program Message Unit Format

The program message unit format is shown below



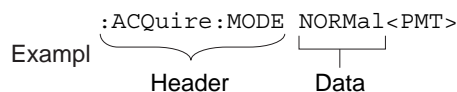
### <Program Header>

The program header indicates the command type. For details, see page 4-3.

### <Program Data>

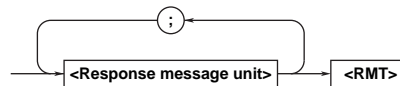
If certain conditions are required in executing a command, program data is added. A space (ASCII code "20H") separates the program data from the header. If there are multiple sets of program data, they are separated by commas (,).

For details, see page 4-5.



## Response Messages

The response message format is shown below.



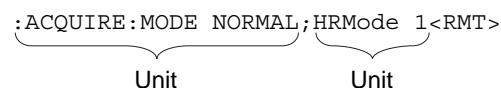
### <Response Message Unit>

A response message consists of one or more response message units; each response message unit corresponds to one response.

Response message units are separated by a semicolon (;).

For details regarding the format of the response message unit, see the next section.

Example



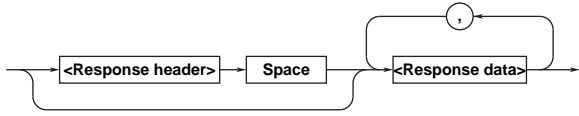
### <RMT>

A response message terminator. It is NL^EOM.

## 4.1 Messages

### • Response Message Unit Format

The response message unit format is shown below.



#### <Response Header>

A response header sometimes precedes the response data. A space separates the data from the header. For details, see page 4-4.

#### <Response Data>

Response data contains the content of the response. If there are multiple sets of response data, they are separated by commas (,). For details, see page 4-5.

Example  
1.25E-02<RMT> :ACQUIRE:MODE NORMAL<RMT>  
Data Header Data

If there are multiple queries in a program message, responses are made in the same order as the queries. In most cases, a single query returns a single response message unit, but there are a few queries that return multiple units. The first response message unit always corresponds to the first query, but the  $n^{\text{th}}$  response unit may not necessarily correspond to the  $n^{\text{th}}$  query. Therefore, if you want to make sure that every response is retrieved, divide the program messages into individual messages.

### Precautions to Be Taken when Transferring Messages

- If a program message that does not contain a query is sent, the next program message can be sent at any time.
- If a program message that contains a query is sent, a response message must be received before the next program message can be sent. If the next program message is sent before the response message is received in its entirety, an error occurs. The response message that was not received is discarded.
- If the controller tries to receive a response message when there is none, an error occurs. If the controller tries to receive a response message before the transmission of the program message is complete, an error occurs.

- If a program message containing multiple message units is sent, and the message contains incomplete units, the instrument attempts to execute the ones that are believed to be complete. However, these attempts may not always be successful. In addition, if the message contains queries, the responses may not be returned.

### Deadlock

The instrument can store in its buffer program and response messages of length 1024 bytes or more (The number of available bytes varies depending on the operating conditions). When both the transmit and receive buffers become full at the same time, the instrument can no longer continue to operate. This state is called a deadlock. In this case, operation can be resumed by discarding the program message. Deadlock will not occur if the program message (including the <PMT>) is kept below 1024 bytes. Furthermore, deadlock never occurs if a program message does not contain a query.

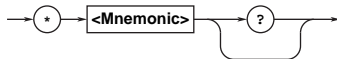
## 4.2 Commands

### Commands

There are three types of commands (program headers) that are sent from the controller to the instrument. They differ in their program header formats.

#### Common Command Header

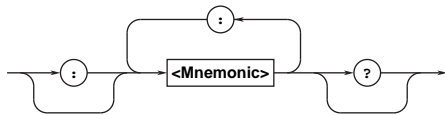
Commands that are defined in the USBTMC-USB488 are called common commands. The header format of a common command is shown below. An asterisk (\*) is always placed in the beginning of a command.



Common command example: \*CLS

#### Compound Header

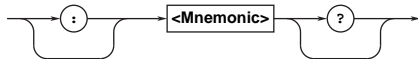
Dedicated commands used by the instrument are classified and arranged in a hierarchy according to their functions. The format of a compound header is shown below. A colon (:) must be used to specify a lower hierarchy.



Compound header example: :ACQUIRE:MODE

#### Simple Header

These commands are functionally independent and do not have a hierarchy. The format of a simple header is shown below.



Simple header example: :START

#### Note

A <mnemonic> is a character string made up of alphanumeric characters.

### When Concatenating Commands

#### • Command Group

A command group is a group of commands that have common compound headers arranged in a hierarchy. A command group may contain sub-groups.

Example Group of commands related to acquisition

```
:ACQUIRE:AVERAGE:COUNT
:ACQUIRE:MODE
:ACQUIRE:AVERAGE:EWEIGHT
:ACQUIRE:REPETITIVE
:ACQUIRE:RLENGTH
:ACQUIRE:INTERLEAVE
```

#### • When Concatenating Commands of the Same Group

The instrument stores the hierarchical level of the command that is currently being executed, and performs analysis on the assumption that the next command sent will also belong to the same level. Therefore, common header sections can be omitted for commands belonging to the same group.

Example :ACQUIRE:MODE NORMAL;  
INTERLEAVE 1<PMT>

#### • When Concatenating Commands of Different Groups

If the following command does not belong to the same group, a colon (:) is placed in front of the header (cannot be omitted).

Example :ACQUIRE:MODE NORMAL;:DISPLAY:  
FORMAT SINGLE<PMT>

#### • When Concatenating Simple Headers

If a simple header follows another command, a colon (:) is placed in front of the simple header (cannot be omitted).

Example :ACQUIRE:MODE NORMAL;:  
START<PMT>

#### • When Concatenating Common Commands

Common commands that are defined in the USBTMC-USB488 are independent of hierarchy. Colons (:) are not needed before a common command.

Example :ACQUIRE:MODE NORMAL;\*CLS;  
INTERLEAVE 1<PMT>

#### • When Separating Commands with <PMT>

If a terminator is used to separate two commands, each command is a separate message. Therefore, the common header must be specified for each command even when commands belonging to the same command group are being concatenated.

Example :ACQUIRE:MODE NORMAL<PMT>:  
ACQUIRE:INTERLEAVE 1<PMT>

## 4.2 Commands

---

### Upper-Level Query

An upper-level query is a query in which a question mark (?) is appended to the highest level command of a group. Execution of an upper-level query allows all settings that can be specified in the group to be received at once. Some query groups which are comprised of more than three hierarchical levels can output all the lower level settings.

Example :ACQUIRE? -> :ACQUIRE:AVERAGE:  
COUNT 2;EWEIGHT 16;:ACQUIRE:  
HRMODE 0;INTERLEAVE 0;  
INTERPOLATE 1;MODE NORMAL;  
REPETITIVE 0;RLENGTH 12500

The response to an upper-level query can be transmitted as a program message back to the instrument. In this way, the settings that existed when the upper-level query was made can be restored. However, some upper-level queries do not return setup information that is not currently in use. It is important to remember that not all the group's information is necessarily returned as part of a response.

### Header Interpretation Rules

The instrument interprets the header that is received according to the rules below.

- Mnemonics are not case sensitive.  
Example "CURSOR" can also be written as "cursor"  
or "Cursor."
- The lower-case section of the header can be omitted.  
Example "CURSOR" can also be written as "CURSO"  
or "CURS."
- The question mark (?) at the end of a header indicates that it is a query. The question mark (?) cannot be omitted.  
Example The shortest abbreviation for CURSOR? is CURS?.
- If the <x> (value) at the end of a mnemonic is omitted, it is interpreted as a 1.  
Example If "CHANNEL<x>" is written as "CHAN," it means "CHANNEL1."
- **The section enclosed by braces ( []) can be omitted.**  
Example HISTory[:CURRENT]:MODE can also be written as HIST:MODE.  
However, the last section enclosed by braces ( []) cannot be omitted in an upper-level query.  
Example "HISTory?" and "HISTory:CURRENT?" are different queries.

## 4.3 Response

### Response

When the controller sends a message unit that has a question mark (?) in its program header (query), the instrument returns a response message to the query. A response message is returned in one of the following two forms.

- **Response Consisting of a Header and Data**  
If the response can be used as a program message without any change, it is returned with a command header attached.

```
Example :ACQUIre:MODE?<PMT>
        -> :ACQUIre:MODE NORMAL<RMT>
```

- **Response Consisting of Data Only**  
If the response cannot be used as a program message unless changes are made to it (query-only command), only the data section is returned. However, there are query-only commands that return responses with the header attached.

```
Example :MEASure:TRACe1:AREAL:PTOPeak:
        VALue?<PMT> -> 10.0E+00<RMT>
```

- **When You Wish to Return a Response without a Header**

Responses that return both header and data can be set so that only the data section is returned. The "COMMunicate:HEADer" command is used to do this.

- **Abbreviated Form**

Normally, the lower-case section is removed from a response header before the response is returned to the controller. Naturally, the full form of the header can also be used. For this, the "COMMunicate:VERBoSe" command is used. The sections enclosed by braces ([]) are also omitted in the abbreviated form.

## 4.4 Data

### Data

A data section comes after the header. A space must be included between the header and the data. The data contains conditions and values. Data is classified as below.

Data	Meaning
<Decimal>	A value expressed as a decimal number (Example: Probe attenuation of CH1 -> CHANnel1:PROBe 100)
<Voltage><Time>	A physical value
<Frequency>	(Example: Time axis range
<Current>	-> TIMEbase:TDIV 1US)
<Register>	Register value expressed as binary, octal, decimal or hexadecimal. (Example: Extended event register value -> STATUS:EESE #HFE)
<Character Data>	Predefined character string (mnemonic). Can be selected from { }. (Example: Select the input coupling of CH1 -> CHANnel1:COUPling {AC DC DC50 GND})
<Boolean>	Indicates ON and OFF. Set using ON, OFF or a value (Example: Turn ON the CH1 display -> CHANnel1:DISPlay ON)
<String data>	An arbitrary character string (Example: Comment to a screen data output -> MATH1:UNIT:USERdefine " VOLT")
<Filename>	Indicates a file name. (Example: Save file name -> FILE:SAVE:WAVEform:NAME " CASE1")
<Block data>	Arbitrary 8-bit data (Example: Response to acquired waveform data -> #800000010ABCDEFHIJ)

### <Decimal>

<Decimal> indicates a value expressed as a decimal number, as shown in the table below. Decimal values are given in the NR form as specified in the ANSI X3.42-1975.

Symbol	Meaning	Example
<NR1>	Integer	125-1 +1000
<NR2>	Fixed-point number	125.0 -.90 +001.
<NR3>	Floating-point number	125.0E+0 -9E-1 +.1E4
<NRf>	Any of the forms <NR1> to <NR3> is allowed.	

- The instrument can receive decimal values that are sent from the controller in any of the forms, <NR1> to <NR3>. This is represented by <NRf>.
- For response messages that the instrument returns to the controller, the form (<NR1> to <NR3> to be used) is determined by the query. The same form is used regardless of the size of the value.
- For the <NR3> format, the "+" sign after the "E" can be omitted. However, the "-" sign cannot be omitted.
- If a value outside the setting range is entered, the value is normalized so that it is just inside the range.
- If a value has more significant digits than the available resolution, the value is rounded.

### <Voltage>, <Time>, <Frequency>, and <Current>

<Voltage>, <Time>, <Frequency>, and <Current> indicate decimal values that have physical significance. <Multiplier> or <Unit> can be attached to the <NRf> form that was described earlier. It is expressed in one of the following forms.

Form	Example
<NRf><Multiplier><Unit>	5MV
<NRf><Unit>	5E-3V
<NRf><Multiplier>	5M
<NRf>	5E-3

### • <Multiplier>

<Multipliers> which can be used are indicated below.

Symbol	Word	Multiplier
EX	Exa	10 <sup>18</sup>
PE	Peta	10 <sup>15</sup>
T	Tera	10 <sup>12</sup>
G	Giga	10 <sup>9</sup>
MA	Mega	10 <sup>6</sup>
K	Kilo	10 <sup>3</sup>
M	Milli	10 <sup>-3</sup>
U	Micro	10 <sup>-6</sup>
N	Nano	10 <sup>-9</sup>
P	Pico	10 <sup>-12</sup>
F	Femto	10 <sup>-15</sup>
A	Ato	10 <sup>-18</sup>

### • <Unit>

<Units> that can be used are indicated below.

Symbol	Word	Meaning
V	Volt	Voltage
S	Second	Time
HZ	Hertz	Frequency
MHZ	Megahertz	Frequency
A	Ampere	Current

- <Multiplier> and <Unit> are not case sensitive.
- "U" is used to indicate micro "μ".
- "MA" is used for Mega to distinguish it from Milli. The only exception is Megahertz which is expressed as "MHZ." Therefore, the "M (Milli)" multiplier cannot be used for frequencies.
- If both <Multiplier> and <Unit> are omitted, the default unit is used.
- Response messages are always expressed in the <NR3> form. Response messages are returned using the default unit without the <Multiplier> or <Unit>.



**<Register>**

<Register> indicates an integer, and can be expressed in hexadecimal, octal, or binary as well as a decimal number. It is used when each bit of the value has a particular meaning. It is expressed in one of the following forms.

Form	Example
<NRf>	1
#H<Hexadecimal value made up of the digits 0 to 9 and A to F>	#H0F
#Q<Octal value made up of the digits 0 to 7>	#Q777
#B<Binary value made up of the digits 0 and 1>	#B001100

- <Register> is not case sensitive.
- Response messages are always expressed as <NR1>.

**<Character Data>**

<Character Data> is a specified string of character data (a mnemonic). It is mainly used to indicate options and is chosen from the character strings given in { }. For interpretation rules, refer to "Header Interpretation Rules" on page 4-4.

Form	Example
{AC DC DC50 GND}	AC

- As with the header, the "COMMunicate:VERBoSe" command can be used to select whether to return the response in the full form or in the abbreviated form.
- The "COMMunicate:HEADer" setting does not affect the character data.

**<Boolean>**

<Boolean> is data that indicates ON or OFF. It is expressed in one of the following forms.

Form	Example
{ON OFF <NRf>}	ON    OFF    1    0

- When <Boolean> is expressed in the <NRf> form, "OFF" is selected if the rounded integer value is 0, and ON for all other cases.
- A response message is always returned with a 1 if the value is ON and 0 if the value is OFF.

**<String data>**

<String data> is not a specified character string like <Character data>. It is an arbitrary character string. The character string must be enclosed in single quotation marks (') or double quotation marks (").

Form	Example
<String data>	'ABC'    "IEEE488.2-1987"

- If a character string contains a double quotation mark ('), the double quotation mark is replaced by two double quotation marks ("). This rule also applies to a single quotation mark within a character string.
- A response message is always enclosed in double quotation marks (").
- <String data> is an arbitrary character string. Therefore the instrument assumes that the remaining program message units are part of the character string if no single (') or double quotation mark (") is encountered. As a result, no error is detected if a quotation mark is omitted.

**<Filename>**

<Filename> is data that indicates a file name. It is expressed in one of the following forms.

Form	Example
{<NRf> <Character data> <String data>}	1    CASE    CASE"

- <NRf> is rounded to an 8-digit integer and converted to ASCII code. The result is the file name (example: 1 becomes "00000001"). Negative values are not allowed.
- Response messages are always returned in the <String data> form.
- For <Character data>, the first 12 characters become the file name.
- For <String data>, the first 259 characters become the file name.
- For a description of the number of characters of the <String data> file name, see the *SB5000 User's Manual*.

**<Block data>**

<Block data> is arbitrary 8-bit data. It is only used in response messages on the SB5000. Below is the syntax.

Form	Example
#N<N-digit decimal number>	#800000010ABCDEFGHIJ
<Data byte sequence>	

- #N  
Indicates that the data is <Block data>. "N" indicates the number of succeeding data bytes (digits) in ASCII code characters.
- <N-digit decimal number>  
Indicates the number of bytes of data (example: 00000010 = 10 bytes).
- <data byte sequence>  
Expresses the actual data (example: ABCDEFGHIJ).
- Data is comprised of 8-bit values (0 to 255). This means that the ASCII code "0AH," which stands for "NL," can also be a code used for data. Hence, care must be taken when programming the controller.

## 4.5 Synchronization with the Controller

### Overlap Commands and Sequential Commands

There are two types of commands, overlap commands and sequential commands. In the case of overlap commands, the execution of the next command may start before the execution of the previous command is completed.

For example, if the next program message is transmitted when specifying the V/div value and querying the result, the response always returns the most recent setting (5 V in this case).

```
:CHANnel1:VDIV 5V;VDIV?<PMT>
```

This is because the next command is forced to wait until the processing of "CHANnel1:VDIV" itself is completed. This type of command is called a sequential command.

On the contrary, let us assume that you send the next program message when you wish to load a file and query the V/div value of the result.

```
:FILE:LOAD:SETup:EXECute"CASE1";:  
CHANnel1:VDIV?
```

In this case, "CHANnel1:VDIV?" is executed before the loading of the file is completed, and the V/div value that is returned is the value before the file is loaded. The act of executing the next command before the processing of itself is completed such as with "FILE:LOAD:SETup:EXECute " CASE1"" is called an overlap operation. A command that operates in this way is called an overlap command.

In such case, the overlap operation can be prevented by using the methods below.

### Synchronizing with Overlap Commands

- **Using the \*WAI Command**

The \*WAI command holds the subsequent commands until the overlap command is completed.

```
Example :COMMunicate:OPSE #H0040;:  
FILE:LOAD:SETup:  
EXECute " CASE1";*WAI;:  
CHANnel1:VDIV?<PMT>
```

"COMMunicate:OPSE" is a command used to select the "\*WAI" target. Here, media access is specified. Because "\*WAI" is executed immediately before "CHANnel1:VDIV?," "CHANnel1:VDIV?" is not executed until the file loading is complete.

- **Using the COMMunicate:OVERlap command**

The COMMunicate:OVERlap command enables (or disables) overlap operation.

```
Example :COMMunicate:OVERlap #HFFBF;:  
FILE:LOAD:SETup:  
EXECute " CASE1";:CHANnel1:  
VDIV?<PMT>
```

"COMMunicate:OVERlap #HFFBF" enables overlap operation on commands other than media access. Because the overlap operation of file loading is disabled, "FILE:LOAD:SETup:EXECute " CASE1"" operates in the same way as a sequential command. Therefore, CHANnel1:VDIV? is not executed until the file loading is complete.

- **Using the \*OPC Command**

The \*OPC command sets the OPC bit, bit 0 of the standard event register (see page 6-3), to 1 when the overlap operation is completed.

```
Example :COMMunicate:OPSE #H0040;  
*ESE 1;  
*ESR?;*SRE 32;:FILE:LOAD:SETup:  
EXECute " CASE1";*OPC<PMT>  
(Read the response to *ESR?)  
(Wait for a service request)  
:CHANnel1:VDIV?<PMT>
```

"COMMunicate:OPSE" is a command used to select the "\*OPC" target. Here, media access is specified. "\*ESE 1" and "\*SRE 32" indicate that a service request is generated only when the OPC bit is 1. "\*ESR?" clears the standard event register. In the example above, "CHANnel1:VDIV?" is not executed until a service request is generated.

- **Using the \*OPC? Query**

The \*OPC? query generates a response when an overlap operation is completed.

```
Example :COMMunicate:OPSE #H0040;:FILE:
LOAD:SETup:EXECute " CASE1";
*OPC?<PMT>
(Read the response to *OPC?)
:CHANnel1:VDIV?<PMT>
```

“COMMunicate:OPSE” is a command used to select the “\*OPC?” target. Here, media access is specified.

Because “\*OPC?” does not generate a response until the overlap operation is completed, the loading of the file will have been completed by the time the response to “\*OPC?” is read.

---

**Note**

Most commands are sequential commands. Overlap commands are indicated as overlap commands in chapter 5. All other commands are sequential commands.

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### Achieving Synchronization without Using Overlap Commands

Even for sequential commands, synchronization is sometimes required for non communication-related reasons such as a trigger occurrence.

For example, if the next program message is transmitted to make an inquiry about the waveform data which has been acquired with the trigger mode set to single, the WAVEform:SEND? command may be executed regardless of whether the acquisition has been completed or not and may result in command execution error.

```
TRIGger:MODE SINGLE;:START;:WAVEform:
SEND?<PMT>
```

In this case, the following method must be used to synchronize with the end of the acquisition.

- **Using the STATus:CONDition? Query**

The “STATus:CONDition?” query is used to query the contents of the condition register (page 6-4).

Whether waveforms are being retrieved can be determined by reading bit 0 of the condition register. If bit 0 of the condition register is “1,” waveforms are being retrieved. Otherwise, it is stopped.

```
Example TRIGger:MODE SINGLE;:START<PMT>
:STATus:CONDition?<PMT>
(Read the response. If bit 0 is 1, repeat
this command until it becomes 1.)
:WAVEform:SEND?<PMT>
```

The WAVEform:SEND? command will not be executed until bit 0 of the condition register is set to “0.”

- **Using the Extended Event Register**

The changes in the condition register can be reflected in the extended event register (page 6-4).

```
Example :STATus:FILTer1 FALL;:
STATus:EESE 1;EESR?;*SRE 8;:
TRIGger:MODE SINGLE;:START<PMT>
(Read the response to STATus:EESR?)
(Wait for a service request)
:WAVEform:SEND?<PMT>
```

The “STATus:FILTer1 FALL” command sets the transition filter so that bit 0 (FILTer1) of the extended event register is set to 1 when bit 0 of the condition register changes from 1 to 0.

The “:STATus:EESE 1” command is used to reflect only bit 0 of the extended event register to the status byte.

The “STATus:EESR?” command is used to clear the extended event register.

The “\*SRE 8” command is used to generate a service request solely on the cause of the extended event register.

The “WAVEform:SEND?” command is not executed until a service request is generated.

- **Using the COMMunicate:WAIT Command**

The “COMMunicate:WAIT” command halts communications until a specific event is generated.

```
Example :STATus:FILTer1 FALL;:
STATus:EESR?;:TRIGger:
MODE SINGLE<PMT>
(Read the response to STATus:EESR?)
:COMMunicate:WAIT 1;:WAVEform:
SEND?<PMT>
```

For a description of “STATus:FILTer1 FALL” and “STATus:EESR?” see the previous section regarding the extended event register.

The “COMMunicate:WAIT 1” command indicates that the program will wait for bit 0 of the extended event register to be set to “1.”

The WAVEform:SEND? command will not be executed until bit 0 of the extended event register is set to “1.”

## 5.1 A List of Commands

Command	Function	Page
<b>ACQUIRE Group</b>		
:ACQUIRE?	Queries all settings related to the waveform acquisition.	5-72
:ACQUIRE:AVERAGE?	Queries all settings related to averaging and the waveform acquisition count.	5-72
:ACQUIRE:AVERAGE:COUNT	Sets the waveform acquisition count of averaging mode or queries the current setting.	5-72
:ACQUIRE:AVERAGE:EWEIGHT	Sets the attenuation constant when averaging mode is used infinitely or queries the current setting.	5-72
:ACQUIRE:HRMODE	Turns ON/OFF the harmonic analysis mode or queries the current setting.	5-72
:ACQUIRE:INTERLEAVE	Turns ON/OFF interleave or queries the current setting.	5-72
:ACQUIRE:INTERPOLATE	Turns ON/OFF data interpolation or queries the current setting.	5-72
:ACQUIRE:MODE	Sets the waveform acquisition mode or queries the current setting.	5-72
:ACQUIRE:REPETITIVE	Turns ON/OFF the repetitive sampling or queries the current setting.	5-72
:ACQUIRE:RENGTH	Sets the record length or queries the current setting.	5-72
<b>ANALYSIS Group</b>		
:ANALYSIS?	Queries all settings related to the analysis function.	5-73
:ANALYSIS:AHISTOGRAM<x>?	Queries all settings related to the accumulated histogram function.	5-73
:ANALYSIS:AHISTOGRAM<x>:HORIZONTAL	Sets the horizontal range or queries the current setting.	5-73
:ANALYSIS:AHISTOGRAM<x>:MEASURE?	Queries all settings related automated measurement.	5-74
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR?	Queries all settings related to cursor measurements.	5-74
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR:BASIC?	Queries all settings related to basic items of the cursor.	5-74
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR[:BASIC]:ALL	Turns ON/OFF all basic items of the cursor.	5-74
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR[:BASIC]:C<x>?	Queries all settings related to the cursor.	5-75
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR[:BASIC]:C<x>:STATE	Turns ON/OFF the cursor or queries the current setting.	5-75
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR[:BASIC]:C<x>:VALUE?	Queries the measured value of the cursor.	5-75
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR[:BASIC]:DC?	Queries all settings related to measured values between cursors.	5-75
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR[:BASIC]:DC:STATE	Turns ON/OFF the measured values between cursors or queries the current setting.	5-75
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR[:BASIC]:DC:VALUE?	Queries the measured value between cursors.	5-75
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR:CALCULATION?	Queries all settings related to calculation items of the cursor.	5-75
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR:CALCULATION:ALL	Turns ON/OFF all calculation items of the cursor.	5-75
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR:CALCULATION:DEFINE<x>	Sets the equation of the calculation item of the cursor or queries the current setting.	5-76
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR:CALCULATION:STATE<x>	Turns ON/OFF the calculation item of the cursor or queries the current setting.	5-76
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR:CALCULATION:VALUE<x>?	Queries the measured value of the calculation item of the cursor.	5-76
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR:HLINKAGE	Turns ON/OFF the horizontal cursor link of the accumulated histogram or queries the current setting.	5-76
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR:HPOSITION<x>	Sets the horizontal cursor position or queries the current setting.	5-76
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR:VLINKAGE	Turns ON/OFF the vertical cursor link of the accumulated histogram or queries the current setting.	5-76
:ANALYSIS:AHISTOGRAM<x>:MEASURE:CUSOR:VPOSITION<x>	Sets the vertical cursor position or queries the current setting.	5-77
:ANALYSIS:AHISTOGRAM<x>:MEASURE:MODE	Sets the automated measurement mode or queries the current setting.	5-77

## 5.1 A List of Commands

Command	Function	Page
:ANALysis:AHIStogram<x>:MEASure:PARAMeter?	Queries all settings related to the automated measurement of waveform parameters.	5-77
:ANALysis:AHIStogram<x>:MEASure:PARAMeter:AREA<x>?	Queries all settings related to the area.	5-78
:ANALysis:AHIStogram<x>:MEASure:PARAMeter:AREA<x>:ALL	Turns ON/OFF all waveform parameters.	5-78
:ANALysis:AHIStogram<x>:MEASure:PARAMeter:AREA<x>:<Parameter>?	Queries all settings related to the waveform parameter.	5-78
:ANALysis:AHIStogram<x>:MEASure:PARAMeter:AREA<x>:<Parameter>:STATe	Turns ON/OFF the waveform parameter or queries the current setting.	5-78
:ANALysis:AHIStogram<x>:MEASure:PARAMeter:AREA<x>:<Parameter>:VALue?	Queries the automated measured value of the waveform parameter.	5-79
:ANALysis:AHIStogram<x>:MEASure:PARAMeter:CALCulation?	Queries all settings related to the calculation items of waveform parameters.	5-79
:ANALysis:AHIStogram<x>:MEASure:PARAMeter:CALCulation:ALL	Turns ON/OFF all calculation items of the waveform parameters.	5-79
:ANALysis:AHIStogram<x>:MEASure:PARAMeter:CALCulation:DEFine<x>	Sets the equation of the calculation items of the waveform parameter or queries the current setting.	5-79
:ANALysis:AHIStogram<x>:MEASure:PARAMeter:CALCulation:STATe<x>	Turns ON/OFF the calculation items of the waveform parameter or queries the current setting.	5-79
:ANALysis:AHIStogram<x>:MEASure:PARAMeter:CALCulation:VALue<x>?	Queries the automated measured value of the calculation items of the waveform parameter.	5-79
:ANALysis:AHIStogram<x>:MEASure:PARAMeter:HRANge<x>	Sets the horizontal range of the waveform parameter or queries the current setting.	5-80
:ANALysis:AHIStogram<x>:MEASure:PARAMeter:VRANge<x>	Sets the vertical range of the waveform parameter or queries the current setting.	5-80
:ANALysis:AHIStogram<x>:MODE	Sets the accumulated histogram mode or queries the current setting.	5-80
:ANALysis:AHIStogram<x>:TRACe	Sets the source trace of the accumulated histogram or queries the current setting.	5-80
:ANALysis:AHIStogram<x>:VERTical	Sets the vertical range of the accumulated histogram or queries the current setting.	5-80
:ANALysis:AHIStogram<x>:WINDow	Sets the measurement target window of the accumulated histogram or queries the current setting.	5-80
:ANALysis:DISPlay<x>	Turns ON/OFF the analysis function display or queries the current setting.	5-80
:ANALysis:FFT<x>?	Queries all settings related to the FFT computation function.	5-81
:ANALysis:FFT<x>:HORizontal?	Queries all settings related the horizontal axis of the FFT computation.	5-81
:ANALysis:FFT<x>:HORizontal:CSPan?	Queries all settings related to the center and span of the horizontal axis of the FFT computation.	5-81
:ANALysis:FFT<x>:HORizontal:CSPan:CENTer	Sets the horizontal center of the FFT computation or queries the current setting.	5-81
:ANALysis:FFT<x>:HORizontal:CSPan:SPAN	Sets the horizontal span of the FFT computation or queries the current setting.	5-81
:ANALysis:FFT<x>:HORizontal:LRIGHt?	Queries all settings related the left and right edges of the horizontal axis of the FFT computation.	5-81
:ANALysis:FFT<x>:HORizontal:LRIGHt:RANge	Sets the range of the horizontal left and right edges of the FFT computation or queries the current setting.	5-82
:ANALysis:FFT<x>:HORizontal:MODE	Sets the horizontal mode of the FFT computation or queries the current setting.	5-82
:ANALysis:FFT<x>:IPART	Sets the source trace of the imaginary part of the FFT computation or queries the current setting.	5-82
:ANALysis:FFT<x>:LENGth	Sets the number of FFT points or queries the current setting.	5-82
:ANALysis:FFT<x>:MAXHold	Turns ON/OFF the maximum value hold function of the FFT computation or queries the current setting.	5-82
:ANALysis:FFT<x>:MEASure?	Queries all settings related to the automated measurement of the FFT computation.	5-82
:ANALysis:FFT<x>:MEASure:MARKer?	Queries all settings related to the marker cursor measurement of the FFT computation.	5-83
:ANALysis:FFT<x>:MEASure:MARKer:BASic?	Queries all settings related to basic items of the marker cursor of the FFT computation.	5-83
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:ALL	Turns ON/OFF all basic items of the marker cursor of the FFT computation.	5-83

Command	Function	Page
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:DFRequency?	Queries all settings related to the frequency value between marker cursors of the FFT computation.	5-83
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:DFRequency:STATe	Turns ON/OFF the frequency value between marker cursors of the FFT computation or queries the current setting.	5-83
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:DFRequency:VALue?	Queries the frequency value between marker cursors of the FFT computation.	5-83
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:DV?	Queries all settings related to the power value between marker cursors of the FFT computation.	5-84
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:DV:STATe	Turns ON/OFF the power value between marker cursors of the FFT computation or queries the current setting.	5-84
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:DV:VALue?	Queries the power value between marker cursors of the FFT computation.	5-84
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:FREQuency<x>?	Queries all settings related to the frequency value of the marker cursor of the FFT computation.	5-84
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:FREQuency<x>:STATe	Turns ON/OFF the frequency value of the marker cursor of the FFT computation or queries the current setting.	5-84
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:FREQuency<x>:VALue?	Queries the frequency value of the marker cursor of the FFT computation.	5-84
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:POSition<x> {<NRf>}	Sets the marker cursor position of the FFT computation or queries the current setting.	5-84
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:V<x>?	Queries all settings related to the power value of the marker cursor of the FFT computation.	5-85
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:V<x>:STATe	Turns ON/OFF the power value of the marker cursor of the FFT computation or queries the current setting.	5-85
:ANALysis:FFT<x>:MEASure:MARKer[:BASic]:V<x>:VALue?	Queries the power value of the marker cursor of the FFT computation.	5-85
:ANALysis:FFT<x>:MEASure:MARKer:CALCulation?	Queries all settings related to calculation items of the marker cursor of the FFT computation.	5-85
:ANALysis:FFT<x>:MEASure:MARKer:CALCulation:ALL	Turns ON/OFF all calculation items of the marker cursor of the FFT computation.	5-85
:ANALysis:FFT<x>:MEASure:MARKer:CALCulation:DEFine<x>	Sets the equation of the calculation items of the marker cursor of the FFT computation or queries the current setting.	5-85
:ANALysis:FFT<x>:MEASure:MARKer:CALCulation:STATe<x>	Turns ON/OFF the calculation items of the marker cursor of the FFT computation or queries the current setting.	5-85
:ANALysis:FFT<x>:MEASure:MARKer:CALCulation:VALue<x>?	Queries the measured value of the calculation items of the marker cursor of the FFT computation.	5-86
:ANALysis:FFT<x>:MEASure:MODE	Sets the automated measurement mode of the FFT computation or queries the current setting.	5-86
:ANALysis:FFT<x>:MEASure:PEAK?	Queries all settings related to the peak value measurement of the FFT computation.	5-86
:ANALysis:FFT<x>:MEASure:PEAK:BASic?	Queries all settings related to basic items of the peak value of the FFT computation.	5-86
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:ALL	Turns ON/OFF all basic items of the peak value of the FFT computation.	5-86
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DFRequency?	Queries all settings related to the frequency value between peak values of the FFT computation.	5-86
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DFRequency:STATe	Turns ON/OFF the frequency value between peak values of the FFT computation or queries the current setting.	5-87
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DFRequency:VALue?	Queries the frequency value between peak values of the FFT computation.	5-87
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DV?	Queries all settings related to the power value between peak values of the FFT computation.	5-87
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DV:STATe	Turns ON/OFF the power value between peak values of the FFT computation or queries the current setting.	5-87
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DV:VALue?	Queries the power value between peak values of the FFT computation.	5-87
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:FREQuency<x>?	Queries all settings related to the peak frequency value of the FFT computation.	5-87
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:FREQuency<x>:STATe	Turns ON/OFF the peak frequency value of the FFT computation or queries the current setting.	5-87
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:FREQuency<x>:VALue?	Queries the peak frequency value of the FFT computation.	5-87

## 5.1 A List of Commands

Command	Function	Page
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:RANGe<x>	Sets the measurement range of the peak value of the FFT computation or queries the current setting.	5-88
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:V<x>?	Queries all settings related to the peak value of the FFT computation.	5-88
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:V<x>:STATe	Turns ON/OFF the peak value of the FFT computation or queries the current setting.	5-88
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:V<x>:VALue?	Queries the peak value of the FFT computation.	5-88
:ANALysis:FFT<x>:MEASure:PEAK:CALCulation?	Queries all settings related to calculation items of the FFT computation.	5-88
:ANALysis:FFT<x>:MEASure:PEAK:CALCulation:ALL	Turns ON/OFF all calculation items of the FFT computation.	5-88
:ANALysis:FFT<x>:MEASure:PEAK:CALCulation:DEFine<x>	Sets the equation of the calculation item of the FFT computation or queries the current setting.	5-88
:ANALysis:FFT<x>:MEASure:PEAK:CALCulation:STATe<x>	Turns ON/OFF the calculation items of the FFT computation or queries the current setting.	5-89
:ANALysis:FFT<x>:MEASure:PEAK:CALCulation:VALue<x>?	Queries the measured value of the calculation item of the FFT computation.	5-89
:ANALysis:FFT<x>:RANGe	Sets the measurement source window used in the FFT computation or queries the current setting.	5-89
:ANALysis:FFT<x>:RPART	Sets the source trace of the real part of the FFT computation or queries the current setting.	5-89
:ANALysis:FFT<x>:RPOSITion	Sets the center point of magnification of the vertical axis of the FFT computation or queries the current setting.	5-89
:ANALysis:FFT<x>:VERTical?	Queries all settings related the vertical axis of the FFT computation.	5-89
:ANALysis:FFT<x>:VERTical:LEVel	Sets the display position of the vertical axis of the FFT computation or queries the current setting.	5-89
:ANALysis:FFT<x>:VERTical:MODE	Sets the vertical axis mode of the FFT computation or queries the current setting.	5-89
:ANALysis:FFT<x>:VERTical:SENSitivity	Sets the vertical sensitivity of the FFT computation or queries the current setting.	5-90
:ANALysis:FFT<x>:WINDow	Sets the window function or queries the current setting.	5-90
:ANALysis:LSBus<x>?	Queries all settings related to the logic serial bus signal analysis function.	5-90
:ANALysis:LSBus<x>[:ANALyze]?	Queries all settings related to the logic serial bus signal analysis.	5-90
:ANALysis:LSBus<x>[:ANALyze]:I2CBus?	Queries all settings related to the logic I <sup>2</sup> C bus signal analysis.	5-90
:ANALysis:LSBus<x>[:ANALyze]:I2CBus:CLOCK	Sets the clock channel of the logic I <sup>2</sup> C bus signal analysis or queries the current setting.	5-90
:ANALysis:LSBus<x>[:ANALyze]:I2CBus:DTRace	Sets the data channel of the logic I <sup>2</sup> C bus signal analysis or queries the current setting.	5-91
:ANALysis:LSBus<x>[:ANALyze]:LINBus?	Queries all settings related to the logic LIN bus signal analysis.	5-91
:ANALysis:LSBus<x>[:ANALyze]:LINBus:BRATe	Sets the bit rate (data transfer rate) of the logic LIN bus signal analysis or queries the current setting.	5-91
:ANALysis:LSBus<x>[:ANALyze]:LINBus:FJUMp:BReak	Executes a field jump to the Break Field in the results of the logic LIN bus signal analysis.	5-91
:ANALysis:LSBus<x>[:ANALyze]:LINBus:FJUMp:CSUM	Executes a field jump to the Checksum Field in the results of the logic LIN bus signal analysis.	5-91
:ANALysis:LSBus<x>[:ANALyze]:LINBus:FJUMp:DATA	Executes a field jump to the Data Field in the results of the logic LIN bus signal analysis.	5-91
:ANALysis:LSBus<x>[:ANALyze]:LINBus:FJUMp:IDENTifier	Executes a field jump to the Identifier Field in the results of the logic LIN bus signal analysis.	5-91
:ANALysis:LSBus<x>[:ANALyze]:LINBus:FJUMp:SYNCh	Executes a field jump to the Synch Field in the results of the logic LIN bus signal analysis.	5-91
:ANALysis:LSBus<x>[:ANALyze]:LINBus:REVision	Sets the revision (1.3 or 2.0) of the logic LIN bus signal analysis or queries the current setting.	5-92
:ANALysis:LSBus<x>[:ANALyze]:LINBus:SPOint	Sets the logic LIN bus signal analysis sample point or queries the current setting.	5-92
:ANALysis:LSBus<x>[:ANALyze]:LINBus:TRACe	Sets the trace of the logic LIN bus signal analysis or queries the current setting.	5-92
:ANALysis:LSBus<x>[:ANALyze]:LIST?	Queries all settings related to the analysis result list of the logic serial bus signal analysis.	5-92
:ANALysis:LSBus<x>[:ANALyze]:LIST:DISPlay	Turns ON/OFF the analysis result list of the logic serial bus signal analysis or queries the current setting.	5-92

Command	Function	Page
:ANALYSIS:LSBus<x>[:ANALyze]:LIST:ITEM?	Queries all items displayed on the analysis result list of the logic serial bus signal analysis.	5-92
:ANALYSIS:LSBus<x>[:ANALyze]:LIST:MODE	Sets the mode of the analysis result list of the logic serial bus signal analysis or queries the current setting.	5-93
:ANALYSIS:LSBus<x>[:ANALyze]:LIST:SCROLL	Sets the scroll method of the analysis result list of the logic serial bus signal analysis or queries the current setting.	5-93
:ANALYSIS:LSBus<x>[:ANALyze]:LIST:VALue?	Queries the automated measured value of the specified analysis number in the analysis result list of the logic serial bus signal analysis.	5-93
:ANALYSIS:LSBus<x>[:ANALyze]:MODE	Sets the logic serial bus signal analysis mode or queries the current setting.	5-93
:ANALYSIS:LSBus<x>[:ANALyze]:RPOINT	Sets the analysis reference point of the logic serial bus signal analysis or queries the current setting.	5-93
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus?	Queries all settings related to the logic SPI bus signal analysis.	5-93
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus:CLOCK?	Queries all settings related to the clock signal channel of the logic SPI bus signal analysis.	5-93
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus:CLOCK:POLarity	Sets the polarity of the clock signal channel of the logic SPI bus signal analysis or queries the current setting.	5-94
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus:CLOCK:SOURce	Sets the clock signal channel of the logic SPI bus signal analysis or queries the current setting.	5-94
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus:CS?	Queries all settings related to the chip select signal channel of the logic SPI bus signal analysis.	5-94
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus:CS:ACTive	Sets the active level of the chip select signal channel of the logic SPI bus signal analysis or queries the current setting.	5-94
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus:CS:TRACe	Sets the chip select signal channel of the logic SPI bus signal analysis or queries the current setting.	5-94
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus:DATA<x>?	Queries all settings related to each data of the logic SPI bus signal analysis.	5-94
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus:DATA<x>:ACTive	Sets the active level of each data of the logic SPI bus signal analysis or queries the current setting.	5-95
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus:DATA<x>:TRACe	Sets the data channel of the logic SPI bus signal analysis or queries the current setting.	5-95
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus[:SETup]?	Queries all settings related to the setup of the logic SPI bus signal analysis.	5-95
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus[:SETup]:BITorder	Sets the bit order of the logic SPI bus signal analysis or queries the current setting.	5-95
:ANALYSIS:LSBus<x>[:ANALyze]:SPIBus[:SETup]:MODE	Sets the wiring system of the logic SPI bus signal analysis (three-wire or four-wire) or queries the current setting.	5-95
:ANALYSIS:LSBus<x>[:ANALyze]:UART?	Queries all settings related to the logic UART bus signal analysis.	5-95
:ANALYSIS:LSBus<x>[:ANALyze]:UART:BITorder	Sets the logic UART bus signal analysis bit order or queries the current setting.	5-96
:ANALYSIS:LSBus<x>[:ANALyze]:UART:BRATe	Sets the logic UART bus signal analysis bit rate (data transfer rate) or queries the current setting.	5-96
:ANALYSIS:LSBus<x>[:ANALyze]:UART:FORMat	Sets the logic UART bus signal analysis data format or queries the current setting.	5-96
:ANALYSIS:LSBus<x>[:ANALyze]:UART:PMODE	Sets the logic UART bus signal analysis parity mode or queries the current setting.	5-96
:ANALYSIS:LSBus<x>[:ANALyze]:UART:POLarity	Sets the logic UART bus signal analysis parity or queries the current setting.	5-96
:ANALYSIS:LSBus<x>[:ANALyze]:UART:SPOINT	Sets the logic UART bus signal analysis sample point or queries the current setting.	5-96
:ANALYSIS:LSBus<x>[:ANALyze]:UART:TRACe	Sets the logic UART bus signal analysis trace or queries the current setting.	5-97
:ANALYSIS:LSBus<x>:ZLINKage	Sets the zoom link of the logic serial bus signal analysis or queries the current setting.	5-97
:ANALYSIS:SBUS<x>?	Queries all settings related to the serial bus signal analysis function.	5-97
:ANALYSIS:SBUS<x>:ANALyze?	Queries all settings related to the serial bus signal analysis.	5-97
:ANALYSIS:SBUS<x>[:ANALyze]:CANBus?	Queries all settings related to the CAN bus signal analysis.	5-97
:ANALYSIS:SBUS<x>[:ANALyze]:CANBus:BRATe	Sets the bit rate (data transfer rate) of the CAN bus signal analysis or queries the current setting.	5-98
:ANALYSIS:SBUS<x>[:ANALyze]:CANBus:FJUMP:ACK	Executes a field jump to the ACK Field in the results of the CAN bus signal analysis.	5-98



## 5.1 A List of Commands

Command	Function	Page
:ANALysis:SBUS<x>[:ANALyze]:CANBus:FJUMp:CONTRol	Executes a field jump to the Control Field in the results of the CAN bus signal analysis.	5-98
:ANALysis:SBUS<x>[:ANALyze]:CANBus:FJUMp:CRC	Executes a field jump to the CRC Field in the results of the CAN bus signal analysis.	5-98
:ANALysis:SBUS<x>[:ANALyze]:CANBus:FJUMp:DATA	Executes a field jump to the Data Field in the results of the CAN bus signal analysis.	5-98
:ANALysis:SBUS<x>[:ANALyze]:CANBus:FJUMp:IDENTifier	Executes a field jump to the Identifier Field in the results of the CAN bus signal analysis.	5-98
:ANALysis:SBUS<x>[:ANALyze]:CANBus:FJUMp:SOFT	Executes a field jump to the SOF Field in the results of the CAN bus signal analysis.	5-98
:ANALysis:SBUS<x>[:ANALyze]:CANBus:RECCessive	Sets the recessive level (bus level) of the CAN bus signal analysis or queries the current setting.	5-98
:ANALysis:SBUS<x>[:ANALyze]:CANBus:SIGNal?	Queries all settings related to the CAN bus signal analysis signal.	5-99
:ANALysis:SBUS<x>[:ANALyze]:CANBus:SIGNal:LIST:ITEM	Turns ON/OFF items to be displayed in the CAN bus signal analysis signal list.	5-99
:ANALysis:SBUS<x>[:ANALyze]:CANBus:SIGNal:MODE	Turns ON/OFF the CAN bus signal analysis signal or queries the current setting.	5-99
:ANALysis:SBUS<x>[:ANALyze]:CANBus:SIGNal:TREND:ITEM	Turns ON/OFF items of the CAN bus signal analysis signal to be trend-displayed.	5-99
:ANALysis:SBUS<x>[:ANALyze]:CANBus:SPOINT	Sets the sample point of the CAN bus signal analysis or queries the current setting.	5-99
:ANALysis:SBUS<x>[:ANALyze]:CANBus:TRACe	Sets the source channel of the CAN bus signal analysis or queries the current setting.	5-99
:ANALysis:SBUS<x>[:ANALyze]:DECode	Turns the serial bus signal analysis decoding display ON/OFF or queries the current status.	5-99
:ANALysis:SBUS<x>[:ANALyze]:FLEXray?	Queries all settings related to the FLEXRAY bus signal analysis.	5-99
:ANALysis:SBUS<x>[:ANALyze]:FLEXray:BRATe	Sets the FLEXRAY bus signal analysis bit rate (data transfer rate) or queries the current setting.	5-100
:ANALysis:SBUS<x>[:ANALyze]:FLEXray:FJUMp:CCOUNT	Performs a field jump to the Cycle Count Field in the results of the FLEXRAY bus signal analysis.	5-100
:ANALysis:SBUS<x>[:ANALyze]:FLEXray:FJUMp:CRC	Performs a field jump to the CRC Field in the results of the FLEXRAY bus signal analysis.	5-100
:ANALysis:SBUS<x>[:ANALyze]:FLEXray:FJUMp:DATA	Performs a field jump to the Data Field in the results of the FLEXRAY bus signal analysis.	5-100
:ANALysis:SBUS<x>[:ANALyze]:FLEXray:FJUMp:HCRC	Performs a field jump to the Header CRC Field in the results of the FLEXRAY bus signal analysis.	5-100
:ANALysis:SBUS<x>[:ANALyze]:FLEXray:FJUMp:IDENTifier	Performs a field jump to the Identifier Field in the results of the FLEXRAY bus signal analysis.	5-100
:ANALysis:SBUS<x>[:ANALyze]:FLEXray:FJUMp:PLENgtH	Performs a field jump to the Payload Length Field in the results of the FLEXRAY bus signal analysis.	5-100
:ANALysis:SBUS<x>[:ANALyze]:FLEXray:SPOINT	Sets the FLEXRAY bus signal analysis sample point or queries the current setting.	5-100
:ANALysis:SBUS<x>[:ANALyze]:FLEXray:TRACe	Sets the FLEXRAY bus signal analysis trace or queries the current setting.	5-100
:ANALysis:SBUS<x>[:ANALyze]:I2CBus?	Queries all settings related to the I <sup>2</sup> C bus signal analysis.	5-101
:ANALysis:SBUS<x>[:ANALyze]:I2CBus:CLOCK	Sets the clock channel of the I <sup>2</sup> C bus signal analysis or queries the current setting.	5-101
:ANALysis:SBUS<x>[:ANALyze]:I2CBus:DTRAcE	Sets the data channel of the I <sup>2</sup> C bus signal analysis or queries the current setting.	5-101
:ANALysis:SBUS<x>[:ANALyze]:LINBus?	Queries all settings related to the LIN bus signal analysis.	5-101
:ANALysis:SBUS<x>[:ANALyze]:LINBus:BRATe	Sets the LIN bus signal analysis bitrate (data transfer rate) or queries the current setting.	5-101
:ANALysis:SBUS<x>[:ANALyze]:LINBus:FJUMp:BReAk	Executes a field jump to the Break Field in the results of the LIN bus signal analysis.	5-101
:ANALysis:SBUS<x>[:ANALyze]:LINBus:FJUMp:CSUM	Executes a field jump to the Checksum Field in the results of the LIN bus signal analysis.	5-101
:ANALysis:SBUS<x>[:ANALyze]:LINBus:FJUMp:DATA	Executes a field jump to the Data Field in the results of the LIN bus signal analysis.	5-101

Command	Function	Page
:ANALysis:SBUS<x>[:ANALyze]:LINBus:FJUMp:IDENtifier	Executes a field jump to the Identifier Field in the results of the LIN bus signal analysis.	5-102
:ANALysis:SBUS<x>[:ANALyze]:LINBus:FJUMp:SYNCh	Executes a field jump to the Synch Field in the results of the LIN bus signal analysis.	5-102
:ANALysis:SBUS<x>[:ANALyze]:LINBus:REVIsion	Sets the LIN bus signal analysis revision (1.3 or 2.0) or queries the current setting.	5-102
:ANALysis:SBUS<x>[:ANALyze]:LINBus:SPOInt	Sets the LIN bus signal analysis sample point or queries the current setting.	5-102
:ANALysis:SBUS<x>[:ANALyze]:LINBus:TRACe	Sets the LIN bus signal analysis trace or queries the current setting.	5-102
:ANALysis:SBUS<x>[:ANALyze]:LIST?	Queries all settings related to the list display of the serial bus signal analysis.	5-102
:ANALysis:SBUS<x>[:ANALyze]:LIST:DISPlay	Turns the serial bus signal analysis list display ON/OFF or queries the current status.	5-102
:ANALysis:SBUS<x>[:ANALyze]:LIST:ITeM?	Queries the item in the list display of the serial bus signal analysis.	5-102
:ANALysis:SBUS<x>[:ANALyze]:LIST:MODe	Sets the mode of the list display of the serial bus signal analysis or queries the current setting.	5-103
:ANALysis:SBUS<x>[:ANALyze]:LIST:SCROll	Sets the scroll method of the list display of the serial bus signal analysis or queries the current setting.	5-103
:ANALysis:SBUS<x>[:ANALyze]:LIST:VALue?	Queries the analyzed value of the specified list display number in the serial bus signal analysis.	5-103
:ANALysis:SBUS<x>[:ANALyze]:MODe	Sets the serial bus signal analysis mode or queries the current setting.	5-103
:ANALysis:SBUS<x>[:ANALyze]:RPOInt	Sets the analysis reference point of the serial bus signal analysis or queries the current setting.	5-103
:ANALysis:SBUS<x>[:ANALyze]:SPIBus?	Queries all settings related to the SPI bus signal analysis.	5-103
:ANALysis:SBUS<x>[:ANALyze]:SPIBus:CLOCK?	Queries all settings related to the clock channel of the SPI bus signal analysis.	5-103
:ANALysis:SBUS<x>[:ANALyze]:SPIBus:CLOCK:POLarity	Sets the polarity of the clock channel of the SPI bus signal analysis or queries the current setting.	5-104
:ANALysis:SBUS<x>[:ANALyze]:SPIBus:CLOCK:SOURce	Sets the clock channel of the SPI bus signal analysis or queries the current setting.	5-104
:ANALysis:SBUS<x>[:ANALyze]:SPIBus:CS?	Queries all settings related to the chip select channel of the SPI bus signal analysis.	5-104
:ANALysis:SBUS<x>[:ANALyze]:SPIBus:CS:ACTive	Sets the active level of the chip select channel of the SPI bus signal analysis or queries the current setting.	5-104
:ANALysis:SBUS<x>[:ANALyze]:SPIBus:CS:TRACe	Sets the chip select channel of the SPI bus signal analysis or queries the current setting.	5-104
:ANALysis:SBUS<x>[:ANALyze]:SPIBus:DATA<x>?	Queries all settings related to the data of the SPI bus signal analysis.	5-104
:ANALysis:SBUS<x>[:ANALyze]:SPIBus:DATA<x>:ACTive	Sets the active level of the data of the SPI bus signal analysis or queries the current setting.	5-105
:ANALysis:SBUS<x>[:ANALyze]:SPIBus:DATA<x>:TRACe	Sets the data channel of the SPI bus signal analysis or queries the current setting.	5-105
:ANALysis:SBUS<x>[:ANALyze]:SPIBus:SETUp?	Queries all settings related to the SPI bus signal analysis setup.	5-105
:ANALysis:SBUS<x>[:ANALyze]:SPIBus[:SETUp]:BITOrder	Sets the bit order of the SPI bus signal analysis or queries the current setting.	5-105
:ANALysis:SBUS<x>[:ANALyze]:SPIBus[:SETUp]:MODe	Sets the wiring system of the SPI bus signal analysis (three-wire or four-wire) or queries the current setting.	5-105
:ANALysis:SBUS<x>[:ANALyze]:TRACe<x>?	Queries all settings related to the threshold level of the source channel of the serial bus signal analysis.	5-105
:ANALysis:SBUS<x>[:ANALyze]:TRACe<x>:HYSTerEsis	Sets the hysteresis of the threshold level of the source channel of the serial bus signal analysis or queries the current setting.	5-106
:ANALysis:SBUS<x>[:ANALyze]:TRACe<x>:LEVeL	Sets the level of the threshold level of the source channel of the serial bus signal analysis or queries the current setting.	5-106
:ANALysis:SBUS<x>[:ANALyze]:TREND?	Queries all settings related to the CAN bus signal analysis trend display.	5-106
:ANALysis:SBUS<x>[:ANALyze]:TREND:CURSor?	Queries all settings related to cursor measurement in the CAN bus signal analysis trend display.	5-106
:ANALysis:SBUS<x>[:ANALyze]:TREND:CURSor:C<x>?	Queries all settings related to each cursor measurement of the CAN bus signal analysis trend.	5-106

## 5.1 A List of Commands

Command	Function	Page
:ANALysis:SBUS<x>[:ANALyze]:TREND:CURSor:C<x>:POSition	Sets each cursor position on the CAN bus signal analysis trend or queries the current setting.	5-106
:ANALysis:SBUS<x>[:ANALyze]:TREND:CURSor:C<x>:VALue?	Queries the measured value of each cursor on the CAN bus signal analysis trend.	5-107
:ANALysis:SBUS<x>[:ANALyze]:TREND:CURSor:DC:VALue?	Queries the measured value between cursors on the CAN bus signal analysis trend.	5-107
:ANALysis:SBUS<x>[:ANALyze]:TREND:CURSor:DISPlay	Turns ON/OFF each cursor on the CAN bus signal analysis trend or queries the current setting.	5-107
:ANALysis:SBUS<x>[:ANALyze]:TREND:CURSor:DT:VALue?	Queries the $\Delta T$ value of the cursor on the CAN bus signal analysis trend.	5-107
:ANALysis:SBUS<x>[:ANALyze]:TREND:CURSor:PERDt:VALue?	Queries the $1/\Delta T$ value of the cursor on the CAN bus signal analysis trend.	5-107
:ANALysis:SBUS<x>[:ANALyze]:TREND:CURSor:T<x>:VALue?	Queries the time value of the cursor on the CAN bus signal analysis trend.	5-107
:ANALysis:SBUS<x>[:ANALyze]:TREND:DISPlay	Turns ON/OFF the CAN bus signal analysis trend display or queries the current setting.	5-107
:ANALysis:SBUS<x>[:ANALyze]:TREND:SCALE?	Queries all settings related to the scaling of the CAN bus signal analysis trend display.	5-107
:ANALysis:SBUS<x>[:ANALyze]:TREND:SCALE:CENTer	Sets the offset of the CAN bus signal analysis trend display or queries the current setting.	5-108
:ANALysis:SBUS<x>[:ANALyze]:TREND:SCALE:MODE	Sets the scaling method of the CAN bus signal analysis trend display or queries the current setting.	5-108
:ANALysis:SBUS<x>[:ANALyze]:TREND:SCALE:SENSitivity	Sets the vertical axis sensitivity of the CAN bus signal analysis trend display or queries the current setting.	5-108
:ANALysis:SBUS<x>[:ANALyze]:UART?	Queries all settings related to the UART bus signal analysis.	5-108
:ANALysis:SBUS<x>[:ANALyze]:UART:BITOrder	Sets the UART bus signal analysis bit order or queries the current setting.	5-108
:ANALysis:SBUS<x>[:ANALyze]:UART:BRATe	Sets the UART bus signal analysis bit rate (data transfer rate) or queries the current setting.	5-108
:ANALysis:SBUS<x>[:ANALyze]:UART:FORMat	Sets the UART bus signal analysis data format or queries the current setting.	5-109
:ANALysis:SBUS<x>[:ANALyze]:UART:PMODE	Sets the UART bus signal analysis parity mode or queries the current setting.	5-109
:ANALysis:SBUS<x>[:ANALyze]:UART:POLarity	Sets the UART bus signal analysis polarity or queries the current setting.	5-109
:ANALysis:SBUS<x>[:ANALyze]:UART:SPOint	Sets the UART bus signal analysis sample point or queries the current setting.	5-109
:ANALysis:SBUS<x>[:ANALyze]:UART:TRACe	Sets the UART bus signal analysis trace or queries the current setting.	5-109
:ANALysis:SBUS<x>[:ANALyze]:WTYPE	Sets the serial bus signal analysis window type or queries the current setting.	5-109
:ANALysis:SBUS<x>:ZLINKage	Sets the zoom link of the serial bus signal analysis or queries the current setting.	5-109
:ANALysis:TYPE<x>	Sets the analysis function type or queries the current setting.	5-109
:ANALysis:VTDisPlay	Turns ON/OFF the VT waveform display or queries the current setting.	5-110
:ANALysis:WAIT<x>?	Waits for the analysis to complete with a timeout.	5-110
:ANALysis:WPARAMeter<x>?	Queries all settings related to the waveform parameter measurement function.	5-110
:ANALysis:WPARAMeter<x>:BIT<x>?	Queries all settings related to each logic bit of logic waveform parameter measurement.	5-110
:ANALysis:WPARAMeter<x>:BIT<x>:AREA<x>?	Queries all settings related to each area of logic waveform parameter measurement.	5-110
:ANALysis:WPARAMeter<x>:BIT<x>:AREA<x>:TYPE	Sets the logic waveform parameters for logic waveform parameter measurement or queries the current setting.	5-110
:ANALysis:WPARAMeter<x>:CALCulation	Sets the calculation items or queries the current setting.	5-111
:ANALysis:WPARAMeter<x>:FLEXray?	Queries all settings related to the FLEXRAY bus for waveform parameter measurement.	5-111
:ANALysis:WPARAMeter<x>:FLEXray:BUS?	Queries all settings related to bus waveforms of the FLEXRAY bus for waveform parameter measurement.	5-111
:ANALysis:WPARAMeter<x>:FLEXray:BUS:TYPE	Sets the bus waveform parameters for waveform parameter measurement or queries the current setting.	5-111
:ANALysis:WPARAMeter<x>:FLEXray:RECEiver?	Queries all settings related to the receiver waveform of the FLEXRAY bus for waveform parameter measurement.	5-111

Command	Function	Page
:ANALysis:WPARAMeter<x>:FLEXray:RECEiver:RXD?	Queries all settings related to the receiver data waveforms of the FLEXRAY bus for waveform parameter measurement.	5-111
:ANALysis:WPARAMeter<x>:FLEXray:RECEiver:RXD:TYPE	Sets the receiver data waveform parameters for waveform parameter measurement or queries the current setting	5-111
:ANALysis:WPARAMeter<x>:FLEXray:RECEiver:RXEN?	Queries all settings related to the receiver enable waveform of the FLEXRAY bus for waveform parameter measurement.	5-111
:ANALysis:WPARAMeter<x>:FLEXray:RECEiver:RXEN:TYPE	Sets the receiver enable waveform parameters for waveform parameter measurement or queries the current setting	5-112
:ANALysis:WPARAMeter<x>:FLEXray:TRANsmitter?	Queries all settings related to the transmitter waveform of the FLEXRAY bus for waveform parameter measurement.	5-112
:ANALysis:WPARAMeter<x>:FLEXray:TRANsmitter:TXD?	Queries all settings related to the transmitter data waveforms of the FLEXRAY bus for waveform parameter measurement.	5-112
:ANALysis:WPARAMeter<x>:FLEXray:TRANsmitter:TXD:TYPE	Sets the transmitter data waveform parameters for waveform parameter measurement or queries the current setting	5-112
:ANALysis:WPARAMeter<x>:FLEXray:TRANsmitter:TXEN?	Queries all settings related to the transmitter enable waveform of the FLEXRAY bus for waveform parameter measurement.	5-112
:ANALysis:WPARAMeter<x>:FLEXray:TRANsmitter:TXEN:TYPE	Sets the transmitter enable waveform parameters for waveform parameter measurement or queries the current setting	5-112
:ANALysis:WPARAMeter<x>:HISTogram?	Queries all settings related to the histogram display.	5-113
:ANALysis:WPARAMeter<x>:HISTogram:MEASure?	Queries all settings related to the automated measurement of the histogram display.	5-113
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:CURSor?	Queries all settings related to cursor measurements on the histogram.	5-113
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:CURSor:ALL	Turn ON/OFF all histogram cursors.	5-114
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:CURSor:C<x>?	Queries all settings related to the cursor measurement on the histogram.	5-114
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:CURSor:C<x>:POSITION	Sets the cursor position on the histogram or queries the current setting.	5-114
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:CURSor:C<x>:STATE	Turns ON/OFF the cursor on the histogram or queries the current setting.	5-114
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:CURSor:C<x>:VALUE?	Queries the measured value of the cursor on the histogram.	5-114
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:CURSor:DC?	Queries all settings related to the measurement between cursors on the histogram.	5-114
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:CURSor:DC:STATE	Turns ON/OFF the measurement between cursors on the histogram or queries the current setting.	5-115
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:CURSor:DC:VALUE?	Queries the measured value between cursors on the histogram.	5-115
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:CURSor:LINKage	Turns ON/OFF the cursor link on the histogram or queries the current setting.	5-115
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:MODE	Sets the automated measurement mode of the histogram display or queries the current setting.	5-115
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:PARAMeter?	Queries all settings related to the automated measurement of histogram parameters.	5-115
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:PARAMeter:ALL	Turn ON/OFF all histogram parameters.	5-115
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:PARAMeter:<Parameter>?	Queries all settings related to the histogram parameter.	5-116
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:PARAMeter:<Parameter>:STATE	Turns ON/OFF the histogram parameter or queries the current setting.	5-116
:ANALysis:WPARAMeter<x>:HISTogram:MEASure:PARAMeter:<Parameter>:VALUE?	Queries the measured value of the histogram parameter.	5-116
:ANALysis:WPARAMeter<x>:LIST?	Queries all settings related to the list display.	5-116
:ANALysis:WPARAMeter<x>:LIST:ITEM?	Queries list display items.	5-116

## 5.1 A List of Commands

Command	Function	Page
:ANALysis:WPARAMeter<x>:LIST:MODE	Sets the list display mode of the waveform parameter measurement or queries the current setting.	5-116
:ANALysis:WPARAMeter<x>:LIST:SCROLL	Sets the scroll direction of the list display or queries the current setting.	5-116
:ANALysis:WPARAMeter<x>:LIST:VALue?	Queries the automated measured value of the list display number of the waveform parameter measurement.	5-117
:ANALysis:WPARAMeter<x>:MODE	Sets the mode of the waveform parameter measurement or queries the current setting.	5-117
:ANALysis:WPARAMeter<x>:TRACe<x>?	Queries all settings related to the trace of the waveform parameter measurement.	5-117
:ANALysis:WPARAMeter<x>:TRACe<x>:AREA<x>?	Queries all settings related to the area of the waveform parameter measurement.	5-117
:ANALysis:WPARAMeter<x>:TRACe<x>:AREA<x>:TYPE	Sets the waveform parameter of the waveform parameter measurement or queries the current setting.	5-117
:ANALysis:WPARAMeter<x>:TREND?	Queries all settings related to the trend display of the waveform parameter measurement.	5-117
:ANALysis:WPARAMeter<x>:TREND:ASCale[:EXECute]	Executes the auto scaling of the trend display of the waveform parameter measurement.	5-118
:ANALysis:WPARAMeter<x>:TREND:HRANge	Sets the target window for trend display of measured waveform parameters or queries the current setting.	5-118
:ANALysis:WPARAMeter<x>:TREND:HSPan	Sets the horizontal span of the trend display of the waveform parameter measurement or queries the current setting.	5-118
:ANALysis:WPARAMeter<x>:TREND:MEASure?	Queries all settings related to the automated measurement of the trend display of the waveform parameter measurement.	5-118
:ANALysis:WPARAMeter<x>:TREND:MEASure:CURSor?	Queries all settings related to the cursor measurement of the trend of the waveform parameter measurement.	5-118
:ANALysis:WPARAMeter<x>:TREND:MEASure:CURSor:ALL	Turns ON/OFF all cursors of the trend of the waveform parameter measurement.	5-118
:ANALysis:WPARAMeter<x>:TREND:MEASure:CURSor:C<x>?	Queries all settings related to the measured value of the cursor of the trend of the waveform parameter measurement.	5-118
:ANALysis:WPARAMeter<x>:TREND:MEASure:CURSor:C<x>:POSITION	Sets the cursor position of the trend of the waveform parameter measurement or queries the current setting.	5-119
:ANALysis:WPARAMeter<x>:TREND:MEASure:CURSor:C<x>:STATE	Turns ON/OFF the cursor of the trend of the waveform parameter measurement or queries the current setting.	5-119
:ANALysis:WPARAMeter<x>:TREND:MEASure:CURSor:C<x>:VALue?	Queries the measured value of the cursor of the trend of the waveform parameter measurement.	5-119
:ANALysis:WPARAMeter<x>:TREND:MEASure:CURSor:DC?	Queries all settings related to the measurement between cursors on the trend.	5-119
:ANALysis:WPARAMeter<x>:TREND:MEASure:CURSor:DC:STATE	Turns ON/OFF the measurement between cursors on the trend or queries the current setting.	5-119
:ANALysis:WPARAMeter<x>:TREND:MEASure:CURSor:DC:VALue?	Queries the measured value between cursors on the trend.	5-119
:ANALysis:WPARAMeter<x>:TREND:MEASure:CURSor:LINKage	Turns ON/OFF the trend cursor link of the waveform parameter measurement or queries the current setting.	5-120
:ANALysis:WPARAMeter<x>:TREND:MEASure:MODE	Sets the automated measurement mode of the trend of the waveform parameter measurement or queries the current setting.	5-120
:ANALysis:WPARAMeter<x>:TREND:VERTical	Sets the vertical range of the trend of the waveform parameter measurement or queries the current setting.	5-120
:ANALysis:XY<x>?	Queries all settings related to the XY display function.	5-120
:ANALysis:XY<x>:GATE?	Queries all settings related to the gate function of the XY display.	5-120
:ANALysis:XY<x>:GATE:ALEVel	Sets the active level of the gate of the XY display or queries the current setting.	5-121
:ANALysis:XY<x>:GATE:HYSteresis<x>	Sets the hysteresis of the gate of the XY display or queries the current setting.	5-121
:ANALysis:XY<x>:GATE:LEVel<x>	Sets the level of the gate of the XY display or queries the current setting.	5-121
:ANALysis:XY<x>:GATE:TRACe	Sets the gate trace of the XY display or queries the current setting.	5-121
:ANALysis:XY<x>:MEASure?	Queries all settings related to the automated measurement of the XY display.	5-121
:ANALysis:XY<x>:MEASure:CURSor?	Queries all settings related to the cursor measurement of the XY display.	5-121
:ANALysis:XY<x>:MEASure:CURSor:XLINKage	Turns ON/OFF the horizontal cursor link on the XY display or queries the current setting.	5-122
:ANALysis:XY<x>:MEASure:CURSor:X<x>?	Queries all settings related to the horizontal cursor of the XY display.	5-122

Command	Function	Page
:ANALysis:XY<x>:MEASure:CURSor: X<x>:POSition	Sets the horizontal cursor position of the XY display or queries the current setting.	5-122
:ANALysis:XY<x>:MEASure:CURSor: X<x>:VALue?	Queries the voltage value at the horizontal cursor of the XY display.	5-122
:ANALysis:XY<x>:MEASure:CURSor: YLINKage	Turns ON/OFF the vertical cursor link on the XY display or queries the current setting.	5-122
:ANALysis:XY<x>:MEASure:CURSor: Y<x>?	Queries all settings related to the vertical cursor of the XY display.	5-122
:ANALysis:XY<x>:MEASure:CURSor: Y<x>:POSition	Sets the vertical cursor position of the XY display or queries the current setting.	5-122
:ANALysis:XY<x>:MEASure:CURSor: Y<x>:VALue?	Queries the voltage value at the vertical cursor of the XY display.	5-123
:ANALysis:XY<x>:MEASure:MODE	Sets the automated measurement mode of the XY display or queries the current setting.	5-123
:ANALysis:XY<x>:MEASure:XYINteg?	Queries all settings related to the integration of the XY display.	5-123
:ANALysis:XY<x>:MEASure:XYINteg: LOOP	Sets the integration mode of the XY display or queries the current setting.	5-123
:ANALysis:XY<x>:MEASure:XYINteg: POLarity	Sets the integration polarity of the XY display or queries the current setting.	5-123
:ANALysis:XY<x>:MEASure:XYINteg: VALue?	Queries the integral value of the XY display.	5-123
:ANALysis:XY<x>:TRANge	Sets the measurement range of the XY display or queries the current setting.	5-123
:ANALysis:XY<x>:WINDow	Sets the measurement source window of the XY display or queries the current setting.	5-123
:ANALysis:XY<x>:XTRace	Sets the X-axis trace of the XY display or queries the current setting.	5-124
:ANALysis:XY<x>:YTRace	Sets the Y-axis trace of the XY display or queries the current setting.	5-124
<b>ASETup Group</b>		
:ASETup:EXECute	Executes auto setup.	5-125
:ASETup:UNDO	Cancels auto setup that has been executed.	5-125
<b>CALibrate Group</b>		
:CALibrate?	Queries all settings related to the calibration.	5-125
:CALibrate:EXECute	Executes calibration.	5-125
:CALibrate:MODE	Turns ON/OFF the auto calibration or queries the current setting.	5-125
<b>CHANnel Group</b>		
:CHANnel<x>?	Queries all settings related to the channel.	5-126
:CHANnel<x>:ASCale[:EXECute]	Executes the auto scaling of the channel.	5-126
:CHANnel<x>:BWIDth	Sets the input filter of the channel or queries the current setting.	5-126
:CHANnel<x>:COUPLing	Sets the input coupling of the channel or queries the current setting.	5-126
:CHANnel<x>:DESKew	Sets the skew correction of the channel or queries the current setting.	5-126
:CHANnel<x>:DISPlay	Turns ON/OFF the display of the channel or queries the current setting.	5-126
:CHANnel<x>:INVert	Turns ON/OFF the inverted display of the channel or queries the current setting.	5-126
:CHANnel<x>:LABel?	Queries all settings related to the waveform label of the channel.	5-126
:CHANnel<x>:LABel[:DEFine]	Sets the waveform label of the channel or queries the current setting.	5-126
:CHANnel<x>:LABel:MODE	Turns ON/OFF the waveform label display of the channel or queries the current setting.	5-126
:CHANnel<x>:OCANcel	Turns ON/OFF the offset cancel of the channel or queries the current setting.	5-127
:CHANnel<x>:OFFSet	Sets the offset voltage of the channel or queries the current setting.	5-127
:CHANnel<x>:POSition	Sets the vertical position of the channel or queries the current setting.	5-127
:CHANnel<x>:PROBe?	Queries all settings related to the probe attenuation of the channel.	5-127
:CHANnel<x>:PROBe[:MODE]	Sets the probe attenuation of the channel or queries the current setting.	5-127
:Chanal<x>:PROBe:AUTO?	Queries the probe attenuation of the channel when set to AUTO.	5-127
:CHANnel<x>:SELEct	Sets the waveform (input/computation) to be assigned to the input channel or queries the current setting.	5-127
:CHANnel<x>:SVALue	Turns ON/OFF the scale display of the channel or queries the current setting.	5-127
:CHANnel<x>:VDIV	Sets the vertical sensitivity (V/div) of the channel or queries the current setting.	5-127
<b>CLEar Group</b>		
:CLEar:ACCumulate	Clears accumulated waveforms.	5-128

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Command	Function	Page
:CLEar[:HISTory]	Clears history waveforms.	5-128
:CLEar:SNAP	Clears snapshot waveforms.	5-128
<b>COMMunicate Group</b>		
:COMMunicate?	Queries all settings related to communications.	5-128
:COMMunicate:HEADer	Sets whether to attach a header to the response data or queries the current setting.	5-128
:COMMunicate:LOCKout	Sets or clears local lockout.	5-128
:COMMunicate:OPSE	Sets the overlap command that is to be used by the *OPC, *OPC?, and *WAI commands or queries the current setting.	5-128
:COMMunicate:OPSR?	Queries the operation pending status register.	5-128
:COMMunicate:OVERlap	Sets the commands that will operate as overlap commands or queries the current setting.	5-129
:COMMunicate:REMOte	Sets remote or local.	5-129
:COMMunicate:STATus?	Queries line-specific status.	5-129
:COMMunicate:VERBose	Sets whether to use abbreviated or unabbreviated form for response data or queries the current setting.	5-129
:COMMunicate:WAIT	Waits for a specified extended event.	5-129
:COMMunicate:WAIT?	Creates the response that is returned when the specified event occurs.	5-129
<b>CURSor Group</b>		
:CURSor?	Queries all settings related to cursor measurements.	5-130
:CURSor:DISPlay	Turns ON/OFF the cursor or queries the current setting.	5-130
:CURSor:HORizontal?	Queries all settings related to the horizontal cursors.	5-130
:CURSor:HORizontal:BASic?	Queries all settings related to basic items of the horizontal cursors.	5-130
:CURSor:HORizontal[:BASic]:ALL	Turns ON/OFF all basic items of the horizontal cursors.	5-130
:CURSor:HORizontal[:BASic]:DV?	Queries all settings related to the $\Delta V$ measurement of the horizontal cursors.	5-130
:CURSor:HORizontal[:BASic]:DV:STATe	Turns ON/OFF the $\Delta V$ measurement of the horizontal cursors or queries the current setting.	5-130
:CURSor:HORizontal[:BASic]:DV:VALue?	Queries the $\Delta V$ value of the horizontal cursors.	5-130
:CURSor:HORizontal[:BASic]:LINKage	Turns ON/OFF the horizontal cursor link or queries the current setting.	5-130
:CURSor:HORizontal[:BASic]:V<x>?	Queries all settings related to the horizontal cursor.	5-131
:CURSor:HORizontal[BASic]:V<x>:JUMP	Jumps the horizontal cursor to the center position of the zoom waveform.	5-131
:CURSor:HORizontal[:BASic]:V<x>:POSITION	Sets the horizontal cursor position or queries the current setting.	5-131
:CURSor:HORizontal[:BASic]:V<x>:STATe	Turns ON/OFF the horizontal cursor or queries the current setting.	5-131
:CURSor:HORizontal[:BASic]:V<x>:VALue?	Queries the voltage value at the horizontal cursor.	5-131
:CURSor:HORizontal:CALCulation?	Queries all settings related to calculation items of the horizontal cursors.	5-131
:CURSor:HORizontal:CALCulation:ALL	Turns ON/OFF all calculation items of the horizontal cursors.	5-131
:CURSor:HORizontal:CALCulation:DEFine<x>	Sets the equation of the calculation item of the horizontal cursor or queries the current setting.	5-131
:CURSor:HORizontal:CALCulation:STATe<x>	Turns ON/OFF the calculation item of the horizontal cursor or queries the current setting.	5-131
:CURSor:HORizontal:CALCulation:VALue<x>?	Queries the measured value of the calculation item of the horizontal cursor.	5-132
:CURSor:HORizontal:TRACe	Sets the source trace of the horizontal cursor or queries the current setting.	5-132
:CURSor:MARKer?	Queries all settings related to the marker cursors.	5-132
:CURSor:MARKer:CALCulation?	Queries all settings related to calculation items of the marker cursors.	5-132
:CURSor:MARKer:CALCulation:ALL	Turns ON/OFF all calculation items of the marker cursors.	5-132
:CURSor:MARKer:CALCulation:DEFine<x>	Sets the equation of the calculation item of the marker cursors or queries the current setting.	5-132
:CURSor:MARKer:CALCulation:STATe<x>	Turns ON/OFF the calculation item of the marker cursors or queries the current setting.	5-132
:CURSor:MARKer:CALCulation:VALue<x>?	Queries the measured value of the calculation item of the marker cursors.	5-132
:CURSor:MARKer:CM<x>?	Queries all settings related to the marker cursor.	5-132
:CURSor:MARKer:CM<x>:ALL	Turns ON/OFF all items of the marker cursor.	5-133
:CURSor:MARKer:CM<x>:DT<x>?	Queries all settings related to the $\Delta T$ measurement of the cursor marker.	5-133

Command	Function	Page
:CURSOR:MARKER:CM<x>:DT<x>:STATE	Turns ON/OFF the $\Delta T$ measurement of the marker cursor or queries the current setting.	5-133
:CURSOR:MARKER:CM<x>:DT<x>:VALUE?	Queries the $\Delta T$ value of the marker cursor.	5-133
:CURSOR:MARKER:CM<x>:DV<x>?	Queries all settings related to the $\Delta V$ measurement of the cursor marker.	5-133
:CURSOR:MARKER:CM<x>:DV<x>:STATE	Turns ON/OFF the $\Delta V$ measurement of the marker cursor or queries the current setting.	5-133
:CURSOR:MARKER:CM<x>:DV<x>:VALUE?	Queries the $\Delta V$ value of the marker cursor.	5-133
:CURSOR:MARKER:CM<x>:JUMP	Jumps the marker cursor to the center position of the zoom waveform.	5-133
:CURSOR:MARKER:CM<x>:POSITION	Sets the marker cursor position or queries the current setting.	5-133
:CURSOR:MARKER:CM<x>:T?	Queries all settings related to the time measurement of the marker cursor.	5-133
:CURSOR:MARKER:CM<x>:T:STATE	Turns ON/OFF the time measurement of the marker cursor or queries the current setting.	5-134
:CURSOR:MARKER:CM<x>:T:VALUE?	Queries the time value at the marker cursor position.	5-134
:CURSOR:MARKER:CM<x>:TRACE	Sets the source trace of the marker cursor or queries the current setting.	5-134
:CURSOR:MARKER:CM<x>:V?	Queries all settings related to the voltage measurement of the marker cursor.	5-134
:CURSOR:MARKER:CM<x>:V:STATE	Turns ON/OFF the voltage measurement of the marker cursor or queries the current setting.	5-134
:CURSOR:MARKER:CM<x>:V:VALUE?	Queries the voltage value at the marker cursor position.	5-134
:CURSOR:MARKER:FORM	Sets the marker cursor form or queries the current setting.	5-134
:CURSOR:SERIAL?	Queries all settings related to the serial cursors.	5-134
:CURSOR:SERIAL:SCURSOR<x>?	Queries all settings related to the serial cursor.	5-134
:CURSOR:SERIAL:SCURSOR<x>:ACTIVE	Sets the active level of the serial cursor or queries the current setting.	5-134
:CURSOR:SERIAL:SCURSOR<x>:BCOUNT	Sets the bit length of the serial cursor or queries the current setting.	5-135
:CURSOR:SERIAL:SCURSOR<x>:BITRATE	Sets the bit rate of the serial cursor or queries the current setting.	5-135
:CURSOR:SERIAL:SCURSOR<x>:BITORDER	Sets the bit order of the serial cursor or queries the current setting.	5-135
:CURSOR:SERIAL:SCURSOR<x>:FORMAT	Sets the display format of the serial cursor or queries the current setting.	5-135
:CURSOR:SERIAL:SCURSOR<x>:HYSTERESIS	Sets the hysteresis of the serial cursor or queries the current setting.	5-135
:CURSOR:SERIAL:SCURSOR<x>:JUMP	Moves the serial cursor to the specified direction.	5-135
:CURSOR:SERIAL:SCURSOR<x>:LEVEL	Sets the threshold level of the serial cursor or queries the current setting.	5-135
:CURSOR:SERIAL:SCURSOR<x>:MODE	Turns ON/OFF the serial cursor or queries the current setting.	5-135
:CURSOR:SERIAL:SCURSOR<x>:POSITION	Sets the serial cursor position or queries the current setting.	5-135
:CURSOR:SERIAL:SCURSOR<x>:TRACE	Sets the trace of the serial cursor or queries the current setting.	5-136
:CURSOR:SERIAL:SCURSOR<x>:TRACK	Jumps the serial cursor onto the zoom waveform.	5-136
:CURSOR:SERIAL:SCURSOR<x>:VALUE?	Queries the measured value of the serial cursor.	5-136
:CURSOR:TYPE	Sets the cursor type or queries the current setting.	5-136
:CURSOR:VERTICAL?	Queries all settings related to the vertical cursors.	5-136
:CURSOR:VERTICAL:BASIC?	Queries all settings related to basic items of the vertical cursors.	5-136
:CURSOR:VERTICAL[:BASIC]:ALL	Turns ON/OFF all basic items of the vertical cursors.	5-136
:CURSOR:VERTICAL[:BASIC]:DT?	Queries all settings related to the $\Delta T$ measurement of the vertical cursors.	5-136
:CURSOR:VERTICAL[:BASIC]:DT:STATE	Turns ON/OFF the $\Delta T$ measurement of the vertical cursors or queries the current setting.	5-136
:CURSOR:VERTICAL[:BASIC]:DT:VALUE?	Queries the $\Delta T$ value of the vertical cursors.	5-136
:CURSOR:VERTICAL[:BASIC]:LINKAGE	Turns ON/OFF the vertical cursor link or queries the current setting.	5-136
:CURSOR:VERTICAL[:BASIC]:PERDt?	Queries all settings related to the $1/\Delta T$ measurement of the vertical cursors.	5-137
:CURSOR:VERTICAL[:BASIC]:PERDt:STATE	Turns ON/OFF the $1/\Delta T$ measurement of the vertical cursors or queries the current setting.	5-137
:CURSOR:VERTICAL[:BASIC]:PERDt:VALUE?	Queries the $1/\Delta T$ value of the vertical cursors.	5-137
:CURSOR:VERTICAL[:BASIC]:T<x>?	Queries all settings related to the vertical cursor.	5-137
:CURSOR:VERTICAL[:BASIC]:T<x>:JUMP	Jumps the vertical cursor to the center position of the zoom waveform.	5-137
:CURSOR:VERTICAL[:BASIC]:T<x>:POSITION	Sets the vertical cursor position or queries the current setting.	5-137
:CURSOR:VERTICAL[:BASIC]:T<x>:STATE	Turns ON/OFF the vertical cursor or queries the current setting.	5-137



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Command	Function	Page
:CURSor:VERTical[:BASic]:T<x>:VALue?	Queries the time value at the vertical cursor.	5-137
:CURSor:VERTical:CALCulation?	Queries all settings related to calculation items of the vertical cursors.	5-137
:CURSor:VERTical:CALCulation:ALL	Turns ON/OFF all calculation items of the vertical cursors.	5-137
:CURSor:VERTical:CALCulation:DEFine<x>	Sets the equation of the calculation item of the vertical cursor or queries the current setting.	5-137
:CURSor:VERTical:CALCulation:STATE<x>	Turns ON/OFF the calculation item of the vertical cursor or queries the current setting.	5-138
:CURSor:VERTical:CALCulation:VALue<x>?	Queries the measured value of the calculation item of the vertical cursor.	5-138
:CURSor:VT?	Queries all settings related to the VT cursor.	5-138
:CURSor:VT:BASic?	Queries all settings related to basic items of the VT cursor.	5-138
:CURSor:VT[:BASic]:ALL	Turns ON/OFF all basic items of the VT cursor.	5-138
:CURSor:VT[:BASic]:GROup<x>?	Queries all settings related to the VT cursor of the logic group.	5-138
:CURSor:VT[:BASic]:GROup<x>:BITorder	Sets the measurement bit order of the logic group of the VT cursor or queries the current setting.	5-138
:CURSor:VT[:BASic]:GROup<x>:FORMat	Sets the display format of the measured value of the logic group of the VT cursor or queries the current setting.	5-139
:CURSor:VT[:BASic]:GROup<x>:STATE	Turns ON/OFF the measured value of the logic group of the VT cursor or queries the current setting.	5-139
:CURSor:VT[:BASic]:GROup<x>:VALue?	Queries the measured value of the logic group of the VT cursor.	5-139
:CURSor:VT[:BASic]:POSITION	Sets the VT cursor position or queries the current setting.	5-139
:CURSor:VT[:BASic]:T?	Queries all settings related to the time value of the VT cursor.	5-139
:CURSor:VT[:BASic]:T:STATE	Turns ON/OFF the time value of the VT cursor or queries the current setting.	5-139
:CURSor:VT[:BASic]:T:VALue?	Queries the time value at the VT cursor.	5-139
:CURSor:VT[:BASic]:V<x>?	Queries all settings related to the voltage value of the VT cursor.	5-139
:CURSor:VT[:BASic]:V<x>:STATE	Turns ON/OFF the voltage value of the VT cursor or queries the current setting.	5-139
:CURSor:VT[:BASic]:V<x>:VALue?	Queries the voltage value at the VT cursor.	5-139
:CURSor:VT:CALCulation?	Queries all settings related to calculation items of the VT cursor.	5-139
:CURSor:VT:CALCulation:ALL	Turns ON/OFF all calculation items of the VT cursor.	5-140
:CURSor:VT:CALCulation:DEFine<x>	Sets the equation of the calculation item of the VT cursor or queries the current setting.	5-140
:CURSor:VT:CALCulation:STATE<x>	Turns ON/OFF the calculation item of the VT cursor or queries the current setting.	5-140
:CURSor:VT:CALCulation:VALue<x>?	Queries the measured value of the calculation item of the VT cursor.	5-140
:CURSor:VT:JUMP	Jumps to the center position of the zoom waveform of the VT cursor.	5-140
<b>DISPlay Group</b>		
:DISPlay?	Queries all settings related to the display.	5-141
:DISPlay:ACCumulate?	Queries all settings related to the accumulated display of waveforms.	5-141
:DISPlay:ACCumulate:GRADE	Sets the accumulate mode or queries the current setting.	5-141
:DISPlay:ACCumulate:MODE	Turns ON/OFF the accumulate mode or queries the current setting.	5-141
:DISPlay:ACCumulate:PERSistence?	Queries all settings related to persistence.	5-141
:DISPlay:ACCumulate:PERSistence:COUNT	Sets the persistence count or queries the current setting.	5-141
:DISPlay:ACCumulate:PERSistence:MODE	Sets the persistence mode or queries the current setting.	5-141
:DISPlay:ACCumulate:PERSistence:TIME	Sets the persistence time or queries the current setting.	5-141
:DISPlay:BLIGHT?	Queries all settings related to the backlight.	5-142
:DISPlay:BLIGHT:AUTOoff	Sets the function that automatically turns the backlight off or queries the current setting.	5-142
:DISPlay:BLIGHT:BRIGHtness	Sets the brightness of the backlight or queries the current setting.	5-142
:DISPlay:BLIGHT:LCD	Turns ON/OFF the backlight or queries the current setting.	5-142
:DISPlay:BLIGHT:TIMEout	Sets the timeout of the backlight or queries the current setting.	5-142
:DISPlay:COLor?	Queries all settings related to the waveform display color.	5-142
:DISPlay:COLor:{CHANnel<x> LOGic LState MATH<x> REFerence<x>}	Sets the waveform color or queries the current setting.	5-142
:DISPlay:FORMat	Sets the display format or queries the current setting.	5-142
:DISPlay:GRATICule	Sets the graticule (grid) or queries the current setting.	5-142
:DISPlay:INTENSity?	Queries all settings related to the intensity of the display item.	5-143

Command	Function	Page
:DISPlay:INTENsity[:WAVEform]	Sets the intensity of the waveform or queries the current setting.	5-143
:DISPlay:INTENsity:{CURSor GRID MARKer ZBOX}	Sets the intensity of the display item or queries the current setting.	5-143
:DISPlay:INTERpolate	Sets the display interpolation format or queries the current setting.	5-143
:DISPlay:MAPPING?	Queries all settings related to the waveform mapping to the split screen.	5-143
:DISPlay:MAPPING[:MODE]	Sets the waveform mapping mode for the split screen or queries the current setting.	5-143
:DISPlay:MAPPING:TRACe<x>	Sets the mapping of the waveform to the split screen or queries the current setting.	5-143
:DISPlay:TRANslucent	Turns ON/OFF the translucent mode or queries the current setting.	5-143
<b>EYEDiagram Group</b>		
:EYEDiagram?	Queries all settings related to the eye diagram.	5-144
:EYEDiagram:DISPlay	Turns ON/OFF the eye diagram display or queries the current setting.	5-144
:EYEDiagram:FLEXray?	Queries all settings related to the FLEXRAY eye diagram.	5-144
:EYEDiagram:FLEXray:CONTInuous?	Queries all settings related to the FLEXRAY eye diagram CONTInuous Statistics.	5-144
:EYEDiagram:FLEXray:CONTInuous:ADJust	Executes automatic adjustment of FLEXRAY eye diagram CONTInuous Statistics.	5-145
:EYEDiagram:FLEXray:CONTInuous:COUNT	Sets the count for FLEXRAY eye diagram CONTInuous Statistics or queries the current setting.	5-145
:EYEDiagram:FLEXray:CYCLe?	Queries all settings related to the FLEXRAY eye diagram Cycle Statistics.	5-145
:EYEDiagram:FLEXray:CYCLe:COUNT	Sets the count for FLEXRAY eye diagram Cycle Statistics or queries the current setting.	5-145
:EYEDiagram:FLEXray:CYCLe:EXECute	Executes FLEXRAY eye diagram Cycle Statistics.	5-145
:EYEDiagram:FLEXray:CYCLe:TRANge	Sets the measurement range for FLEXRAY eye diagram Cycle Statistics or queries the current setting.	5-145
:EYEDiagram:FLEXray:FITem?	Queries all settings related to the FLEXRAY eye diagram parameters.	5-145
:EYEDiagram:FLEXray:FITem:ALL	Turns ON/OFF all FLEXRAY eye diagram parameters.	5-145
:EYEDiagram:FLEXray:FITem:<parameter>?	Queries all settings related to the FLEXRAY eye diagram waveform parameters.	5-145
:EYEDiagram:FLEXray:FITem:<parameter>:STATe	Turns ON/OFF FLEXRAY eye diagram waveform parameters or queries the current setting.	5-146
:EYEDiagram:FLEXray:FITem:<parameter>:VALue?	Queries FLEXRAY eye diagram waveform parameter values.	5-146
:EYEDiagram:FLEXray:FITem:TLEVels?	Queries all settings related to the FLEXRAY eye diagram threshold level.	5-146
:EYEDiagram:FLEXray:FITem:TLEVels:MODE	Sets the unit of the FLEXRAY eye diagram threshold level or queries the current setting.	5-146
:EYEDiagram:FLEXray:FITem:TLEVels:PERCent	Sets the FLEXRAY eye diagram threshold level to a percentage (%) or queries the current setting.	5-146
:EYEDiagram:FLEXray:FITem:TLEVels:UNIT	Sets the FLEXRAY eye diagram threshold level in UNIT or queries the current setting.	5-146
:EYEDiagram:FLEXray[:SETup]?	Queries all settings related to the FLEXRAY eye diagram setup.	5-147
:EYEDiagram:FLEXray[:SETup]:BRATe	Sets the FLEXRAY eye diagram bit rate (data transfer rate) or queries the current setting.	5-147
:EYEDiagram:FLEXray[:SETup]:DMODE	Turns ON/OFF the diagram of the FLEXRAY eye diagram or queries the current setting.	5-147
:EYEDiagram:FLEXray[:SETup]:FTRace	Sets the FLEXRAY eye diagram trace or queries the current setting.	5-147
:EYEDiagram:FLEXray[:SETup]:<parameter>?	Queries all settings related to the diagram of the FLEXRAY eye diagram.	5-147
:EYEDiagram:FLEXray[:SETup]:<parameter>:LRIGHt	Turns ON/OFF the diagram of the FLEXRAY eye diagram or queries the current setting.	5-147
:EYEDiagram:FLEXray[:SETup]:<parameter>:RESet	Resets the diagram of the FLEXRAY eye diagram.	5-147
:EYEDiagram:FLEXray[:SETup]:<parameter>:RPOINT	Sets the reference point of the diagram of the FLEXRAY eye diagram or queries the current setting.	5-148
:EYEDiagram:FLEXray[:SETup]:<parameter>:ULOWER	Sets the upper and lower limits of the diagram of the FLEXRAY eye diagram or queries the current setting.	5-148
:EYEDiagram:FLEXray[:SETup]:<parameter>:WIDTh	Sets the width of the diagram of the FLEXRAY eye diagram or queries the current setting.	5-148
:EYEDiagram:FLEXray[:SETup]:SELEct	Sets the FLEXRAY eye diagram or queries the current setting.	5-148

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Command	Function	Page
:EYEDiagram:FLEXray[:SETup]:TRACe<x>?	Queries all settings related to the FLEXRAY eye diagram trace.	5-148
:EYEDiagram:FLEXray[:SETup]:TRACe<x>;HYSTEResis	Sets the hysteresis of each trace of the FLEXRAY eye diagram or queries the current setting.	5-148
:EYEDiagram:FLEXray[:SETup]:TRACe<x>;LEVel	Sets the level of each trace of the FLEXRAY eye diagram or queries the current setting.	5-149
:EYEDiagram:FLEXray[:SETup]:VTDisPlay	Turns ON/OFF FLEXRAY eye diagram VT waveform display or queries the current setting.	5-149
:EYEDiagram:FLEXray:TMODe	Sets the FLEXRAY eye diagram test mode or queries the current setting.	5-149
:EYEDiagram:MODe	Sets the eye diagram mode or queries the current setting.	5-149
:EYEDiagram:TELeComtest?	Queries all settings related to the telecom test.	5-149
:EYEDiagram:TELeComtest:CATegory	Sets the telecom test type or queries the current setting.	5-149
:EYEDiagram:TELeComtest:DISPlay	Turns ON/OFF the telecom test display or queries the current setting.	5-149
:EYEDiagram:TELeComtest:EYEPattern?	Queries all settings related to the eye pattern.	5-150
:EYEDiagram:TELeComtest:EYEPattern:ALL	Turns ON/OFF all eye pattern parameters.	5-150
:EYEDiagram:TELeComtest:EYEPattern:<parameter>?	Queries all settings related to eye pattern waveform parameters.	5-150
:EYEDiagram:TELeComtest:EYEPattern:<parameter>;STATe	Turns ON/OFF the eye pattern waveform parameters or queries the current setting.	5-150
:EYEDiagram:TELeComtest:EYEPattern:<parameter>;VALue?	Queries eye pattern waveform parameter values.	5-150
:EYEDiagram:TELeComtest:EYEPattern:TLEVelS?	Queries all settings related to eye patter Threshold levels.	5-150
:EYEDiagram:TELeComtest:EYEPattern:TLEVelS:MODe	Sets the unit of the eye pattern Threshold levels or queries the current setting.	5-151
:EYEDiagram:TELeComtest:EYEPattern:TLEVelS:PERCent	Sets the eye pattern threshold level to a percentage (%) or queries the current setting.	5-151
:EYEDiagram:TELeComtest:EYEPattern:TLEVelS:UNIT	Sets the eye pattern Threshold levels to UNIT or queries the current setting.	5-151
:EYEDiagram:TELeComtest:EYEPattern:VDARk	Sets the dark level (zero light level) of the eye pattern or queries the current setting.	5-151
:EYEDiagram:TELeComtest:MASK?	Queries all settings related to the mask test.	5-151
:EYEDiagram:TELeComtest:MASK:ELEMent<x>?	Queries all settings related to each element used in the mask test.	5-152
:EYEDiagram:TELeComtest:MASK:ELEMent<x>;ALL	Turns ON/OFF all items of each element all at once.	5-152
:EYEDiagram:TELeComtest:MASK:ELEMent<x>;<parameter>?	Queries settings related to waveform parameters of each element.	5-152
:EYEDiagram:TELeComtest:MASK:ELEMent<x>;<parameter>;STATe	Turns ON/OFF each of the element waveform parameters or queries the current setting.	5-152
:EYEDiagram:TELeComtest:MASK:ELEMent<x>;<parameter>;VALue?	Queries waveform parameters of each element.	5-152
:EYEDiagram:TELeComtest:MMODe	Turns ON/OFF the mask display or queries the current setting.	5-152
:EYEDiagram:TELeComtest:TRACe	Sets the target trace for the telecom test or queries the current setting.	5-152
:EYEDiagram:TELeComtest:TRANge (Time Range)	Sets the time range of the telecom test or queries the current setting.	5-153
:EYEDiagram:TELeComtest:WINDow	Sets the window to be measured in the telecom test or queries the current setting.	5-153
<b>FILE Group</b>		
:FILE?	Queries all settings related to the specified storage medium or internal memory.	5-154
:FILE:DIRectory?	Queries all settings related to the specified storage medium.	5-154
:FILE[:DIRectory]:CDIRectory	Sets the current directory or queries the current setting.	5-154
:FILE[:DIRectory]:FREE?	Queries the free disk space in bytes on the specified storage medium.	5-154
:FILE[:DIRectory]:MDIRectory	Creates a directory under the specified directory.	5-155
:FILE:INTernal?	Queries all settings related to the internal memory.	5-155
:FILE:INTernal:RECall:DMEMory[:EXECute]	Executes the loading of the accumulated data from the internal memory.	5-155
:FILE:INTernal:RECall:SETup[:EXECute]	Executes the loading of the setup data from the internal memory.	5-155

Command	Function	Page
:FILE:INTernal:STORe?	Queries all settings related to the saving to the internal memory.	5-155
:FILE:INTernal:STORe:BINary?	Queries all settings related to the saving of the binary data to the internal memory.	5-155
:FILE:INTernal:STORe:BINary[:EXECute]	Executes the saving of the binary data to the internal memory.	5-155
:FILE:INTernal:STORe:BINary:TRACe	Sets the trace to be saved in binary data to the internal memory or queries the current setting.	5-155
:FILE:INTernal:STORe:DMEMemory?	Queries all settings related to the saving of the accumulated data to the internal memory.	5-155
:FILE:INTernal:STORe:DMEMemory[:EXECute]	Executes the saving of the accumulated data to the internal memory.	5-156
:FILE:INTernal:STORe:DMEMemory:TRACe	Sets the trace to be saved in accumulated data to the internal memory or queries the current setting.	5-156
:FILE:INTernal:STORe:SETUp?	Queries all settings related to the saving of the setup data to the internal memory.	5-156
:FILE:INTernal:STORe:SETUp:COMMeNt<x>	Sets the comment to the setup data to be saved to the internal memory or queries the current setting.	5-156
:FILE:INTernal:STORe:SETUp:DATE<x>?	Queries the date/time when the setup data was saved to the internal memory.	5-156
:FILE:INTernal:STORe:SETUp[:EXECute]	Executes the saving of the setup data to the internal memory.	5-156
:FILE:INTernal:STORe:SETUp:LOCK<x>	Turns ON/OFF the read-only attribute of the setup data in the internal memory or queries the current setting.	5-156
:FILE:INTernal:UNLoad:DMEMemory[:EXECute]	Clears the loaded accumulated data.	5-156
:FILE:LOAD?	Queries all settings related to the loading of files on the specified storage medium.	5-156
:FILE:LOAD:{BINary ZPOLYgon ZWAVE}?	Queries all settings related to the loading of specific data.	5-156
:FILE:LOAD:{BINary DMEMemory MASK SETUp SYMBOL ZPOLYgon ZWAVE}:ABORt	Aborts the loading of the specific data.	5-157
:FILE:LOAD:{BINary DMEMemory MASK SETUp SYMBOL ZPOLYgon ZWAVE}[:EXECute]	Executes the loading of the specific data.	5-157
:FILE:LOAD:BINary:REFerence	Sets the load destination of the binary data or queries the current setting.	5-157
:FILE:LOAD:{ZPOLYgon ZWAVE}:ZONE	Sets the load destination of the zone data of specific data or queries the current setting.	5-157
:FILE:SAVE?	Queries all settings related to the saving of the data.	5-157
:FILE:SAVE:{AHISTogram ASCIi BINary DMEMemory FFT FLOat SBUS ZWAVE}?	Queries all settings related to the saving of the specific data.	5-157
:FILE:SAVE:{AHISTogram ASCIi BINary DMEMemory FFT FLOat SETUp SBUS WPARAMeter ZWAVE}:ABORt	Aborts the save operation of specific data.	5-157
:FILE:SAVE:{AHISTogram ASCIi BINary DMEMemory FFT FLOat SETUp SBUS WPARAMeter ZWAVE}[:EXECute]	Executes the saving of specific data by specifying a file name.	5-158
:FILE:SAVE:{AHISTogram FFT SBUS}:ANALYsis	Sets the trace of specific data to be saved or queries the current setting.	5-158
:FILE:SAVE:ANAMing	Sets the type of auto naming of file names of the saved data or queries the current setting.	5-158
:FILE:SAVE:{ASCIi BINary FLOat}:COMPRession	Sets the compression method for saving specific data or queries the current setting.	5-158
:FILE:SAVE:{ASCIi BINary FLOat}:HISTory	Sets whether to save the entire data or the selected data of specific data or queries the current setting.	5-158
:FILE:SAVE:{ASCIi BINary FLOat}:LENGth	Sets the size of waveform data to save for each type of data or queries the current setting.	5-158
:FILE:SAVE:ASCIi:RANGe	Sets the ASCII data saving range or queries the current setting.	5-158
:FILE:SAVE:{ASCIi BINary FLOat}:TRACe	Sets the trace of specific data to be saved or queries the current setting.	5-159
:FILE:SAVE:COMMeNt	Sets the comment of data to be saved or queries the current setting.	5-159
:FILE:SAVE:DMEMemory:TRACe	Sets the trace to be saved as accumulated data or queries the current setting.	5-159

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Command	Function	Page
:FILE:SAVE:NAME	Sets the name of the data file to be saved or queries the current setting.	5-159
:FILE:SAVE:ZWAVE:ZONE	Sets the zone of the zone data to be saved or queries the current setting.	5-159
<b>GONogo Group</b>		
:GONogo?	Queries all settings related to the GO/NO-GO determination.	5-160
:GONogo:ABORT	Aborts the GO/NO-GO determination.	5-160
:GONogo:ACTion?	Queries all settings related to the action taken when the determination result is NO-GO and the criteria.	5-160
:GONogo:ACTion:BUZZer	Sets whether to sound a buzzer when the determination result is NO-GO or queries the current setting.	5-160
:GONogo:ACTion:HCOPy	Sets whether to print the screen image on the printer when the determination result is NO-GO or queries the current setting.	5-160
:GONogo:ACTion:MAIL?	Queries all settings related to the mail transmission when the determination is NO-GO.	5-160
:GONogo:ACTion:MAIL:INTerval	Sets the interval at which to send mail when the determination is NO-GO or queries the current setting.	5-160
:GONogo:ACTion:MAIL:MODE	Sets whether to send mail when the determination is NO-GO or queries the current setting.	5-161
:GONogo:ACTion:SAVE	Sets whether to save the waveform data to the storage medium when the determination result is NO-GO or queries the current setting.	5-161
:GONogo:CONDition<x>	Sets the GO/NO-GO determination criteria or queries the current setting.	5-161
:GONogo:COUNT?	Queries the actual number of GO/NO-GO determinations.	5-161
:GONogo:EXECute	Executes the GO/NO-GO determination.	5-161
:GONogo:EYEdiagram?	Queries all settings related to the eye diagram judgment.	5-161
:GONogo:EYEdiagram:SElect<x>?	Queries all settings related to each condition of the eye diagram judgment.	5-161
:GONogo:EYEdiagram:SElect<x>:FLEXray?	Queries all settings related to the FLEXRAY eye diagram judgment.	5-161
:GONogo:EYEdiagram:SElect<x>:FLEXray:<parameter>	Sets the upper and lower limits of the waveform parameters of the FLEXRAY eye diagram judgment or queries the current setting.	5-161
:GONogo:EYEdiagram:SElect<x>:TELEcomtest?	Queries all settings related to the telecom test judgment.	5-162
:GONogo:EYEdiagram:SElect<x>:TELEcomtest:EYEPattern?	Queries all settings related to the eye pattern judgment of each condition.	5-162
:GONogo:EYEdiagram:SElect<x>:TELEcomtest:EYEPattern:<parameter>	Sets the upper and lower limits of the waveform parameters of eye pattern judgment or queries the current setting.	5-162
:GONogo:EYEdiagram:SElect<x>:TELEcomtest:MASK?	Queries all settings related to the mask judgment of each condition.	5-162
:GONogo:EYEdiagram:SElect<x>:TELEcomtest:MASK:ELEMent<x>?	Queries all settings related to each element used in the mask judgment.	5-162
:GONogo:EYEdiagram:SElect<x>:TELEcomtest:MASK:ELEMent<x>:<parameter>	Sets the upper and lower limits of the error rate per number of sample data of each element.	5-162
:GONogo:LOGic	Sets the GO/NO-GO determination logic or queries the current setting.	5-163
:GONogo:MODE	Sets the type of GO/NO-GO determination or queries the current setting.	5-163
:GONogo:NGCount?	Queries the actual number of NO-GOs of the GO/NO-GO determination.	5-163
:GONogo:SCONdition?	Queries all settings related to the determination termination condition.	5-163
:GONogo[:SCONdition]:NGCount	Sets the number of NO-GOs that terminates the GO/NO-GO determination or queries the current setting.	5-163
:GONogo[:SCONdition]:STOPcount	Sets the acquisition count that terminates the GO/NO-GO determination or queries the current setting.	5-163
:GONogo:ZPARAMeter?	Queries all settings related to zone/parameter determination.	5-163
:GONogo:ZPARAMeter:SElect<x>?	Queries all settings related to the condition of the zone/parameter determination.	5-163
:GONogo:ZPARAMeter:SElect<x>:MODE	Sets the mode of the condition or queries the current setting.	5-164
:GONogo:ZPARAMeter:SElect<x>:PARAMeter?	Queries all settings related to the condition parameter.	5-164
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:CATegory	Sets the parameter category or queries the current setting.	5-164
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:FFT<x>?	Queries all settings related to the FFT determination.	5-164
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:FFT<x>:CALCulation<x>	Sets the upper and lower limits of the calculation item of the FFT determination or queries the current setting.	5-164

Command	Function	Page
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:FFT<x>:PEAK?	Queries all settings related to the peak value of the FFT determination.	5-164
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:FFT<x>:PEAK:DFREquency	Sets the upper and lower limits between the peak frequencies of the FFT determination or queries the current setting.	5-165
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:FFT<x>:PEAK:DV	Sets the upper and lower limits between the peak voltages of the FFT determination or queries the current setting.	5-165
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:FFT<x>:PEAK: FREquency<x>	Sets the upper and lower limits of the peak frequency of the FFT determination or queries the current setting.	5-165
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:FFT<x>:PEAK:V<x>	Sets the upper and lower limits of the peak voltage of the FFT determination or queries the current setting.	5-165
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure?	Queries all settings related to the determination using automated measurement of waveform parameters.	5-165
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:BIT<x>?	Queries all settings related to each logic bit of measure determination.	5-166
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:BIT<x>:AREA<x>?	Queries all settings related to each area of measure determination.	5-166
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:BIT<x>:AREA<x>: TYPE?	Queries all settings related to logic waveform parameters of measure determination.	5-166
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:BIT<x>:AREA<x>: TYPE:<Parameter>	Sets the upper and lower limits of the logic waveform of measure determination or queries the current setting.	5-166
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:CALCulation<x>	Sets the upper and lower limits of the calculation item of the measure determination or queries the current setting.	5-166
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray?	Queries all settings related to the FLEXRAY of the measure determination.	5-167
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray:BUS?	Queries all settings related to the FLEXRAY bus of the measure determination.	5-167
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray:BUS: TYPE?	Queries all settings related to the waveform parameters of the FLEXRAY bus of the measure determination.	5-167
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray:BUS: TYPE:<parameter>	Sets the upper and lower limits of the FLEXRAY bus waveform parameters of the measure determination or queries the current setting.	5-167
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray: RECeiver?	Queries all settings related to the FLEXRAY receiver of the measure determination.	5-167
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray: RECeiver:RXD?	Queries all settings related to the FLEXRAY receiver data of the measure determination.	5-167
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray: RECeiver:RXD:TYPE?	Queries all settings related to the FLEXRAY receiver waveform data parameters of the measure determination.	5-168
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray: RECeiver:RXD:TYPE:<parameter>	Sets the upper and lower limits of the FLEXRAY receiver waveform data parameters of the measure determination or queries the current setting.	5-168
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray: RECeiver:RXEN?	Queries all settings related to the FLEXRAY receiver enable data of the measure determination.	5-168
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray: RECeiver:RXEN:TYPE?	Queries all settings related to the FLEXRAY receiver waveform enable data parameters of the measure determination.	5-168
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray: RECeiver:RXEN:TYPE:<parameter>	Sets the upper and lower limits of the FLEXRAY receiver waveform enable data parameters of the measure determination or queries the current setting.	5-169
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray: TRANsmitter?	Queries all settings related to the FLEXRAY transmitter of the measure determination.	5-169
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray: TRANsmitter:TXD?	Queries all settings related to the FLEXRAY transmitter data of the measure determination.	5-169
:GONogo:ZPARAMeter:SElect<x>: PARAmeter:MEASure:FLEXray: TRANsmitter:TXD:TYPE?	Queries all settings related to the FLEXRAY transmitter waveform data parameters of the measure determination.	5-169

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:GONogo:ZPARAMeter:SElect<x>: PARAMeter:MEASure:FLEXray: TRANSMitter:TXD:TYPE:<parameter>	Sets the upper and lower limits of the FLEXRAY transmitter waveform data parameters of the measure determination or queries the current setting.	5-169
:GONogo:ZPARAMeter:SElect<x>: PARAMeter:MEASure:FLEXray: TRANSMitter:TXEN?	Queries all settings related to the FLEXRAY transmitter enable data of the measure determination.	5-170
:GONogo:ZPARAMeter:SElect<x>: PARAMeter:MEASure:FLEXray: TRANSMitter:TXEN:TYPE?	Queries all settings related to the FLEXRAY transmitter waveform enable data parameters of the measure determination.	5-170
:GONogo:ZPARAMeter:SElect<x>: PARAMeter:MEASure:FLEXray: TRANSMitter:TXEN:TYPE:<parameter>	Sets the upper and lower limits of the FLEXRAY transmitter waveform enable data parameters of the measure determination or queries the current setting.	5-170
:GONogo:ZPARAMeter:SElect<x>: PARAMeter:MEASure:STATistics	Sets the statistical value of the measure determination or queries the current setting.	5-170
:GONogo:ZPARAMeter:SElect<x>: PARAMeter:MEASure:TRACe<x>?	Queries all settings related to the trace of the measure determination.	5-171
:GONogo:ZPARAMeter:SElect<x>: PARAMeter:MEASure:TRACe<x>: AREA<x>?	Queries all settings related to the area of the measure determination.	5-171
:GONogo:ZPARAMeter:SElect<x>: PARAMeter:MEASure:TRACe<x>: AREA<x>:TYPE?	Queries all settings related to the waveform parameters of the measure determination.	5-171
:GONogo:ZPARAMeter:SElect<x>: PARAMeter:MEASure:TRACe<x>: AREA<x>:TYPE:<parameter>	Sets the upper and lower limits of the waveform parameter of the measure determination or queries the current setting.	5-171
:GONogo:ZPARAMeter:SElect<x>: PARAMeter:XY<x>?	Queries all settings related to the XY determination.	5-171
:GONogo:ZPARAMeter:SElect<x>: PARAMeter:XY<x>:XYINtegr	Sets the upper and lower limits integral value of the XY determination or queries the current setting.	5-172
:GONogo:ZPARAMeter:SElect<x>: RECTangle?	Queries all settings related to the rectangle determination.	5-172
:GONogo:ZPARAMeter:SElect<x>: RECTangle:HORizontal	Sets the horizontal position of the rectangle used in the rectangle determination or queries the current setting.	5-172
:GONogo:ZPARAMeter:SElect<x>: RECTangle:VERTical	Sets the vertical position of the rectangle used in the rectangle determination or queries the current setting.	5-172
:GONogo:ZPARAMeter:SElect<x>: TRACe	Sets the source trace of the zone/parameter determination or queries the current setting.	5-172
:GONogo:ZPARAMeter:SElect<x>: WAVE?	Queries all settings related to the wave determination.	5-172
:GONogo:ZPARAMeter:SElect<x>: WAVE:EDIT<x>:EXIT	Exits the zone edit menu of the wave determination.	5-172
:GONogo:ZPARAMeter:SElect<x>: WAVE:EDIT<x>:PART	Sets the editing of the portion of the zone of the wave determination.	5-173
:GONogo:ZPARAMeter:SElect<x>: WAVE:EDIT<x>:WHOLE	Sets the editing of the entire zone of the waveform zone.	5-173
:GONogo:ZPARAMeter:SElect<x>: WAVE:TRANge	Sets the determination range of the zone determination or queries the current setting.	5-173
:GONogo:ZPARAMeter:SElect<x>: WINDow	Sets the source window of the zone determination or queries the current setting.	5-173
<b>Hcopy Group</b>		
:HCOpy?	Queries all settings related to the output of screen data.	5-174
:HCOpy:ABORt	Aborts data output and paper feeding.	5-174
:HCOpy:DIRection	Sets the data output destination or queries the current setting.	5-174
:HCOpy:EXECute	Executes the data output.	5-174
:HCOpy:EXTPrinter?	Queries all settings related to the external printer output.	5-174
:HCOpy:EXTPrinter:TONE	Sets the half tone of the external printer output or queries the current setting.	5-174
:HCOpy:EXTPrinter:TYPE	Sets the type of output commands to send to the external printer or queries the current setting.	5-174
:HCOpy:FILE?	Queries all settings related to file output.	5-174
:HCOpy:FILE:FORMat	Sets the file output image format or queries the current setting.	5-174
:HCOpy:FILE:SAVE?	Queries all settings related to the saving of file output.	5-175
:HCOpy:FILE:SAVE:ANAMing	Sets the type of auto naming of save destination file names or queries the current setting.	5-175
:HCOpy:FILE:SAVE:CDIRectory	Sets the save destination directory name or queries the current setting.	5-175

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:HCOpy:FILE:SAVE:NAME	Sets the save destination file name or queries the current setting.	5-175
:HCOpy:NETPrint?	Queries all settings related to network printer output or queries the current setting.	5-175
:HCOpy:NETPrint:TONE	Sets the half tone for the network printer or queries the current setting.	5-175
:HCOpy:NETPrint:TYPE	Sets the output command type for the network printer or queries the current setting.	5-175
:HCOpy:PRINTer?	Queries all settings related to the built-in printer output.	5-175
:HCOpy:PRINTer:HRMode	Turns ON/OFF the harmonic analysis mode of the built-in printer output or queries the current setting.	5-175
<b>HISTory Group</b>		
:HISTory?	Queries all settings related to the history function.	5-176
:HISTory:CURRent?	Queries all settings related to the history function of the current waveform (CH1 to 4, M1 to 8).	5-176
:HISTory[:CURRent]:DISPlay	Sets the start number and end number of the display record of the history waveform or queries the current setting.	5-176
:HISTory[:CURRent]:DMODE	Sets the display mode of the history waveform or queries the current setting.	5-177
:HISTory[:CURRent]:MODE	Sets the highlight display mode of the history waveform or queries the current setting.	5-177
:HISTory[:CURRent]:RECORD	Sets the target record of the history waveform or queries the current setting.	5-177
:HISTory[:CURRent]:RECORD?MINIMUM	Queries the minimum record number of the history waveform.	5-177
:HISTory[:CURRent]:REPLay?	Queries all settings related to the replay function of the history function.	5-177
:HISTory[:CURRent]:REPLay:JUMP	Jumps the history waveform to the specified record number.	5-177
:HISTory[:CURRent]:REPLay:SPEEd	Sets the replay speed of the history waveform or queries the current setting.	5-177
:HISTory[:CURRENT]:REPLay:START	Starts the replay of the history waveform.	5-177
:HISTory[:CURRENT]:REPLay:STOP	Stops the replay of the history waveform.	5-177
:HISTory[:CURRent]:SEARCh?	Queries all settings related to the history search function.	5-178
:HISTory[:CURRent][:SEARCh]:ABORt	Aborts the history search.	5-178
:HISTory[:CURRent][:SEARCh]:EXECute	Executes the history search.	5-178
:HISTory[:CURRent][:SEARCh]:LOGic	Sets the history search logic or queries the current setting.	5-178
:HISTory[:CURRent][:SEARCh]:RESEt	Resets the search conditions of the history search.	5-178
:HISTory[:CURRent][:SEARCh]:SELEct<x>?	Queries all settings related to the history search condition.	5-178
:HISTory[:CURRent][:SEARCh]:SELEct<x>:CONDition	Sets determination criteria of the history search condition or queries the current setting.	5-178
:HISTory[:CURRent][:SEARCh]:SELEct<x>:MODE	Sets the mode of the history search condition or queries the current setting.	5-179
:HISTory[:CURRent][:SEARCh]:SELEct<x>:PARAmeter?	Queries all settings related to the parameter of the history search condition.	5-179
:HISTory[:CURRent][:SEARCh]:SELEct<x>:PARAmeter:CATEgory	Sets the parameter category or queries the current setting.	5-179
:HISTory[:CURRent][:SEARCh]:SELEct<x>:PARAmeter:FFT<x>?	Queries all settings related to the FFT search.	5-179
:HISTory[:CURRent][:SEARCh]:SELEct<x>:PARAmeter:FFT<x>:CALCulation<x>	Sets the upper and lower limits of the calculation item of the FFT search or queries the current setting.	5-179
:HISTory[:CURRent][:SEARCh]:SELEct<x>:PARAmeter:FFT<x>:PEAK?	Queries all settings related to the peak value of the FFT search.	5-179
:HISTory[:CURRent][:SEARCh]:SELEct<x>:PARAmeter:FFT<x>:PEAK:DFREquency	Sets the upper and lower limits between the peak frequencies of the FFT search or queries the current setting.	5-180
:HISTory[:CURRent][:SEARCh]:SELEct<x>:PARAmeter:FFT<x>:PEAK:DV	Sets the upper and lower limits between the peak voltages of the FFT search or queries the current setting.	5-180
:HISTory[:CURRent][:SEARCh]:SELEct<x>:PARAmeter:FFT<x>:PEAK:FREquency<x>	Sets the upper and lower limits of the peak frequency of the FFT search or queries the current setting.	5-180
:HISTory[:CURRent][:SEARCh]:SELEct<x>:PARAmeter:FFT<x>:PEAK:V<x>	Sets the upper and lower limits of the peak voltage of the FFT search or queries the current setting.	5-180



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Command	Function	Page
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure?	Queries all settings related to the measure search.	5-181
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: BIT<x>?	Queries all settings related to each logic bit of measure search.	5-181
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: BIT<x>:AREA<x>?	Queries all settings related to each area of measure search.	5-181
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: BIT<x>:AREA<x>:TYPE?	Queries all settings related to logic waveform parameters of measure search.	5-181
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: BIT<x>:AREA<x>:TYPE:<Parameter>	Sets the upper and lower limits of the logic waveform of measure search or queries the current setting.	5-181
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: CALCulation<x>	Sets the upper and lower limits of the calculation item of the measure search or queries the current setting.	5-182
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray?	Queries all settings related to the FLEXRAY of the measure search.	5-182
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:BUS?	Queries all settings related to the FLEXRAY bus of the measure search.	5-182
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:BUS:TYPE?	Queries all settings related to the waveform parameters of the FLEXRAY bus of the measure search.	5-182
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:BUS:TYPE:<parameter>	Sets the upper and lower limits waveform parameters of the FLEXRAY bus of the measure search or queries the current setting.	5-182
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:RECeiver?	Queries all settings related to the FLEXRAY receiver of the measure search.	5-182
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:RECeiver:RXD?	Queries all settings related to the FLEXRAY receiver data of the measure search.	5-183
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:RECeiver:RXD:TYPE?	Queries all settings related to the FLEXRAY receiver waveform data parameters of the measure search.	5-183
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:RECeiver:RXD: TYPE:<parameter>	Sets the upper and lower limits of the FLEXRAY receiver waveform data parameters of the measure search or queries the current setting.	5-183
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:RECeiver:RXEN?	Queries all settings related to the FLEXRAY receiver enable data of the measure search.	5-183
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:RECeiver:RXEN:TYPE?	Queries all settings related to the FLEXRAY receiver waveform enable data parameters of the measure search.	5-184
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:RECeiver:RXEN: TYPE:<parameter>	Sets the upper and lower limits of the FLEXRAY receiver waveform enable data parameters of the measure search or queries the current setting.	5-184
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:TRANSmmitter?	Queries all settings related to the FLEXRAY transmitter of the measure search.	5-184
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:TRANSmmitter:TXD?	Queries all settings related to the FLEXRAY transmitter data of the measure search.	5-184
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:TRANSmmitter:TXD:TYPE?	Queries all settings related to the FLEXRAY transmitter waveform data parameters of the measure search.	5-184
:HISTory[:CURRent][:SEARCh]: SELEct<x>:PARAmeter:MEASure: FLEXray:TRANSmmitter:TXD: TYPE:<parameter>	Sets the upper and lower limits of the FLEXRAY transmitter waveform data parameters of the measure search or queries the current setting.	5-185

Command	Function	Page
:HISTory[:CURRENT][:SEARCH]: SElect<x>:PARAmeter:MEASure: FLEXray:TRANSMitter:TXEN?	Queries all settings related to the FLEXRAY transmitter enable data of the measure search.	5-185
:HISTory[:CURRENT][:SEARCH]: SElect<x>:PARAmeter:MEASure: FLEXray:TRANSMitter:TXEN:TYPE?	Queries all settings related to the FLEXRAY transmitter waveform enable data parameters of the measure search.	5-185
:HISTory[:CURRENT][:SEARCH]: SElect<x>:PARAmeter:MEASure: FLEXray:TRANSMitter:TXEN: TYPE:<parameter>	Sets the upper and lower limits of the FLEXRAY transmitter waveform enable data parameters of the measure search or queries the current setting.	5-185
:HISTory[:CURRENT][:SEARCH]: SElect<x>:PARAmeter:MEASure: TRACe<x>?	Queries all settings related to the trace of the measure search.	5-186
:HISTory[:CURRENT][:SEARCH]: SElect<x>:PARAmeter:MEASure: TRACe<x>:AREA<x>?	Queries all settings related to the area of the measure search.	5-186
:HISTory[:CURRENT][:SEARCH]: SElect<x>:PARAmeter:MEASure: TRACe<x>:AREA<x>:TYPE?	Queries all settings related to the waveform parameters of the measure search.	5-186
:HISTory[:CURRENT][:SEARCH]: SElect<x>:PARAmeter:MEASure: TRACe<x>:AREA<x>:TYPE:<Parameter>	Sets the upper and lower limits of the waveform parameter of the measure search or queries the current setting.	5-186
:HISTory[:CURRENT][:SEARCH]: SElect<x>:PARAmeter:XY<x>?	Queries all settings related to the XY search.	5-187
:HISTory[:CURRENT][:SEARCH]: SElect<x>:PARAmeter:XY<x>:XYINtegral	Sets the upper and lower limits integral value of the XY search or queries the current setting.	5-187
:HISTory[:CURRENT][:SEARCH]: SElect<x>:RECTangle?	Queries all settings related to the rectangle search.	5-187
:HISTory[:CURRENT][:SEARCH]: SElect<x>:RECTangle:HORizontal	Sets the horizontal position of the rectangle used in the rectangle search or queries the current setting.	5-187
:HISTory[:CURRENT][:SEARCH]: SElect<x>:RECTangle:VERTical	Sets the vertical position of the rectangle used in the rectangle search or queries the current setting.	5-187
:HISTory[:CURRENT][:SEARCH]: SElect<x>:TRACe	Sets the source trace of the history search or queries the current setting.	5-187
:HISTory[:CURRENT][:SEARCH]: SElect<x>:WAVE?	Queries all settings related to the wave search.	5-188
:HISTory[:CURRENT][:SEARCH]: SElect<x>:WAVE:EDIT<x>:EXIT	Exits the zone edit menu of the wave search.	5-188
:HISTory[:CURRENT][:SEARCH]: SElect<x>:WAVE:EDIT<x>:PART	Sets the editing of the portion of the zone of the wave search.	5-188
:HISTory[:CURRENT][:SEARCH]: SElect<x>:WAVE:EDIT<x>:WHOLE	Sets the editing of the entire zone of the wave search.	5-188
:HISTory[:CURRENT][:SEARCH]: SElect<x>:WAVE:TRANge	Sets the range over which to perform the wave search or queries the current setting.	5-188
:HISTory[:CURRENT][:SEARCH]: SElect<x>:WINDow	Sets the source window of the history search or queries the current setting.	5-188
:HISTory[:CURRENT]:TIME?	Queries the time of the source record number of the history waveform.	5-189
:HISTory:REFerence<x>?	Queries all settings related to the history function of the reference.	5-189
:HISTory:REFerence<x>:DMODE	Sets the display mode of the history waveform of the reference or queries the current setting.	5-189
:HISTory:REFerence<x>:MODE	Sets the highlight display mode of the history waveform of the reference or queries the current setting.	5-189
:HISTory:REFerence<x>:RECOrd	Sets the source record of the history waveform of the reference or queries the current setting.	5-189
:HISTory:REFerence<x>:RECOrd? MINimum	Queries the minimum record number of the history waveform of the reference.	5-189
:HISTory:REFerence<x>:REPLay?	Queries all settings related to the replay function of the history function of the reference.	5-189
:HISTory:REFerence<x>:REPLay:JUMP	Jumps to the specified record number of the history waveform of the reference.	5-189
:HISTory:REFerence<x>:REPLay: SPEed	Sets the replay speed of the history waveform of the reference or queries the current setting.	5-189

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Command	Function	Page
:HISTory:REfERENCE<x>:REPLay:START	Starts the replay of the history waveform of the reference.	5-189
:HISTory:REfERENCE<x>:REPLay:STOP	Stops the replay of the history waveform of the reference.	5-189
:HISTory:REfERENCE<x>:TIME?	Queries the time of the source record number of the reference waveform.	5-190
<b>IMAGE Group</b>		
:IMAGe?	Queries all settings related to the output of screen image data.	5-191
:IMAGe:FORMat	Sets the output format of the screen image data or queries the current setting.	5-191
:IMAGe:SEND?	Queries the screen image data.	5-191
:IMAGe:TONE	Sets the tone of the screen image data or queries the current setting.	5-191
<b>INITialize Group</b>		
:INITialize:EXECute	Executes the initialization.	5-191
:INITialize:UNDO	Cancel the initialization that has been executed.	5-191
<b>LOGic Group</b>		
:LOGic?	Queries all settings related to the logic.	5-192
:LOGic:AWINdow?	Queries all settings related to analog waveform display.	5-192
:LOGic:AWINdow[:DISPlay]	Turns ON/OFF the analog waveform display or queries the current setting.	5-192
:LOGic:AWINdow:RATio	Sets the analog waveform display ratio or queries the current setting.	5-192
:LOGic:DESKew	Sets the skew correction of the logic signal or queries the current setting.	5-192
:LOGic:GROup<x>?	Queries all settings related to the logic group.	5-192
:LOGic:GROup<x>:BUNDle?	Queries all settings related to the bundle of the logic group.	5-192
:LOGic:GROup<x>:BUNDle:FORMat	Sets the display format (bus display) of the bundled value of the logic group or queries the current setting.	5-193
:LOGic:GROup<x>:BUNDle:MODE	Sets the bundle mode of the logic group or queries the current setting.	5-193
:LOGic:GROup<x>:BUNDle:SYMBol	Sets the symbol item of the bundle value of each logic group.	5-193
:LOGic:GROup<x>:DISPlay	Turns ON/OFF the display of the logic group or queries the current setting.	5-193
:LOGic:GROup<x>:MAPPing	Sets the bit mapping of the logic group or queries the current setting.	5-193
:LOGic:GROup<x>:ORDer	Sets the displayed order of the logic group or queries the current setting.	5-193
:LOGic:GROup<x>:STATe	Turns ON/OFF the state display of the logic group or queries the current setting.	5-193
:LOGic:LAbel?	Queries all settings related to the label of the logic signal.	5-193
:LOGic:LAbel:BNAMe?	Queries all settings related to the bit name of the logic signal.	5-193
:LOGic:LAbel:BNAMe:{A<x> B<x> C<x> D<x>}	Sets the bit name of the logic signal or queries the current setting.	5-194
:LOGic:LAbel:LNAME?	Queries all settings related to the group name of the logic signal.	5-194
:LOGic:LAbel:LNAME:GROup<x>	Sets the group name of the logic signal or queries the current setting.	5-194
:LOGic:LAbel:MODE	Turns ON/OFF the logic signal label or queries the current setting.	5-194
:LOGic:MODE	Turns ON/OFF the logic signal or queries the current setting.	5-194
:LOGic:POSition	Sets the vertical position of the logic signal or queries the current setting.	5-194
:LOGic:SClock?	Queries all settings related to the state clock of the logic signal.	5-194
:LOGic:SClock:POLarity	Sets the state clock polarity of the logic signal or queries the current setting.	5-194
:LOGic:SClock:SOURce	Sets the state clock source of the logic signal or queries the current setting.	5-194
:LOGic:SIZE	Sets the display size of the logic signal or queries the current setting.	5-194
:LOGic:THReshold?	Queries all settings related to the threshold level of the logic signal.	5-195
:LOGic:THReshold:{PODA PODB PODC PODD}?	Queries all settings related to the threshold level of the specified pod (port).	5-195
:LOGic:THReshold:{PODA PODB PODC PODD}:TYPE	Sets the type of threshold level of the specified pod (port) or queries the current setting.	5-195
:LOGic:THReshold:{PODA PODB PODC PODD}:USERlevel	Sets the threshold level of the specified pod (port) or queries the current setting.	5-195
<b>MATH Group</b>		
:MATH<x>?	Queries all settings related to the computation.	5-196
:MATH<x>:DA?	Queries all settings related to the D/A conversion.	5-196
:MATH<x>:DA:ARANGing	Executes the auto range of the D/A conversion.	5-196
:MATH<x>:DA:BFORmat	Sets the binary format of DA conversion or queries the current setting.	5-196
:MATH<x>:DA:HISTory:ABORt	Aborts the history computation of the D/A conversion.	5-196
:MATH<x>:DA:HISTory:EXECute	Executes the history computation of the D/A conversion.	5-196
:MATH<x>:DA:RESCaling?	Queries all settings related to the rescaling of the D/A conversion.	5-196
:MATH<x>:DA:RESCaling:AVAlue	Sets rescaling coefficient A of the D/A conversion or queries the current setting.	5-197
:MATH<x>:DA:RESCaling:BVALue	Sets rescaling offset B of the D/A conversion or queries the current setting.	5-197
:MATH<x>:DISPlay	Turns ON/OFF the computed waveform or queries the current setting.	5-197

Command	Function	Page
:MATH<x>:ECOUNT?	Queries all settings related to the edge count computation.	5-197
:MATH<x>:ECOUNT:HYS TERESIS	Sets the hysteresis of the edge detection level of the edge count computation or queries the current setting.	5-197
:MATH<x>:ECOUNT:POLARITY	Sets the edge detection polarity of the edge count computation or queries the current setting.	5-197
:MATH<x>:FILTER?	Queries all settings related to filters.	5-197
:MATH<x>:FILTER:DELAY?	Queries all settings related to the delay computation.	5-197
:MATH<x>:FILTER:DELAY:TIME	Sets the delay value of the delay computation or queries the current setting.	5-197
:MATH<x>:FILTER:IIR?	Queries all settings related to the IIR filter computation.	5-197
:MATH<x>:FILTER:IIR:FORDER	Sets the filter order of the IIR filter computation or queries the current setting.	5-198
:MATH<x>:FILTER:IIR:HIPASS?	Queries all settings related to the IIR high pass filter computation.	5-198
:MATH<x>:FILTER:IIR:HIPASS:COFF	Sets the cutoff frequency of the IIR high pass filter computation or queries the current setting.	5-198
:MATH<x>:FILTER:IIR:LOWPASS?	Queries all settings related to the IIR low pass filter computation.	5-198
:MATH<x>:FILTER:IIR:LOWPASS:COFF	Sets the cutoff frequency of the IIR low pass filter computation or queries the current setting.	5-198
:MATH<x>:FILTER:MAVG?	Queries all settings related to the moving average computation.	5-198
:MATH<x>:FILTER:MAVG:WEIGHT	Sets the weight of the moving average computation or queries the current setting.	5-198
:MATH<x>:FILTER:RESCALING?	Queries all settings related to the rescaling of the filter.	5-198
:MATH<x>:FILTER:RESCALING:AVALUE	Sets rescaling coefficient A of the filter or queries the current setting.	5-198
:MATH<x>:FILTER:RESCALING:BVALUE	Sets rescaling offset B of the filter or queries the current setting.	5-198
:MATH<x>:FILTER:TYPE	Sets the filter type or queries the current setting.	5-199
:MATH<x>:INTEGRAL?	Queries all settings related to the integral computation.	5-199
:MATH<x>:INTEGRAL:PSCALING?	Queries all settings related to the pre-scaling of the integral computation.	5-199
:MATH<x>:INTEGRAL:PSCALING:AVALUE	Sets pre-scaling coefficient A of the integral computation or queries the current setting.	5-199
:MATH<x>:INTEGRAL:PSCALING:BVALUE	Sets pre-scaling offset B of the integral computation or queries the current setting.	5-199
:MATH<x>:INTEGRAL:RESCALING?	Queries all settings related to the rescaling of the integral computation.	5-199
:MATH<x>:INTEGRAL:RESCALING:AVALUE	Sets rescaling coefficient A of the integral computation or queries the current setting.	5-199
:MATH<x>:INTEGRAL:RESCALING:BVALUE	Sets rescaling offset B of the integral computation or queries the current setting.	5-199
:MATH<x>:INVERT	Turns ON/OFF the inverted display of the computed waveform or queries the current setting.	5-199
:MATH<x>:IPOINT?	Queries all settings related to the computation reference point.	5-199
:MATH<x>:IPOINT:JUMP	Moves the computation reference point to the specified position.	5-200
:MATH<x>:IPOINT:POSITION	Sets the computation reference point or queries the current setting.	5-200
:MATH<x>:LABEL?	Queries all settings related to the label of the computed waveform.	5-200
:MATH<x>:LABEL[:DEFINE]	Sets the label of the computed waveform or queries the current setting.	5-200
:MATH<x>:LABEL:MODE	Turns ON/OFF the label display of the computed waveform or queries the current setting.	5-200
:MATH<x>:MINUS?	Queries all settings related to the subtraction.	5-200
:MATH<x>:MINUS:PSCALING<x>?	Queries all settings related to the pre-scaling of the subtraction.	5-200
:MATH<x>:MINUS:PSCALING<x>:AVALUE	Sets pre-scaling coefficient A of the subtraction or queries the current setting.	5-200
:MATH<x>:MINUS:PSCALING<x>:BVALUE	Sets pre-scaling offset B of the subtraction or queries the current setting.	5-200
:MATH<x>:MINUS:RESCALING?	Queries all settings related to the rescaling of the subtraction.	5-201
:MATH<x>:MINUS:RESCALING:AVALUE	Sets rescaling coefficient A of the subtraction or queries the current setting.	5-201
:MATH<x>:MINUS:RESCALING:BVALUE	Sets rescaling offset B of the subtraction or queries the current setting.	5-201
:MATH<x>:MULTIPLE?	Queries all settings related to the multiplication.	5-201
:MATH<x>:MULTIPLE:PSCALING<x>?	Queries all settings related to the pre-scaling of the multiplication.	5-201
:MATH<x>:MULTIPLE:PSCALING<x>:AVALUE	Sets pre-scaling coefficient A of the multiplication or queries the current setting.	5-201
:MATH<x>:MULTIPLE:PSCALING<x>:BVALUE	Sets pre-scaling offset B of the multiplication or queries the current setting.	5-201
:MATH<x>:MULTIPLE:RESCALING?	Queries all settings related to the rescaling of the multiplication.	5-201
:MATH<x>:MULTIPLE:RESCALING:AVALUE	Sets rescaling coefficient A of the multiplication or queries the current setting.	5-201
:MATH<x>:MULTIPLE:RESCALING:BVALUE	Sets rescaling offset B of the multiplication or queries the current setting.	5-202

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:MATH<x>:OPERation	Sets the operator or queries the current setting.	5-202
:MATH<x>:PLUS?	Queries all settings related to the addition.	5-202
:MATH<x>:PLUS:PSCaling<x>?	Queries all settings related to the pre-scaling of the addition.	5-202
:MATH<x>:PLUS:PSCaling<x>:AVALue	Sets pre-scaling coefficient A of the addition or queries the current setting.	5-202
:MATH<x>:PLUS:PSCaling<x>:BVALue	Sets pre-scaling offset B of the addition or queries the current setting.	5-202
:MATH<x>:PLUS:RESCaling?	Queries all settings related to the rescaling of the addition.	5-202
:MATH<x>:PLUS:RESCaling:AVALue	Sets rescaling coefficient A of the addition or queries the current setting.	5-202
:MATH<x>:PLUS:RESCaling:BVALue	Sets rescaling offset B of the addition or queries the current setting.	5-203
:MATH<x>:POSition	Sets the vertical position of the computed waveform or queries the current setting.	5-203
:MATH<x>:SBIT?	Queries all settings related to the stuff bit computation.	5-203
:MATH<x>:SBIT:BRATe	Sets the bit rate (data transfer rate) of the stuff bit computation or queries the current setting.	5-203
:MATH<x>:SBIT:HISTory:ABORT	Cancel history computation for stuff bit computation.	5-203
:MATH<x>:SBIT:HISTory:EXECute	Executes history computation for stuff bit computation.	5-203
:MATH<x>:SBIT:HYSteresis	Sets the hysteresis of the stuff bit computation or queries the current setting.	5-203
:MATH<x>:SBIT:LEVel	Sets the threshold level of the stuff bit computation or queries the current setting.	5-203
:MATH<x>:SBIT:RECCessive	Sets the recessive level (bus level) of the stuff bit computation or queries the current setting.	5-203
:MATH<x>:SBIT:SPOint	Sets the sample point of the stuff bit computation or queries the current setting.	5-204
:MATH<x>:SCALE?	Queries all settings related to scaling.	5-204
:MATH<x>:SCALE:CENTer	Sets the offset of the computed waveform or queries the current setting.	5-204
:MATH<x>:SCALE:MODE	Sets the scaling mode or queries the current setting.	5-204
:MATH<x>:SCALE:SENSitivity	Sets the vertical sensitivity of the computed waveform or queries the current setting.	5-204
:MATH<x>:SElect	Sets the display option or queries the current setting.	5-204
:MATH<x>:SVALue	Turns ON/OFF the scale value display or queries the current setting.	5-204
:MATH<x>:THReshold<x>	Sets the edge detection level of the count computation or queries the current setting.	5-204
:MATH<x>:UNIT?	Queries all settings related to the computation unit.	5-204
:MATH<x>:UNIT[:DEFine]	Sets the computation unit or queries the current setting.	5-204
:MATH<x>:UNIT:MODE	Sets the automatic/manual addition of the computation unit or queries the current setting.	5-205
:MATH<x>:USERdefine?	Queries all settings related to user-defined math or queries the current setting.	5-205
:MATH<x>:USERdefine:ARANGing	Executes auto ranging for user-defined math.	5-205
:MATH<x>:USERdefine:CONStant<x>	Sets a user-defined math constant or queries the current setting.	5-205
:MATH<x>:USERdefine:DEFine	Sets a user-defined math equation or queries the current setting.	5-205
:MATH<x>:USERdefine:HISTory:ABORT	Cancel history computation for user-defined math.	5-205
:MATH<x>:USERdefine:HISTory:EXECute	Executes history computation for user-defined math.	5-205
<b>MEASure Group</b>		
:MEASure?	Queries all settings related to the automated measurement of waveform parameters.	5-206
:MEASure:BIT<x>?	Queries all settings related to each logic bit.	5-206
:MEASure:BIT<x>:AREA<x>?	Queries all settings related to each area.	5-207
:MEASure:BIT<x>:AREA<x>:ALL	Turns ON/OFF all logic waveform parameters.	5-207
:MEASure:BIT<x>:AREA<x>:<Parameter>?	Queries all settings related to logic waveform parameters.	5-207
:MEASure:BIT<x>:AREA<x>:<Parameter>:COUNT?	Queries the count for continuous statistical processing of logic waveform parameters.	5-207
:MEASure:BIT<x>:AREA<x>:<Parameter>:{MAXimum MEAN MINimum SDEVIation}?	Queries each statistical value of logic waveform parameters.	5-207
:MEASure:BIT<x>:AREA<x>:<Parameter>:STATe	Turns ON/OFF the logic waveform parameters or queries the current setting.	5-207
:MEASure:BIT<x>:AREA<x>:<Parameter>:VALue?	Queries automatically measured values of logic waveform parameters.	5-208
:MEASure:BIT<x>:AREA<x>:DELay:MEASure?	Queries all settings related to the measurement conditions for the source waveform of delay measurement between channels.	5-208

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:MEASure:BIT<x>:AREA<x>:DElay:MEASure:COUNT	Sets the edge detection count for the source waveform of delay measurement between channels or queries the current setting.	5-208
:MEASure:BIT<x>:AREA<x>:DElay:MEASure:POLarity	Sets the polarity of the source waveform of delay measurement between channels or queries the current setting.	5-208
:MEASure:BIT<x>:AREA<x>:DElay:REFerence?	Queries all settings related to the reference waveform of delay measurement between channels.	5-208
:MEASure:BIT<x>:AREA<x>:DElay:REFerence:COUNT	Sets the edge detection count for the reference waveform of delay measurement between channels or queries the current setting.	5-209
:MEASure:BIT<x>:AREA<x>:DElay:REFerence:POLarity	Sets the polarity of the reference waveform of delay measurement between channels or queries the current setting.	5-209
:MEASure:BIT<x>:AREA<x>:DElay:REFerence:TRAcE	Sets the trace for the reference waveform of delay measurement between channels or queries the current setting.	5-209
:MEASure:BIT<x>:AREA<x>:DElay:SOURce	Sets the reference of delay measurement between channels or queries the current setting.	5-209
:MEASure:CALCulation?	Queries all settings related to calculation items.	5-209
:MEASure:CALCulation:ALL	Turns ON/OFF all calculation items.	5-210
:MEASure:CALCulation:COUNT<x>?	Queries the statistical processing count of the calculation item.	5-210
:MEASure:CALCulation:DEFine<x>	Sets the equation of the calculation item or queries the current setting.	5-210
:MEASure:CALCulation:{MAXimum<x> MEAN<x> MINimum<x> SDEViation<x>}?	Queries the statistical value of the calculation item.	5-210
:MEASure:CALCulation:STATe<x>	Turns ON/OFF the calculation item or queries the current setting.	5-210
:MEASure:CALCulation:VALue<x>?	Queries the automated measured value of the calculation item.	5-210
:MEASure:CONTinuous?	Queries all settings related to the continuous statistical processing.	5-210
:MEASure:CONTinuous:COUNT	Sets the continuous statistical processing count or queries the current setting.	5-210
:MEASure:CONTinuous:REStArt	Restarts the continuous statistical processing.	5-210
:MEASure:CYCLe?	Queries all settings related to the cycle statistical processing.	5-210
:MEASure:CYCLe:ABORt	Aborts the execution of the cycle statistical processing.	5-211
:MEASure:CYCLe:EXECute	Executes the cycle statistical processing.	5-211
:MEASure:CYCLe:TRAcE	Sets the cycle source trace of the continuous statistical processing count or queries the current setting.	5-211
:MEASure:DISPlay	Turns ON/OFF the display of the automated measurement of waveform parameters or queries the current setting.	5-211
:MEASure:FLEXray?	Queries all settings related to the FLEXRAY waveform parameters.	5-211
:MEASure:FLEXray:BUS?	Queries all settings related to the FLEXRAY bus waveforms.	5-211
:MEASure:FLEXray:BUS:BRATe	Sets the FLEXRAY bus waveform bit rate (data transfer rate) or queries the current setting.	5-212
:MEASure:FLEXray:BUS:<parameter>?	Queries all settings related to the FLEXRAY bus waveform parameters.	5-212
:MEASure:FLEXray:BUS:<parameter>:COUNT?	Queries the count for continuous statistical processing of the FLEXRAY bus waveform parameters.	5-212
:MEASure:FLEXray:BUS:<parameter>:{MAXimum MEAN MINimum SDEViation}?	Queries each statistical value of the FLEXRAY bus waveform parameters.	5-212
:MEASure:FLEXray:BUS:<parameter>:STATe	Turns ON/OFF FLEXRAY bus waveform parameters or queries the current setting.	5-212
:MEASure:FLEXray:BUS:<parameter>:VALue?	Queries automated measurement values of the FLEXRAY bus waveform parameters.	5-212
:MEASure:FLEXray:BUS:BSSFESID	Sets the BSSFES ID of the FLEXRAY bus waveform or queries the current setting.	5-212
:MEASure:FLEXray:BUS:BSSID	Sets the BSS ID of the FLEXRAY bus waveform or queries the current setting.	5-212
:MEASure:FLEXray:BUS:FBSSID	Sets the FBSS ID of the FLEXRAY bus waveform or queries the current setting.	5-212
:MEASure:FLEXray:BUS:FTRAcE	Sets the trace of the FLEXRAY bus waveform or queries the current setting.	5-213
:MEASure:FLEXray:BUS:SPOint	Sets the sample point of the FLEXRAY bus waveform or queries the current setting.	5-213
:MEASure:FLEXray:BUS:TRAcE<x>?	Queries all Threshold level and hysteresis settings of each trace of the FLEXRAY bus waveform.	5-213
:MEASure:FLEXray:BUS:TRAcE<x>:HYSTeresis	Sets the hysteresis of the Threshold of each trace of the FLEXRAY bus waveform or queries the current setting.	5-213
:MEASure:FLEXray:BUS:TRAcE<x>:LEVel	Sets the level of the Threshold of each trace of the FLEXRAY bus waveform or queries the current setting.	5-213

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:MEASure:FLEXray:RECeiver?	Queries all settings related to the FLEXRAY receiver waveform.	5-213
:MEASure:FLEXray:RECeiver:RXD?	Queries all settings related to the FLEXRAY receiver waveform data.	5-213
:MEASure:FLEXray:RECeiver:RXD:<parameter>?	Queries all settings related to the FLEXRAY receiver waveform data parameters.	5-214
:MEASure:FLEXray:RECeiver:RXD:<parameter>:COUNT?	Queries the count for continuous statistical processing of the FLEXRAY receiver waveform data parameters.	5-214
:MEASure:FLEXray:RECeiver:RXD:<parameter>:{MAXimum MEAN MINimum SD EVIation}?	Sets each statistical value of the FLEXRAY receiver waveform data parameters	5-214
:MEASure:FLEXray:RECeiver:RXD:<parameter>:STATE	Turns ON/OFF the FLEXRAY receiver waveform data parameters.	5-214
:MEASure:FLEXray:RECeiver:RXD:<parameter>:VALue?	Sets automated measurement values of the FLEXRAY receiver waveform data parameters	5-214
:MEASure:FLEXray:RECeiver:RXD:BPBM?	Queries all settings in BPBM of the FLEXRAY receiver waveform data.	5-214
:MEASure:FLEXray:RECeiver:RXD:BPBM:LEVel	Queries the BPBM level of the FLEXRAY receiver waveform data.	5-214
:MEASure:FLEXray:RECeiver:RXD:BPBM:TRACe	Queries the BPBM trace of the FLEXRAY receiver waveform data.	5-215
:MEASure:FLEXray:RECeiver:RXD:DATA?	Queries all settings in the FLEXRAY receiver waveform data.	5-215
:MEASure:FLEXray:RECeiver:RXD:DATA:LEVel	Queries the level of the FLEXRAY receiver waveform data.	5-215
:MEASure:FLEXray:RECeiver:RXD:DATA:TRACe	Queries the trace of the FLEXRAY receiver waveform data.	5-215
:MEASure:FLEXray:RECeiver:RXEN?	Queries all settings related to the FLEXRAY receiver waveform enable data.	5-215
:MEASure:FLEXray:RECeiver:RXEN:<parameter>?	Queries all settings related to the FLEXRAY receiver waveform enable data parameters.	5-215
:MEASure:FLEXray:RECeiver:RXEN:<parameter>:COUNT?	Queries the count for continuous statistical processing of the FLEXRAY receiver waveform enable data parameters.	5-215
:MEASure:FLEXray:RECeiver:RXEN:<parameter>:{MAXimum MEAN MINimum S DEVIation}?	Queries each statistical value of the FLEXRAY receiver waveform enable data parameters.	5-215
:MEASure:FLEXray:RECeiver:RXEN:<parameter>:STATE	Turns ON/OFF FLEXRAY receiver waveform enable data parameters.	5-216
:MEASure:FLEXray:RECeiver:RXEN:<parameter>:VALue?	Queries automated measurement values of the FLEXRAY receiver waveform enable data parameters.	5-216
:MEASure:FLEXray:RECeiver:RXEN:BPBM?	Queries all settings in BPBM of the FLEXRAY receiver waveform enable data.	5-216
:MEASure:FLEXray:RECeiver:RXEN:BPBM:LEVel	Queries the BPBM level of the FLEXRAY receiver waveform enable data.	5-216
:MEASure:FLEXray:RECeiver:RXEN:BPBM:TRACe	Queries the BPBM trace of the FLEXRAY receiver waveform enable data.	5-216
:MEASure:FLEXray:RECeiver:RXEN:ENABLE?	Queries all settings in the FLEXRAY receiver waveform enable data.	5-216
:MEASure:FLEXray:RECeiver:RXEN:ENABLE:LEVel	Queries the level of the FLEXRAY receiver waveform enable data.	5-217
:MEASure:FLEXray:RECeiver:RXEN:ENABLE:TRACe	Queries the trace of the FLEXRAY receiver waveform enable data.	5-217
:MEASure:FLEXray:STATistics	Turns ON/OFF statistics mode of the FLEXRAY waveform parameters or queries the current setting.	5-217
:MEASure:FLEXray:TRANSmmitter?	Queries all settings related to the FLEXRAY transmitter waveform.	5-217
:MEASure:FLEXray:TRANSmmitter:TXD?	Queries all settings related to the FLEXRAY transmitter waveform data.	5-217
:MEASure:FLEXray:TRANSmmitter:TXD:<parameter>?	Queries all settings related to the FLEXRAY transmitter waveform data parameters.	5-218
:MEASure:FLEXray:TRANSmmitter:TXD:<parameter>:COUNT?	Sets the count of the CONTinuous Statistics of the FLEXRAY transmitter waveform data parameters	5-218
:MEASure:FLEXray:TRANSmmitter:TXD:<parameter>:{MAXimum MEAN MINimum SDEVIation}?	Queries each statistical value of the FLEXRAY transmitter waveform data parameters.	5-218
:MEASure:FLEXray:TRANSmmitter:TXD:<parameter>:STATE	Turns ON/OFF FLEXRAY transmitter waveform data parameters.	5-218

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:MEASure:FLEXray:TRANsmitter:TXD:<parameter>:VALue?	Queries automated measurement values of the FLEXRAY transmitter waveform data parameters.	5-218
:MEASure:FLEXray:TRANsmitter:TXD:BPBM?	Queries all settings in BPBM of the FLEXRAY transmitter waveform data.	5-218
:MEASure:FLEXray:TRANsmitter:TXD:BPBM:DPRoximal	Sets the BPBM distal/proximal value of the FLEXRAY transmitter waveform data or queries the current setting.	5-219
:MEASure:FLEXray:TRANsmitter:TXD:BPBM:LEVel	Queries the BPBM level of the FLEXRAY transmitter waveform data.	5-219
:MEASure:FLEXray:TRANsmitter:TXD:BPBM:TRACe	Queries the BPBM trace of the FLEXRAY transmitter waveform data.	5-219
:MEASure:FLEXray:TRANsmitter:TXD:DATA?	Queries all settings in the FLEXRAY transmitter waveform data.	5-219
:MEASure:FLEXray:TRANsmitter:TXD:DATA:LEVel	Queries the level of the FLEXRAY transmitter waveform data.	5-219
:MEASure:FLEXray:TRANsmitter:TXD:DATA:TRACe	Queries the trace of the FLEXRAY transmitter waveform data.	5-219
:MEASure:FLEXray:TRANsmitter:TXEN?	Queries all settings related to the FLEXRAY transmitter enable data.	5-220
:MEASure:FLEXray:TRANsmitter:TXEN:<parameter>?	Queries all settings related to the FLEXRAY transmitter waveform enable data parameters.	5-220
:MEASure:FLEXray:TRANsmitter:TXEN:<parameter>:COUNT?	Queries the count for continuous statistical processing of the FLEXRAY transmitter waveform enable data parameters.	5-220
:MEASure:FLEXray:TRANsmitter:TXEN:<parameter>:{MAXimum MEAN MINimum SDEviation}?	Queries each statistical value of the FLEXRAY transmitter waveform enable data parameters.	5-220
:MEASure:FLEXray:TRANsmitter:TXEN:<parameter>:STATE	Turns ON/OFF FLEXRAY transmitter waveform enable data parameters.	5-220
:MEASure:FLEXray:TRANsmitter:TXEN:<parameter>:VALue?	Queries automated measurement values of the FLEXRAY transmitter waveform enable data parameters.	5-221
:MEASure:FLEXray:TRANsmitter:TXEN:BPBM?	Queries all settings in BPBM of the FLEXRAY transmitter waveform enable data.	5-221
:MEASure:FLEXray:TRANsmitter:TXEN:BPBM:LEVel	Queries the BPBM level of the FLEXRAY transmitter waveform enable data.	5-221
:MEASure:FLEXray:TRANsmitter:TXEN:BPBM:TRACe	Queries the BPBM trace of the FLEXRAY transmitter waveform enable data.	5-221
:MEASure:FLEXray:TRANsmitter:TXEN:ENABle?	Queries all settings in the FLEXRAY transmitter waveform enable data.	5-221
:MEASure:FLEXray:TRANsmitter:TXEN:ENABle:LEVel	Queries the level of the FLEXRAY transmitter waveform enable data.	5-221
:MEASure:FLEXray:TRANsmitter:TXEN:ENABle:TRACe	Queries the trace of the FLEXRAY transmitter waveform enable data.	5-222
:MEASure:FLEXray:TYPE	Queries the type of the waveform parameters of the FLEXRAY.	5-222
:MEASure:HISTory:ABORt	Aborts the execution of the statistical processing of the history data.	5-222
:MEASure:HISTory:EXECute	Executes the statistical processing of the history data.	5-222
:MEASure:MODE	Sets the mode of the automated measurement of waveform parameters or queries the current setting.	5-222
:MEASure:THReshold?	Queries all settings related to the threshold levels of the automated measurement of waveform parameters.	5-222
:MEASure:THReshold:TRACe<x>?	Queries the threshold levels of the trace.	5-223
:MEASure:THReshold:TRACe<x>:AUTO	Sets the detection mode when the auto setting of the threshold level is enabled or queries the current setting.	5-223
:MEASure:THReshold:TRACe<x>:LHYSteresis?	Queries all settings related to the level and hysteresis of the threshold level.	5-223
:MEASure:THReshold:TRACe<x>:LHYSteresis:HYSteresis	Sets the hysteresis of the threshold level or queries the current setting.	5-223
:MEASure:THReshold:TRACe<x>:LHYSteresis:LEVel	Sets the level of the threshold level or queries the current setting.	5-223
:MEASure:THReshold:TRACe<x>:MODE	Sets the setup mode of the threshold level or queries the current setting.	5-223
:MEASure:THReshold:TRACe<x>:ULOWer?	Queries all settings related to the upper and lower limits of the threshold level.	5-224
:MEASure:THReshold:TRACe<x>:ULOWer:RANGe	Sets the upper and lower limits of the threshold level or queries the current setting.	5-224
:MEASure:TRACe<x>?	Queries all settings related to the trace.	5-224



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:MEASure:TRACe<x>:AREA<x>?	Queries all settings related to the area.	5-225
:MEASure:TRACe<x>:AREA<x>:ALL	Turns ON/OFF all waveform parameters.	5-225
:MEASure:TRACe<x>: AREA<x>:<Parameter>?	Queries all settings related to the waveform parameter.	5-225
:MEASure:TRACe<x>: AREA<x>:<Parameter>:COUNT?	Queries the continuous statistical processing count of the waveform parameter.	5-225
:MEASure:TRACe<x>:AREA<x>: <Parameter>:{MAXimum MEAN  MINimum SDEVIation}?	Queries the statistical value of the waveform parameter.	5-226
:MEASure:TRACe<x>: AREA<x>:<Parameter>:STATE	Turns ON/OFF the waveform parameter or queries the current setting.	5-226
:MEASure:TRACe<x>: AREA<x>:<Parameter>:VALue?	Queries the automated measured value of the waveform parameter.	5-226
:MEASure:TRACe<x>:AREA<x>:DELay: MEASure?	Queries all settings related to the measurement conditions of the source waveform of the delay measurement between channels.	5-226
:MEASure:TRACe<x>:AREA<x>:DELay: MEASure:COUNT	Sets the edge detection count of the source waveform of the delay measurement between channels or queries the current setting.	5-227
:MEASure:TRACe<x>:AREA<x>:DELay: MEASure:POLarity	Sets the polarity of the source waveform of the delay measurement between channels or queries the current setting.	5-227
:MEASure:TRACe<x>:AREA<x>:DELay: REFerence?	Queries all settings related to the reference waveform of the delay measurement between channels.	5-227
:MEASure:TRACe<x>:AREA<x>:DELay: REFerence:COUNT	Sets the edge detection count of the reference waveform of the delay measurement between channels or queries the current setting.	5-227
:MEASure:TRACe<x>:AREA<x>:DELay: REFerence:POLarity	Sets the polarity of the reference waveform of the delay measurement between channels or queries the current setting.	5-227
:MEASure:TRACe<x>:AREA<x>:DELay: REFerence:TRACe	Sets the trace of the reference waveform of the delay measurement between channels or queries the current setting.	5-228
:MEASure:TRACe<x>:AREA<x>:DELay: SOURce	Sets the reference of the delay measurement between channels or queries the current setting.	5-228
:MEASure:TRACe<x>:AREA<x>: DPRoximal?	Queries all settings related to the distal and proximal values.	5-228
:MEASure:TRACe<x>:AREA<x>: DPRoximal:MODE	Sets the unit of the distal and proximal values or queries the current setting.	5-228
:MEASure:TRACe<x>:AREA<x>: DPRoximal:PERCent	Sets the distal and proximal values as a percentage or queries the current setting.	5-228
:MEASure:TRACe<x>:AREA<x>: DPRoximal:UNIT	Sets the distal and proximal values in the specified unit or queries the current setting.	5-229
:MEASure:TRACe<x>:AREA<x>:METHod	Sets the method for detecting the High/Low level for automated measurement of waveform parameters or queries the current setting.	5-229
:MEASure:TRANge<x>	Sets the measurement range or queries the current setting.	5-229
:MEASure:WAIT?	Waits for the completion of the automated measurement with a timeout option.	5-229
:MEASure:WINDow<x>	Sets the measurement source window of the area or queries the current setting.	5-229
<b>REFerence Group</b>		
:REFerence<x>?	Queries all settings related to the reference.	5-230
:REFerence<x>:DISPlay	Turns ON/OFF the display of the reference or queries the current setting.	5-230
:REFerence<x>:INVert	Sets the inverted display of the reference or queries the current setting.	5-230
:REFerence<x>:LABel?	Queries all settings related to the waveform label of the reference.	5-230
:REFerence<x>:LABel[:DEFine]	Sets the waveform label of the reference or queries the current setting.	5-230
:REFerence<x>:LABel:MODE	Turns ON/OFF the waveform label display of the reference or queries the current setting.	5-230
:REFerence<x>:LOAD	Loads the waveform to the reference.	5-230
:REFerence<x>:POSition	Sets the vertical position of the reference or queries the current setting.	5-230
:REFerence<x>:SELect	Sets the waveform (computation or reference) to the computation channel or queries the current setting.	5-230
:REFerence<x>:SVALue	Turns ON/OFF the scale display of the reference or queries the current setting.	5-230
<b>SEARCh Group</b>		
:SEARCh<x>?	Queries all settings related to the search function.	5-231
:SEARCh<x>:ABORt	Aborts the search.	5-231
:SEARCh<x>:CANBUS?	Queries all settings related to the CAN bus signal search.	5-231

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:SEARCH<x>:CANBus:SETup?	Queries all settings related to the CAN bus signal search setup.	5-231
:SEARCH<x>:CANBus[:SETup]:ACK	Sets the ACK condition of the CAN bus signal search or queries the current setting.	5-232
:SEARCH<x>:CANBus[:SETup]:BRATE	Sets the bit rate (data transfer rate) of the CAN bus signal search or queries the current setting.	5-232
:SEARCH<x>:CANBus[:SETup]:DATA?	Queries all settings related to the CAN bus signal search data.	5-232
:SEARCH<x>:CANBus[:SETup]:DATA:BORDER	Sets the byte order of the CAN bus signal search data or queries the current setting.	5-232
:SEARCH<x>:CANBus[:SETup]:DATA:CONDition	Sets the data condition of the CAN bus signal search or queries the current setting.	5-232
:SEARCH<x>:CANBus[:SETup]:DATA:DATA<x>	Sets the comparison data of the CAN bus signal search data or queries the current setting.	5-232
:SEARCH<x>:CANBus[:SETup]:DATA:DLC	Sets the number of valid bytes (DLC) of the CAN bus signal search data or queries the current setting.	5-232
:SEARCH<x>:CANBus[:SETup]:DATA:HEXA	Sets the CAN bus signal search data in hexadecimal notation.	5-233
:SEARCH<x>:CANBus[:SETup]:DATA:MSBLSb	Sets the MSB and LSB bits of the CAN bus signal search data or queries the current setting.	5-233
:SEARCH<x>:CANBus[:SETup]:DATA:PATtern	Sets the CAN bus signal search data in binary notation or queries the current setting.	5-233
:SEARCH<x>:CANBus[:SETup]:DATA:SIGN	Sets the sign of the CAN bus signal search data or queries the current setting.	5-233
:SEARCH<x>:CANBus[:SETup]:IDExt?	Queries all settings related to the ID of the extended format of the CAN bus signal search.	5-233
:SEARCH<x>:CANBus[:SETup]:IDExt:HEXA	Sets the ID of the extended format of the CAN bus signal search in hexadecimal notation.	5-233
:SEARCH<x>:CANBus[:SETup]:IDExt:PATtern	Sets the ID of the extended format of the CAN bus signal search in binary notation or queries the current setting.	5-233
:SEARCH<x>:CANBus[:SETup]:IDSTd?	Queries all settings related to the ID of the standard format of the CAN bus signal search.	5-233
:SEARCH<x>:CANBus[:SETup]:IDSTd:HEXA	Sets the ID of the standard format of the CAN bus signal search in hexadecimal notation.	5-233
:SEARCH<x>:CANBus[:SETup]:IDSTd:PATtern	Sets the ID of the standard format of the CAN bus signal search in binary notation or queries the current setting.	5-234
:SEARCH<x>:CANBus[:SETup]:MODE	Sets the CAN bus signal search mode or queries the current setting.	5-234
:SEARCH<x>:CANBus[:SETup]:MSIGnal?	Queries all settings related to the message signal of the CAN bus signal search.	5-234
:SEARCH<x>:CANBus[:SETup]:MSIGnal:MESSAge?	Queries all settings related to the message of the CAN bus signal search.	5-234
:SEARCH<x>:CANBus[:SETup]:MSIGnal:MESSAge:ITEM	Sets the CAN bus signal search message item.	5-234
:SEARCH<x>:CANBus[:SETup]:MSIGnal:MESSAge:MODE	Turns ON/OFF the CAN bus signal search message or queries the current setting.	5-234
:SEARCH<x>:CANBus[:SETup]:MSIGnal:SElect	Sets the message signal conditions for the CAN bus signal search or queries the current setting.	5-234
:SEARCH<x>:CANBus[:SETup]:MSIGnal:SIGnal?	Queries all settings related to the signal of the CAN bus signal search.	5-234
:SEARCH<x>:CANBus[:SETup]:MSIGnal:SIGnal:CONDition	Sets the signal data conditions for the CAN bus signal search or queries the current setting.	5-235
:SEARCH<x>:CANBus[:SETup]:MSIGnal:SIGnal:DATA<x>	Sets the signal data comparison data for the CAN bus signal search or queries the current setting.	5-235
:SEARCH<x>:CANBus[:SETup]:MSIGnal:SIGnal:ITEM	Sets the CAN bus signal search signal item.	5-235
:SEARCH<x>:CANBus[:SETup]:MSIGnal:SIGnal:MODE	Turns ON/OFF the CAN bus signal search signal or queries the current setting.	5-235
:SEARCH<x>:CANBus[:SETup]:RECCessive	Sets the recessive level (bus level) of the CAN bus signal search or queries the current setting.	5-235
:SEARCH<x>:CANBus[:SETup]:RTR	Sets the RTR of the CAN bus signal search or queries the current setting.	5-235
:SEARCH<x>:CANBus[:SETup]:SPoint	Sets the sample point of the CAN bus signal search or queries the current setting.	5-236

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:SEARCH<x>:CANBus[:SETup]:TRACe	Sets the source channel of the CAN bus signal search or queries the current setting.	5-236
:SEARCH<x>:CLOCK?	Queries all settings related to the clock channel.	5-236
:SEARCH<x>:CLOCK:POLarity	Sets the polarity of the clock channel or queries the current setting.	5-236
:SEARCH<x>:CLOCK:SOURce	Sets the clock trace of the search or queries the current setting.	5-236
:SEARCH<x>:DECimation	Sets the decimation detection of the skip mode or queries the current setting.	5-236
:SEARCH<x>:EXECute	Executes the search.	5-236
:SEARCH<x>:FLEXray?	Queries all settings related to the FLEXRAY bus signal search .	5-236
:SEARCH<x>:FLEXray:BRATe	Sets the FLEXRAY bus signal search bit rate (data transfer rate) or queries the current setting.	5-237
:SEARCH<x>:FLEXray:ERRor?	Queries all settings related to the FLEXRAY bus signal search error .	5-237
:SEARCH<x>:FLEXray:ERRor:BSS	Sets the FLEXRAY bus signal search BSS error or queries the current setting.	5-237
:SEARCH<x>:FLEXray:ERRor:CRC	Sets the FLEXRAY bus signal search CRC error or queries the current setting.	5-237
:SEARCH<x>:FLEXray:ERRor:CRCBus	Sets the target channel of the FLEXRAY bus signal search CRC error or queries the current setting.	5-237
:SEARCH<x>:FLEXray:ERRor:FES	Sets the FLEXRAY bus signal search FES error or queries the current setting.	5-237
:SEARCH<x>:FLEXray:ERRor:TRACe	Sets the FLEXRAY bus signal search error trace or queries the current setting.	5-237
:SEARCH<x>:FLEXray:IDData?	Queries all settings related to the IDData of the FLEXRAY bus signal search .	5-237
:SEARCH<x>:FLEXray:IDData:CCOunt?	Queries all settings related to the Cycle Count of the FLEXRAY bus signal search .	5-237
:SEARCH<x>:FLEXray:IDData:CCOunt:CONDition	Sets the Cycle Count data conditions for the FLEXRAY bus signal search or queries the current setting.	5-238
:SEARCH<x>:FLEXray:IDData:CCOunt:COUNT<x>	Sets the FLEXRAY bus signal search Cycle Count or queries the current setting.	5-238
:SEARCH<x>:FLEXray:IDData:DATA?	Queries all settings related to the Data Field of the FLEXRAY bus signal search .	5-238
:SEARCH<x>:FLEXray:IDData:DATA:BORDER	Sets the byte order of the Data Field of the FLEXRAY bus signal search or queries the current setting.	5-238
:SEARCH<x>:FLEXray:IDData:DATA:CONDition	Sets the data conditions of the Data Field of the FLEXRAY bus signal search or queries the current setting.	5-238
:SEARCH<x>:FLEXray:IDData:DATA:DATA<x>	Sets the comparison data of the Data Field of the FLEXRAY bus signal search or queries the current setting.	5-239
:SEARCH<x>:FLEXray:IDData:DATA:DPOSITION	Sets the position for pattern comparison of the data of the Data Field of the FLEXRAY bus signal search or queries the current setting.	5-239
:SEARCH<x>:FLEXray:IDData:DATA:DSIZE	Sets the number of bytes of data in the Data Field of the FLEXRAY bus signal search or queries the current setting.	5-239
:SEARCH<x>:FLEXray:IDData:DATA:HEXA	Sets the data in the Data Field of the FLEXRAY bus signal search in hexadecimal.	5-239
:SEARCH<x>:FLEXray:IDData:DATA:MSBLSb	Sets the MSB/LSB bit of data in the Data Field of the FLEXRAY bus signal search or queries the current setting.	5-239
:SEARCH<x>:FLEXray:IDData:DATA:PATTERN	Sets the data of the Data Field of the FLEXRAY bus signal search in binary or queries the current setting.	5-239
:SEARCH<x>:FLEXray:IDData:DATA:SIGN	Sets the data sign of the Data Field of the FLEXRAY bus signal search or queries the current setting.	5-239
:SEARCH<x>:FLEXray:IDData:FID?	Queries all settings related to the Frame ID of the FLEXRAY bus signal search.	5-240
:SEARCH<x>:FLEXray:IDData:FID:CONDition	Sets the Frame ID data conditions for the FLEXRAY bus signal search or queries the current setting.	5-240
:SEARCH<x>:FLEXray:IDData:FID:ID<x>	Sets the Frame ID value for the FLEXRAY bus signal search or queries the current setting.	5-240
:SEARCH<x>:FLEXray:IDData:INDicator?	Queries all settings related to the Indicator of the FLEXRAY bus signal search .	5-240
:SEARCH<x>:FLEXray:IDData:INDicator:CONDition	Sets the data conditions of the Indicator of the FLEXRAY bus signal search or queries the current setting.	5-240

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:SEARCH<x>:FLEXray:IDData:INDicator:NFRame	Sets the Null frame of the Indicator of the FLEXRAY bus signal search or queries the current setting.	5-240
:SEARCH<x>:FLEXray:IDData:INDicator:PPreamble	Sets the Payload preamble of the Indicator of the FLEXRAY bus signal search or queries the current setting.	5-241
:SEARCH<x>:FLEXray:IDData:INDicator:STFRame	Sets the Start frame of the Indicator of the FLEXRAY bus signal search or queries the current setting.	5-241
:SEARCH<x>:FLEXray:IDData:INDicator:SYFRame	Sets the Sync frame of the Indicator of the FLEXRAY bus signal search or queries the current setting.	5-241
:SEARCH<x>:FLEXray:MODE	Sets the FLEXRAY bus signal search mode or queries the current setting.	5-241
:SEARCH<x>:FLEXray:TRACe	Sets the FLEXRAY bus signal search trace or queries the current setting.	5-241
:SEARCH<x>:HOLDoff	Sets the hold off detection or queries the current setting.	5-241
:SEARCH<x>:I2Cbus?	Queries all settings related to the I <sup>2</sup> C bus signal search.	5-242
:SEARCH<x>:I2Cbus:CLOCK?	Queries all settings related to the clock of the I <sup>2</sup> C bus signal search.	5-242
:SEARCH<x>:I2Cbus:CLOCK:SOURce	Sets the clock trace of the I <sup>2</sup> C bus signal search or queries the current setting.	5-242
:SEARCH<x>:I2Cbus:SETup?	Queries all settings related to the I <sup>2</sup> C bus signal search setup.	5-242
:SEARCH<x>:I2Cbus[:SETup]:ADATa?	Queries all settings related to the address of the I <sup>2</sup> C bus signal search.	5-242
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT10address?	Queries all settings related to the 10-bit address of the I <sup>2</sup> C bus signal search.	5-243
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT10address:HEXA	Sets the 10-bit address of the I <sup>2</sup> C bus signal search in hexadecimal notation.	5-243
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT10address:PATtern	Sets the 10-bit address of the I <sup>2</sup> C bus signal search in binary notation or queries the current setting.	5-243
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT7Address?	Queries all settings related to the 7-bit address of the I <sup>2</sup> C bus signal search.	5-243
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT7Address:HEXA	Sets the 7-bit address of the I <sup>2</sup> C bus signal search in hexadecimal notation.	5-243
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT7Address:PATtern	Sets the 7-bit address of the I <sup>2</sup> C bus signal search in binary notation or queries the current setting.	5-244
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT7APsub?	Queries all settings related to the 7-bit + Sub address of the I <sup>2</sup> C bus signal search.	5-244
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT7APsub:ADDRESS?	Queries all settings related to the 7-bit address of the 7-bit + Sub address of the I <sup>2</sup> C bus signal search.	5-244
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT7APsub:ADDRESS:HEXA	Sets the 7-bit address of the 7-bit + Sub address of the I <sup>2</sup> C bus signal search in hexadecimal notation.	5-244
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT7APsub:ADDRESS:PATtern	Sets the 7-bit address of the 7-bit + Sub address of the I <sup>2</sup> C bus signal search in binary notation or queries the current setting.	5-244
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT7APsub:SADDRESS?	Queries all settings related to the Sub address of the 7-bit + Sub address of the I <sup>2</sup> C bus signal search.	5-244
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT7APsub:SADDRESS:HEXA	Sets the Sub address of the 7-bit + Sub address of the I <sup>2</sup> C bus signal search in hexadecimal notation.	5-244
:SEARCH<x>:I2Cbus[:SETup]:ADATa:BIT7APsub:SADDRESS:PATtern	Sets the Sub address of the 7-bit + Sub address of the I <sup>2</sup> C bus signal search in binary notation or queries the current setting.	5-245
:SEARCH<x>:I2Cbus[:SETup]:ADATa:TYPE	Sets the address type of the I <sup>2</sup> C bus signal search or queries the current setting.	5-245
:SEARCH<x>:I2Cbus[:SETup]:DATA?	Queries all settings related to the data of the I <sup>2</sup> C bus signal search.	5-245
:SEARCH<x>:I2Cbus[:SETup]:DATA:BYTE	Sets the number of data bytes of the I <sup>2</sup> C bus signal search or queries the current setting.	5-245
:SEARCH<x>:I2Cbus[:SETup]:DATA:CONDition	Sets the determination method (match or not match) of the data of the I <sup>2</sup> C bus signal search or queries the current setting.	5-245
:SEARCH<x>:I2Cbus[:SETup]:DATA:DPOSITion	Sets the position for comparing the data pattern of the I <sup>2</sup> C bus signal search or queries the current setting.	5-245
:SEARCH<x>:I2Cbus[:SETup]:DATA:HEXA<x>	Sets the data of the I <sup>2</sup> C bus signal search in hexadecimal notation.	5-245
:SEARCH<x>:I2Cbus[:SETup]:DATA:MODE	Enables/Disables the data conditions of the I <sup>2</sup> C bus signal search or queries the current setting.	5-245
:SEARCH<x>:I2Cbus[:SETup]:DATA:PATtern<x>	Sets the data of the I <sup>2</sup> C bus signal search in binary notation or queries the current setting.	5-246
:SEARCH<x>:I2Cbus[:SETup]:DATA:PMODE	Sets the pattern comparison start position mode of the data of the I <sup>2</sup> C bus signal search or queries the current setting.	5-246
:SEARCH<x>:I2Cbus[:SETup]:DATA:TRACe	Sets the trace of the data of the I <sup>2</sup> C bus signal search or queries the current setting.	
:SEARCH<x>:I2Cbus[:SETup]:GCALl?	Queries all settings related to the general call of the I <sup>2</sup> C bus signal search.	5-246

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Command	Function	Page
:SEARCH<x>:I2Cbus[:SETup]:GCALl:BIT7maddress?	Queries all settings related to the 7-bit master address of the general call of the I <sup>2</sup> C bus signal search.	5-246
:SEARCH<x>:I2Cbus[:SETup]:GCALl:BIT7maddress:HEXA	Sets the 7-bit master address of the general call of the I <sup>2</sup> C bus signal search in hexadecimal notation.	5-246
:SEARCH<x>:I2Cbus[:SETup]:GCALl:BIT7maddress:PATtern	Sets the 7-bit master address of the general call of the I <sup>2</sup> C bus signal search in binary notation or queries the current setting.	5-246
:SEARCH<x>:I2Cbus[:SETup]:GCALl:SBYTE	Sets the second byte type of the general call of the I <sup>2</sup> C bus signal search or queries the current setting.	5-246
:SEARCH<x>:I2Cbus[:SETup]:MODE	Sets the search mode of the I <sup>2</sup> C bus signal search or queries the current setting.	5-247
:SEARCH<x>:I2Cbus[:SETup]:NAIGnore?	Queries all settings related to the NON ACK ignore mode of the I <sup>2</sup> C bus signal search.	5-247
:SEARCH<x>:I2Cbus[:SETup]:NAIGnore:HSMoDe	Sets whether to ignore NON ACK in high speed mode of the I <sup>2</sup> C bus signal search or queries the current setting.	5-247
:SEARCH<x>:I2Cbus[:SETup]:NAIGnore:RACcEss	Sets whether to ignore NON ACK in read access mode of the I <sup>2</sup> C bus signal search or queries the current setting.	5-247
:SEARCH<x>:I2Cbus[:SETup]:NAIGnore:SBYTE	Sets whether to ignore NON ACK in the start byte of the I <sup>2</sup> C bus signal search or queries the current setting.	5-247
:SEARCH<x>:I2Cbus[:SETup]:SBHSmode?	Queries all settings related to the start byte and high speed mode of the I <sup>2</sup> C bus signal search.	5-247
:SEARCH<x>:I2Cbus[:SETup]:SBHSmode:TYPE	Sets the type of the start byte or high speed mode of the I <sup>2</sup> C bus signal search or queries the current setting.	5-247
:SEARCH<x>:LINBus?	Queries all settings related to the LIN bus signal search or queries the current setting.	5-248
:SEARCH<x>:LINBus:SETup?	Queries all settings related to setup of the LIN bus signal search or queries the current setting.	5-248
:SEARCH<x>:LINBus[:SETup]:BLENgtH	Sets the LIN bus signal search break length or queries the current setting.	5-248
:SEARCH<x>:LINBus[:SETup]:BRATe	Sets the LIN bus signal search bitrate (data transfer rate) or queries the current setting.	5-248
:SEARCH<x>:LINBus[:SETup]:DATA?	Queries all settings related to data of the LIN bus signal search or queries the current setting.	5-248
:SEARCH<x>:LINBus[:SETup]:DATA:BNUM	Sets the number of LIN bus signal search data bytes or queries the current setting.	5-248
:SEARCH<x>:LINBus[:SETup]:DATA:BOReR	Sets the data byte order of the LIN bus signal search or queries the current setting.	5-248
:SEARCH<x>:LINBus[:SETup]:DATA:COndition	Sets the LIN bus signal search data or queries the current setting.	5-249
:SEARCH<x>:LINBus[:SETup]:DATA:DATA<x>	Sets the comparison data of the LIN bus signal search data or queries the current setting.	5-249
:SEARCH<x>:LINBus[:SETup]:DATA:HEXA	Sets the LIN bus signal search data in hexadecimal.	5-249
:SEARCH<x>:LINBus[:SETup]:DATA:MSBLsb	Sets the MSB/LSB bit of the LIN bus signal search or queries the current setting.	5-249
:SEARCH<x>:LINBus[:SETup]:DATA:PATtern	Sets the LIN bus signal search data in binary or queries the current setting.	5-249
:SEARCH<x>:LINBus[:SETup]:DATA:SIGN	Sets the data sign of the LIN bus signal search or queries the current setting.	5-249
:SEARCH<x>:LINBus[:SETup]:ERRor?	Queries all settings related to the LIN bus signal search error .	5-249
:SEARCH<x>:LINBus[:SETup]:ERRor:CHecKsum	Sets the LIN bus signal search Checksum error or queries the current setting.	5-250
:SEARCH<x>:LINBus[:SETup]:ERRor:FRAMing	Sets the LIN bus signal search Framing error or queries the current setting.	5-250
:SEARCH<x>:LINBus[:SETup]:ERRor:PARity	Sets the LIN bus signal search Parity error or queries the current setting.	5-250
:SEARCH<x>:LINBus[:SETup]:ERRor:SYNCh	Sets the LIN bus signal search Synch error or queries the current setting.	5-250
:SEARCH<x>:LINBus[:SETup]:ERRor:TOUT	Sets the LIN bus signal search Timeout error or queries the current setting.	5-250
:SEARCH<x>:LINBus[:SETup]:ID?	Queries all settings related to ID of the LIN bus signal search or queries the current setting.	5-250
:SEARCH<x>:LINBus[:SETup]:ID:HEXA	Sets the LIN bus signal search ID in hexadecimal.	5-250

Command	Function	Page
:SEARCH<x>:LINBus[:SETup]:ID:PATtern	Sets the LIN bus signal search ID in binary or queries the current setting.	5-250
:SEARCH<x>:LINBus[:SETup]:MODE	Sets the LIN bus signal search mode or queries the current setting.	5-250
:SEARCH<x>:LINBus[:SETup]:REvIsion	Sets the LIN bus signal search revision (1.3 or 2.0) or queries the current setting.	5-251
:SEARCH<x>:LINBus[:SETup]:SPoiNt	Sets the LIN bus signal search sampling point or queries the current setting.	5-251
:SEARCH<x>:LINBus[:SETup]:TRACe	Sets the LIN bus signal search trace or queries the current setting.	5-251
:SEARCH<x>:LOGic	Sets the search logic or queries the current setting.	5-251
:SEARCH<x>:MARK	Turns ON/OFF the search mark or queries the current setting.	5-251
:SEARCH<x>:POLarity	Sets the search polarity or queries the current setting.	5-251
:SEARCH<x>:SElect	Sets the detection waveform number of the search function or queries the current setting.	5-251
:SEARCH<x>:SElect? MAXimum	Queries the detection count of the search function.	5-251
:SEARCH<x>:SLOGic?	Queries all settings related to the logic search.	5-252
:SEARCH<x>:SLOGic:CLOCK?	Queries all settings related to the logic search clock.	5-252
:SEARCH<x>:SLOGic:CLOCK:POLarity	Sets the polarity of the clock of the logic search or queries the current setting.	5-252
:SEARCH<x>:SLOGic:CLOCK:SOURce	Sets the clock for the logic search or queries the current setting.	5-252
:SEARCH<x>:SLOGic:I2CBus?	Queries all settings related to the logic I <sup>2</sup> C bus signal search.	5-253
:SEARCH<x>:SLOGic:I2CBus:CLOCK?	Queries all settings related to the clock channel of the logic I <sup>2</sup> C bus signal search.	5-253
:SEARCH<x>:SLOGic:I2CBus:CLOCK:SOURce	Sets the clock channel of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-253
:SEARCH<x>:SLOGic:I2CBus[:SETup]?	Queries all settings related to the setup of the logic I <sup>2</sup> C bus signal search.	5-253
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa?	Queries all settings related to the address of the logic I <sup>2</sup> C bus signal search.	5-253
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT10address?	Queries all settings related to the 10-bit address of the logic I <sup>2</sup> C bus signal search.	5-254
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT10address:HEXA	Sets the 10-bit address of the logic I <sup>2</sup> C bus signal search in hexadecimal notation.	5-254
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT10address:PATtern	Sets the 10-bit address of the logic I <sup>2</sup> C bus signal search in binary notation or queries the current setting.	5-254
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7Address?	Queries all settings related to the 7-bit address of the logic I <sup>2</sup> C bus signal search.	5-254
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7Address:HEXA	Sets the 7-bit address of the logic I <sup>2</sup> C bus signal search in hexadecimal notation.	5-254
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7Address:PATtern	Sets the 7-bit address of the logic I <sup>2</sup> C bus signal search in binary notation or queries the current setting.	5-254
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub?	Queries all settings related to the 7-bit address + Sub address of the logic I <sup>2</sup> C bus signal search.	5-254
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:ADDRESS?	Queries all settings related to the 7-bit address of the 7-bit address + Sub address of the logic I <sup>2</sup> C bus signal search.	5-255
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:ADDRESS:HEXA	Sets the 7-bit address of the 7-bit address + Sub address of the logic I <sup>2</sup> C bus signal search in hexadecimal notation.	5-255
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:ADDRESS:PATtern	Sets the 7-bit address of the 7-bit address + Sub address of the logic I <sup>2</sup> C bus signal search in binary notation or queries the current setting.	5-255
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:SADDRESS?	Queries all settings related to the Sub address of the 7-bit address + Sub address of the logic I <sup>2</sup> C bus signal search.	5-255
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:SADDRESS:HEXA	Sets the Sub address of the 7-bit address + Sub address of the logic I <sup>2</sup> C bus signal search in hexadecimal notation.	5-255
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:SADDRESS:PATtern	Sets the Sub address of the 7-bit address + Sub address of the logic I <sup>2</sup> C bus signal search in binary notation or queries the current setting.	5-255
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:TYPE	Sets the address type of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-256
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:DATA?	Queries all settings related to the data of the logic I <sup>2</sup> C bus signal search.	5-256
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:BYTE	Sets the number of setup data bytes of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-256
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:CONDition	Sets the determination method (match or not match) of the data of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-256
:SEARCH<x>:SLOGic:I2CBus[:SETup]:ADATa:DPOSITiON	Sets the position for comparing the data pattern of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-256

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Command	Function	Page
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:DATA:HEXA<x>	Sets the data of the logic I <sup>2</sup> C bus signal search in hexadecimal notation.	5-256
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:DATA:MODE	Enables/disables the data conditions of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-257
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:DATA:PATtern<x>	Sets the data of the logic I <sup>2</sup> C bus signal search in binary notation or queries the current setting.	5-257
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:DATA:PMODE	Sets the pattern comparison start position mode of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-257
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:DATA:TRACe	Sets the data trace of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-257
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:GCALL?	Queries all settings related to the general call of the logic I <sup>2</sup> C bus signal search.	5-257
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:GCALL:BIT7address?	Queries all settings related to the 7-bit master address of the general code of the logic I <sup>2</sup> C bus signal search.	5-257
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:GCALL:BIT7address:HEXA	Sets the 7-bit master address of the general call of the logic I <sup>2</sup> C bus signal search in hexadecimal notation.	5-257
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:GCALL:BIT7address:PATtern	Sets the 7-bit master address of the general call of the logic I <sup>2</sup> C bus signal search in binary notation or queries the current setting.	5-258
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:GCALL:SBYTE (Second Byte)	Sets the second byte type of the general call of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-258
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:MODE	Sets the search mode of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-258
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:NAIgnore?	Queries all settings related to the NON ACK ignore mode of the logic I <sup>2</sup> C bus signal search.	5-258
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:NAIgnore:HSMODE	Sets whether to ignore NON ACK in high speed mode of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-258
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:NAIgnore:RACcess	Sets whether to ignore NON ACK in read access mode of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-258
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:NAIgnore:SBYTE (Start Byte)	Sets whether to ignore NON ACK in the start byte of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-259
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:SBHSMODE?	Queries all settings related to the start byte and high speed mode of the logic I <sup>2</sup> C bus signal search.	5-259
:SEARCH<x>:SLOGic:I2Cbus[:SETup]:SBHSMODE:TYPE	Sets the type of start byte and high speed mode of the logic I <sup>2</sup> C bus signal search or queries the current setting.	5-259
:SEARCH<x>:SLOGic:LINbus?	Queries all settings related to the logic LIN bus signal search.	5-259
:SEARCH<x>:SLOGic:LINbus[:SETup]?	Queries all settings related to the setup of the logic LIN bus signal search.	5-259
:SEARCH<x>:SLOGic:LINbus[:SETup]:BLENGth	Sets the logic LIN bus signal search break length or queries the current setting.	5-259
:SEARCH<x>:SLOGic:LINbus[:SETup]:BRATe	Sets the bit rate (data transfer rate) of the logic LIN bus signal search or queries the current setting.	5-260
:SEARCH<x>:SLOGic:LINbus[:SETup]:DATA?	Queries all settings related to the data of the logic LIN bus signal search.	5-260
:SEARCH<x>:SLOGic:LINbus[:SETup]:DATA:BNUM	Sets the number of bytes of the logic LIN bus signal search or queries the current setting.	5-260
:SEARCH<x>:SLOGic:LINbus[:SETup]:DATA:BORDER	Sets the data byte order of the logic LIN bus signal search or queries the current setting.	5-260
:SEARCH<x>:SLOGic:LINbus[:SETup]:DATA:CONDition	Sets the data condition of the logic LIN bus signal search or queries the current setting.	5-260
:SEARCH<x>:SLOGic:LINbus[:SETup]:DATA:DATA<x>	Sets the comparison data of the logic LIN bus signal search data or queries the current setting.	5-261
:SEARCH<x>:SLOGic:LINbus[:SETup]:DATA:HEXA	Sets the data of the logic LIN bus signal search in hexadecimal notation.	5-261
:SEARCH<x>:SLOGic:LINbus[:SETup]:DATA:MSBLsb	Sets the MSB/LSB bit of the logic LIN bus signal search or queries the current setting.	5-261
:SEARCH<x>:SLOGic:LINbus[:SETup]:DATA:PATtern	Sets the data of the logic LIN bus signal search in binary notation or queries the current setting.	5-261
:SEARCH<x>:SLOGic:LINbus[:SETup]:DATA:SIGN	Sets the data sign of the logic LIN bus signal search or queries the current setting.	5-261
:SEARCH<x>:SLOGic:LINbus[:SETup]:ERROR?	Queries all settings related to the logic LIN bus signal search error .	5-262
:SEARCH<x>:SLOGic:LINbus[:SETup]:ERROR:CHECKsum	Sets the logic LIN bus signal search Checksum error or queries the current setting.	5-262

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:SEARCH<x>:SLOGic:LINBus[:SETup]:ERRor:FRAMing	Sets the logic LIN bus signal search Framing error or queries the current setting.	5-262
:SEARCH<x>:SLOGic:LINBus[:SETup]:ERRor:PARity	Sets the logic LIN bus signal search Parity error or queries the current setting.	5-262
:SEARCH<x>:SLOGic:LINBus[:SETup]:ERRor:SYNCh	Sets the logic LIN bus signal search Synch error or queries the current setting.	5-262
:SEARCH<x>:SLOGic:LINBus[:SETup]:ERRor:TOUT	Sets the logic LIN bus signal search Timeout error or queries the current setting.	5-262
:SEARCH<x>:SLOGic:LINBus[:SETup]:ID?	Queries all settings related to the ID of the logic LIN bus signal search.	5-262
:SEARCH<x>:SLOGic:LINBus[:SETup]:ID:HEXA	Sets the ID of the logic LIN bus signal search in hexadecimal notation.	5-263
:SEARCH<x>:SLOGic:LINBus[:SETup]:ID:PATtern	Sets the ID of the logic LIN bus signal search in binary notation or queries the current setting.	5-263
:SEARCH<x>:SLOGic:LINBus[:SETup]:MODE	Sets the logic LIN bus signal search mode or queries the current setting.	5-263
:SEARCH<x>:SLOGic:LINBus[:SETup]:REVIsion	Sets the logic LIN bus signal search revision (1.3 or 2.0) or queries the current setting.	5-263
:SEARCH<x>:SLOGic:LINBus[:SETup]:SPOint	Sets the logic LIN bus signal search sampling point or queries the current setting.	5-263
:SEARCH<x>:SLOGic:LINBus[:SETup]:TRACe	Sets the trace of the logic LIN bus signal search or queries the current setting.	5-263
:SEARCH<x>:SLOGic:POLarity	Sets the logic search polarity or queries the current setting.	5-263
:SEARCH<x>:SLOGic:SOURce	Sets the logic search source or queries the current setting.	5-264
:SEARCH<x>:SLOGic:SPATtern?(Serial Pattern)	Queries all settings related to logic serial pattern search.	5-264
:SEARCH<x>:SLOGic:SPATtern:CLOCK?	Queries all settings related to the clock for the logic serial pattern search.	5-264
:SEARCH<x>:SLOGic:SPATtern:CLOCK:MODE	Enables/disables the clock for the logic serial analysis pattern search or queries the current setting.	5-264
:SEARCH<x>:SLOGic:SPATtern:CLOCK:POLarity	Sets the polarity of the clock trace of the logic serial pattern search or queries the current setting.	5-264
:SEARCH<x>:SLOGic:SPATtern:CLOCK:SOURce	Sets the clock trace for the logic serial pattern search or queries the current setting.	5-264
:SEARCH<x>:SLOGic:SPATtern:CS	Enables/disables the chip select for the logic serial analysis pattern search or queries the current setting.	5-264
:SEARCH<x>:SLOGic:SPATtern:LATCH?	Queries all settings related to the latch for the logic serial pattern search.	5-265
:SEARCH<x>:SLOGic:SPATtern:LATCH:POLarity	Sets the polarity of the latch trace of the logic serial pattern search or queries the current setting.	5-265
:SEARCH<x>:SLOGic:SPATtern:LATCH:TRACe	Sets the latch trace for the logic serial pattern search or queries the current setting.	5-265
:SEARCH<x>:SLOGic:SPATtern[:SETup]?	Queries all settings related to the setup for the logic serial pattern search.	5-265
:SEARCH<x>:SLOGic:SPATtern[:SETup]:BITRate	Sets the bit rate for the logic serial pattern search or queries the current setting.	5-265
:SEARCH<x>:SLOGic:SPATtern[:SETup]:CLEar	Clears (Don't care) all patterns of the logic serial pattern search.	5-265
:SEARCH<x>:SLOGic:SPATtern[:SETup]:DATA?	Queries all settings related to the data for the logic serial pattern search.	5-265
:SEARCH<x>:SLOGic:SPATtern[:SETup]:DATA:ACTive	Sets the active trace level of the data for the logic serial pattern search or queries the current setting.	5-266
:SEARCH<x>:SLOGic:SPATtern[:SETup]:DATA:TRACe	Sets the trace of the data for the logic serial pattern search or queries the current setting.	5-266
:SEARCH<x>:SLOGic:SPATtern[:SETup]:HEXA	Sets the pattern of the logic serial pattern search in hexadecimal notation.	5-266
:SEARCH<x>:SLOGic:SPATtern[:SETup]:PATtern	Sets the pattern of the logic serial pattern search in binary notation, or queries the current setting.	5-266
:SEARCH<x>:SLOGic:SPIBus?	Queries all settings related to the logic SPI bus signal search.	5-266
:SEARCH<x>:SLOGic:SPIBus:CLOCK?	Queries all settings related to the clock signal channel of the logic SPI bus signal search.	5-266
:SEARCH<x>:SLOGic:SPIBus:CLOCK:POLarity	Sets the polarity of the clock signal channel of the logic SPI bus signal search or queries the current setting.	5-267



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Command	Function	Page
:SEARCH<x>:SLOGic:SPIBus:CLOCK:SOURCE	Sets the clock signal channel of the logic SPI bus signal search or queries the current setting.	5-267
:SEARCH<x>:SLOGic:SPIBus:CS?	Queries all settings related to the chip select signal channel of the logic SPI bus signal search.	5-267
:SEARCH<x>:SLOGic:SPIBus:CS:ACTIVE	Sets the active level of the chip select signal channel of the logic SPI bus signal search or queries the current setting.	5-267
:SEARCH<x>:SLOGic:SPIBus:CS:TRACE	Sets the chip select signal channel of the logic SPI bus signal search or queries the current setting.	5-267
:SEARCH<x>:SLOGic:SPIBus[:SETup]?	Queries all settings related to the setup of the logic SPI bus signal search.	5-267
:SEARCH<x>:SLOGic:SPIBus[:SETup]:BITOrder	Sets the bit order of the logic SPI bus signal search or queries the current setting.	5-267
:SEARCH<x>:SLOGic:SPIBus[:SETup]:DATA<x>?	Queries all settings related to each data of the logic SPI bus signal search.	5-268
:SEARCH<x>:SLOGic:SPIBus[:SETup]:DATA<x>:BYTE	Sets the data size (in bytes) of each data of the logic SPI bus signal search or queries the current setting.	5-268
:SEARCH<x>:SLOGic:SPIBus[:SETup]:DATA<x>:CONDition	Sets the determination method (match or not match) of the data of the logic SPI bus signal search or queries the current setting.	5-268
:SEARCH<x>:SLOGic:SPIBus[:SETup]:DATA<x>:DPOSITION	Sets the pattern comparison start position of the logic SPI bus signal search or queries the current setting.	5-268
:SEARCH<x>:SLOGic:SPIBus[:SETup]:DATA<x>:HEXA<x>	Sets the data of the logic SPI bus signal search in hexadecimal notation.	5-268
:SEARCH<x>:SLOGic:SPIBus[:SETup]:DATA<x>:PATTERN<x>	Sets the data of the logic SPI bus signal search in binary notation or queries the current setting.	5-268
:SEARCH<x>:SLOGic:SPIBus[:SETup]:DATA<x>:TRACE	Sets the source channel of each data of the logic SPI bus signal search or queries the current setting.	5-269
:SEARCH<x>:SLOGic:SPIBus[:SETup]:MODE	Sets the wiring system of the logic SPI bus signal search (three-wire or four-wire) or queries the current setting.	5-269
:SEARCH<x>:SLOGic:STATE?	Queries all settings related to the logic state search.	5-269
:SEARCH<x>:SLOGic:STATE:BIT?	Queries all settings related to the bits of the logic state search.	5-270
:SEARCH<x>:SLOGic:STATE:BIT:{A<x> B<x> C<x> D<x>}	Sets the truth conditions for each bit of the logic state search or queries the current setting.	5-270
:SEARCH<x>:SLOGic:STATE:BIT:CLEAR	Clears (Don't care) all truth conditions for each bit of the logic serial pattern search.	5-270
:SEARCH<x>:SLOGic:STATE:BIT:LOGic	Sets the logic of the logic state search or queries the current setting.	5-270
:SEARCH<x>:SLOGic:STATE:GROUP<x>?	Queries all settings related to each group of the logic state search.	5-270
:SEARCH<x>:SLOGic:STATE:GROUP<x>:CLEAR	Clears (Don't care) all truth conditions for each group of the logic serial pattern search.	5-270
:SEARCH<x>:SLOGic:STATE:GROUP<x>:CONDition	Sets the determination condition for each group of the logic state search or queries the current setting.	5-270
:SEARCH<x>:SLOGic:STATE:GROUP<x>:DATA<x>	Sets the comparison data for each group of the logic state search or queries the current setting.	5-271
:SEARCH<x>:SLOGic:STATE:GROUP<x>:HEXA	Sets the truth conditions for each group of the logic serial pattern search in hexadecimal notation.	5-271
:SEARCH<x>:SLOGic:STATE:GROUP<x>:PATTERN	Sets the truth condition for each group of the logic state search in binary notation or queries the current setting.	5-271
:SEARCH<x>:SLOGic:STATE:GROUP<x>:SYMBOL	Sets the symbol item for each group of the logic state search.	5-271
:SEARCH<x>:SLOGic:STATE:TYPE	Sets the setting method of the logic state search or queries the current setting.	5-271
:SEARCH<x>:SLOGic:UART?	Queries all settings related to the logic UART bus signal search.	5-272
:SEARCH<x>:SLOGic:UART:BRATE	Sets the logic UART bus signal search bit rate (data transfer rate) or queries the current setting.	5-272
:SEARCH<x>:SLOGic:UART:DATA?	Queries all settings related to data of the logic UART bus signal search .	5-272
:SEARCH<x>:SLOGic:UART:DATA:BITOrder	Sets the data bit order of the logic UART bus signal search or queries the current setting.	5-272
:SEARCH<x>:SLOGic:UART:DATA:DSIZE	Sets the number of data bytes of the logic UART bus signal search or queries the current setting.	5-272
:SEARCH<x>:SLOGic:UART:DATA:HEXA	Sets the logic UART bus signal search data in hexadecimal.	5-272
:SEARCH<x>:SLOGic:UART:DATA:PATTERN	Sets the data of the logic UART bus signal search in binary or queries the current setting.	5-272
:SEARCH<x>:SLOGic:UART:ERROR?	Queries all settings related to the logic UART bus signal search error .	5-272
:SEARCH<x>:SLOGic:UART:ERROR:FRAMing	Sets the logic UART bus signal search Framing error or queries the current setting.	5-273

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:SEARCH<x>:SLOGic:UART:ERROR:PARity	Sets the logic UART bus signal search Parity error or queries the current setting.	5-273
:SEARCH<x>:SLOGic:UART:ERROR:PMODE	Sets the logic UART bus signal search Parity mode or queries the current setting.	5-273
:SEARCH<x>:SLOGic:UART:FORMat	Sets the logic UART bus signal search format or queries the current setting.	5-273
:SEARCH<x>:SLOGic:UART:MODE	Sets the logic UART bus signal search mode or queries the current setting.	5-273
:SEARCH<x>:SLOGic:UART:POLarity	Sets the logic UART bus signal search polarity or queries the current setting.	5-273
:SEARCH<x>:SLOGic:UART:TRACe	Sets the logic UART bus signal search trace or queries the current setting.	5-273
:SEARCH<x>:SLOGic:UART:SPOint	Sets the logic UART bus signal search sampling point or queries the current setting.	5-273
:SEARCH<x>:SLOGic:WIDTh?	Queries all settings of the logic pulse width search.	5-273
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:SEARCH<x>:SLOGic:WIDTh:TIME<x>	Sets the pulse width of the logic pulse width search or queries the current setting.	5-274
:SEARCH<x>:SLOGic:WIDTh:TYPE	Sets the logic pulse width search type or queries the current setting.	5-274
:SEARCH<x>:SMODE	Sets the skip mode or queries the current setting.	5-274
:SEARCH<x>:SPATtern?	Queries all settings related to the serial pattern search.	5-274
:SEARCH<x>:SPATtern:CLOCK?	Queries all settings related to clock of the serial pattern search.	5-274
:SEARCH<x>:SPATtern:CLOCK:MODE	Enables/Disables the clock of the serial pattern search or queries the current setting.	5-274
:SEARCH<x>:SPATtern:CLOCK:POLarity	Sets the polarity of the clock trace of the serial pattern search or queries the current setting.	5-274
:SEARCH<x>:SPATtern:CLOCK:SOURce	Sets the clock trace of the serial pattern search or queries the current setting.	5-275
:SEARCH<x>:SPATtern:CS	Enables/Disables the chip select of the serial pattern search or queries the current setting.	5-275
:SEARCH<x>:SPATtern:LATCh?	Queries all settings related to latch of the serial pattern search.	5-275
:SEARCH<x>:SPATtern:LATCh:POLarity	Sets the polarity of the latch trace of the serial pattern search or queries the current setting.	5-275
:SEARCH<x>:SPATtern:LATCh:TRACe	Sets the latch trace of the serial pattern search or queries the current setting.	5-275
:SEARCH<x>:SPATtern:SETup?	Queries all settings related to setup of the serial pattern search.	5-275
:SEARCH<x>:SPATtern[:SETup]:BITRate	Sets the bit rate of the serial pattern search or queries the current setting.	5-275
:SEARCH<x>:SPATtern[:SETup]:CLEar	Clears the entire pattern of the serial pattern search.	5-275
:SEARCH<x>:SPATtern[:SETup]:DATA?	Queries all settings related to data of the serial pattern search.	5-275
:SEARCH<x>:SPATtern[:SETup]:DATA:ACTive	Sets the active level of the data trace of the serial pattern search or queries the current setting.	5-276
:SEARCH<x>:SPATtern[:SETup]:DATA:TRACe	Sets the data trace of the serial pattern search or queries the current setting.	5-276
:SEARCH<x>:SPATtern[:SETup]:HEXA	Sets the pattern of the serial pattern search in hexadecimal notation.	5-276
:SEARCH<x>:SPATtern[:SETup]:PATtern	Sets the pattern of the serial pattern search in binary notation or queries the current setting.	5-276
:SEARCH<x>:SPIBus?	Queries all settings related to the SPI bus signal search.	5-276
:SEARCH<x>:SPIBus:CLOCK	Queries all settings related to the clock channel of the SPI bus signal search.	5-276
:SEARCH<x>:SPIBus:CLOCK:POLarity	Sets the polarity of the clock channel of the SPI bus signal search or queries the current setting.	5-276
:SEARCH<x>:SPIBus:CLOCK:SOURce	Sets the clock channel of the SPI bus signal search or queries the current setting.	5-276
:SEARCH<x>:SPIBus:CS?	Queries all settings related to the chip select channel of the SPI bus signal search.	5-277
:SEARCH<x>:SPIBus:CS:ACTive	Sets the active level of the chip select channel of the SPI bus signal search or queries the current setting.	5-277
:SEARCH<x>:SPIBus:CS:TRACe	Sets the chip select channel of the SPI bus signal search or queries the current setting.	5-277
:SEARCH<x>:SPIBus:SETup?	Queries all settings related to the SPI bus signal search setup.	5-277
:SEARCH<x>:SPIBus[:SETup]:BITOrder	Sets the bit order of the SPI bus signal search or queries the current setting.	5-277

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:SEARCH<x>:SPIBus[:SETup]:DATA<x>?	Queries all settings related to the data of the SPI bus signal search.	5-277
:SEARCH<x>:SPIBus[:SETup]:DATA<x>:BYTE	Sets the number of bytes of the data of the SPI bus signal search or queries the current setting.	5-277
:SEARCH<x>:SPIBus[:SETup]:DATA<x>:CONDition	Sets the determination method (match or not match) of the data of the SPI bus signal search or queries the current setting.	5-278
:SEARCH<x>:SPIBus[:SETup]:DATA<x>:DPOsition	Sets the pattern comparison start position of the data of the SPI bus signal search or queries the current setting.	5-278
:SEARCH<x>:SPIBus[:SETup]:DATA<x>:HEXA<x>	Sets the data of the SPI bus signal search in hexadecimal notation.	5-278
:SEARCH<x>:SPIBus[:SETup]:DATA<x>:PATtern<x>	Sets the data of the SPI bus signal search in binary notation or queries the current setting.	5-278
:SEARCH<x>:SPIBus[:SETup]:DATA<x>:TRACe	Sets the source channel of the data of the SPI bus signal search or queries the current setting.	5-278
:SEARCH<x>:SPIBus[:SETup]:MODE	Sets the wiring system of the SPI bus signal search (three-wire or four-wire) or queries the current setting.	5-278
:SEARCH<x>:SPOint	Sets the search start position or queries the current setting.	5-279
:SEARCH<x>:STRace	Sets the search source trace or queries the current setting.	5-279
:SEARCH<x>:TRACe<x>?	Queries all settings related to the search conditions of the trace.	5-279
:SEARCH<x>:TRACe<x>:CONDition	Sets the condition to be satisfied for the trace or queries the current setting.	5-279
:SEARCH<x>:TRACe<x>:HYSTeresis	Sets the hysteresis of the trace or queries the current setting.	5-279
:SEARCH<x>:TRACe<x>:LEVEl	Sets the threshold level of the trace or queries the current setting.	5-279
:SEARCH<x>:TYPE	Sets the search type or queries the current setting.	5-279
:SEARCH<x>:UART?	Queries all settings related to the UART bus signal search.	5-279
:SEARCH<x>:UART:BRATe	Sets the UART bus signal search bit rate (data transfer rate) or queries the current setting.	5-280
:SEARCH<x>:UART:DATA?	Queries all settings related to data of the UART bus signal search .	5-280
:SEARCH<x>:UART:DATA:BITorder	Sets the data bit order of the UART bus signal search or queries the current setting.	5-280
:SEARCH<x>:UART:DATA:DSIZe	Sets the number of data bytes of the UART bus signal search or queries the current setting.	5-280
:SEARCH<x>:UART:DATA:HEXA	Sets the UART bus signal search data in hexadecimal.	5-280
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:SEARCH<x>:UART:ERRor?	Queries all settings related to the UART bus signal search error .	5-280
:SEARCH<x>:UART:ERRor:FRAMing	Sets the UART bus signal search Framing error or queries the current setting.	5-280
:SEARCH<x>:UART:ERRor:PARity	Sets the UART bus signal search Parity error or queries the current setting.	5-280
:SEARCH<x>:UART:ERRor:PMODE	Sets the UART bus signal search Parity mode or queries the current setting.	5-281
:SEARCH<x>:UART:FORMat	Sets the UART bus signal search format or queries the current setting.	5-281
:SEARCH<x>:UART:MODE	Sets the UART bus signal search mode or queries the current setting.	5-281
:SEARCH<x>:UART:POLarity	Sets the UART bus signal search polarity or queries the current setting.	5-281
:SEARCH<x>:UART:TRACe	Sets the UART bus signal search trace or queries the current setting.	5-281
:SEARCH<x>:UART:SPOint	Sets the UART bus signal search sample point or queries the current setting.	5-281
:SEARCH<x>:WIDTh?	Queries all settings related to the pulse width search.	5-281
:SEARCH<x>:WIDTh:MODE	Sets the pulse width determination mode or queries the current setting.	5-281
:SEARCH<x>:WIDTh:TIME<x>	Sets the pulse width of the pulse width search or queries the current setting.	5-281
:SEARCH<x>:WIDTh:TYPE	Sets the pulse width search type or queries the current setting.	5-281
<b>SERialbus Group</b>		
:SERialbus?	Queries all settings related to the serial bus setup.	5-282
:SERialbus:SETup<x>?	Queries all settings related to each setup of the serial bus setup.	5-282
:SERialbus:SETup<x>:ASETup:ABORT	Cancels auto setup of the serial bus setup.	5-282
:SERialbus:SETup<x>:ASETup:EXECute	Executes auto setup of the serial bus setup.	5-282
:SERialbus:SETup<x>:ASETup:UNDO	Undoes the executed auto setup of the serial bus setup.	5-283
:SERialbus:SETup<x>:CANBus?	Queries all settings related to the CAN bus setup.	5-283
:SERialbus:SETup<x>:CANBus:BRATe	Sets the CAN bus setup bit rate (data transfer rate) or queries the current setting.	5-283

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:Serialbus:SETup<x>:CANBus:REcessive	Sets the CAN bus setup recessive level (bus level) or queries the current setting.	5-283
:Serialbus:SETup<x>:CANBus:SPOint	Sets the CAN bus setup sample point or queries the current setting.	5-283
:Serialbus:SETup<x>:CANBus:TRACe	Sets the CAN bus setup trace or queries the current setting.	5-283
:Serialbus:SETup<x>:FLEXray?	Queries all settings related to the FLEXRAY bus setup.	5-283
:Serialbus:SETup<x>:FLEXray:BRATe	Sets the FLEXRAY bus setup bit rate (data transfer rate) or queries the current setting.	5-283
:Serialbus:SETup<x>:FLEXray:CRCBus	Sets the FLEXRAY bus setup CRC Error or queries the current setting.	5-283
:Serialbus:SETup<x>:FLEXray:SPOint	Sets the FLEXRAY bus setup sample point or queries the current setting.	5-284
:Serialbus:SETup<x>:FLEXray:TRACe	Sets the FLEXRAY bus setup trace or queries the current setting.	5-284
:Serialbus:SETup<x>:I2CBus?	Queries all settings related to the I2C bus setup.	5-284
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:Serialbus:SETup<x>:I2CBus:DTRACe	Sets the I2C bus signal analysis data channel or queries the current setting.	5-284
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:Serialbus:SETup<x>:LINBus:BRATe	Sets the LIN bus setup bit rate (data transfer rate) or queries the current setting.	5-284
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:Serialbus:SETup<x>:SPIBus?	Queries all settings related to the SPI bus setup.	5-285
:Serialbus:SETup<x>:SPIBus:BITOrder	Sets the SPI bus setup bit order or queries the current setting.	5-285
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:Serialbus:SETup<x>:SPIBus:CLOCk:POLarity	Sets the polarity of the channel of the clock signal of the SPI bus setup.	5-285
:Serialbus:SETup<x>:SPIBus:CLOCk:TRACe	Sets the channel of the clock signal of the SPI bus setup or queries the current setting.	5-285
:Serialbus:SETup<x>:SPIBus:CS?	Queries all settings related to the channel of the chip select signal of the SPI bus setup.	5-285
:Serialbus:SETup<x>:SPIBus:CS:ACTive	Sets the active level of the channel of the chip select signal of the SPI bus setup.	5-286
:Serialbus:SETup<x>:SPIBus:CS:TRACe	Sets the channel of the chip select signal of the SPI bus setup or queries the current setting.	5-286
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:Serialbus:SETup<x>:SPIBus:DATA<x>:ACTive	Sets the active level of each data of the SPI bus setup or queries the current setting.	5-286
:Serialbus:SETup<x>:SPIBus:DATA<x>:TRACe	Sets each data channel of the SPI bus setup or queries the current setting.	5-286
:Serialbus:SETup<x>:SPIBus:MODE	Sets the wiring method (3-wire/4-wire) of the SPI bus setup or queries the current setting.	5-286
:Serialbus:SETup<x>:TRACe<x>?	Queries all settings related to each trace.	5-286
:Serialbus:SETup<x>:TRACe<x>:HYSTEResis	Sets the hysteresis of the threshold level of each trace or queries the current setting.	5-286
:Serialbus:SETup<x>:TRACe<x>:LEVel	Sets the threshold level of each trace or queries the current setting.	5-287
:Serialbus:SETup<x>:TYPE	Sets the serial bus setup type or queries the current setting.	5-287
:Serialbus:SETup<x>:UART?	Queries all settings related to the UART bus setup.	5-287
:Serialbus:SETup<x>:UART:BITOrder	Sets the UART bus setup bit order or queries the current setting.	5-287
:Serialbus:SETup<x>:UART:BRATe	Sets the UART bus setup bit rate (data transfer rate) or queries the current setting.	5-287
:Serialbus:SETup<x>:UART:FORMat	Sets the UART bus setup data format or queries the current setting.	5-287
:Serialbus:SETup<x>:UART:PMODE	Sets the UART bus setup Parity mode or queries the current setting.	5-287
:Serialbus:SETup<x>:UART:POLarity	Sets the UART bus setup polarity or queries the current setting.	5-287
:Serialbus:SETup<x>:UART:SPOint	Sets the UART bus setup sample point or queries the current setting.	5-288
:Serialbus:SETup<x>:UART:TRACe	Sets the UART bus setup trace or queries the current setting.	5-288
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<b>SNAP Group</b>		
:SNAP	Executes the snapshot.	5-289

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:SStart?	Executes the single start of the trigger mode.	5-289
<b>STARt Group</b>		
:STARt	Starts waveform acquisition.	5-289
<b>STATus Group</b>		
:STATus?	Queries all settings related to the communication status function.	5-290
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:STATus:EESR?	Queries the content of the extended event register and clears the register.	5-290
:STATus:ERRor?	Queries the code and message of the error that occurred.	5-290
:STATus:FILTer<x>	Sets the transition filter or queries the current setting.	5-290
:STATus:QENable	Sets whether to store messages other than errors to the error queue or queries the current setting.	5-290
:STATus:QMESsage	Sets whether to attach a message description to the response to the :STATus:ERRor? query or queries the current setting.	5-290
:STATus:SPOLl?	Executes serial polling.	5-290
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:STOP	Stops waveform acquisition.	5-291
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:SYSTem:CLICk	Turns ON/OFF the click sound or queries the current setting.	5-291
:SYSTem:CLOCk?	Queries all settings related to the date, time, and time difference with respect to GMT.	5-291
:SYSTem:CLOCk:DTIME	Sets the date, time, and time difference with respect to GMT or queries the current setting.	5-291
:SYSTem:CLOCk:MODE	Turns ON/OFF the date, time, and time difference with respect to GMT or queries the current setting.	5-291
:SYSTem:FORMat:IMEMory[:EXECute]	Formats the internal memory.	5-291
:SYSTem:FORMat:IHDD[:EXECute]	Formats the internal hard disk.	5-291
:SYSTem:FORMat:SDElete[:EXECute]	Clears and formats the internal memory.	5-291
:SYSTem:LANguage	Sets the message language or queries the current setting.	5-291
:SYSTem:MFSize	Sets the menu font size or queries the current setting.	5-292
:SYSTem:MLANguage	Sets the menu language or queries the current setting.	5-292
:SYSTem:OVERview	Displays system information.	5-292
:SYSTem:USBKeyboarD	Sets the USB keyboard type or queries the current setting.	5-292
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:TIMEbase?	Queries all settings related to the time base.	5-293
:TIMEbase:SRATE?	Queries the sample rate.	5-293
:TIMEbase:TDIV	Sets the T/div value or queries the current setting.	5-293
<b>TRIGger Group</b>		
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:TRIGger:ACTion?	Queries all settings related to the action-on-trigger.	5-294
:TRIGger:ACTion:ACQCount	Sets the action count of action-on-trigger or queries the current setting.	5-294
:TRIGger:ACTion:BUZZer	Sets whether to sound a buzzer when an action is activated or queries the current setting.	5-294
:TRIGger:ACTion:HCOpy	Sets whether to output screen image data (ON/OFF) when an action is activated or queries the current setting.	5-294
:TRIGger:ACTion:MAIL?	Queries all settings related to the mail transmission when an action is activated.	5-294
:TRIGger:ACTion:MAIL:INTerval	Sets the interval at which to send mail when an action is activated or queries the current setting.	5-295
:TRIGger:ACTion:MAIL:MODE	Sets whether to send mail when an action is activated or queries the current setting.	5-295
:TRIGger:ACTion:MODE	Sets the action-on-trigger mode or queries the current setting.	5-295
:TRIGger:ACTion:SAVE	Sets whether to save the waveform data to the storage medium (ON/OFF) when an action is activated or queries the current setting.	5-295
:TRIGger:ACTion:STARt	Starts the action-on-trigger.	5-295
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:TRIGger:CLOCk?	Queries all settings related to the clock channel.	5-295
:TRIGger:CLOCk:POLarity	Sets the polarity of the clock channel or queries the current setting.	5-295
:TRIGger:CLOCk:SOURce	Sets the source waveform of the clock channel or queries the current setting.	5-295

Command	Function	Page
:TRIGger:DElay?	Queries all settings related to the trigger delay.	5-295
:TRIGger:DElay:EDGecount?	Queries all settings related to edge count of the trigger delay.	5-295
:TRIGger:DElay:EDGecount:COUNT	Sets the edge count value of the trigger delay or queries the current setting.	5-295
:TRIGger:DElay:MODE	Turns ON/OFF the trigger delay or queries the current setting.	5-296
:TRIGger:DElay:POLarity	Sets the edge polarity the trigger delay or queries the current setting.	5-296
:TRIGger:DElay:SOURce	Sets the edge source the trigger delay or queries the current setting.	5-296
:TRIGger:DElay:TIME	Sets the delay value the trigger delay or queries the current setting.	5-296
:TRIGger:DElay:TYPE	Sets the trigger delay type or queries the current setting.	5-296
:TRIGger:EINterval?	Queries all settings related to the event interval.	5-296
:TRIGger:EINterval:EVENT<x>?	Queries all settings related to the event.	5-297
:TRIGger:EINterval:EVENT<x>:CANBus?	Queries all settings related to the CAN bus signal trigger of the event.	5-297
:TRIGger:EINterval:EVENT<x>:CANBus:ACK	Sets the ACK condition of the CAN bus signal trigger or queries the current setting.	5-297
:TRIGger:EINterval:EVENT<x>:CANBus:BRATe	Sets the bit rate (data transfer rate) of the CAN bus signal trigger or queries the current setting.	5-298
:TRIGger:EINterval:EVENT<x>:CANBus:DATA?	Queries all settings related to the CAN bus signal trigger data.	5-298
:TRIGger:EINterval:EVENT<x>:CANBus:DATA:BORDER	Sets the byte order of the CAN bus signal trigger data or queries the current setting.	5-298
:TRIGger:EINterval:EVENT<x>:CANBus:DATA:CONDition	Sets the data condition of the CAN bus signal trigger or queries the current setting.	5-298
:TRIGger:EINterval:EVENT<x>:CANBus:DATA:DATA<x>	Sets the comparison data of the CAN bus signal trigger data or queries the current setting.	5-298
:TRIGger:EINterval:EVENT<x>:CANBus:DATA:DLC	Sets the number of valid bytes (DLC) of the CAN bus signal trigger data or queries the current setting.	5-299
:TRIGger:EINterval:EVENT<x>:CANBus:DATA:HEXA	Sets the CAN bus signal trigger data in hexadecimal notation.	5-299
:TRIGger:EINterval:EVENT<x>:CANBus:DATA:MSBLsb	Sets the MSB and LSB bits of the CAN bus signal trigger data or queries the current setting.	5-299
:TRIGger:EINterval:EVENT<x>:CANBus:DATA:PATtern	Sets the CAN bus signal trigger data in binary notation or queries the current setting.	5-299
:TRIGger:EINterval:EVENT<x>:CANBus:DATA:SIGN	Sets the sign of the CAN bus signal trigger data or queries the current setting.	5-299
:TRIGger:EINterval:EVENT<x>:CANBus:IDEXt?	Queries all settings related to the ID of the extended format of the CAN bus signal trigger.	5-299
:TRIGger:EINterval:EVENT<x>:CANBus:IDEXt:HEXA	Sets the ID of the extended format of the CAN bus signal trigger in hexadecimal notation.	5-299
:TRIGger:EINterval:EVENT<x>:CANBus:IDEXt:PATtern	Sets the ID of the extended format of the CAN bus signal trigger in binary notation or queries the current setting.	5-300
:TRIGger:EINterval:EVENT<x>:CANBus:IDOR?	Queries all settings related to the OR condition of the CAN bus signal trigger.	5-300
:TRIGger:EINterval:EVENT<x>:CANBus:IDOR:ID<x>?	Queries all settings related to each ID of the OR condition of the CAN bus signal trigger.	5-301
:TRIGger:EINterval:EVENT<x>:CANBus:IDOR:ID<x>:ACK	Sets each ACK condition of the OR condition of the CAN bus signal trigger or queries the current setting.	5-301
:TRIGger:EINterval:EVENT<x>:CANBus:IDOR:ID<x>:DATA?	Queries all settings related to each data of the OR condition of the CAN bus signal trigger.	5-301
:TRIGger:EINterval:EVENT<x>:CANBus:IDOR:ID<x>:DATA:BORDER	Sets byte order of each data of the OR condition of the CAN bus signal trigger or queries the current setting.	5-301
:TRIGger:EINterval:EVENT<x>:CANBus:IDOR:ID<x>:DATA:CONDition	Sets each data condition of the OR condition of the CAN bus signal trigger or queries the current setting.	5-301
:TRIGger:EINterval:EVENT<x>:CANBus:IDOR:ID<x>:DATA:DATA<x>	Sets comparison data of each data of the OR condition of the CAN bus signal trigger or queries the current setting.	5-302
:TRIGger:EINterval:EVENT<x>:CANBus:IDOR:ID<x>:DATA:DLC	Sets the number of valid bytes (DLC) of each data of the OR condition of the CAN bus signal trigger or queries the current setting.	5-302
:TRIGger:EINterval:EVENT<x>:CANBus:IDOR:ID<x>:DATA:HEXA	Sets each data of the OR condition of the CAN bus signal trigger in hexadecimal notation.	5-302
:TRIGger:EINterval:EVENT<x>:CANBus:IDOR:ID<x>:DATA:MSBLsb	Sets the MSB and LSB bits of each data of the OR condition of the CAN bus signal trigger or queries the current setting.	5-302

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Command	Function	Page
:TRIGger:EINterval:EVENT<x>: CANBus:IDOR:ID<x>:DATA:PATtern	Sets each data of the OR condition of the CAN bus signal trigger in binary notation or queries the current setting.	5-302
:TRIGger:EINterval:EVENT<x>: CANBus:IDOR:ID<x>:DATA:SIGN	Sets sign of each data of the OR condition of the CAN bus signal trigger or queries the current setting.	5-303
:TRIGger:EINterval:EVENT<x>: CANBus:IDOR:ID<x>:FORMat	Sets each message format (standard or extended) of the OR condition of the CAN bus signal trigger or queries the current setting.	5-303
:TRIGger:EINterval:EVENT<x>: CANBus:IDOR:ID<x>:IDExt?	Queries all settings related to the ID of each extended format of the OR condition of the CAN bus signal trigger.	5-303
:TRIGger:EINterval:EVENT<x>: CANBus:IDOR:ID<x>:IDExt:HEXA	Sets the ID of each extended format of the OR condition of the CAN bus signal trigger in hexadecimal notation.	5-303
:TRIGger:EINterval:EVENT<x>: CANBus:IDOR:ID<x>:IDExt:PATtern	Sets the ID of each extended format of the OR condition of the CAN bus signal trigger in binary notation or queries the current setting.	5-303
:TRIGger:EINterval:EVENT<x>: CANBus:IDOR:ID<x>:IDSTd?	Queries all settings related to the ID of each standard format of the OR condition of the CAN bus signal trigger.	5-303
:TRIGger:EINterval:EVENT<x>: CANBus:IDOR:ID<x>:IDSTd:HEXA	Sets the ID of each standard format of the OR condition of the CAN bus signal trigger in hexadecimal notation.	5-304
:TRIGger:EINterval:EVENT<x>: CANBus:IDOR:ID<x>:IDSTd:PATtern	Sets the ID of each standard format of the OR condition of the CAN bus signal trigger in binary notation or queries the current setting.	5-304
:TRIGger:EINterval:EVENT<x>: CANBus:IDOR:ID<x>:MODE	Enables or disables each condition of the OR condition of the CAN bus signal trigger or queries the current setting.	5-304
:TRIGger:EINterval:EVENT<x>: CANBus:IDOR:ID<x>:RTR	Sets each RTR of the OR condition of the CAN bus signal trigger or queries the current setting.	5-304
:TRIGger:EINterval:EVENT<x>: CANBus:IDSTd?	Queries all settings related to the ID of the standard format of the CAN bus signal trigger.	5-304
:TRIGger:EINterval:EVENT<x>: CANBus:IDSTd:HEXA	Sets the ID of the standard format of the CAN bus signal trigger in hexadecimal notation.	5-304
:TRIGger:EINterval:EVENT<x>: CANBus:IDSTd:PATtern	Sets the ID of the standard format of the CAN bus signal trigger in binary notation or queries the current setting.	5-305
:TRIGger:EINterval:EVENT<x>: CANBus:MODE	Sets the CAN bus signal trigger mode or queries the current setting.	5-305
:TRIGger:EINterval:EVENT<x>: CANBus:MSIGnal?	Queries all settings related to the message signal of the CAN bus signal trigger .	5-305
:TRIGger:EINterval:EVENT<x>: CANBus:MSIGnal:MESSAge<x>?	Queries all settings related to message of the CAN bus signal trigger .	5-305
:TRIGger:EINterval:EVENT<x>: CANBus:MSIGnal:MESSAge<x>:ITEM	Sets the CAN bus signal trigger message item.	5-306
:TRIGger:EINterval:EVENT<x>: CANBus:MSIGnal:MESSAge<x>:MODE	Turns ON/OFF the CAN bus signal trigger message or queries the current setting.	5-306
:TRIGger:EINterval:EVENT<x>: CANBus:MSIGnal:SElect	Sets the message signal conditions for the CAN bus signal trigger or queries the current setting.	5-306
:TRIGger:EINterval:EVENT<x>: CANBus:MSIGnal:SIGNal<x>?	Queries all settings related to the signal of the CAN bus signal trigger .	5-306
:TRIGger:EINterval:EVENT<x>: CANBus:MSIGnal:SIGNal<x>: CONDition	Sets the signal data conditions for the CAN bus signal trigger or queries the current setting.	5-306
:TRIGger:EINterval:EVENT<x>: CANBus:MSIGnal:SIGNal<x>:DATA<x>	Sets the signal data comparison data for the CAN bus signal trigger or queries the current setting.	5-306
:TRIGger:EINterval:EVENT<x>: CANBus:MSIGnal:SIGNal<x>:ITEM	Sets the CAN bus signal trigger signal item.	5-307
:TRIGger:EINterval:EVENT<x>: CANBus:MSIGnal:SIGNal<x>:MODE	Turns ON/OFF the CAN bus signal trigger signal or queries the current setting.	5-307
:TRIGger:EINterval:EVENT<x>: CANBus:REcessive	Sets the recessive level (bus level) of the CAN bus signal trigger or queries the current setting.	5-307
:TRIGger:EINterval:EVENT<x>: CANBus:RTR	Sets the RTR of the CAN bus signal trigger or queries the current setting.	5-307
:TRIGger:EINterval:EVENT<x>: CANBus:SOURce	Sets the trigger source of the CAN bus signal trigger or queries the current setting.	5-307
:TRIGger:EINterval:EVENT<x>: CANBus:SPOint	Sets the sample point of the CAN bus signal trigger or queries the current setting.	5-307
:TRIGger:EINterval:EVENT<x>: CLOCK?	Queries all settings related to the clock channel of the event.	5-307
:TRIGger:EINterval:EVENT<x>: CLOCK:POLarity	Sets the polarity of the clock channel of the event or queries the current setting.	5-308

Command	Function	Page
:TRIGger:EINterval:EVENT<x>:CLOCK:SOURce	Sets the source waveform of the clock channel of the event or queries the current setting.	5-308
:TRIGger:EINterval:EVENT<x>:EState?	Queries all settings related to the edge/state trigger.	5-308
:TRIGger:EINterval:EVENT<x>:EState:POLarity	Sets the polarity of the edge/state trigger or queries the current setting.	5-308
:TRIGger:EINterval:EVENT<x>:EState:SOURce	Sets the trigger source of the edge/state trigger or queries the current setting.	5-308
:TRIGger:EINterval:EVENT<x>:FLEXray?	Queries all settings related to the FLEXRAY bus signal triggers of each event.	5-309
:TRIGger:EINterval:EVENT<x>:FLEXray:BRATe	Sets the FLEXRAY bus signal trigger bit rate (data transfer rate) or queries the current setting.	5-309
:TRIGger:EINterval:EVENT<x>:FLEXray:ERRor?	Queries all settings related to the FLEXRAY bus signal trigger error .	5-309
:TRIGger:EINterval:EVENT<x>:FLEXray:ERRor:BSS	Sets the FLEXRAY bus signal trigger BSS error or queries the current setting.	5-309
:TRIGger:EINterval:EVENT<x>:FLEXray:ERRor:CHANnel	Sets the FLEXRAY bus signal trigger error channel or queries the current setting.	5-309
:TRIGger:EINterval:EVENT<x>:FLEXray:ERRor:CRC	Sets the FLEXRAY bus signal trigger CRC error or queries the current setting.	5-310
:TRIGger:EINterval:EVENT<x>:FLEXray:ERRor:CRCBus<x>	Sets the target channel of the FLEXRAY bus signal trigger CRC error or queries the current setting.	5-310
:TRIGger:EINterval:EVENT<x>:FLEXray:ERRor:FES	Sets the FLEXRAY bus signal trigger FES error or queries the current setting.	5-310
:TRIGger:EINterval:EVENT<x>:FLEXray:ERRor:SOURce<x>	Sets the FLEXRAY bus signal trigger error source or queries the current setting.	5-310
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData?	Queries all settings related to the IDData of the FLEXRAY bus signal trigger .	5-310
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:CCOunt?	Queries all settings related to the Cycle Count of the FLEXRAY bus signal trigger .	5-310
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:CCOunt:CONDition	Sets the Cycle Count data conditions for the FLEXRAY bus signal trigger or queries the current setting.	5-311
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:CCOunt:COUnT<x>	Sets the FLEXRAY bus signal trigger Cycle Count or queries the current setting.	5-311
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:DATA?	Queries all settings related to the Data Field of the FLEXRAY bus signal trigger .	5-311
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:DATA:BORDER	Sets the byte order of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-311
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:DATA:CONDition	Sets the data conditions of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-311
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:DATA:DATA<x>	Sets the comparison data of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-312
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:DATA:DPOSITION	Sets the position for pattern comparison of the data of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-312
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:DATA:DSIZE	Sets the number of bytes of data in the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-312
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:DATA:HEXA	Sets the data in the Data Field of the FLEXRAY bus signal trigger in hexadecimal.	5-312
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:DATA:MSBLsb	Sets the MSB/LSB bit of data in the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-312
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:DATA:PATTERN	Sets the data of the Data Field of the FLEXRAY bus signal trigger in binary or queries the current setting.	5-313
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:DATA:SIGN	Sets the data sign of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-313
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:FID?	Queries all settings related to the Frame ID of the FLEXRAY bus signal trigger .	5-313
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:FID:CONDition	Sets the Frame ID data conditions for the FLEXRAY bus signal trigger or queries the current setting.	5-313
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:FID:ID<x>	Sets the Frame ID value for the FLEXRAY bus signal trigger or queries the current setting.	5-313
:TRIGger:EINterval:EVENT<x>:FLEXray:IDData:INDicator?	Queries all settings related to the Indicator of the FLEXRAY bus signal trigger .	5-314



## 5.1 A List of Commands

Command	Function	Page
:TRIGger:EINterval:EVENT<x>: FLEXray:IDData:INDicator: CONDition	Sets the data conditions of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.	5-314
:TRIGger:EINterval:EVENT<x>: FLEXray:IDData:INDicator:NFRame	Sets the Null frame of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.	5-314
:TRIGger:EINterval:EVENT<x>: FLEXray:IDData:INDicator: PPReamble	Sets the Payload preamble of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.	5-314
:TRIGger:EINterval:EVENT<x>: FLEXray:IDData:INDicator:STFRame	Sets the Start frame of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.	5-314
:TRIGger:EINterval:EVENT<x>: FLEXray:IDData:INDicator:SYFRame	Sets the Synch frame of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.	5-314
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR?	Queries all settings related to the OR conditions of the FLEXRAY bus signal trigger .	5-315
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:DPOsition	Sets the position for pattern comparison of the data of the Data Field of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-315
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:DSIZe	Sets the number of bytes of data in the Data Field of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-315
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>?	Queries all settings related to each IDData of the OR condition of the FLEXRAY bus signal trigger .	5-315
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:CCounT?	Queries all settings related to the Cycle Count of each IDData of the OR condition of the FLEXRAY bus signal trigger .	5-316
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:CCounT: CONDition	Sets each Cycle Count data condition of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-316
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:CCounT: COUNt<x>	Sets each Cycle Count of the OR conditions for the FLEXRAY bus signal trigger or queries the current setting.	5-316
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:DATA?	Queries all settings related to each Data Field of the OR condition of the FLEXRAY bus signal trigger .	5-316
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:DATA: BORDer	Sets the byte order of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-317
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:DATA: CONDition	Sets the data conditions of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-317
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:DATA: DATA<x>	Sets the comparison data of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-317
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:DATA:HEXA	Sets the data in each Data Field of the OR condition of the FLEXRAY bus signal trigger in hexadecimal.	5-317
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:DATA: MSBLsb	Sets the MSB/LSB bit of data in each Data Field of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-318
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:DATA: PATTern	Sets the data of each Data Field of the OR conditions of the FLEXRAY bus signal trigger or queries the current setting.	5-318
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:DATA:SIGN	Sets the data sign of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-318
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:FID?	Queries all settings related to each Frame ID of the OR condition of the FLEXRAY bus signal trigger .	5-318
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:FID: CONDition	Sets the data conditions of the Frame ID of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-318
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:FID:ID<x>	Sets each Frame ID value of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-319
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:INDicator?	Queries all settings related to each Indicator of the OR condition of the FLEXRAY bus signal trigger .	5-319
:TRIGger:EINterval:EVENT<x>: FLEXray:IDOR:IDData<x>:INDicator: CONDition	Sets each Indicator data condition of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-319

Command	Function	Page
:TRIGger:EINTerval:EVENT<x>: FLEXray:IDOR:IDData<x>:INDicator: NFRame	Sets each Indicator Null frame of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-319
:TRIGger:EINTerval:EVENT<x>: FLEXray:IDOR:IDData<x>:INDicator: PPReamble	Sets each Indicator Payload preamble of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-320
:TRIGger:EINTerval:EVENT<x>: FLEXray:IDOR:IDData<x>:INDicator: STFRame	Sets each Indicator Start frame of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-320
:TRIGger:EINTerval:EVENT<x>: FLEXray:IDOR:IDData<x>:INDicator: SYFRame	Sets each Indicator Synch frame of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-320
:TRIGger:EINTerval:EVENT<x>: FLEXray:IDOR:IDData<x>:MODE	Enables (1) or disables (0) each condition for each OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-320
:TRIGger:EINTerval:EVENT<x>: FLEXray:MODE	Sets the FLEXRAY bus signal trigger mode or queries the current setting.	5-320
:TRIGger:EINTerval:EVENT<x>: FLEXray:SOURce	Sets the FLEXRAY bus signal trigger source or queries the current setting.	5-320
:TRIGger:EINTerval:EVENT<x>: I2Cbus?	Queries all settings related to the I <sup>2</sup> C bus trigger of the event.	5-321
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa?	Queries all settings related to the address of the I <sup>2</sup> C bus trigger.	5-321
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT10address?	Queries all settings related to the 10-bit address of the I <sup>2</sup> C bus trigger.	5-321
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT10address:HEXA	Sets the 10-bit address of the I <sup>2</sup> C bus trigger in hexadecimal notation.	5-321
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT10address:PATtern	Sets the 10-bit address of the I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-321
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT7Address?	Queries all settings related to the 7-bit address of the I <sup>2</sup> C bus trigger.	5-321
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT7Address:HEXA	Sets the 7-bit address of the I <sup>2</sup> C bus trigger in hexadecimal notation.	5-322
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT7Address:PATtern	Sets the 7-bit address of the I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-322
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT7APsub?	Queries all settings related to the 7-bit + Sub address of the I <sup>2</sup> C bus trigger.	5-322
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT7APsub:ADDRess?	Queries all settings related to the 7-bit address of the 7-bit + Sub address of the I <sup>2</sup> C bus trigger.	5-322
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT7APsub:ADDRess: HEXA	Sets the 7-bit address of the 7-bit + Sub address of the I <sup>2</sup> C bus trigger in hexadecimal notation.	5-322
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT7APsub:ADDRess: PATtern	Sets the 7-bit address of the 7-bit + Sub address of the I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-322
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT7APsub:SADDRess?	Queries all settings related to the Sub address of the 7-bit + Sub address of the I <sup>2</sup> C bus trigger.	5-322
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT7APsub:SADDRess: HEXA	Sets the Sub address of the 7-bit + Sub address of the I <sup>2</sup> C bus trigger in hexadecimal notation.	5-323
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:BIT7APsub:SADDRess: PATtern	Sets the Sub address of the 7-bit + Sub address of the I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-323
:TRIGger:EINTerval:EVENT<x>: I2Cbus:ADATa:TYPE	Sets the address type of the I <sup>2</sup> C bus trigger or queries the current setting.	5-323
:TRIGger:EINTerval:EVENT<x>: I2Cbus:CLOCK?	Queries all settings related to the clock of the I <sup>2</sup> C bus trigger.	5-323
:TRIGger:EINTerval:EVENT<x>: I2Cbus:CLOCK:SOURce	Sets the clock trace of the I <sup>2</sup> C bus trigger or queries the current setting.	5-323
:TRIGger:EINTerval:EVENT<x>: I2Cbus:DATA?	Queries all settings related to the data of the I <sup>2</sup> C bus trigger.	5-323
:TRIGger:EINTerval:EVENT<x>: I2Cbus:DATA:BYTE	Sets the number of data bytes of the I <sup>2</sup> C bus trigger or queries the current setting.	5-324

Command	Function	Page
:TRIGger:EINterval:EVENT<x>: I2CBus:DATA:CONDition	Sets the determination method (match or not match) of the data of the I <sup>2</sup> C bus trigger or queries the current setting.	5-324
:TRIGger:EINterval:EVENT<x>: I2CBus:DATA:DPOsition	Sets the position for comparing the data pattern of the I <sup>2</sup> C bus trigger or queries the current setting.	5-324
:TRIGger:EINterval:EVENT<x>: I2CBus:DATA:HEXA<x>	Sets the data of the I <sup>2</sup> C bus trigger in hexadecimal notation.	5-324
:TRIGger:EINterval:EVENT<x>: I2CBus:DATA:MODE	Enables/Disables the data conditions of the I <sup>2</sup> C bus trigger or queries the current setting.	5-324
:TRIGger:EINterval:EVENT<x>: I2CBus:DATA:PATtern<x>	Sets the data of the I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-324
:TRIGger:EINterval:EVENT<x>: I2CBus:DATA:PMODE	Sets the pattern comparison start position mode of the data of the I <sup>2</sup> C bus trigger or queries the current setting.	5-325
:TRIGger:EINterval:EVENT<x>: I2CBus:DATA:SOURce	Sets the data trace of the I <sup>2</sup> C bus trigger or queries the current setting.	5-325
:TRIGger:EINterval:EVENT<x>: I2CBus:GCALl?	Queries all settings related to the general call of the I <sup>2</sup> C bus trigger.	5-325
:TRIGger:EINterval:EVENT<x>: I2CBus:GCALl:BIT7maddress?	Queries all settings related to the 7-bit master address of the general call of the I <sup>2</sup> C bus trigger.	5-325
:TRIGger:EINterval:EVENT<x>: I2CBus:GCALl:BIT7maddress:HEXA	Sets the 7-bit master address of the general call of the I <sup>2</sup> C bus trigger in hexadecimal notation.	5-325
:TRIGger:EINterval:EVENT<x>: I2CBus:GCALl:BIT7maddress:PATtern	Sets the 7-bit master address of the general call of the I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-325
:TRIGger:EINterval:EVENT<x>: I2CBus:GCALl:SBYTE	Sets the second byte type of the general call of the I <sup>2</sup> C bus trigger or queries the current setting.	5-326
:TRIGger:EINterval:EVENT<x>: I2CBus:MODE	Sets the trigger mode of the I <sup>2</sup> C bus trigger or queries the current setting.	5-326
:TRIGger:EINterval:EVENT<x>: I2CBus:NAIGNore?	Queries all settings related to the NON ACK ignore mode of the I <sup>2</sup> C bus trigger.	5-326
:TRIGger:EINterval:EVENT<x>: I2CBus:NAIGNore:HSMODE	Sets whether to ignore NON ACK in high speed mode of the I <sup>2</sup> C bus trigger or queries the current setting.	5-326
:TRIGger:EINterval:EVENT<x>: I2CBus:NAIGNore:RACCess	Sets whether to ignore NON ACK in read access mode of the I <sup>2</sup> C bus trigger or queries the current setting.	5-326
:TRIGger:EINterval:EVENT<x>: I2CBus:NAIGNore:SBYTE	Sets whether to ignore NON ACK in the start byte of the I <sup>2</sup> C bus trigger or queries the current setting.	5-326
:TRIGger:EINterval:EVENT<x>: I2CBus:SBHSMODE?	Queries all settings related to the start byte and high speed mode of the I <sup>2</sup> C bus trigger.	5-327
:TRIGger:EINterval:EVENT<x>: I2CBus:SBHSMODE:TYPE	Sets the type of the start byte or high speed mode of the I <sup>2</sup> C bus trigger or queries the current setting.	5-327
:TRIGger:EINterval:EVENT<x>: LINBus?	Queries all settings related to LIN bus signal triggers of each event.	5-327
:TRIGger:EINterval:EVENT<x>: LINBus:BLENght	Sets the LIN bus signal trigger break length or queries the current setting.	5-327
:TRIGger:EINterval:EVENT<x>: LINBus:BRATE	Sets the LIN bus signal trigger bitrate (data transfer rate) or queries the current setting.	5-327
:TRIGger:EINterval:EVENT<x>: LINBus:ERRor?	Queries all settings related to the LIN bus signal trigger error .	5-327
:TRIGger:EINterval:EVENT<x>: LINBus:ERRor:CHECksum	Sets the LIN bus signal trigger Checksum error or queries the current setting.	5-328
:TRIGger:EINterval:EVENT<x>: LINBus:ERRor:DSIZE	Sets the number of error data bytes for the LIN bus signal trigger or queries the current setting.	5-328
:TRIGger:EINterval:EVENT<x>: LINBus:ERRor:FRAMing	Sets the LIN bus signal trigger Framing error or queries the current setting.	5-328
:TRIGger:EINterval:EVENT<x>: LINBus:ERRor:PARity	Sets the LIN bus signal trigger Parity error or queries the current setting.	5-328
:TRIGger:EINterval:EVENT<x>: LINBus:ERRor:SYNCh	Sets the LIN bus signal trigger Synch error or queries the current setting.	5-328
:TRIGger:EINterval:EVENT<x>: LINBus:ERRor:TOUT	Sets the LIN bus signal trigger Timeout error or queries the current setting.	5-328
:TRIGger:EINterval:EVENT<x>: LINBus:IDData?	Queries all settings related to the IDData of the LIN bus signal trigger .	5-329

Command	Function	Page
:TRIGger:EINterval:EVENT<x>: LINBus:IDData:DATA?	Queries all settings related to the Data Field of the LIN bus signal trigger .	5-329
:TRIGger:EINterval:EVENT<x>: LINBus:IDData:DATA:BORDER	Sets the data byte order of the LIN bus signal trigger or queries the current setting.	5-329
:TRIGger:EINterval:EVENT<x>: LINBus:IDData:DATA:CONDition	Sets the data conditions of the Data Field of the LIN bus signal trigger or queries the current setting.	5-329
:TRIGger:EINterval:EVENT<x>: LINBus:IDData:DATA:DATA<x>	Sets the comparison data of the LIN bus signal trigger data or queries the current setting.	5-329
:TRIGger:EINterval:EVENT<x>: LINBus:IDData:DATA:DSIZE	Sets the number of bytes of data in the Data Field of the LIN bus signal trigger or queries the current setting.	5-330
:TRIGger:EINterval:EVENT<x>: LINBus:IDData:DATA:HEXA	Sets the data in the Data Field of the LIN bus signal trigger in hexadecimal.	5-330
:TRIGger:EINterval:EVENT<x>: LINBus:IDData:DATA:MSBLSb	Sets the MSB/LSB bit of the LIN bus signal trigger or queries the current setting.	5-330
:TRIGger:EINterval:EVENT<x>: LINBus:IDData:DATA:PATtern	Sets the data of the Data Field of the LIN bus signal trigger in binary or queries the current setting.	5-330
:TRIGger:EINterval:EVENT<x>: LINBus:IDData:DATA:SIGN	Sets the data sign of the LIN bus signal trigger or queries the current setting.	5-330
:TRIGger:EINterval:EVENT<x>: LINBus:IDData:ID?	Queries all settings related to the ID of the LIN bus signal trigger .	5-330
:TRIGger:EINterval:EVENT<x>: LINBus:IDData:ID:HEXA	Sets the LIN bus signal trigger ID in hexadecimal.	5-331
:TRIGger:EINterval:EVENT<x>: LINBus:IDData:ID:PATtern	Sets the LIN bus signal trigger ID in binary or queries the current setting.	5-331
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR?	Queries all settings related to the OR conditions of the LIN bus signal trigger .	5-331
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:DSIZE	Sets the number of bytes of data in the Data Field of the OR condition of the LIN bus signal trigger or queries the current setting.	5-331
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>?	Queries all settings related to each IDData of the OR condition of the LIN bus signal trigger .	5-331
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>:DATA?	Queries all settings related to each Data Field of the OR condition of the LIN bus signal trigger .	5-331
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>:DATA:BORDER	Sets the byte order of each data of the OR conditions of the LIN bus signal trigger or queries the current setting.	5-332
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>:DATA:CONDition	Sets the data conditions of the Data Field of each OR condition of the LIN bus signal trigger or queries the current setting.	5-332
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>:DATA:DATA<x>	Sets the comparison data of each data of the OR conditions of the LIN bus signal trigger or queries the current setting.	5-332
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>:DATA:HEXA	Sets the data in each Data Field of the OR condition of the LIN bus signal trigger in hexadecimal.	5-332
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>:DATA:MSBLSb	Sets the MSB/LSB bit of each data of the OR condition of the LIN bus signal trigger or queries the current setting.	5-333
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>:DATA:PATtern	Sets the data of each Data Field of the OR conditions of the LIN bus signal trigger or queries the current setting.	5-333
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>:DATA:SIGN	Sets the sign of each data of the OR conditions of the LIN bus signal trigger or queries the current setting.	5-333
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>:ID?	Queries all settings related to each ID of the OR condition of the LIN bus signal trigger .	5-333
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>:ID:HEXA	Sets each ID of the OR conditions of the LIN bus signal trigger in hexadecimal.	5-333
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>:ID:PATtern	Sets each ID of the OR conditions of the LIN bus signal trigger binary or queries the current setting.	5-333
:TRIGger:EINterval:EVENT<x>: LINBus:IDOR:IDData<x>:MODE	Enables (1) or disables (0) each condition for each OR condition of the LIN bus signal trigger or queries the current setting.	5-334
:TRIGger:EINterval:EVENT<x>: LINBus:MODE	Sets the LIN bus signal trigger mode or queries the current setting.	5-334
:TRIGger:EINterval:EVENT<x>: LINBus:REVision	Sets the LIN bus signal trigger revision (1.3 or 2.0) or queries the current setting.	5-334

Command	Function	Page
:TRIGger:EINterval:EVENT<x>: LINBus:SOURce	Sets the LIN bus signal trigger source or queries the current setting.	5-334
:TRIGger:EINterval:EVENT<x>: LINBus:SPOint	Sets the LIN bus signal trigger sample point or queries the current setting.	5-334
:TRIGger:EINterval:EVENT<x>: LOGic?	Queries all settings related to the logic trigger of the event.	5-335
:TRIGger:EINterval:EVENT<x>: LOGic:CLOCK?	Queries all settings related to the logic trigger clock.	5-335
:TRIGger:EINterval:EVENT<x>: LOGic:CLOCK:POLarity	Sets the polarity of the logic trigger clock or queries the current setting.	5-335
:TRIGger:EINterval:EVENT<x>: LOGic:CLOCK:SOURce	Sets the clock source of the logic trigger or queries the current setting.	5-335
:TRIGger:EINterval:EVENT<x>: LOGic:ESTate?	Queries all settings related to the edge/state trigger of the logic.	5-335
:TRIGger:EINterval:EVENT<x>: LOGic:ESTate:POLarity	Sets the polarity of the edge/state trigger of the logic or queries the current setting.	5-336
:TRIGger:EINterval:EVENT<x>: LOGic:ESTate:SOURce	Sets the edge/state trigger source of the logic or queries the current setting.	5-336
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus?	Queries all settings related to the logic I <sup>2</sup> C bus trigger for each event.	5-336
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa?	Queries all settings related to the address of the logic I <sup>2</sup> C bus trigger.	5-337
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT10address?	Queries all settings related to the 10-bit address of the logic I <sup>2</sup> C bus trigger.	5-337
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT10address: HEXA	Sets the 10-bit address of the logic I <sup>2</sup> C bus trigger in hexadecimal notation.	5-337
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT10address: PATtern	Sets the 10-bit address of the logic I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-337
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT7Address?	Queries all settings related to the 7-bit address of the logic I <sup>2</sup> C bus trigger.	5-337
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT7Address: HEXA	Sets the 7-bit address of the logic I <sup>2</sup> C bus trigger in hexadecimal notation.	5-337
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT7Address: PATtern	Sets the 7-bit address of the logic I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-338
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT7APsub?	Queries all settings related to the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger.	5-338
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT7APsub: ADDRESS?	Queries all settings related to the 7-bit address of the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger.	5-338
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT7APsub: ADDRESS:HEXA	Sets the 7-bit address of the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger in hexadecimal notation.	5-338
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT7APsub: ADDRESS:PATtern	Sets the 7-bit address of the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-338
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT7APsub: SADDRESS?	Queries all settings related to the sub address of the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger.	5-338
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT7APsub: SADDRESS:HEXA	Sets the sub address of the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger in hexadecimal notation.	5-339
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:BIT7APsub: SADDRESS:PATtern	Sets the sub address of the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-339
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:ADATa:TYPE	Sets the address type of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-339
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:CLOCK?	Queries all settings related to the clock of the logic I <sup>2</sup> C bus trigger.	5-339
:TRIGger:EINterval:EVENT<x>: LOGic:I2CBus:CLOCK:SOURce	Sets the clock trace for the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-339

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:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:DATA?	Queries all settings related to the data of the logic I <sup>2</sup> C bus trigger.	5-339
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:DATA:BYTE	Sets the number of settings for the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-340
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:DATA:CONDition	Sets the determination method for the data of the logic I <sup>2</sup> C bus trigger (match / no match) or queries the current setting.	5-340
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:DATA:DPOsition	Sets the pattern comparison position for the data of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-340
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:DATA:HEXA<x>	Sets the data of the logic I <sup>2</sup> C bus trigger in hexadecimal notation.	5-340
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:DATA:MODE	Enables/disables the data conditions of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-340
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:DATA:PATtern<x>	Sets the data for the logic I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-340
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:DATA:PMODE	Sets the pattern comparison start position for the data of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-341
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:DATA:SOURce	Sets the data trace for the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-341
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:GCALl?	Queries all settings related to the general call of the logic I <sup>2</sup> C bus trigger.	5-341
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:GCALl:BIT7maddress?	Queries all settings related to the 7-bit master address of the general call of the logic I <sup>2</sup> C bus trigger.	5-341
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:GCALl:BIT7maddress: HEXA	Sets the 7-bit master address of the general call of the logic I <sup>2</sup> C bus trigger in hexadecimal notation.	5-341
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:GCALl:BIT7maddress: PATtern	Sets the 7-bit master address of the general call of the logic I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-341
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:GCALl:SBYTE (Second Byte)	Sets the type of the second byte of the general call of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-342
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:MODE	Sets the trigger mode for the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-342
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:NAIgnore?	Queries all settings related to the NON-ACK Ignore mode of the logic I <sup>2</sup> C bus trigger.	5-342
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:NAIgnore:HSMODE	Sets whether to ignore NON ACK in high speed mode of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-342
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:NAIgnore:RACCess	Sets whether to ignore NON ACK in read access mode of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-342
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:NAIgnore:SBYTE (Start Byte)	Sets whether to ignore NON ACK in the start byte of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-342
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:SBHSMODE?	Queries all settings related to the start byte/high speed mode of the logic I <sup>2</sup> C bus trigger.	5-343
:TRIGger:EINTerval:EVENT<x>: LOGic:I2CBus:SBHSMODE:TYPE	Sets the type of the start byte/high speed mode of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-343
:TRIGger:EINTerval:EVENT<x>: LOGic:LINBus?	Queries all settings related to the logic LIN bus signal trigger of each event.	5-343
:TRIGger:EINTerval:EVENT<x>: LOGic:LINBus:BLENgth	Sets the logic LIN bus signal trigger break length or queries the current setting.	5-343
:TRIGger:EINTerval:EVENT<x>: LOGic:LINBus:BRATE	Sets the bit rate (data transfer rate) of the logic LIN bus signal trigger or queries the current setting.	5-344
:TRIGger:EINTerval:EVENT<x>: LOGic:LINBus:ERRor?	Queries all settings related to the logic LIN bus signal trigger error .	5-344
:TRIGger:EINTerval:EVENT<x>: LOGic:LINBus:ERRor:CHECKsum	Sets the logic LIN bus signal trigger Checksum error or queries the current setting.	5-344
:TRIGger:EINTerval:EVENT<x>: LOGic:LINBus:ERRor:DSIZE	Sets the number of error data bytes for the logic LIN bus signal trigger or queries the current setting.	5-344
:TRIGger:EINTerval:EVENT<x>: LOGic:LINBus:ERRor:FRAMing	Sets the logic LIN bus signal trigger Framing error or queries the current setting.	5-344
:TRIGger:EINTerval:EVENT<x>: LOGic:LINBus:ERRor:PARity	Sets the logic LIN bus signal trigger Parity error or queries the current setting.	5-344
:TRIGger:EINTerval:EVENT<x>: LOGic:LINBus:ERRor:SYNCh	Sets the logic LIN bus signal trigger Synch error or queries the current setting.	5-345

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:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:ERRor:TOUT	Sets the logic LIN bus signal trigger Timeout error or queries the current setting.	5-345
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData?	Queries all settings related to the IDData of the logic LIN bus signal trigger .	5-345
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData:DATA?	Queries all settings related to the Data Field of the logic LIN bus signal trigger or queries the current setting.	5-345
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData:DATA:BORDER	Sets the data byte order of the logic LIN bus signal trigger or queries the current setting.	5-345
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData:DATA: CONDition	Sets the data conditions of the Data Field of the logic LIN bus signal trigger or queries the current setting.	5-345
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData:DATA:DATA<x>	Sets the comparison data of the logic LIN bus signal trigger data or queries the current setting.	5-346
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData:DATA:DSIZE	Sets the number of bytes of data in the Data Field of the logic LIN bus signal trigger or queries the current setting.	5-346
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData:DATA:HEXA	Sets the data in the Data Field of the logic LIN bus signal trigger in hexadecimal.	5-346
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData:DATA:MSBLSb	Sets the MSB/LSB bit of the logic LIN bus signal trigger or queries the current setting.	5-346
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData:DATA:PATtern	Sets the data of the Data Field of the logic LIN bus signal trigger in binary or queries the current setting.	5-346
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData:DATA:SIGN	Sets the data sign of the logic LIN bus signal trigger or queries the current setting.	5-347
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData:ID?	Queries all settings related to the ID of the logic LIN bus signal trigger .	5-347
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData:ID:HEXA	Sets the logic LIN bus signal trigger ID in hexadecimal.	5-347
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDData:ID:PATtern	Sets the logic LIN bus signal trigger ID in binary or queries the current setting.	5-347
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR?	Queries all settings related to the OR conditions of the logic LIN bus signal trigger .	5-347
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:DSIZE	Sets the number of bytes of data in the Data Field of the OR condition of the logic LIN bus signal trigger or queries the current setting.	5-348
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>?	Queries all settings related to each IDData of the OR condition of the logic LIN bus signal trigger .	5-348
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>:DATA?	Queries all settings related to each Data Field of the OR condition of the logic LIN bus signal trigger .	5-348
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>:DATA: BORDER	Sets the byte order of each data of the OR conditions of the logic LIN bus signal trigger or queries the current setting.	5-348
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>:DATA: CONDition	Sets the data conditions of the Data Field of each OR condition of the logic LIN bus signal trigger or queries the current setting.	5-349
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>:DATA: DATA<x>	Sets the comparison data of each data of the OR conditions of the logic LIN bus signal trigger or queries the current setting.	5-349
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>:DATA: HEXA	Sets the data in each Data Field of the OR condition of the logic LIN bus signal trigger in hexadecimal.	5-349
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>:DATA: MSBLSb	Sets the MSB/LSB bit of each data of the OR condition of the logic LIN bus signal trigger or queries the current setting.	5-349
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>:DATA: PATtern	Sets the data of each Data Field of the OR conditions of the logic LIN bus signal trigger or queries the current setting.	5-349
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>:DATA: SIGN	Sets the sign of each data of the OR conditions of the logic LIN bus signal trigger or queries the current setting.	5-350
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>:ID?	Queries all settings related to each ID of the OR condition of the logic LIN bus signal trigger .	5-350
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>:ID: HEXA	Sets each ID of the OR conditions of the logic LIN bus signal trigger in hexadecimal.	5-350

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:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>:ID: PATtern	Sets each ID of the OR conditions of the logic LIN bus signal trigger binary or queries the current setting.	5-350
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:IDOR:IDData<x>:MODE	Enables (1) or disables (0) each condition for each OR condition of the logic LIN bus signal trigger or queries the current setting.	5-350
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:MODE	Sets the logic LIN bus signal trigger mode or queries the current setting.	5-350
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:REVision	Sets the logic LIN bus signal trigger revision (1.3 or 2.0) or queries the current setting.	5-351
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:SOURce	Sets the trigger source of the logic LIN bus signal trigger or queries the current setting.	5-351
:TRIGger:EINterval:EVENT<x>: LOGic:LINBus:SPOint	Sets the logic LIN bus signal trigger sample point or queries the current setting.	5-351
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern? (Serial Pattern)	Queries all settings related to the logic serial pattern trigger of each event.	5-351
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:BITRate	Sets the bit rate for the logic serial pattern trigger or queries the current setting.	5-351
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:CLEar	Clears (set to don't care) all patterns of the logic serial pattern trigger.	5-351
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:CLOCK?	Queries all settings related to the clock for the logic serial pattern trigger.	5-352
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:CLOCK:MODE	Enables/disables the clock for the logic serial analysis pattern trigger or queries the current setting.	5-352
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:CLOCK:POLarity	Sets the polarity of the clock trace of the logic serial pattern trigger or queries the current setting.	5-352
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:CLOCK:SOURce	Sets the clock trace for the logic serial pattern trigger or queries the current setting.	5-352
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:CS	Enables/disables the chip select for the logic serial analysis pattern trigger or queries the current setting.	5-352
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:DATA?	Queries all settings related to the data for the logic serial pattern trigger.	5-352
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:DATA:ACTIVE	Sets the active level of the data for the logic serial pattern trigger or queries the current setting.	5-353
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:DATA:SOURce	Sets the data rate for the logic serial pattern trigger or queries the current setting.	5-353
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:HEXA	Sets the pattern of the logic serial pattern trigger in hexadecimal notation.	5-353
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:LATCh?	Queries all settings related to the latch for the logic serial pattern trigger.	5-353
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:LATCh:POLarity	Sets the polarity of the latch trace of the logic serial pattern trigger or queries the current setting.	5-353
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:LATCh:SOURce	Sets the latch trace for the logic serial pattern trigger or queries the current setting.	5-354
:TRIGger:EINterval:EVENT<x>: LOGic:SPATtern:PATtern	Sets the pattern of the logic serial pattern trigger in binary notation, or queries the current setting.	5-354
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus?	Queries all settings related to the logic SPI bus trigger for each event.	5-354
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:BITOrder	Sets the bit order for the logic SPI bus trigger or queries the current or queries the current setting.	5-354
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:CLOCK?	Queries all settings related to the clock of the logic SPI bus trigger.	5-355
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:CLOCK:POLarity	Sets the polarity of the clock trace for the logic SPI bus trigger or queries the current setting.	5-355
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:CLOCK:SOURce	Sets the clock trace for the logic SPI bus trigger or queries the current setting.	5-355
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:CS?	Queries all settings related to the chip select of the logic SPI bus trigger.	5-355
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:CS:ACTIVE	Sets the active level of the chip select for the logic SPI bus trigger or queries the current setting.	5-355
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:CS:SOURce	Sets the chip select trace for the logic SPI bus trigger or queries the current setting.	5-355
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:DATA<x>?	Queries all settings related to each data of the logic SPI bus trigger.	5-356



Command	Function	Page
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:DATA<x>:BYTE	Sets the number of settings for each data of the logic SPI bus trigger or queries the current setting.	5-356
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:DATA<x>:CONDition	Sets the determination method for the data of the logic SPI bus trigger (match / no match) or queries the current setting.	5-356
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:DATA<x>:DPOSITion	Sets the pattern comparison start position for the data of the logic SPI bus trigger or queries the current setting.	5-356
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:DATA<x>:HEXA<x>	Sets the data of the logic SPI bus trigger in hexadecimal notation.	5-356
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:DATA<x>:PATTern<x>	Sets each data of the logic SPI bus trigger in binary notation or queries the current setting.	5-356
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:DATA<x>:SOURce	Sets the trace of each data of the logic SPI bus trigger or queries the current setting.	5-357
:TRIGger:EINterval:EVENT<x>: LOGic:SPIBus:MODE	Sets the wiring method (3-wire/4-wire) of the logic SPI bus trigger or queries the current setting.	5-357
:TRIGger:EINterval:EVENT<x>: LOGic:STATe?	Queries all settings related to the logic state trigger.	5-357
:TRIGger:EINterval:EVENT<x>: LOGic:STATe:BIT?	Queries all settings related to the bit of the logic state trigger.	5-358
:TRIGger:EINterval:EVENT<x>: LOGic:STATe:BIT:{A<y> B<y> C<y> D<y>}	Sets the condition to be satisfied for the bit of the logic state trigger or queries the current setting.	5-358
:TRIGger:EINterval:EVENT<x>: LOGic:STATe:BIT:CLEar	Clears the entire condition to be satisfied for the bit of the logic state trigger (set to don't care) or queries the current setting.	5-358
:TRIGger:EINterval:EVENT<x>: LOGic:STATe:BIT:LOGic	Sets the logic of the logic state trigger or queries the current setting.	5-358
:TRIGger:EINterval:EVENT<x>: LOGic:STATe:GROup<x>?	Queries all settings related to the group of the logic state trigger.	5-358
:TRIGger:EINterval:EVENT<x>: LOGic:STATe:GROup<x>:CLEar	Clears the entire condition to be satisfied for the group of the logic state trigger (set to don't care) or queries the current setting.	5-358
:TRIGger:EINterval:EVENT<x>: LOGic:STATe:GROup<x>:CONDition	Sets the determination condition for the group of the logic state trigger or queries the current setting.	5-359
:TRIGger:EINterval:EVENT<x>: LOGic:STATe:GROup<x>:HEXA	Sets the condition to be satisfied for the group of the logic state trigger in hexadecimal notation.	5-359
:TRIGger:EINterval:EVENT<x>: LOGic:STATe:GROup<x>:PATTern	Sets the condition to be satisfied for the group of the logic state trigger in binary notation or queries the current setting.	5-359
:TRIGger:EINterval:EVENT<x>: LOGic:STATe:GROup<x>:SYMBOL	Sets the symbol item for each group of the logic state trigger.	5-359
:TRIGger:EINterval:EVENT<x>: LOGic:STATe:TYPE	Sets the setup type of the logic state trigger or queries the current setting.	5-359
:TRIGger:EINterval:EVENT<x>: LOGic:UART?	Queries all settings related to the logic UART bus signal trigger of each event.	5-359
:TRIGger:EINterval:EVENT<x>: LOGic:UART:BRATe	Sets the logic UART bus signal trigger bit rate (data transfer rate) or queries the current setting.	5-360
:TRIGger:EINterval:EVENT<x>: LOGic:UART:DATA?	Queries all settings related to the data of the logic UART bus signal trigger .	5-360
:TRIGger:EINterval:EVENT<x>: LOGic:UART:DATA:BITorder	Sets the logic UART bus signal trigger data bit order or queries the current setting.	5-360
:TRIGger:EINterval:EVENT<x>: LOGic:UART:DATA:DSIZe	Sets the number of bytes of the logic UART bus signal trigger data or queries the current setting.	5-360
:TRIGger:EINterval:EVENT<x>: LOGic:UART:DATA:HEXA	Sets the logic UART bus signal trigger data in hexadecimal.	5-360
:TRIGger:EINterval:EVENT<x>: LOGic:UART:DATA:PATTern	Sets the data of the logic UART bus signal trigger in binary or queries the current setting.	5-360
:TRIGger:EINterval:EVENT<x>: LOGic:UART:ERRor?	Queries all settings related to the logic UART bus signal trigger error .	5-361
:TRIGger:EINterval:EVENT<x>: LOGic:UART:ERRor:FRAMing	Sets the logic UART bus signal trigger Framing error or queries the current setting.	5-361
:TRIGger:EINterval:EVENT<x>: LOGic:UART:ERRor:PARity	Sets the logic UART bus signal trigger Parity error or queries the current setting.	5-361

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:TRIGger:EINterval:EVENT<x>: LOGic:UART:ERRor:PMODE	Sets the logic UART bus signal trigger Parity mode or queries the current setting.	5-361
:TRIGger:EINterval:EVENT<x>: LOGic:UART:FORMat	Sets the logic UART bus signal trigger format or queries the current setting.	5-361
:TRIGger:EINterval:EVENT<x>: LOGic:UART:MODE	Sets the logic UART bus signal trigger mode or queries the current setting.	5-361
:TRIGger:EINterval:EVENT<x>: LOGic:UART:POLarity	Sets the logic UART bus signal trigger polarity or queries the current setting.	5-362
:TRIGger:EINterval:EVENT<x>: LOGic:UART:SOURce	Sets the logic UART bus signal trigger source or queries the current setting.	5-362
:TRIGger:EINterval:EVENT<x>: LOGic:UART:SPOint	Sets the logic UART bus signal sample point or queries the current setting.	5-362
:TRIGger:EINterval:EVENT<x>: LOGic:WIDTH?	Queries all settings related to the logic pulse width trigger.	5-362
:TRIGger:EINterval:EVENT<x>: LOGic:WIDTH:MODE	Sets the determination mode of the logic pulse width trigger or queries the current setting.	5-362
:TRIGger:EINterval:EVENT<x>: LOGic:WIDTH:POLarity	Sets the polarity of the logic pulse width trigger or queries the current setting.	5-363
:TRIGger:EINterval:EVENT<x>: LOGic:WIDTH:SOURce	Sets the trigger source of the logic pulse width trigger or queries the current setting.	5-363
:TRIGger:EINterval:EVENT<x>: LOGic:WIDTH:TIME<x>	Sets the logic pulse width of the pulse width trigger or queries the current setting.	5-363
:TRIGger:EINterval:EVENT<x>: SPATtern?	Queries all settings related to the serial pattern trigger of the event.	5-363
:TRIGger:EINterval:EVENT<x>: SPATtern:BITRate	Sets the bit rate of the serial pattern trigger or queries the current setting.	5-363
:TRIGger:EINterval:EVENT<x>: SPATtern:CLEAR	Clears the entire pattern of the serial pattern trigger.	5-364
:TRIGger:EINterval:EVENT<x>: SPATtern:CLOCK?	Queries all settings related to clock of the serial pattern trigger.	5-364
:TRIGger:EINterval:EVENT<x>: SPATtern:CLOCK:MODE	Enables/Disables the clock of the serial pattern trigger or queries the current setting.	5-364
:TRIGger:EINterval:EVENT<x>: SPATtern:CLOCK:POLarity	Sets the polarity of the clock trace of the serial pattern trigger or queries the current setting.	5-364
:TRIGger:EINterval:EVENT<x>: SPATtern:CLOCK:SOURce	Sets the clock trace of the serial pattern trigger or queries the current setting.	5-364
:TRIGger:EINterval:EVENT<x>: SPATtern:CS	Enables/Disables the chip select of the serial pattern trigger or queries the current setting.	5-364
:TRIGger:EINterval:EVENT<x>: SPATtern:DATA?	Queries all settings related to data of the serial pattern trigger.	5-364
:TRIGger:EINterval:EVENT<x>: SPATtern:DATA:ACTive	Sets the active level of the data of the serial pattern trigger or queries the current setting.	5-365
:TRIGger:EINterval:EVENT<x>: SPATtern:DATA:SOURce	Sets the data trace of the serial pattern trigger or queries the current setting.	5-365
:TRIGger:EINterval:EVENT<x>: SPATtern:HEXA	Sets the pattern of the serial pattern trigger in hexadecimal notation.	5-365
:TRIGger:EINterval:EVENT<x>: SPATtern:LATCh?	Queries all settings related to latch of the serial pattern trigger.	5-365
:TRIGger:EINterval:EVENT<x>: SPATtern:LATCh:POLarity	Sets the polarity of the latch trace of the serial pattern trigger or queries the current setting.	5-365
:TRIGger:EINterval:EVENT<x>: SPATtern:LATCh:SOURce	Sets the latch trace of the serial pattern trigger or queries the current setting.	5-365
:TRIGger:EINterval:EVENT<x>: SPATtern:PATtern	Sets the pattern of the serial pattern trigger in binary notation or queries the current setting.	5-366
:TRIGger:EINterval:EVENT<x>: SPIBus?	Queries all settings related to the SPI bus trigger of the event.	5-366
:TRIGger:EINterval:EVENT<x>: SPIBus:BITorder	Sets the bit order of the SPI bus trigger or queries the current setting.	5-366
:TRIGger:EINterval:EVENT<x>: SPIBus:CLOCK?	Queries all settings related to the clock of the SPI bus trigger.	5-366

Command	Function	Page
:TRIGger:EINterval:EVENT<x>:SPIBus:CLOCK:POLarity	Sets the polarity of the clock trace of the SPI bus trigger or queries the current setting.	5-366
:TRIGger:EINterval:EVENT<x>:SPIBus:CLOCK:SOURce	Sets the clock trace of the SPI bus trigger or queries the current setting.	5-366
:TRIGger:EINterval:EVENT<x>:SPIBus:CS?	Queries all settings related to the chip select of the SPI bus trigger.	5-366
:TRIGger:EINterval:EVENT<x>:SPIBus:CS:ACTive	Sets the active level of the chip select of the SPI bus trigger or queries the current setting.	5-367
:TRIGger:EINterval:EVENT<x>:SPIBus:CS:SOURce	Sets the chip select trace of the SPI bus trigger or queries the current setting.	5-367
:TRIGger:EINterval:EVENT<x>:SPIBus:DATA<x>?	Queries all settings related to the data of the SPI bus trigger.	5-367
:TRIGger:EINterval:EVENT<x>:SPIBus:DATA<x>:BYTE	Sets the number of bytes of the data of the SPI bus trigger or queries the current setting.	5-367
:TRIGger:EINterval:EVENT<x>:SPIBus:DATA<x>:CONDition	Sets the determination method (match or not match) of the data of the SPI bus trigger or queries the current setting.	5-367
:TRIGger:EINterval:EVENT<x>:SPIBus:DATA<x>:DPOSition	Sets the pattern comparison start position of the data of the SPI bus trigger or queries the current setting.	5-367
:TRIGger:EINterval:EVENT<x>:SPIBus:DATA<x>:HEXA<x>	Sets the data of the SPI bus trigger in hexadecimal notation.	5-368
:TRIGger:EINterval:EVENT<x>:SPIBus:DATA<x>:PATtern<x>	Sets the data of the SPI bus trigger in binary notation or queries the current setting.	5-368
:TRIGger:EINterval:EVENT<x>:SPIBus:DATA<x>:SOURce	Sets the trace of the data of the SPI bus trigger or queries the current setting.	5-368
:TRIGger:EINterval:EVENT<x>:SPIBus:MODE	Sets the wiring system of the SPI bus trigger (three-wire or four-wire) or queries the current setting.	5-368
:TRIGger:EINterval:EVENT<x>:STATE?	Queries all settings related to the state trigger of the event.	5-368
:TRIGger:EINterval:EVENT<x>:STATE:CHANnel<x>	Sets the condition to be satisfied of the channel or queries the current setting.	5-368
:TRIGger:EINterval:EVENT<x>:STATE:LOGic	Sets the logic of the condition to be satisfied or queries the current setting.	5-369
:TRIGger:EINterval:EVENT<x>:TYPE	Sets the trigger type of the event or queries the current setting.	5-369
:TRIGger:EINterval:EVENT<x>:UART?	Queries all settings related to the UART bus signal trigger of each event.	5-369
:TRIGger:EINterval:EVENT<x>:UART:BRATe	Sets the UART bus signal trigger bit rate (data transfer rate) or queries the current setting.	5-369
:TRIGger:EINterval:EVENT<x>:UART:DATA?	Queries all settings related to the data of the UART bus signal trigger .	5-369
:TRIGger:EINterval:EVENT<x>:UART:DATA:BITorder	Sets the UART bus signal trigger data bit order or queries the current setting.	5-369
:TRIGger:EINterval:EVENT<x>:UART:DATA:DSIZE	Sets the number of bytes of the UART bus signal trigger data or queries the current setting.	5-370
:TRIGger:EINterval:EVENT<x>:UART:DATA:HEXA	Sets the UART bus signal trigger data in hexadecimal.	5-370
:TRIGger:EINterval:EVENT<x>:UART:DATA:PATtern	Sets the data of the UART bus signal trigger in binary or queries the current setting.	5-370
:TRIGger:EINterval:EVENT<x>:UART:ERROR?	Queries all settings related to the UART bus signal trigger error .	5-370
:TRIGger:EINterval:EVENT<x>:UART:ERROR:FRAMing	Sets the UART bus signal trigger Framing error or queries the current setting.	5-370
:TRIGger:EINterval:EVENT<x>:UART:ERROR:PARity	Sets the UART bus signal trigger Parity error or queries the current setting.	5-370
:TRIGger:EINterval:EVENT<x>:UART:ERROR:PMODE	Sets the UART bus signal trigger Parity mode or queries the current setting.	5-370
:TRIGger:EINterval:EVENT<x>:UART:FORMat	Sets the UART bus signal trigger format or queries the current setting.	5-371
:TRIGger:EINterval:EVENT<x>:UART:MODE	Sets the UART bus signal trigger mode or queries the current setting.	5-371
:TRIGger:EINterval:EVENT<x>:UART:POLarity	Sets the UART bus signal trigger polarity or queries the current setting.	5-371

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:TRIGger:EINterval:EVENT<x>:UART:SOURCE	Sets the UART bus signal trigger source or queries the current setting.	5-371
:TRIGger:EINterval:EVENT<x>:UART:SPOint	Sets the UART bus signal trigger sample point or queries the current setting.	5-371
:TRIGger:EINterval:EVENT<x>:WIDTH?	Queries all settings related to the pulse width trigger of the event.	5-371
:TRIGger:EINterval:EVENT<x>:WIDTH:MODE	Sets the determination mode of the pulse width trigger or queries the current setting.	5-372
:TRIGger:EINterval:EVENT<x>:WIDTH:POLarity	Sets the polarity of the pulse width trigger or queries the current setting.	5-372
:TRIGger:EINterval:EVENT<x>:WIDTH:SOURce	Sets the trigger source of the pulse width trigger or queries the current setting.	5-372
:TRIGger:EINterval:EVENT<x>:WIDTH:TIME<x>	Sets the pulse width of the pulse width trigger or queries the current setting.	5-372
:TRIGger:EINterval:MODE	Sets the determination mode of the event interval or queries the current setting.	5-372
:TRIGger:EINterval:TIME<x>	Sets the interval time of the event interval or queries the current setting.	5-373
:TRIGger:EINterval:TRY?	Queries all settings related to the event interval trial.	5-373
:TRIGger:EINterval:TRY:MODE	Sets the trial mode or queries the current setting.	5-373
:TRIGger:EINterval:TRY:SElect	Sets the source event of the trial mode or queries the current setting.	5-373
:TRIGger:ENHanced?	Queries all settings related to the enhanced trigger.	5-373
:TRIGger:ENHanced:CANBus?	Queries all settings related to the CAN bus signal trigger.	5-374
:TRIGger:ENHanced:CANBus:ACK	Sets the ACK condition of the CAN bus signal trigger or queries the current setting.	5-374
:TRIGger:ENHanced:CANBus:BRATe	Sets the bit rate (data transfer rate) of the CAN bus signal trigger or queries the current setting.	5-374
:TRIGger:ENHanced:CANBus:DATA?	Queries all settings related to the CAN bus signal trigger data.	5-374
:TRIGger:ENHanced:CANBus:DATA:BORDER	Sets the byte order of the CAN bus signal trigger data or queries the current setting.	5-374
:TRIGger:ENHanced:CANBus:DATA:CONDition	Sets the data condition of the CAN bus signal trigger or queries the current setting.	5-374
:TRIGger:ENHanced:CANBus:DATA:DATA<x>	Sets the comparison data of the CAN bus signal trigger data or queries the current setting.	5-375
:TRIGger:ENHanced:CANBus:DATA:DLC	Sets the number of valid bytes (DLC) of the CAN bus signal trigger data or queries the current setting.	5-375
:TRIGger:ENHanced:CANBus:DATA:HEXA	Sets the CAN bus signal trigger data in hexadecimal notation.	5-375
:TRIGger:ENHanced:CANBus:DATA:MSBLSb	Sets the MSB and LSB bits of the CAN bus signal trigger data or queries the current setting.	5-375
:TRIGger:ENHanced:CANBus:DATA:PATtern	Sets the CAN bus signal trigger data in binary notation or queries the current setting.	5-375
:TRIGger:ENHanced:CANBus:DATA:SIGN	Sets the sign of the CAN bus signal trigger data or queries the current setting.	5-375
:TRIGger:ENHanced:CANBus:IDExt?	Queries all settings related to the ID of the extended format of the CAN bus signal trigger.	5-375
:TRIGger:ENHanced:CANBus:IDExt:HEXA	Sets the ID of the extended format of the CAN bus signal trigger in hexadecimal notation.	5-376
:TRIGger:ENHanced:CANBus:IDExt:PATtern	Sets the ID of the extended format of the CAN bus signal trigger in binary notation or queries the current setting.	5-376
:TRIGger:ENHanced:CANBus:IDOR?	Queries all settings related to the OR condition of the CAN bus signal trigger.	5-376
:TRIGger:ENHanced:CANBus:IDOR:ID<x>?	Queries all settings related to each ID of the OR condition of the CAN bus signal trigger.	5-376
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:ACK	Sets each ACK condition of the OR condition of the CAN bus signal trigger or queries the current setting.	5-377
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:DATA?	Queries all settings related to each data of the OR condition of the CAN bus signal trigger.	5-377
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:DATA:BORDER	Sets byte order of each data of the OR condition of the CAN bus signal trigger or queries the current setting.	5-377
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:DATA:CONDition	Sets each data condition of the OR condition of the CAN bus signal trigger or queries the current setting.	5-377

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:TRIGger:ENHanced:CANBus:IDOR:ID<x>:DATA:DATA<x>	Sets comparison data of each data of the OR condition of the CAN bus signal trigger or queries the current setting.	5-377
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:DATA:DLC	Sets the number of valid bytes (DLC) of each data of the OR condition of the CAN bus signal trigger or queries the current setting.	5-378
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:DATA:HEXA	Sets each data of the OR condition of the CAN bus signal trigger in hexadecimal notation.	5-378
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:DATA:MSBLsb	Sets the MSB and LSB bits of each data of the OR condition of the CAN bus signal trigger or queries the current setting.	5-378
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:DATA:PATtern	Sets each data of the OR condition of the CAN bus signal trigger in binary notation or queries the current setting.	5-378
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:DATA:SIGN	Sets sign of each data of the OR condition of the CAN bus signal trigger or queries the current setting.	5-378
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:FORMat	Sets each message format (standard or extended) of the OR condition of the CAN bus signal trigger or queries the current setting.	5-378
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:IDEXt?	Queries all settings related to the ID of each extended format of the OR condition of the CAN bus signal trigger.	5-379
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:IDEXt:HEXA	Sets the ID of each extended format of the OR condition of the CAN bus signal trigger in hexadecimal notation.	5-379
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:IDEXt:PATtern	Sets the ID of each extended format of the OR condition of the CAN bus signal trigger in binary notation or queries the current setting.	5-379
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:IDSTd?	Queries all settings related to the ID of each standard format of the OR condition of the CAN bus signal trigger.	5-379
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:IDSTd:HEXA	Sets the ID of each standard format of the OR condition of the CAN bus signal trigger in hexadecimal notation.	5-379
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:IDSTd:PATtern	Sets the ID of each standard format of the OR condition of the CAN bus signal trigger in binary notation or queries the current setting.	5-379
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:MODE	Enables or disables each condition of the OR condition of the CAN bus signal trigger or queries the current setting.	5-380
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:RTR	Sets each RTR of the OR condition of the CAN bus signal trigger or queries the current setting.	5-380
:TRIGger:ENHanced:CANBus:IDSTd?	Queries all settings related to the ID of the standard format of the CAN bus signal trigger.	5-380
:TRIGger:ENHanced:CANBus:IDSTd:HEXA	Sets the ID of the standard format of the CAN bus signal trigger in hexadecimal notation.	5-380
:TRIGger:ENHanced:CANBus:IDSTd:PATtern	Sets the ID of the standard format of the CAN bus signal trigger in binary notation or queries the current setting.	5-380
:TRIGger:ENHanced:CANBus:MODE	Sets the CAN bus signal trigger mode or queries the current setting.	5-380
:TRIGger:ENHanced:CANBus:MSIGnal?	Queries all settings related to the message signal of the CAN bus signal trigger .	5-380
:TRIGger:ENHanced:CANBus:MSIGnal:MESSAge<x>?	Queries all settings related to message of the CAN bus signal trigger .	5-381
:TRIGger:ENHanced:CANBus:MSIGnal:MESSAge<x>:ITEM	Sets the CAN bus signal trigger message item.	5-381
:TRIGger:ENHanced:CANBus:MSIGnal:MESSAge<x>:MODE	Turns ON/OFF the CAN bus signal trigger message or queries the current setting.	5-381
:TRIGger:ENHanced:CANBus:MSIGnal:SElect	Sets the message signal conditions for the CAN bus signal trigger or queries the current setting.	5-381
:TRIGger:ENHanced:CANBus:MSIGnal:SIGNal<x>?	Queries all settings related to the signal of the CAN bus signal trigger .	5-381
:TRIGger:ENHanced:CANBus:MSIGnal:SIGNal<x>:CONDition	Sets the signal data conditions for the CAN bus signal trigger or queries the current setting.	5-381
:TRIGger:ENHanced:CANBus:MSIGnal:SIGNal<x>:DATA<x>	Sets the signal data comparison data for the CAN bus signal trigger or queries the current setting.	5-381
:TRIGger:ENHanced:CANBus:MSIGnal:SIGNal<x>:ITEM	Sets the CAN bus signal trigger signal item.	5-382
:TRIGger:ENHanced:CANBus:MSIGnal:SIGNal<x>:MODE	Turns ON/OFF the CAN bus signal trigger signal or queries the current setting.	5-382
:TRIGger:ENHanced:CANBus:RECCessive	Sets the recessive level (bus level) of the CAN bus signal trigger or queries the current setting.	5-382
:TRIGger:ENHanced:CANBus:RTR	Sets the RTR of the CAN bus signal trigger or queries the current setting.	5-382

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:TRIGger:ENHanced:CANBus:SOURce	Sets the trigger source of the CAN bus signal trigger or queries the current setting.	5-382
:TRIGger:ENHanced:CANBus:SPOint	Sets the sample point of the CAN bus signal trigger or queries the current setting.	5-382
:TRIGger:ENHanced:FLEXray?	Queries all settings related to the FLEXRAY bus signal trigger.	5-382
:TRIGger:ENHanced:FLEXray:BRATe	Sets the FLEXRAY bus signal trigger bit rate (data transfer rate) or queries the current setting.	5-383
:TRIGger:ENHanced:FLEXray:ERRor?	Queries all settings related to the FLEXRAY bus signal trigger error .	5-383
:TRIGger:ENHanced:FLEXray:ERRor: BSS	Sets the FLEXRAY bus signal trigger BSS error or queries the current setting.	5-383
:TRIGger:ENHanced:FLEXray:ERRor: CHANnel	Sets the FLEXRAY bus signal trigger error channel or queries the current setting.	5-383
:TRIGger:ENHanced:FLEXray:ERRor: CRC	Sets the FLEXRAY bus signal trigger CRC error or queries the current setting.	5-383
:TRIGger:ENHanced:FLEXray:ERRor: CRCBus<x>	Sets the target channel of the FLEXRAY bus signal trigger CRC error or queries the current setting.	5-383
:TRIGger:ENHanced:FLEXray:ERRor: FES	Sets the FLEXRAY bus signal trigger FES error or queries the current setting.	5-383
:TRIGger:ENHanced:FLEXray:ERRor: SOURce<x>	Sets the FLEXRAY bus signal trigger error source or queries the current setting.	5-383
:TRIGger:ENHanced:FLEXray:IDData?	Queries all settings related to the IDData of the FLEXRAY bus signal trigger .	5-384
:TRIGger:ENHanced:FLEXray:IDData: CCOunt?	Queries all settings related to the Cycle Count of the FLEXRAY bus signal trigger .	5-384
:TRIGger:ENHanced:FLEXray:IDData: CCOunt: CONDItion	Sets the Cycle Count data conditions for the FLEXRAY bus signal trigger or queries the current setting.	5-384
:TRIGger:ENHanced:FLEXray:IDData: CCOunt: COUNt<x>	Sets the FLEXRAY bus signal trigger Cycle Count or queries the current setting.	5-384
:TRIGger:ENHanced:FLEXray:IDData: DATA?	Queries all settings related to the Data Field of the FLEXRAY bus signal trigger .	5-384
:TRIGger:ENHanced:FLEXray:IDData: DATA: BORDer	Sets the byte order of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-384
:TRIGger:ENHanced:FLEXray:IDData: DATA: CONDItion	Sets the data conditions of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-385
:TRIGger:ENHanced:FLEXray:IDData: DATA: DATA<x>	Sets the comparison data of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-385
:TRIGger:ENHanced:FLEXray:IDData: DATA: DPOSItion	Sets the position for pattern comparison of the data of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-385
:TRIGger:ENHanced:FLEXray:IDData: DATA: DSIZe	Sets the number of bytes of data in the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-385
:TRIGger:ENHanced:FLEXray:IDData: DATA: HEXA	Sets the data in the Data Field of the FLEXRAY bus signal trigger in hexadecimal.	5-385
:TRIGger:ENHanced:FLEXray:IDData: DATA: MSBLsb	Sets the MSB/LSB bit of data in the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-386
:TRIGger:ENHanced:FLEXray:IDData: DATA: PATtern	Sets the data of the Data Field of the FLEXRAY bus signal trigger in binary or queries the current setting.	5-386
:TRIGger:ENHanced:FLEXray:IDData: DATA: SIGN	Sets the data sign of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.	5-386
:TRIGger:ENHanced:FLEXray:IDData: FID?	Queries all settings related to the Frame ID of the FLEXRAY bus signal trigger .	5-386
:TRIGger:ENHanced:FLEXray:IDData: FID: CONDItion	Sets the Frame ID data conditions for the FLEXRAY bus signal trigger or queries the current setting.	5-386
:TRIGger:ENHanced:FLEXray:IDData: FID: ID<x>	Sets the Frame ID value for the FLEXRAY bus signal trigger or queries the current setting.	5-386
:TRIGger:ENHanced:FLEXray:IDData: INDICator?	Queries all settings related to the Indicator of the FLEXRAY bus signal trigger .	5-386
:TRIGger:ENHanced:FLEXray:IDData: INDICator: CONDItion	Sets the data conditions of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.	5-387
:TRIGger:ENHanced:FLEXray:IDData: INDICator: NFRame	Sets the Null frame of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.	5-387
:TRIGger:ENHanced:FLEXray:IDData: INDICator: PPReamble	Sets the Payload preamble of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.	5-387

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:TRIGger:ENHanced:FLEXray:IDData:INDicator:STFRame	Sets the Start frame of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.	5-387
:TRIGger:ENHanced:FLEXray:IDData:INDicator:SYFRame	Sets the Synch frame of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.	5-387
:TRIGger:ENHanced:FLEXray:IDOR?	Queries all settings related to the OR conditions of the FLEXRAY bus signal trigger .	5-387
:TRIGger:ENHanced:FLEXray:IDOR:DPOsition	Sets the position for pattern comparison of the data of the Data Field of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-388
:TRIGger:ENHanced:FLEXray:IDOR:DSIZe	Sets the number of bytes of data in the Data Field of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-388
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>?	Queries all settings related to each IDData of the OR condition of the FLEXRAY bus signal trigger .	5-388
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:CCOunt?	Queries all settings related to the Cycle Count of each IDData of the OR condition of the FLEXRAY bus signal trigger .	5-388
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:CCOunt:CONDition	Sets each Cycle Count data condition of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-388
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:CCOunt:COUnT<x>	Sets each Cycle Count of the OR conditions for the FLEXRAY bus signal trigger or queries the current setting.	5-389
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:DATA?	Queries all settings related to each Data Field of the OR condition of the FLEXRAY bus signal trigger .	5-389
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:DATA:BOReDer	Sets the byte order of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-389
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:DATA:CONDition	Sets the data conditions of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-389
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:DATA:DATA<x>	Sets the comparison data of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-390
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:DATA:HEXA	Sets the data in each Data Field of the OR condition of the FLEXRAY bus signal trigger in hexadecimal.	5-390
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:DATA:MSBLSb	Sets the MSB/LSB bit of data in each Data Field of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-390
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:DATA:PAATtern	Sets the data of each Data Field of the OR conditions of the FLEXRAY bus signal trigger or queries the current setting.	5-390
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:DATA:SIGN	Sets the data sign of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-390
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:FID?	Queries all settings related to each Frame ID of the OR condition of the FLEXRAY bus signal trigger .	5-391
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:FID:CONDition	Sets the data conditions of the Frame ID of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-391
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:FID:ID<x>	Sets each Frame ID value of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-391
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:INDicator?	Queries all settings related to each Indicator of the OR condition of the FLEXRAY bus signal trigger .	5-391
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:INDicator:CONDition	Sets each Indicator data condition of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-392
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:INDicator:NFRame	Sets each Indicator Null frame of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-392
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:INDicator:PPReamble	Sets each Indicator Payload preamble of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-392
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:INDicator:STFRame	Sets each Indicator Start frame of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-392
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:INDicator:SYFRame	Sets each Indicator Synch frame of the OR condition for the FLEXRAY bus signal trigger or queries the current setting.	5-392
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:MODE	Enables (1) or disables (0) each condition for each OR condition of the FLEXRAY bus signal trigger or queries the current setting.	5-392
:TRIGger:ENHanced:FLEXray:MODE	Sets the FLEXRAY bus signal trigger mode or queries the current setting.	5-393
:TRIGger:ENHanced:FLEXray:SOURce	Sets the FLEXRAY bus signal trigger source or queries the current setting.	5-393
:TRIGger:ENHanced:I2CBus?	Queries all settings related to the I <sup>2</sup> C bus trigger.	5-393
:TRIGger:ENHanced:I2CBus:ADATa?	Queries all settings related to the address of the I <sup>2</sup> C bus trigger.	5-393

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:TRIGger:ENHanced:I2CBus:ADATa:BIT10address?	Queries all settings related to the 10-bit address of the I <sup>2</sup> C bus trigger.	5-393
:TRIGger:ENHanced:I2CBus:ADATa:BIT10address:HEXA	Sets the 10-bit address of the I <sup>2</sup> C bus trigger in hexadecimal notation.	5-393
:TRIGger:ENHanced:I2CBus:ADATa:BIT10address:PATtern	Sets the 10-bit address of the I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-393
:TRIGger:ENHanced:I2CBus:ADATa:BIT7Address?	Queries all settings related to the 7-bit address of the I <sup>2</sup> C bus trigger.	5-394
:TRIGger:ENHanced:I2CBus:ADATa:BIT7Address:HEXA	Sets the 7-bit address of the I <sup>2</sup> C bus trigger in hexadecimal notation.	5-394
:TRIGger:ENHanced:I2CBus:ADATa:BIT7Address:PATtern	Sets the 7-bit address of the I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-394
:TRIGger:ENHanced:I2CBus:ADATa:BIT7APsub?	Queries all settings related to the 7-bit + Sub address of the I <sup>2</sup> C bus trigger.	5-394
:TRIGger:ENHanced:I2CBus:ADATa:BIT7APsub:ADDReSS?	Queries all settings related to the 7-bit address of the 7-bit + Sub address of the I <sup>2</sup> C bus trigger.	5-394
:TRIGger:ENHanced:I2CBus:ADATa:BIT7APsub:ADDReSS:HEXA	Sets the 7-bit address of the 7-bit + Sub address of the I <sup>2</sup> C bus trigger in hexadecimal notation.	5-394
:TRIGger:ENHanced:I2CBus:ADATa:BIT7APsub:ADDReSS:PATtern	Sets the 7-bit address of the 7-bit + Sub address of the I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-394
:TRIGger:ENHanced:I2CBus:ADATa:BIT7APsub:SADDeSS?	Queries all settings related to the Sub address of the 7-bit + Sub address of the I <sup>2</sup> C bus trigger.	5-394
:TRIGger:ENHanced:I2CBus:ADATa:BIT7APsub:SADDeSS:HEXA	Sets the Sub address of the 7-bit + Sub address of the I <sup>2</sup> C bus trigger in hexadecimal notation.	5-395
:TRIGger:ENHanced:I2CBus:ADATa:BIT7APsub:SADDeSS:PATtern	Sets the Sub address of the 7-bit + Sub address of the I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-395
:TRIGger:ENHanced:I2CBus:ADATa:TYPE	Sets the address type of the I <sup>2</sup> C bus trigger or queries the current setting.	5-395
:TRIGger:ENHanced:I2CBus:CLOCk?	Queries all settings related to the clock of the I <sup>2</sup> C bus trigger.	5-395
:TRIGger:ENHanced:I2CBus:CLOCk:SOURce	Sets the clock trace of the I <sup>2</sup> C bus trigger or queries the current setting.	5-395
:TRIGger:ENHanced:I2CBus:DATA?	Queries all settings related to the data of the I <sup>2</sup> C bus trigger.	5-395
:TRIGger:ENHanced:I2CBus:DATA:BYTE	Sets the number of data bytes of the I <sup>2</sup> C bus trigger or queries the current setting.	5-395
:TRIGger:ENHanced:I2CBus:DATA:CONDition	Sets the determination method (match or not match) of the data of the I <sup>2</sup> C bus trigger or queries the current setting.	5-395
:TRIGger:ENHanced:I2CBus:DATA:DPOSition	Sets the position for comparing the data pattern of the I <sup>2</sup> C bus trigger or queries the current setting.	5-396
:TRIGger:ENHanced:I2CBus:DATA:HEXA<x>	Sets the data of the I <sup>2</sup> C bus trigger in hexadecimal notation.	5-396
:TRIGger:ENHanced:I2CBus:DATA:MODE	Enables/Disables the data conditions of the I <sup>2</sup> C bus trigger or queries the current setting.	5-396
:TRIGger:ENHanced:I2CBus:DATA:PATtern<x>	Sets the data of the I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-396
:TRIGger:ENHanced:I2CBus:DATA:PMODE	Sets the pattern comparison start position mode of the data of the I <sup>2</sup> C bus trigger or queries the current setting.	5-396
:TRIGger:ENHanced:I2CBus:DATA:SOURce	Sets the data trace of the I <sup>2</sup> C bus trigger or queries the current setting.	5-396
:TRIGger:ENHanced:I2CBus:GCALl?	Queries all settings related to the general call of the I <sup>2</sup> C bus trigger.	5-396
:TRIGger:ENHanced:I2CBus:GCALl:BIT7maddress?	Queries all settings related to the 7-bit master address of the general call of the I <sup>2</sup> C bus trigger.	5-396
:TRIGger:ENHanced:I2CBus:GCALl:BIT7maddress:HEXA	Sets the 7-bit master address of the general call of the I <sup>2</sup> C bus trigger in hexadecimal notation.	5-397
:TRIGger:ENHanced:I2CBus:GCALl:BIT7maddress:PATtern	Sets the 7-bit master address of the general call of the I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-397
:TRIGger:ENHanced:I2CBus:GCALl:SBYTE	Sets the second byte type of the general call of the I <sup>2</sup> C bus trigger or queries the current setting.	5-397
:TRIGger:ENHanced:I2CBus:MODE	Sets the trigger mode of the I <sup>2</sup> C bus trigger or queries the current setting.	5-397



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:TRIGger:ENHanced:I2CBus:NAIGnore?	Queries all settings related to the NON ACK ignore mode of the I <sup>2</sup> C bus trigger.	5-397
:TRIGger:ENHanced:I2CBus:NAIGnore:HSMoDe	Sets whether to ignore NON ACK in high speed mode of the I <sup>2</sup> C bus trigger or queries the current setting.	5-397
:TRIGger:ENHanced:I2CBus:NAIGnore:RACcEss	Sets whether to ignore NON ACK in read access mode of the I <sup>2</sup> C bus trigger or queries the current setting.	5-397
:TRIGger:ENHanced:I2CBus:NAIGnore:SBYTE	Sets whether to ignore NON ACK in the start byte of the I <sup>2</sup> C bus trigger or queries the current setting.	5-397
:TRIGger:ENHanced:I2CBus:SBHSMoDe?	Queries all settings related to the start byte and high speed mode of the I <sup>2</sup> C bus trigger.	5-398
:TRIGger:ENHanced:I2CBus:SBHSMoDe:TYPE	Sets the type of the start byte or high speed mode of the I <sup>2</sup> C bus trigger or queries the current setting.	5-398
:TRIGger:ENHanced:LINBus?	Queries all settings related to the LIN bus trigger or queries the current setting.	5-398
:TRIGger:ENHanced:LINBus:BLENgtH	Sets the LIN bus signal trigger break length or queries the current setting.	5-398
:TRIGger:ENHanced:LINBus:BRATe	Sets the LIN bus signal trigger bitrate (data transfer rate) or queries the current setting.	5-398
:TRIGger:ENHanced:LINBus:ERRor?	Queries all settings related to the LIN bus signal trigger error .	5-398
:TRIGger:ENHanced:LINBus:ERRor:CHECKsum	Sets the LIN bus signal trigger Checksum error or queries the current setting.	5-398
:TRIGger:ENHanced:LINBus:ERRor:DSIZe	Sets the number of error data bytes for the LIN bus signal trigger or queries the current setting.	5-399
:TRIGger:ENHanced:LINBus:ERRor:FRAMing	Sets the LIN bus signal trigger Framing error or queries the current setting.	5-399
:TRIGger:ENHanced:LINBus:ERRor:PARity	Sets the LIN bus signal trigger Parity error or queries the current setting.	5-399
:TRIGger:ENHanced:LINBus:ERRor:SYNCh	Sets the LIN bus signal trigger Synch error or queries the current setting.	5-399
:TRIGger:ENHanced:LINBus:ERRor:TOUT	Sets the LIN bus signal trigger Timeout error or queries the current setting.	5-399
:TRIGger:ENHanced:LINBus:IDDaTA?	Queries all settings related to the IDData of the LIN bus signal trigger .	5-399
:TRIGger:ENHanced:LINBus:IDDaTA:DAТА?	Queries all settings related to the Data Field of the LIN bus signal trigger .	5-399
:TRIGger:ENHanced:LINBus:IDDaTA:DAТА:BOReR	Sets the data byte order of the LIN bus signal trigger or queries the current setting.	5-399
:TRIGger:ENHanced:LINBus:IDDaTA:DAТА:COndition	Sets the data conditions of the Data Field of the LIN bus signal trigger or queries the current setting.	5-400
:TRIGger:ENHanced:LINBus:IDDaTA:DAТА:DAТА<x>	Sets the comparison data of the LIN bus signal trigger data or queries the current setting.	5-400
:TRIGger:ENHanced:LINBus:IDDaTA:DAТА:DSIZe	Sets the number of bytes of data in the Data Field of the LIN bus signal trigger or queries the current setting.	5-400
:TRIGger:ENHanced:LINBus:IDDaTA:DAТА:HEXA	Sets the data in the Data Field of the LIN bus signal trigger in hexadecimal.	5-400
:TRIGger:ENHanced:LINBus:IDDaTA:DAТА:MSBLsb	Sets the MSB/LSB bit of the LIN bus signal trigger or queries the current setting.	5-400
:TRIGger:ENHanced:LINBus:IDDaTA:DAТА:PAТTern	Sets the data of the Data Field of the LIN bus signal trigger in binary or queries the current setting.	5-401
:TRIGger:ENHanced:LINBus:IDDaTA:DAТА:SIGN	Sets the data sign of the LIN bus signal trigger or queries the current setting.	5-401
:TRIGger:ENHanced:LINBus:IDDaTA:ID?	Queries all settings related to the ID of the LIN bus signal trigger .	5-401
:TRIGger:ENHanced:LINBus:IDDaTA:ID:HEXA	Sets the LIN bus signal trigger ID in hexadecimal.	5-401
:TRIGger:ENHanced:LINBus:IDDaTA:ID:PAТTern	Sets the LIN bus signal trigger ID in binary or queries the current setting.	5-401
:TRIGger:ENHanced:LINBus:IDOR?	Queries all settings related to the OR conditions of the LIN bus signal trigger .	5-401
:TRIGger:ENHanced:LINBus:IDOR:DSIZe	Sets the number of bytes of data in the Data Field of the OR condition of the LIN bus signal trigger or queries the current setting.	5-401

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:TRIGger:ENHanced:LINBus:IDOR:IDData<x>:DATA?	Queries all settings related to each Data Field of the OR condition of the LIN bus signal trigger .	5-402
:TRIGger:ENHanced:LINBus:IDOR:IDData<x>:DATA:BOrDer	Sets the byte order of each data of the OR conditions of the LIN bus signal trigger or queries the current setting.	5-402
:TRIGger:ENHanced:LINBus:IDOR:IDData<x>:DATA:CONditiOn	Sets the data conditions of the Data Field of each OR condition of the LIN bus signal trigger or queries the current setting.	5-402
:TRIGger:ENHanced:LINBus:IDOR:IDData<x>:DATA:DATA<x>	Sets the comparison data of each data of the OR conditions of the LIN bus signal trigger or queries the current setting.	5-402
:TRIGger:ENHanced:LINBus:IDOR:IDData<x>:DATA:HEXA	Sets the data in each Data Field of the OR condition of the LIN bus signal trigger in hexadecimal.	5-403
:TRIGger:ENHanced:LINBus:IDOR:IDData<x>:DATA:MSBLSb	Sets the MSB/LSB bit of each data of the OR condition of the LIN bus signal trigger or queries the current setting.	5-403
:TRIGger:ENHanced:LINBus:IDOR:IDData<x>:DATA:PATrn	Sets the data of each Data Field of the OR conditions of the LIN bus signal trigger or queries the current setting.	5-403
:TRIGger:ENHanced:LINBus:IDOR:IDData<x>:DATA:SIGN	Sets the sign of each data of the OR conditions of the LIN bus signal trigger or queries the current setting.	5-403
:TRIGger:ENHanced:LINBus:IDOR:IDData<x>:ID?	Queries all settings related to each ID of the OR condition of the LIN bus signal trigger .	5-403
:TRIGger:ENHanced:LINBus:IDOR:IDData<x>:ID:HEXA	Sets each ID of the OR conditions of the LIN bus signal trigger in hexadecimal.	5-403
:TRIGger:ENHanced:LINBus:IDOR:IDData<x>:ID:PATrn	Sets each ID of the OR conditions of the LIN bus signal trigger binary or queries the current setting.	5-403
:TRIGger:ENHanced:LINBus:IDOR:IDData<x>:MODE	Enables (1) or disables (0) each condition for each OR condition of the LIN bus signal trigger or queries the current setting.	5-404
:TRIGger:ENHanced:LINBus:MODE	Sets the LIN bus signal trigger mode or queries the current setting.	5-404
:TRIGger:ENHanced:LINBus:REVisiOn	Sets the LIN bus signal trigger revision (1.3 or 2.0) or queries the current setting.	5-404
:TRIGger:ENHanced:LINBus:SOURce	Sets the LIN bus signal trigger source or queries the current setting.	5-404
:TRIGger:ENHanced:LINBus:SPOint	Sets the LIN bus signal trigger sample point or queries the current setting.	5-404
:TRIGger:ENHanced:SPATtern?	Queries all settings related to the serial pattern trigger.	5-404
:TRIGger:ENHanced:SPATtern:BITRate	Sets the bit rate of the serial pattern trigger or queries the current setting.	5-404
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:TRIGger:ENHanced:SPATtern:CLOCK?	Queries all settings related to clock of the serial pattern trigger.	5-404
:TRIGger:ENHanced:SPATtern:CLOCK:MODE	Enables/Disables the clock of the serial pattern trigger or queries the current setting.	5-405
:TRIGger:ENHanced:SPATtern:CLOCK:POLarity	Sets the polarity of the clock trace of the serial pattern trigger or queries the current setting.	5-405
:TRIGger:ENHanced:SPATtern:CLOCK:SOURce	Sets the clock trace of the serial pattern trigger or queries the current setting.	5-405
:TRIGger:ENHanced:SPATtern:CS	Enables/Disables the chip select of the serial pattern trigger or queries the current setting.	5-405
:TRIGger:ENHanced:SPATtern:DATA?	Queries all settings related to data of the serial pattern trigger.	5-405
:TRIGger:ENHanced:SPATtern:DATA:ACTive	Sets the active level of the data of the serial pattern trigger or queries the current setting.	5-405
:TRIGger:ENHanced:SPATtern:DATA:SOURce	Sets the data trace of the serial pattern trigger or queries the current setting.	5-405
:TRIGger:ENHanced:SPATtern:HEXA	Sets the pattern of the serial pattern trigger in hexadecimal notation.	5-405
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:TRIGger:ENHanced:SPATtern:LATCh:SOURce	Sets the latch trace of the serial pattern trigger or queries the current setting.	5-406
:TRIGger:ENHanced:SPATtern:PATrn	Sets the pattern of the serial pattern trigger in binary notation or queries the current setting.	5-406
:TRIGger:ENHanced:SPIBus?	Queries all settings related to the SPI bus trigger.	5-406
:TRIGger:ENHanced:SPIBus:BITOrder	Sets the bit order of the SPI bus trigger or queries the current setting.	5-406

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:TRIGger:ENHanced:SPIBus:CLOCK?	Queries all settings related to the clock of the SPI bus trigger.	5-406
:TRIGger:ENHanced:SPIBus:CLOCK:POLARity	Sets the polarity of the clock trace of the SPI bus trigger or queries the current setting.	5-406
:TRIGger:ENHanced:SPIBus:CLOCK:SOURce	Sets the clock trace of the SPI bus trigger or queries the current setting.	5-407
:TRIGger:ENHanced:SPIBus:CS?	Queries all settings related to the chip select of the SPI bus trigger.	5-407
:TRIGger:ENHanced:SPIBus:CS:ACTIve	Sets the active level of the chip select of the SPI bus trigger or queries the current setting.	5-407
:TRIGger:ENHanced:SPIBus:CS:SOURce	Sets the chip select trace of the SPI bus trigger or queries the current setting.	5-407
:TRIGger:ENHanced:SPIBus:DATA<x>?	Queries all settings related to the data of the SPI bus trigger.	5-407
:TRIGger:ENHanced:SPIBus:DATA<x>:BYTE	Sets the number of bytes of the data of the SPI bus trigger or queries the current setting.	5-407
:TRIGger:ENHanced:SPIBus:DATA<x>:CONDition	Sets the determination method (match or not match) of the data of the SPI bus trigger or queries the current setting.	5-407
:TRIGger:ENHanced:SPIBus:DATA<x>:DPOSition	Sets the pattern comparison start position of the data of the SPI bus trigger or queries the current setting.	5-407
:TRIGger:ENHanced:SPIBus:DATA<x>:HEXA<x>	Sets the data of the SPI bus trigger in hexadecimal notation.	5-407
:TRIGger:ENHanced:SPIBus:DATA<x>:PATtern<x>	Sets the data of the SPI bus trigger in binary notation or queries the current setting.	5-408
:TRIGger:ENHanced:SPIBus:DATA<x>:SOURce	Sets the trace of the data of the SPI bus trigger or queries the current setting.	5-408
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:TRIGger:ENHanced:UART?	Queries all settings related to the logic UART bus signal trigger.	5-408
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:TRIGger:ENHanced:UART:DATA:DSIZe	Sets the number of bytes of the UART bus signal trigger data or queries the current setting.	5-408
:TRIGger:ENHanced:UART:DATA:HEXA	Sets the UART bus signal trigger data in hexadecimal.	5-408
:TRIGger:ENHanced:UART:DATA:PATtern	Sets the data of the UART bus signal trigger in binary or queries the current setting.	5-409
:TRIGger:ENHanced:UART:ERRor?	Queries all settings related to the UART bus signal trigger error .	5-409
:TRIGger:ENHanced:UART:ERRor:FRAMing	Sets the UART bus signal trigger Framing error or queries the current setting.	5-409
:TRIGger:ENHanced:UART:ERRor:PARity	Sets the UART bus signal trigger Parity error or queries the current setting.	5-409
:TRIGger:ENHanced:UART:ERRor:PMODE	Sets the UART bus signal trigger Parity mode or queries the current setting.	5-409
:TRIGger:ENHanced:UART:FORMat	Sets the UART bus signal trigger format or queries the current setting.	5-409
:TRIGger:ENHanced:UART:MODE	Sets the UART bus signal trigger mode or queries the current setting.	5-409
:TRIGger:ENHanced:UART:POLARity	Sets the UART bus signal trigger polarity or queries the current setting.	5-409
:TRIGger:ENHanced:UART:SOURce	Sets the UART bus signal trigger source or queries the current setting.	5-409
:TRIGger:ENHanced:UART:SPOint	Sets the UART bus signal trigger sample point or queries the current setting.	5-409
:TRIGger:ESTate?	Queries all settings related to the edge/state trigger.	5-410
:TRIGger:ESTate:EOR?	Queries all settings related to the OR trigger.	5-410
:TRIGger:ESTate:EOR:CHANnel<x>	Sets the channel polarity of the OR trigger or queries the current setting.	5-410
:TRIGger:ESTate:POLARity	Sets the polarity of the edge/state trigger or queries the current setting.	5-410
:TRIGger:ESTate:SOURce	Sets the trigger source of the edge/state trigger or queries the current setting.	5-410
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:TRIGger:LOGic?	Queries all settings related to the logic trigger.	5-410
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:TRIGger:LOGic:ESTate?	Queries all settings related to the edge/state trigger of the logic.	5-411
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:TRIGger:LOGic:ESTate:SOURce	Sets the edge/state trigger source of the logic or queries the current setting.	5-411
:TRIGger:LOGic:I2CBus?	Queries all settings related to the logic I <sup>2</sup> C bus trigger.	5-411
:TRIGger:LOGic:I2CBus:ADATa?	Queries all settings related to the address of the logic I <sup>2</sup> C bus trigger.	5-411
:TRIGger:LOGic:I2CBus:ADATa:BIT10address?	Queries all settings related to the 10-bit address of the logic I <sup>2</sup> C bus trigger.	5-412
:TRIGger:LOGic:I2CBus:ADATa:BIT10address:HEXA	Sets the 10-bit address of the logic I <sup>2</sup> C bus trigger in hexadecimal notation.	5-412
:TRIGger:LOGic:I2CBus:ADATa:BIT10address:PATtern	Sets the 10-bit address of the logic I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-412
:TRIGger:LOGic:I2CBus:ADATa:BIT7Address?	Queries all settings related to the 7-bit address of the logic I <sup>2</sup> C bus trigger.	5-412
:TRIGger:LOGic:I2CBus:ADATa:BIT7Address:HEXA	Sets the 7-bit address of the logic I <sup>2</sup> C bus trigger in hexadecimal notation.	5-412
:TRIGger:LOGic:I2CBus:ADATa:BIT7Address:PATtern	Sets the 7-bit address of the logic I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-412
:TRIGger:LOGic:I2CBus:ADATa:BIT7APsub?	Queries all settings related to the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger.	5-412
:TRIGger:LOGic:I2CBus:ADATa:BIT7APsub:ADdResS?	Queries all settings related to the 7-bit address of the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger.	5-412
:TRIGger:LOGic:I2CBus:ADATa:BIT7APsub:ADdResS:HEXA	Sets the 7-bit address of the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger in hexadecimal notation.	5-413
:TRIGger:LOGic:I2CBus:ADATa:BIT7APsub:ADdResS:PATtern	Sets the 7-bit address of the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-413
:TRIGger:LOGic:I2CBus:ADATa:BIT7APsub:SADdResS?	Queries all settings related to the sub address of the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger.	5-413
:TRIGger:LOGic:I2CBus:ADATa:BIT7APsub:SADdResS:HEXA	Sets the sub address of the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger in hexadecimal notation.	5-413
:TRIGger:LOGic:I2CBus:ADATa:BIT7APsub:SADdResS:PATtern	Sets the sub address of the 7-bit + Sub address of the logic I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-413
:TRIGger:LOGic:I2CBus:ADATa:TYPE	Sets the address type of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-413
:TRIGger:LOGic:I2CBus:CLOCK?	Queries all settings related to the clock of the logic I <sup>2</sup> C bus trigger.	5-413
:TRIGger:LOGic:I2CBus:CLOCK:SOURce	Sets the clock trace for the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-413
:TRIGger:LOGic:I2CBus:DATA?	Queries all settings related to the data of the logic I <sup>2</sup> C bus trigger.	5-414
:TRIGger:LOGic:I2CBus:DATA:BYTE	Sets the number of settings for the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-414
:TRIGger:LOGic:I2CBus:DATA:CONDition	Sets the determination method for the data of the logic I <sup>2</sup> C bus trigger (match / no match) or queries the current setting.	5-414
:TRIGger:LOGic:I2CBus:DATA:DPOSition	Sets the pattern comparison position for the data of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-414
:TRIGger:LOGic:I2CBus:DATA:HEXA<x>	Sets the data of the logic I <sup>2</sup> C bus trigger in hexadecimal notation.	5-414
:TRIGger:LOGic:I2CBus:DATA:MODE	Enables/disables the data conditions of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-414
:TRIGger:LOGic:I2CBus:DATA:PATtern<x>	Sets the data for the logic I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-414
:TRIGger:LOGic:I2CBus:DATA:PMODE	Sets the pattern comparison start position for the data of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-414
:TRIGger:LOGic:I2CBus:DATA:SOURce	Sets the data trace for the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-415
:TRIGger:LOGic:I2CBus:GCALl?	Queries all settings related to the general call of the logic I <sup>2</sup> C bus trigger.	5-415
:TRIGger:LOGic:I2CBus:GCALl:BIT7mAdDress?	Queries all settings related to the 7-bit master address of the general call of the logic I <sup>2</sup> C bus trigger.	5-415
:TRIGger:LOGic:I2CBus:GCALl:BIT7mAdDress:HEXA	Sets the 7-bit master address of the general call of the logic I <sup>2</sup> C bus trigger in hexadecimal notation.	5-415

Command	Function	Page
:TRIGger:LOGic:I2Cbus:GCALl:BIT7maddress:PATtern	Sets the 7-bit master address of the general call of the logic I <sup>2</sup> C bus trigger in binary notation or queries the current setting.	5-415
:TRIGger:LOGic:I2Cbus:GCALl:SBYTe (Second Byte)	Sets the type of the second byte of the general call of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-415
:TRIGger:LOGic:I2Cbus:MODE	Sets the trigger mode for the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-415
:TRIGger:LOGic:I2Cbus:NAIGnore?	Queries all settings related to the NON-ACK Ignore mode of the logic I <sup>2</sup> C bus trigger.	5-415
:TRIGger:LOGic:I2Cbus:NAIGnore:HSMODE	Sets whether to ignore NON ACK in high speed mode of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-416
:TRIGger:LOGic:I2Cbus:NAIGnore:RACcess	Sets whether to ignore NON ACK in read access mode of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-416
:TRIGger:LOGic:I2Cbus:NAIGnore:SBYTe (Start Byte)	Sets whether to ignore NON ACK in the start byte of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-416
:TRIGger:LOGic:I2Cbus:SBHSMODE?	Queries all settings related to the start byte/high speed mode of the logic I <sup>2</sup> C bus trigger.	5-416
:TRIGger:LOGic:I2Cbus:SBHSMODE:TYPE	Sets the type of the start byte/high speed mode of the logic I <sup>2</sup> C bus trigger or queries the current setting.	5-416
:TRIGger:LOGic:LINBus?	Queries all settings related to the logic LIN bus signal triggers.	5-416
:TRIGger:LOGic:LINBus:BLENgtH	Sets the logic LIN bus signal trigger break length or queries the current setting.	5-416
:TRIGger:LOGic:LINBus:BRATE	Sets the bit rate (data transfer rate) of the logic LIN bus signal trigger or queries the current setting.	5-417
:TRIGger:LOGic:LINBus:ERRor?	Queries all settings related to the logic LIN bus signal trigger error .	5-417
:TRIGger:LOGic:LINBus:ERRor:CHECKsum	Sets the logic LIN bus signal trigger Checksum error or queries the current setting.	5-417
:TRIGger:LOGic:LINBus:ERRor:DSIZE	Sets the number of error data bytes for the logic LIN bus signal trigger or queries the current setting.	5-417
:TRIGger:LOGic:LINBus:ERRor:FRAMing	Sets the logic LIN bus signal trigger Framing error or queries the current setting.	5-417
:TRIGger:LOGic:LINBus:ERRor:PARity	Sets the logic LIN bus signal trigger Parity error or queries the current setting.	5-417
:TRIGger:LOGic:LINBus:ERRor:SYNCh	Sets the logic LIN bus signal trigger Synch error or queries the current setting.	5-417
:TRIGger:LOGic:LINBus:ERRor:TOUT	Sets the logic LIN bus signal trigger Timeout error or queries the current setting.	5-417
:TRIGger:LOGic:LINBus:IDData?	Queries all settings related to the IDData of the logic LIN bus signal trigger .	5-417
:TRIGger:LOGic:LINBus:IDData:DATA?	Queries all settings related to the Data Field of the logic LIN bus signal trigger .	5-418
:TRIGger:LOGic:LINBus:IDData:DATA:BORDer	Sets the data byte order of the logic LIN bus signal trigger or queries the current setting.	5-418
:TRIGger:LOGic:LINBus:IDData:DATA:CONDition	Sets the data conditions of the Data Field of the logic LIN bus signal trigger or queries the current setting.	5-418
:TRIGger:LOGic:LINBus:IDData:DATA:DATA<x>	Sets the comparison data of the logic LIN bus signal trigger data or queries the current setting.	5-418
:TRIGger:LOGic:LINBus:IDData:DATA:DSIZE	Sets the number of bytes of data in the Data Field of the logic LIN bus signal trigger or queries the current setting.	5-418
:TRIGger:LOGic:LINBus:IDData:DATA:HEXA	Sets the data in the Data Field of the logic LIN bus signal trigger in hexadecimal.	5-418
:TRIGger:LOGic:LINBus:IDData:DATA:MSBLSb	Sets the MSB/LSB bit of the logic LIN bus signal trigger or queries the current setting.	5-419
:TRIGger:LOGic:LINBus:IDData:DATA:PATtern	Sets the data of the Data Field of the logic LIN bus signal trigger in binary or queries the current setting.	5-419
:TRIGger:LOGic:LINBus:IDData:DATA:SIGN	Sets the data sign of the logic LIN bus signal trigger or queries the current setting.	5-419
:TRIGger:LOGic:LINBus:IDData:ID?	Queries all settings related to the ID of the logic LIN bus signal trigger .	5-419
:TRIGger:LOGic:LINBus:IDData:ID:HEXA	Sets the logic LIN bus signal trigger ID in hexadecimal.	5-419

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:TRIGger:LOGic:LINBus:IDData:ID:PATtern	Sets the logic LIN bus signal trigger ID in binary or queries the current setting.	5-419
:TRIGger:LOGic:LINBus:IDOR?	Queries all settings related to the OR conditions of the logic LIN bus signal trigger .	5-419
:TRIGger:LOGic:LINBus:IDOR:DSIZE	Sets the number of bytes of data in the Data Field of the OR condition of the logic LIN bus signal trigger or queries the current setting.	5-420
:TRIGger:LOGic:LINBus:IDOR:IDData<x>?	Queries all settings related to each IDData of the OR condition of the logic LIN bus signal trigger .	5-420
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:DATA?	Queries all settings related to each Data Field of the OR condition of the logic LIN bus signal trigger .	5-420
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:DATA:BoRder	Sets the byte order of each data of the OR conditions of the logic LIN bus signal trigger or queries the current setting.	5-420
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:DATA:CoNDition	Sets the data conditions of the Data Field of each OR condition of the logic LIN bus signal trigger or queries the current setting.	5-420
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:DATA:DATA<x>	Sets the comparison data of each data of the OR conditions of the logic LIN bus signal trigger or queries the current setting.	5-420
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:DATA:HEXA	Sets the data in each Data Field of the OR condition of the logic LIN bus signal trigger in hexadecimal.	5-421
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:DATA:MSBLSb	Sets the MSB/LSB bit of each data of the OR condition of the logic LIN bus signal trigger or queries the current setting.	5-421
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:DATA:PATtern	Sets the data of each Data Field of the OR conditions of the logic LIN bus signal trigger or queries the current setting.	5-421
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:DATA:SIGN	Sets the sign of each data of the OR conditions of the logic LIN bus signal trigger or queries the current setting.	5-421
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:ID?	Queries all settings related to each ID of the OR condition of the logic LIN bus signal trigger .	5-421
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:ID:HEXA	Sets each ID of the OR conditions of the logic LIN bus signal trigger in hexadecimal.	5-421
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:ID:PATtern	Sets each ID of the OR conditions of the logic LIN bus signal trigger binary or queries the current setting.	5-421
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:MoDE	Enables (1) or disables (0) each condition for each OR condition of the logic LIN bus signal trigger or queries the current setting.	5-422
:TRIGger:LOGic:LINBus:MoDE	Sets the logic LIN bus signal trigger mode or queries the current setting.	5-422
:TRIGger:LOGic:LINBus:REvIsion	Sets the logic LIN bus signal trigger revision (1.3 or 2.0) or queries the current setting.	5-422
:TRIGger:LOGic:LINBus:SoURce	Sets the trigger source of the logic LIN bus signal trigger or queries the current setting.	5-422
:TRIGger:LOGic:LINBus:SPoInt	Sets the logic LIN bus signal trigger sample point or queries the current setting.	5-422
:TRIGger:LOGic:SPATtern? (Serial Pattern)	Queries all settings related to logic serial pattern trigger.	5-422
:TRIGger:LOGic:SPATtern:BITRate	Sets the bit rate for the logic serial pattern trigger or queries the current setting.	5-422
:TRIGger:LOGic:SPATtern:CLear	Clears (set to don't care) all patterns of the logic serial pattern trigger.	5-422
:TRIGger:LOGic:SPATtern:CLoCK?	Queries all settings related to the clock for the logic serial pattern trigger.	5-422
:TRIGger:LOGic:SPATtern:CLoCK:MoDE	Enables/disables the clock for the logic serial analysis pattern trigger or queries the current setting.	5-423
:TRIGger:LOGic:SPATtern:CLoCK:PoLarity	Sets the polarity of the clock trace of the logic serial pattern trigger or queries the current setting.	5-423
:TRIGger:LOGic:SPATtern:CLoCK:SoURce	Sets the clock trace for the logic serial pattern trigger or queries the current setting.	5-423
:TRIGger:LOGic:SPATtern:CS	Enables/disables the chip select for the logic serial analysis pattern trigger or queries the current setting.	5-423
:TRIGger:LOGic:SPATtern:DATA?	Queries all settings related to the data for the logic serial pattern trigger.	5-423
:TRIGger:LOGic:SPATtern:DATA:ACTive	Sets the active level of the data for the logic serial pattern trigger or queries the current setting.	5-423
:TRIGger:LOGic:SPATtern:DATA:SoURce	Sets the data rate for the logic serial pattern trigger or queries the current setting.	5-423
:TRIGger:LOGic:SPATtern:HEXA	Sets the pattern of the logic serial pattern trigger in hexadecimal notation.	5-423
:TRIGger:LOGic:SPATtern:LATCh?	Queries all settings related to the latch for the logic serial pattern trigger.	5-423

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:TRIGger:LOGic:SPATtern:LATCh:POLarity	Sets the polarity of the latch trace of the logic serial pattern trigger or queries the current setting.	5-424
:TRIGger:LOGic:SPATtern:LATCh:SOURce	Sets the latch trace for the logic serial pattern trigger or queries the current setting.	5-424
:TRIGger:LOGic:SPATtern:PATtern	Sets the pattern of the logic serial pattern trigger in binary notation, or queries the current setting.	5-424
:TRIGger:LOGic:SPIBus?	Queries all settings related to the logic SPI bus trigger.	5-424
:TRIGger:LOGic:SPIBus:BITorder	Sets the bit order for the logic SPI bus trigger or queries the current setting.	5-424
:TRIGger:LOGic:SPIBus:CLOCK?	Queries all settings related to the clock of the logic SPI bus trigger.	5-424
:TRIGger:LOGic:SPIBus:CLOCK:POLarity	Sets the polarity of the clock trace for the logic SPI bus trigger or queries the current setting.	5-424
:TRIGger:LOGic:SPIBus:CLOCK:SOURce	Sets the clock trace for the logic SPI bus trigger or queries the current setting.	5-425
:TRIGger:LOGic:SPIBus:CS?	Queries all settings related to the chip select of the logic SPI bus trigger.	5-425
:TRIGger:LOGic:SPIBus:CS:ACTive	Sets the active level of the chip select for the logic SPI bus trigger or queries the current setting.	5-425
:TRIGger:LOGic:SPIBus:CS:SOURce	Sets the chip select trace for the logic SPI bus trigger or queries the current setting.	5-425
:TRIGger:LOGic:SPIBus:DATA<x>?	Queries all settings related to each data of the logic SPI bus trigger.	5-425
:TRIGger:LOGic:SPIBus:DATA<x>:BYTE	Sets the number of settings for each data of the logic SPI bus trigger or queries the current setting.	5-425
:TRIGger:LOGic:SPIBus:DATA<x>:CONDition	Sets the determination method for the data of the logic SPI bus trigger (match / no match) or queries the current setting.	5-425
:TRIGger:LOGic:SPIBus:DATA<x>:DPOSition	Sets the pattern comparison start position for the data of the logic SPI bus trigger or queries the current setting.	5-425
:TRIGger:LOGic:SPIBus:DATA<x>:HEXA<x>	Sets the data of the logic SPI bus trigger in hexadecimal notation.	5-426
:TRIGger:LOGic:SPIBus:DATA<x>:PATtern<x>	Sets each data of the logic SPI bus trigger in binary notation or queries the current setting.	5-426
:TRIGger:LOGic:SPIBus:DATA<x>:SOURce	Sets the trace of each data of the logic SPI bus trigger or queries the current setting.	5-426
:TRIGger:LOGic:SPIBus:MODE	Sets the wiring method (3-wire/4-wire) of the logic SPI bus trigger or queries the current setting.	5-426
:TRIGger:LOGic:STATe?	Queries all settings related to the logic state trigger.	5-426
:TRIGger:LOGic:STATe:BIT?	Queries all settings related to the bit of the logic state trigger.	5-426
:TRIGger:LOGic:STATe:BIT:{A<x> B<x> C<x> D<x>}	Sets the condition to be satisfied for the bit of the logic state trigger or queries the current setting.	5-427
:TRIGger:LOGic:STATe:BIT:CLEar	Clears the entire condition to be satisfied for the bit of the logic state trigger (set to don't care) or queries the current setting.	5-427
:TRIGger:LOGic:STATe:BIT:LOGic	Sets the logic of the logic state trigger or queries the current setting.	5-427
:TRIGger:LOGic:STATe:GROup<x>?	Queries all settings related to the group of the logic state trigger.	5-427
:TRIGger:LOGic:STATe:GROup<x>:CLEar	Clears the entire condition to be satisfied for the group of the logic state trigger (set to don't care) or queries the current setting.	5-427
:TRIGger:LOGic:STATe:GROup<x>:CONDition	Sets the determination condition for the group of the logic state trigger or queries the current setting.	5-427
:TRIGger:LOGic:STATe:GROup<x>:HEXA	Sets the condition to be satisfied for the group of the logic state trigger in hexadecimal notation.	5-427
:TRIGger:LOGic:STATe:GROup<x>:PATtern	Sets the condition to be satisfied for the group of the logic state trigger in binary notation or queries the current setting.	5-427
:TRIGger:LOGic:STATe:GROup<x>:SYMBOL	Sets the symbol item for the group of the logic state trigger.	5-428
:TRIGger:LOGic:STATe:TYPE	Sets the setup type of the logic state trigger or queries the current setting.	5-428
:TRIGger:LOGic:UART?	Queries all settings related to the logic UART bus signal trigger.	5-428
:TRIGger:LOGic:UART:BRATe	Sets the logic UART bus signal trigger bit rate (data transfer rate) or queries the current setting.	5-428
:TRIGger:LOGic:UART:DATA?	Queries all settings related to the data of the logic UART bus signal trigger.	5-428

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:TRIGger:LOGic:UART:DATA:BITOrder	Sets the logic UART bus signal trigger data bit order or queries the current setting.	5-428
:TRIGger:LOGic:UART:DATA:DSIZE	Sets the number of bytes of the logic UART bus signal trigger data or queries the current setting.	5-428
:TRIGger:LOGic:UART:DATA:HEXA	Sets the logic UART bus signal trigger data in hexadecimal.	5-428
:TRIGger:LOGic:UART:DATA:PATtern	Sets the data of the logic UART bus signal trigger in binary or queries the current setting.	5-428
:TRIGger:LOGic:UART:ERRor?	Queries all settings related to the logic UART bus signal trigger error .	5-428
:TRIGger:LOGic:UART:ERRor:FRAMing	Sets the logic UART bus signal trigger Framing error or queries the current setting.	5-429
:TRIGger:LOGic:UART:ERRor:PARity	Sets the logic UART bus signal trigger Parity error or queries the current setting.	5-429
:TRIGger:LOGic:UART:ERRor:PMODE	Sets the logic UART bus signal trigger Parity mode or queries the current setting.	5-429
:TRIGger:LOGic:UART:FORMat	Sets the logic UART bus signal trigger format or queries the current setting.	5-429
:TRIGger:LOGic:UART:MODE	Sets the logic UART bus signal trigger mode or queries the current setting.	5-429
:TRIGger:LOGic:UART:POLarity	Sets the logic UART bus signal trigger polarity or queries the current setting.	5-429
:TRIGger:LOGic:UART:SOURce	Sets the logic UART bus signal trigger source or queries the current setting.	5-429
:TRIGger:LOGic:UART:SPOint	Sets the logic UART bus signal sample point or queries the current setting.	5-429
:TRIGger:LOGic:WIDTh?	Queries all settings related to the logic pulse width trigger.	5-429
:TRIGger:LOGic:WIDTh:MODE	Sets the determination mode of the logic pulse width trigger or queries the current setting.	5-429
:TRIGger:LOGic:WIDTh:POLarity	Sets the polarity of the logic pulse width trigger or queries the current setting.	5-430
:TRIGger:LOGic:WIDTh:SOURce	Sets the trigger source of the logic pulse width trigger or queries the current setting.	5-430
:TRIGger:LOGic:WIDTh:TIME<x>	Sets the logic pulse width of the pulse width trigger or queries the current setting.	5-430
:TRIGger:MODE	Sets the trigger mode or queries the current setting.	5-430
:TRIGger:POStion	Sets the trigger position or queries the current setting.	5-430
:TRIGger:SCOunt	Sets the number of times the trigger is to be activated when the trigger mode is Single(N) or queries the current setting.	5-430
:TRIGger:SOURce?	Queries all settings related to the trigger source.	5-430
:TRIGger:SOURce:CHANnel<x>?	Queries all settings related to the channel of the trigger source.	5-430
:TRIGger:SOURce:CHANnel<x>:COUpling	Sets the trigger coupling of the channel or queries the current setting.	5-431
:TRIGger:SOURce:CHANnel<x>:HFRejection	Sets the low pass filter (HF rejection) of the channel or queries the current setting.	5-431
:TRIGger:SOURce:CHANnel<x>:HYSTeresis	Sets the hysteresis of the channel or queries the current setting.	5-431
:TRIGger:SOURce:CHANnel<x>:LEVel	Sets the trigger level of the channel or queries the current setting.	5-431
:TRIGger:SOURce:CHANnel<x>:STATe	Sets the condition to be satisfied of the channel or queries the current setting.	5-431
:TRIGger:SOURce:CHANnel<x>:WIDTh	Sets the window trigger width of the channel or queries the current setting.	5-431
:TRIGger:SOURce:CHANnel<x>:WINDow	Turns ON/OFF the window of the channel or queries the current setting.	5-431
:TRIGger:SOURce:EXTErnal?	Queries all settings related to the external trigger.	5-431
:TRIGger:SOURce:EXTErnal:LEVel	Sets the trigger level of the external trigger or queries the current setting.	5-432
:TRIGger:SOURce:EXTErnal:PROBe	Sets the probe attenuation of the external trigger or queries the current setting.	5-432
:TRIGger:SOURce:LOGic	Sets the trigger source logic or queries the current setting.	5-432
:TRIGger:TYPE	Sets the trigger type or queries the current setting.	5-432
:TRIGger:WIDTh?	Queries all settings related to the pulse width trigger.	5-432



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:TRIGger:WIDTh:MODE	Sets the determination mode of the pulse width trigger or queries the current setting.	5-432
:TRIGger:WIDTh:POLarity	Sets the polarity of the pulse width trigger or queries the current setting.	5-432
:TRIGger:WIDTh:SOURce	Sets the trigger source of the pulse width trigger or queries the current setting.	5-432
:TRIGger:WIDTh:TIME<x>	Sets the pulse width of the pulse width trigger or queries the current setting.	5-433
<b>WAVeform Group</b>		
:WAVeform?	Queries all of the information of the waveform data.	5-434
:WAVeform:BITS?	Queries the bit length of the specified waveform data.	5-434
:WAVeform:BYTeorder	Sets the transmission byte order or queries the current setting.	5-434
:WAVeform:END	Sets the last data point of the specified waveform or queries the current setting.	5-434
:WAVeform:FORMat	Sets the format of the data to be transmitted or queries the current setting.	5-434
:WAVeform:LENGth?	Queries the total number of data points of the specified waveform.	5-434
:WAVeform:OFFSet?	Queries the offset value of the specified waveform data.	5-434
:WAVeform:POSition?	Queries the vertical axis position used for converting to voltage when RBYTe is specified with: WAVeform:FORMat.	5-434
:WAVeform:RANGe?	Queries the range value of the specified waveform data.	5-434
:WAVeform:RECOrd	Sets the target record number for the commands in the WAVeform group or queries the current setting.	5-435
:WAVeform:RECOrd? MINimum	Queries the minimum record number.	5-435
:WAVeform:SEND?	Queries the specified waveform data.	5-435
:WAVeform:SIGN?	Queries the presence of a sign.	5-436
:WAVeform:SRATe?	Queries the sample rate of the target record.	5-436
:WAVeform:STARt	Sets the first data point of the specified waveform or queries the current setting.	5-436
:WAVeform:TRACe	Sets the target waveform for the commands in the WAVeform group or queries the current setting.	5-436
:WAVeform:TRIGger?	Queries the trigger position of the target record.	5-436
:WAVeform:TYPE?	Queries the acquisition mode of the specified waveform.	5-436
<b>ZOOM Group</b>		
:ZOOM?	Queries all settings related to the waveform zoom.	5-437
:ZOOM:ALLocation<x>?	Queries all settings related to the zoom source waveform.	5-437
:ZOOM:ALLocation:ALLon	Sets all waveforms to be zoomed.	5-437
:ZOOM:ALLocation:TRACe<x>	Turns ON/OFF the trace you wish to zoom or queries the current setting.	5-437
:ZOOM:FORMat<x>	Sets the display format of the zoom waveform or queries the current setting.	5-437
:ZOOM:HLINKage	Turns ON/OFF the horizontal link or queries the current setting.	5-437
:ZOOM:HORizontal<x>?	Queries all settings related to the horizontal zoom.	5-437
:ZOOM:HORizontal<x>:ASCRoll?	Queries all settings related to the auto scroll function.	5-437
:ZOOM:HORizontal<x>:ASCRoll:JUMP	Moves the zoom center position to the left or right edge.	5-437
:ZOOM:HORizontal<x>:ASCRoll:SPEed	Sets the auto scroll speed or queries the current setting.	5-437
:ZOOM:HORizontal<x>:ASCRoll:STARt	Starts auto scrolling.	5-438
:ZOOM:HORizontal<x>:ASCRoll:STOP	Stops auto scrolling.	5-438
:ZOOM:HORizontal<x>:MAG	Sets the horizontal zoom magnification or queries the current setting.	5-438
:ZOOM:HORizontal<x>:POSition	Sets the horizontal zoom center position or queries the current setting.	5-438
:ZOOM:MODE	Sets the display mode of the zoom waveform or queries the current setting.	5-438
:ZOOM:TYPE<x>	Sets the zoom type or queries the current setting.	5-438
:ZOOM:VERTical<x>?	Queries all settings related to the vertical zoom.	5-438
:ZOOM:VERTical<x>:INITialize	Initializes the vertical zoom.	5-438
:ZOOM:VERTical<x>:MAG	Sets the vertical zoom magnification or queries the current setting.	5-438
:ZOOM:VERTical<x>:POSition	Sets the vertical zoom position or queries the current setting.	5-438
:ZOOM:VERTical<x>:TRACe	Sets the displayed trace of the vertical zoom screen or queries the current setting.	5-438
:ZOOM:VLINKage	Turns ON/OFF the vertical link or queries the current setting.	5-438

Command	Function	Page
<b>Common Command Group</b>		
*CAL?	Performs calibration and queries the result.	5-439
*CLS	Clears the standard event register, extended event register, and error queue.	5-439
*ESE	Sets the standard event enable register or queries the current setting.	5-439
*ESR?	Queries the standard event register and clears the register.	5-439
*IDN?	Queries the instrument model.	5-439
*LRN?	Queries collectively the current settings of the command group.	5-440
*OPC	Sets the OPC bit to 1 after the completion of the specified overlap command.	5-441
*OPC?	Creates a response after the completion of the specified overlap command.	5-441
*OPT?	Queries the options.	5-441
*PSC	Sets whether to clear the registers at power on or queries the current setting.	5-441
*RST	Executes the initialization of settings.	5-441
*SRE	Sets the service request enable register or queries the current setting.	5-441
*STB?	Queries the status byte register.	5-441
*TST?	Performs a self-test and queries the result.	5-442
*WAI	Holds the subsequent command until the completion of the specified overlap operation.	5-442

## 5.2 ACQUIRE Group

### **:ACQUIRE?**

Function Queries all settings related to the waveform acquisition.

Syntax :ACQUIRE?

Example :ACQUIRE? -> :ACQUIRE:AVERAGE:COUNT 2;  
EWEIGHT 16;:ACQUIRE:HRMODE 0;  
INTERLEAVE 0;INTERPOLATE 1;MODE NORMAL;  
REPETITIVE 0;RLENGTH 12500

### **:ACQUIRE:AVERAGE?**

Function Queries all settings related to averaging and the waveform acquisition count.

Syntax :ACQUIRE:AVERAGE?

Example :ACQUIRE:AVERAGE? -> :ACQUIRE:AVERAGE:  
COUNT 2;EWEIGHT 16

### **:ACQUIRE:AVERAGE:COUNT**

Function Sets the waveform acquisition count of averaging mode or queries the current setting.

Syntax :ACQUIRE:AVERAGE:COUNT {<NRf>}  
:ACQUIRE:AVERAGE:COUNT?  
<NRf> = 2 to 65536 (2n steps)

Example :ACQUIRE:AVERAGE:COUNT 2  
:ACQUIRE:AVERAGE:COUNT? -> :ACQUIRE:  
AVERAGE:COUNT 2

### **:ACQUIRE:AVERAGE:EWEIGHT**

Function Sets the attenuation constant when averaging mode is used infinitely or queries the current setting.

Syntax :ACQUIRE:AVERAGE:EWEIGHT {<NRf>}  
:ACQUIRE:AVERAGE:EWEIGHT?  
<NRf> = 2 to 1024 (2n steps)

Example :ACQUIRE:AVERAGE:EWEIGHT 16  
:ACQUIRE:AVERAGE:EWEIGHT? -> :ACQUIRE:  
AVERAGE:EWEIGHT 16

### **:ACQUIRE:HRMODE**

Function Turns ON/OFF the high resolution mode or queries the current setting.

Syntax :ACQUIRE:HRMODE {<Boolean>}  
:ACQUIRE:HRMODE?

Example :ACQUIRE:HRMODE ON  
:ACQUIRE:HRMODE? -> :ACQUIRE:HRMODE 1

### **:ACQUIRE:INTERLEAVE**

Function Turns ON/OFF interleave or queries the current setting.

Syntax :ACQUIRE:INTERLEAVE {<Boolean>}  
:ACQUIRE:INTERLEAVE?

Example :ACQUIRE:INTERLEAVE ON  
:ACQUIRE:INTERLEAVE? -> :ACQUIRE:  
INTERLEAVE 1

### **:ACQUIRE:INTERPOLATE**

Function Turns ON/OFF data interpolation or queries the current setting.

Syntax :ACQUIRE:INTERPOLATE {<Boolean>}  
:ACQUIRE:INTERPOLATE?

Example :ACQUIRE:INTERPOLATE ON  
:ACQUIRE:INTERPOLATE? -> :ACQUIRE:  
INTERPOLATE 1

### **:ACQUIRE:MODE**

Function Sets the waveform acquisition mode or queries the current setting.

Syntax :ACQUIRE:MODE {AVERAGE|ENVELOPE|NORMAL}  
:ACQUIRE:MODE?

Example :ACQUIRE:MODE NORMAL  
:ACQUIRE:MODE? -> :ACQUIRE:MODE NORMAL

### **:ACQUIRE:REPETITIVE**

Function Turns ON/OFF the repetitive sampling or queries the current setting.

Syntax :ACQUIRE:REPETITIVE {<Boolean>}  
:ACQUIRE:REPETITIVE?

Example :ACQUIRE:REPETITIVE ON  
:ACQUIRE:REPETITIVE? -> :ACQUIRE:  
REPETITIVE 1

### **:ACQUIRE:RLENGTH**

Function Sets the record length or queries the current setting.

Syntax :ACQUIRE:RLENGTH {<NRf>}  
:ACQUIRE:RLENGTH?  
<NRf> = See the SB5000 User's Manual.

Example :ACQUIRE:RLENGTH 6250000  
:ACQUIRE:RLENGTH?  
-> :ACQUIRE:RLENGTH 6250000

## 5.3 ANALysis Group

### :ANALysis?

**Function** Queries all settings related to the analysis function.

**Syntax** :ANALysis?

**Example** :ANALYSIS? -> :ANALYSIS:AHISTOGRAM1:  
HORIZONTAL 4.000000E+00,  
-4.000000E+00;MEASURE:CURSOR:BASIC:C1:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
CURSOR:BASIC:C2:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:BASIC:DC:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
CURSOR:CALCULATION:DEFINE1 "C1";  
DEFINE2 "C2";DEFINE3 "C1";DEFINE4 "C2";  
STATE1 0;STATE2 0;STATE3 0;STATE4 0;:  
ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
HLINKAGE 0;HPOSITION1 -5.000000E+00;  
HPOSITION2 5.000000E+00;VLINKAGE 0;  
VPOSITION1 4.000000E+00;  
VPOSITION2 -4.000000E+00;:ANALYSIS:  
AHISTOGRAM1:MEASURE:MODE OFF;PARAMETER:  
AREA1:MAXIMUM:STATE 0;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
MEAN:STATE 0;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA1:MEDIAN:  
STATE 0;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1:MINIMUM:STATE 0;:  
ANALYSIS:AHISTOGRAM1:MEASURE:PARAMETER:  
AREA1:PEAK:STATE 0;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
RMS:STATE 0;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA1:SD2INTEG:  
STATE 0;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1:SD3INTEG:STATE 0;:  
ANALYSIS:AHISTOGRAM1:MEASURE:PARAMETER:  
AREA1:SDEVIATION:STATE 0;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
SDINTEG:STATE 0;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA2:MAXIMUM:  
STATE 0;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA2:MEAN:STATE 0.....

### :ANALysis:AHISTogram<x>?

**Function** Queries all settings related to the accumulated histogram function.

**Syntax** :ANALysis:AHISTogram<x>?  
<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1? -> :ANALYSIS:  
AHISTOGRAM1:HORIZONTAL 0.000E+00,  
0.000E+00;MEASURE:CURSOR:BASIC:C1:  
STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:CURSOR:BASIC:C2:STATE 1;:  
ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:DC:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:CURSOR:CALCULATION:  
DEFINE1 "C1";DEFINE2 "C2";DEFINE3 "C1";  
DEFINE4 "C2";STATE1 1;STATE2 1;  
STATE3 1;STATE4 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:HLINKAGE 1;  
HPOSITION1 0.000E+00;  
HPOSITION2 1.000E+00;VLINKAGE 1;  
VPOSITION1 1.000E+00;  
VPOSITION2 1.000E+00;:ANALYSIS:  
AHISTOGRAM1:MEASURE:MODE CURSOR;  
PARAMETER:AREA1:MAXIMUM:STATE 1;:  
ANALYSIS:AHISTOGRAM1:MEASURE:PARAMETER:  
AREA1:MEAN:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
MEDIAN:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA1:MINIMUM:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1:PEAK:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
RMS:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA1:SD2INTEG:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1:SD3INTEG:STATE 1;:A  
NALYSIS:AHISTOGRAM1:MEASURE:PARAMETER:  
AREA1:SDEVIATION:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
SDINTEG:STATE 1.....

### :ANALysis:AHISTogram<x>:HORizontal

**Function** Sets the horizontal range of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:HORizontal  
{<Nrf>,<Nrf>}  
:ANALysis:AHISTogram<x>:HORizontal?  
<x> = 1 or 2  
<Nrf> = -4 to 4 (div)

**Example** :ANALYSIS:AHISTOGRAM1:HORIZONTAL 0,1  
:ANALYSIS:AHISTOGRAM1:HORIZONTAL?  
-> :ANALYSIS:AHISTOGRAM1:  
HORIZONTAL 0.000E+00,0.000E+00

### 5.3 ANALysis Group

#### **:ANALysis:AHISTogram<x>:MEASure?**

**Function** Queries all settings related automated measurement of the accumulated histogram.

**Syntax** :ANALysis:AHISTogram<x>:MEASure?  
<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE?  
-> :ANALYSIS:AHISTOGRAM1:MEASURE:  
CURSOR:BASIC:C1:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:BASIC:C2:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
CURSOR:BASIC:DC:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:CALCULATION:  
DEFINE1 "C1";DEFINE2 "C2";DEFINE3 "C1";  
DEFINE4 "C2";STATE1 1;STATE2 1;  
STATE3 1;STATE4 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:HLINKAGE 1;  
HPOSITION1 0.000E+00;  
HPOSITION2 1.000E+00;VLINKAGE 1;  
VPOSITION1 0.000E+00;  
VPOSITION2 1.000E+00;:ANALYSIS:  
AHISTOGRAM1:MEASURE:MODE CURSOR;  
PARAMETER:AREA1:MAXIMUM:STATE 1;:  
ANALYSIS:AHISTOGRAM1:MEASURE:PARAMETER:  
AREA1:MEAN:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
MEDIAN:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA1:MINIMUM:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1:PEAK:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
RMS:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA1:SD2INTEG:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1:SD3INTEG:STATE 1;:  
ANALYSIS:AHISTOGRAM1:MEASURE:PARAMETER:  
AREA1:SDEVIATION:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
SDINTEG:STATE 1.....

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **CURSor?**

**Function** Queries all settings related to cursor measurement of the accumulated histogram.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:CURSor?  
<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR?  
-> :ANALYSIS:AHISTOGRAM1:MEASURE:  
CURSOR:BASIC:C1:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:BASIC:C2:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
CURSOR:BASIC:DC:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:CALCULATION:  
DEFINE1 "C1";DEFINE2 "C2";DEFINE3 "C1";  
DEFINE4 "C2";STATE1 1;STATE2 1;  
STATE3 1;STATE4 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:HLINKAGE 1;  
HPOSITION1 0.000E+00;  
HPOSITION2 1.000E+00;VLINKAGE 1;  
VPOSITION1 0.000E+00;  
VPOSITION2 1.000E+00

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **CURSor:BASic?**

**Function** Queries all settings related to basic items of the cursor of the accumulated histogram.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:  
CURSor:BASic?  
<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
BASIC? -> :ANALYSIS:AHISTOGRAM1:  
MEASURE:CURSOR:BASIC:C1:STATE 1;:  
ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:C2:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:CURSOR:BASIC:DC:STATE 1

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **CURSor[:BASic]:ALL**

**Function** Turns ON/OFF all basic items of the cursor of the accumulated histogram.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:  
CURSor[:BASic]:ALL {<Boolean>}  
<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:ALL ON

**:ANALYSIS:AHISTOGRAM<x>:MEASURE:****CURSOr[:BASic]:C<x>?**

Function Queries all settings related to the cursor of the accumulated histogram.

Syntax :ANALYSIS:AHISTOGRAM<x>:MEASURE:  
CURSOR[:BASic]:C<x>?  
<x> of AHISTOGRAM<x> = 1 or 2  
<x> of C<x> = 1 or 2

Example :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:C1? -> :ANALYSIS:AHISTOGRAM1:  
MEASURE:CURSOR:BASIC:C1:STATE 1

**:ANALYSIS:AHISTOGRAM<x>:MEASURE:****CURSOr[:BASic]:C<x>:STATE**

Function Turns ON/OFF the cursor of the accumulated histogram or queries the current setting.

Syntax :ANALYSIS:AHISTOGRAM<x>:MEASURE:  
CURSOR[:BASic]:C<x>:STATE {<Boolean>}  
:ANALYSIS:AHISTOGRAM<x>:MEASURE:  
CURSOR[:BASic]:C<x>:STATE?  
<x> of AHISTOGRAM<x> = 1 or 2  
<x> of C<x> = 1 or 2

Example :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:C1:STATE ON  
:ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:C1:STATE? -> :ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:C1:STATE 1

**:ANALYSIS:AHISTOGRAM<x>:MEASURE:****CURSOr[:BASic]:C<x>:VALUE?**

Function Queries the measured value of the cursor of the accumulated histogram.

Syntax :ANALYSIS:AHISTOGRAM<x>:MEASURE:  
CURSOR[:BASic]:C<x>:VALUE?  
<x> of AHISTOGRAM<x> = 1 or 2  
<x> of C<x> = 1 or 2

Example :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:C1:VALUE? -> :ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:C1:VALUE 1.000E+00

**:ANALYSIS:AHISTOGRAM<x>:MEASURE:****CURSOr[:BASic]:DC?**

Function Queries all settings related to measured values between cursors of the accumulated histogram.

Syntax :ANALYSIS:AHISTOGRAM<x>:MEASURE:  
CURSOR[:BASic]:DC?  
<x> = 1 or 2

Example :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:DC? -> :ANALYSIS:AHISTOGRAM1:  
MEASURE:CURSOR:BASIC:DC:STATE 1

**:ANALYSIS:AHISTOGRAM<x>:MEASURE:****CURSOr[:BASic]:DC:STATE**

Function Turns ON/OFF the measured values between cursors of the accumulated histogram or queries the current setting.

Syntax :ANALYSIS:AHISTOGRAM<x>:MEASURE:  
CURSOR[:BASic]:DC:STATE {<Boolean>}  
:ANALYSIS:AHISTOGRAM<x>:MEASURE:  
CURSOR[:BASic]:DC:STATE?  
<x> = 1 or 2

Example :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:DC:STATE ON  
:ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:DC:STATE? -> :ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:BASIC:DC:  
STATE 1

**:ANALYSIS:AHISTOGRAM<x>:MEASURE:****CURSOr[:BASic]:DC:VALUE?**

Function Queries the measured value between cursors of the accumulated histogram.

Syntax :ANALYSIS:AHISTOGRAM<x>:MEASURE:  
CURSOR[:BASic]:DC:VALUE?  
<x> = 1 or 2

Example :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:DC:VALUE? -> :ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:  
BASIC:DC:VALUE 1.000E+00

**:ANALYSIS:AHISTOGRAM<x>:MEASURE:****CURSOr:CALCulation?**

Function Queries all settings related to calculation items of the cursor of the accumulated histogram.

Syntax :ANALYSIS:AHISTOGRAM<x>:MEASURE:CURSOR:  
CALCulation?  
<x> = 1 or 2

Example :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
CALCulation? -> :ANALYSIS:AHISTOGRAM1:  
MEASURE:CURSOR:  
CALCulation:DEFINE1 "C1";DEFINE2 "C2";  
DEFINE3 "C1";DEFINE4 "C2";STATE1 1;  
STATE2 1;STATE3 1;STATE4 1

**:ANALYSIS:AHISTOGRAM<x>:MEASURE:****CURSOr:CALCulation:ALL**

Function Turns ON/OFF all calculation items of the cursor of the accumulated histogram.

Syntax :ANALYSIS:AHISTOGRAM<x>:MEASURE:CURSOR:  
CALCulation:ALL {<Boolean>}  
<x> = 1 or 2

Example :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
CALCulation:ALL ON

### 5.3 ANALysis Group

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **CURSor:CALCulation:DEFine<x>**

**Function** Sets the equation of the calculation item of the cursor of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:CURSor:  
CALCulation:DEFine<x> {<String>}  
:ANALysis:AHISTogram<x>:MEASure:CURSor:  
CALCulation:DEFine<x>?  
<x> of AHISTogram<x> = 1 or 2  
<x> of DEFine<x> = 1 to 4  
<String> = Up to 128 characters

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
CALCULATION:DEFINE1 "C1"  
:ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
CALCULATION:DEFINE1? -> :ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:  
CALCULATION:DEFINE1 "C1"

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **CURSor:CALCulation:STATe<x>**

**Function** Turns ON/OFF the calculation item of the cursor of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:CURSor:  
CALCulation:STATe<x> {<Boolean>}  
:ANALysis:AHISTogram<x>:MEASure:CURSor:  
CALCulation:STATe<x>?  
<x> of AHISTogram<x> = 1 or 2  
<x> of STATe<x> = 1 to 4

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
CALCULATION:STATE1 ON  
:ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
CALCULATION:STATE1? -> :ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:  
CALCULATION:STATE1 1

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **CURSor:CALCulation:VALue<x>?**

**Function** Queries the measured value of the calculation item of the cursor of the accumulated histogram.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:CURSor:  
CALCulation:VALue<x>?  
<x> of AHISTogram<x> = 1 or 2  
<x> of VALue<x> = 1 to 4

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
CALCULATION:VALUE1? -> :ANALYSIS:  
AHISTOGRAM1:MEASURE:CURSOR:  
CALCULATION:VALUE1 1.000E+00

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **CURSor:HLINKage**

**Function** Turns ON/OFF the horizontal cursor link of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:CURSor:  
HLINKage {<Boolean>}  
:ANALysis:AHISTogram<x>:MEASure:CURSor:  
HLINKage?  
<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
HLINKAGE ON  
:ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
HLINKAGE? -> :ANALYSIS:AHISTOGRAM1:  
MEASURE:CURSOR:HLINKAGE 1

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **CURSor:HPOsition<x>**

**Function** Sets the horizontal cursor position of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:CURSor:  
HPOsition<x> {<NRf>}  
:ANALysis:AHISTogram<x>:MEASure:CURSor:  
HPOsition<x>?  
<x> of AHISTogram<x> = 1 or 2  
<x> of HPOsition<x> = 1 or 2  
<NRf> = -5 to 5 div

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
HPOSITION1 1  
:ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
HPOSITION1? -> :ANALYSIS:AHISTOGRAM1:  
MEASURE:CURSOR:  
HPOSITION1 1.000E+00

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **CURSor:VLINKage**

**Function** Turns ON/OFF the vertical cursor link of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:CURSor:  
VLINKage {<Boolean>}  
:ANALysis:AHISTogram<x>:MEASure:CURSor:  
VLINKage?  
<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
VLINKAGE ON  
:ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
VLINKAGE? -> :ANALYSIS:AHISTOGRAM1:  
MEASURE:CURSOR:VLINKAGE 1

**:ANALysis:AHIStoqram<x>:MEASure:  
CURSor:VPOStion<x>**

**Function** Sets the vertical cursor position of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHIStoqram<x>:MEASure:CURSor:  
VPOStion<x> {<NRF>}  
:ANALysis:AHIStoqram<x>:MEASure:CURSor:  
VPOStion<x>?  
<x> of AHIStoqram<x> = 1 and 2  
<x> of VPOStion<x> = 1 and 2  
<NRF> = -4 to 4 (div)

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
VPOSITION1 1  
:ANALYSIS:AHISTOGRAM1:MEASURE:CURSOR:  
VPOSITION1? -> :ANALYSIS:AHISTOGRAM1:  
MEASURE:CURSOR:  
VPOSITION1 1.000E+00

**:ANALysis:AHIStoqram<x>:MEASure:MODE**

**Function** Sets the automated measurement mode of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHIStoqram<x>:MEASure:MODE  
{CURSor|OFF|PARAmeter}  
:ANALysis:AHIStoqram<x>:MEASure:MODE?  
<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:  
MODE CURSOR  
:ANALYSIS:AHISTOGRAM1:MEASURE:MODE?  
-> :ANALYSIS:AHISTOGRAM1:MEASURE:  
MODE CURSOR

**:ANALysis:AHIStoqram<x>:MEASure:  
PARAmeter?**

**Function** Queries all settings related to the automated measurement of waveform parameters of the accumulated histogram.

**Syntax** :ANALysis:AHIStoqram<x>:MEASure:  
PARAmeter?  
<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER? -> :ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA1:MAXIMUM:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1:MEAN:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
MEDIAN:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA1:MINIMUM:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1:PEAK:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
RMS:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA1:SD2INTEG:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1:SD3INTEG:STATE 1;:  
ANALYSIS:AHISTOGRAM1:MEASURE:PARAMETER:  
AREA1:SDEVIATION:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
SDINTEG:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA2:MAXIMUM:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA2:MEAN:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA2:  
MEDIAN:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA2:MINIMUM:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA2:PEAK:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA2:  
RMS:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA2:SD2INTEG:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA2:SD3INTEG:STATE 1;:  
ANALYSIS:AHISTOGRAM1:MEASURE:PARAMETER:  
AREA2:SDEVIATION:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA2:  
SDINTEG:STATE 1.....



### 5.3 ANALYSIS Group

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **PARAmeter:AREA<x>?**

**Function** Queries all settings related to the area of the accumulated histogram.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:  
PARAmeter:AREA<x>?  
<x> of AHISTogram<x> = 1 and 2  
<x> of AREA<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1? -> :ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
MAXIMUM:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA1:MEAN:STATE 1;:  
ANALYSIS:AHISTOGRAM1:MEASURE:PARAMETER:  
AREA1:MEDIAN:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
MINIMUM:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA1:PEAK:STATE 1;:  
ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1:RMS:STATE 1;:ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:  
SD2INTEG:STATE 1;:ANALYSIS:AHISTOGRAM1:  
MEASURE:PARAMETER:AREA1:SD3INTEG:  
STATE 1;:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1:SDEVIATION:STATE 1;:  
ANALYSIS:AHISTOGRAM1:MEASURE:PARAMETER:  
AREA1:SDINTEG:STATE 1

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **PARAmeter:AREA<x>:ALL**

**Function** Turns ON/OFF all waveform parameters of the accumulated histogram.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:  
PARAmeter:AREA<x>:ALL {<Boolean>}  
<x> of AHISTogram<x> = 1 or 2  
<x> of AREA<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:AREA1:ALL ON

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **PARAmeter:AREA<x>:<Parameter>?**

**Function** Queries all settings related to the waveform parameter of the accumulated histogram.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:  
PARAmeter:AREA<x>:<Parameter>?  
<x> of AHISTogram<x> = 1 or 2  
<x> of AREA<x> = 1 or 2  
<Parameter> = {MAXimum|MEAN|MEDIan|  
MINimum|PEAK|RMS|SD2integ|SD3integ|  
SDEVIation|SDINteg}

**Example** (The following is an example for the maximum value of area 1.)

```
:ANALYSIS:AHISTOGRAM1:MEASURE:
PARAMETER:AREA1:MAXIMUM? -> :ANALYSIS:
AHISTOGRAM1:MEASURE:PARAMETER:AREA1:
MAXIMUM:STATE 1
```

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **PARAmeter:AREA<x>:<Parameter>:STATE**

**Function** Turns ON/OFF the waveform parameter of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:  
PARAmeter:AREA<x>:<Parameter>:  
STATE {<Boolean>}  
:ANALysis:AHISTogram<x>:MEASure:  
PARAmeter:AREA<x>:<Parameter>:STATE?  
<x> of AHISTogram<x> = 1 or 2  
<x> of AREA<x> = 1 or 2

<Parameter> = {MAXimum|MEAN|MEDIan|  
MINimum|PEAK|RMS|SD2integ|SD3integ|  
SDEVIation|SDINteg}

**Example** (The following is an example for the maximum value of area 1.)

```
:ANALYSIS:AHISTOGRAM1:MEASURE:
PARAMETER:AREA1:MAXIMUM:STATE ON
:ANALYSIS:AHISTOGRAM1:MEASURE:
PARAMETER:AREA1:MAXIMUM:STATE?
-> :ANALYSIS:AHISTOGRAM1:MEASURE:
PARAMETER:AREA1:MAXIMUM:STATE 1
```

**:ANALysis:AHIStoqram<x>:MEASure:****PARAmeter:AREA<x>:<Parameter>:VALue?**

Function Queries the automated measured value of the waveform parameter of the accumulated histogram.

Syntax :ANALysis:AHIStoqram<x>:MEASure:  
PARAmeter:AREA<x>:<Parameter>:VALue?  
<x> of AHIStoqram<x> = 1 or 2  
<x> of AREA<x> = 1 or 2  
<Parameter> = {MAXimum|MEAN|MEDIan|  
MINimum|PEAK|RMS|SD2integ|SD3integ|  
SDEVIation|SDINteq}

Example (The following is an example for the maximum value of area 1.)

```
:ANALYSIS:AHISTOGRAM1:MEASURE:
PARAMETER:AREA1:MAXIMUM:VALUE?
-> :ANALYSIS:AHISTOGRAM1:MEASURE:
PARAMETER:AREA1:MAXIMUM:VALUE 1.000E+00
```

**:ANALysis:AHIStoqram<x>:MEASure:****PARAmeter:CALCulation?**

Function Queries all settings related to the calculation items of waveform parameters of the accumulated histogram.

Syntax :ANALysis:AHIStoqram<x>:MEASure:  
PARAmeter:CALCulation?  
<x> = 1 or 2

Example :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:CALCULATION? -> :ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:  
CALCULATION:DEFINE1 "MEAN";  
DEFINE2 "MAX";DEFINE3 "MIN";  
DEFINE4 "PEAK";STATE1 1;STATE2 1;  
STATE3 1;STATE4 1

**:ANALysis:AHIStoqram<x>:MEASure:****PARAmeter:CALCulation:ALL**

Function Turns ON/OFF all calculation items of the waveform parameters of the accumulated histogram.

Syntax :ANALysis:AHIStoqram<x>:MEASure:  
PARAmeter:CALCulation:ALL {<Boolean>}  
<x> = 1 or 2

Example :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:CALCULATION:ALL ON

**:ANALysis:AHIStoqram<x>:MEASure:****PARAmeter:CALCulation:DEFine<x>**

Function Sets the equation of the calculation items of the waveform parameter of the accumulated histogram or queries the current setting.

Syntax :ANALysis:AHIStoqram<x>:MEASure:  
PARAmeter:CALCulation:  
DEFine<x> {<String>}  
:ANALysis:AHIStoqram<x>:MEASure:  
PARAmeter:CALCulation:DEFine<x>?  
<x> of AHIStoqram<x> = 1 or 2  
<x> of DEFine<x> = 1 to 4  
<String> = Up to 128 characters

Example :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:CALCULATION:DEFINE1 "MEAN"  
:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:CALCULATION:DEFINE1?  
-> :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:CALCULATION:DEFINE1 "MEAN"

**:ANALysis:AHIStoqram<x>:MEASure:****PARAmeter:CALCulation:STATE<x>**

Function Turns ON/OFF the calculation items of the waveform parameter of the accumulated histogram or queries the current setting.

Syntax :ANALysis:AHIStoqram<x>:MEASure:  
PARAmeter:CALCulation:STATE<x>  
{<Boolean>}  
:ANALysis:AHIStoqram<x>:MEASure:  
PARAmeter:CALCulation:STATE<x>?  
<x> of AHIStoqram<x> = 1 or 2  
<x> of STATE<x> = 1 to 4

Example :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:CALCULATION:STATE1 ON  
:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:CALCULATION:STATE1?  
-> :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:CALCULATION:STATE1 1

**:ANALysis:AHIStoqram<x>:MEASure:****PARAmeter:CALCulation:VALue<x>?**

Function Queries the automated measured value of the calculation items of the waveform parameter of the accumulated histogram.

Syntax :ANALysis:AHIStoqram<x>:MEASure:  
PARAmeter:CALCulation:VALue<x>?  
<x> of AHIStoqram<x> = 1 or 2  
<x> of VALue<x> = 1 to 4

Example :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:CALCULATION:VALUE1?  
-> :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:CALCULATION:VALUE1 1.000E+00

### 5.3 ANALysis Group

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **PARAMeter:HRANge<x>**

**Function** Sets the horizontal range of the waveform parameter of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:  
PARAMeter:HRANge<x> {<NRf>, <NRf>}  
:ANALysis:AHISTogram<x>:MEASure:  
PARAMeter:HRANge<x>?  
<x> of AHISTogram<x> = 1 or 2  
<x> of HRANge<x> = 1 or 2  
<NRf> = -5 to 5 div

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:HRANGE1 1,2  
:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:HRANGE1? -> :ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:  
HRANGE1 2.000E+00,1.000E+00

#### **:ANALysis:AHISTogram<x>:MEASure:**

##### **PARAMeter:VRANge<x>**

**Function** Sets the vertical range of the waveform parameter of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:MEASure:  
PARAMeter:VRANge<x> {<NRf>, <NRf>}  
:ANALysis:AHISTogram<x>:MEASure:  
PARAMeter:VRANge<x>?  
<x> of AHISTogram<x> = 1 or 2  
<x> of VRANge<x> = 1 or 2  
<NRf> = -4 to 4 (div)

**Example** :ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:VRANGE1 1,2  
:ANALYSIS:AHISTOGRAM1:MEASURE:  
PARAMETER:VRANGE1? -> :ANALYSIS:  
AHISTOGRAM1:MEASURE:PARAMETER:  
VRANGE1 2.000E+00,1.000E+00

#### **:ANALysis:AHISTogram<x>:MODE**

**Function** Sets the accumulated histogram mode or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:MODE  
{HORizontal|VERTical}  
:ANALysis:AHISTogram<x>:MODE?  
<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1:MODE HORIZONTAL  
:ANALYSIS:AHISTOGRAM1:MODE?  
-> :ANALYSIS:AHISTOGRAM1:MODE HORIZONTAL

#### **:ANALysis:AHISTogram<x>:TRACe**

**Function** Sets the source trace of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:TRACe {<NRf>}  
:ANALysis:AHISTogram<x>:TRACe?  
<x> = 1 or 2  
<NRf> = 1 to 8

**Example** :ANALYSIS:AHISTOGRAM1:TRACE 1  
:ANALYSIS:AHISTOGRAM1:TRACE?  
-> :ANALYSIS:AHISTOGRAM1:TRACE 1

#### **:ANALysis:AHISTogram<x>:VERTical**

**Function** Sets the vertical range of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:VERTical  
{<NRf>, <NRf>}  
:ANALysis:AHISTogram<x>:VERTical?  
<x> = 1 or 2  
<NRf> = -4 to 4 (div)

**Example** :ANALYSIS:AHISTOGRAM1:VERTICAL 1,2  
:ANALYSIS:AHISTOGRAM1:VERTICAL?  
-> :ANALYSIS:AHISTOGRAM1:  
VERTICAL 2.000E+00,1.000E+00

#### **:ANALysis:AHISTogram<x>:WINDow**

**Function** Sets the measurement target window of the accumulated histogram or queries the current setting.

**Syntax** :ANALysis:AHISTogram<x>:WINDow {MAIN|  
Z1|Z2}  
:ANALysis:AHISTogram<x>:WINDow?  
<x> = 1 or 2

**Example** :ANALYSIS:AHISTOGRAM1:WINDOW MAIN  
:ANALYSIS:AHISTOGRAM1:WINDOW?  
-> :ANALYSIS:AHISTOGRAM1:WINDOW MAIN

#### **:ANALysis:DISPlay<x>**

**Function** Turns ON/OFF the analysis function display or queries the current setting.

**Syntax** :ANALysis:DISPlay<x> {<Boolean>}  
:ANALysis:DISPlay<x>?  
<x> = 1 or 2

**Example** :ANALYSIS:DISPLAY1 ON  
:ANALYSIS:DISPLAY1? -> :ANALYSIS:  
DISPLAY1 1

**:ANALysis:FFT<x>?**

**Function** Queries all settings related to the FFT computation function.

**Syntax** :ANALysis:FFT<x>?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1? -> :ANALYSIS:FFT1:  
HORIZONTAL:CSPAN:CENTER 1.000E+00;  
SPAN1.000E+00;;ANALYSIS:FFT1:  
HORIZONTAL:LRIGHT:RANGE2.000E+00,  
1.000E+00;;ANALYSIS:FFT1:HORIZONTAL:  
MODE AUTO;;ANALYSIS:FFT1:IPART 1;  
LENGTH 2500;MAXHOLD 1;MEASURE:MARKer:  
BASIC:DFREQUENCY:STATE1;;ANALYSIS:FFT1:  
MEASURE:MARKER:BASIC:DV:STATE 1;  
:ANALYSIS:FFT1:MEASURE:MARKER:BASIC:  
FREQUENCY1:STATE 1;;ANALYSIS:FFT1:  
MEASURE:MARKER:BASIC:FREQUENCY2:  
STATE 1;;ANALYSIS:FFT1:MEASURE:MARKER:  
BASIC:POSITION1 1.000E+00;;ANALYSIS:  
FFT1:MEASURE:MARKER:BASIC:  
POSITION2 2.000E+00;V1:STATE 1;  
:ANALYSIS:FFT1:MEASURE:MARKER:BASIC:  
V2:STATE 1;;ANALYSIS:FFT1:MEASURE:  
MARKER:CALCULATION:DEFINE1 "V(F1)";  
DEFINE2 "V(F2)";DEFINE3 "V(F1)";  
DEFINE4 "V(F2)";STATE1 1;STATE2 1;  
STATE3 1;STATE4 1;;ANALYSIS:FFT1:  
MEASURE:MODE MARKER;PEAK:BASIC:  
DFREQUENCY:STATE 1;;ANALYSIS:FFT1:  
MEASURE:PEAK:BASIC:DV:STATE 1;  
:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
FREQUENCY1:STATE 1;;ANALYSIS:FFT1:  
MEASURE:PEAK:BASIC:FREQUENCY2:STATE 1;  
:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
RANGE1 1.000E+00,0.000E+00;  
RANGE2 1.000E+00,0.000E+00;V1:  
STATE 1;;ANALYSIS:FFT1:MEASURE:PEAK:  
BASIC:V2:STATE 1.....

**:ANALysis:FFT<x>:HORizontal?**

**Function** Queries all settings related the horizontal axis of the FFT computation.

**Syntax** :ANALysis:FFT<x>:HORizontal?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:HORIZONTAL?  
-> :ANALYSIS:FFT1:HORIZONTAL:CSPAN:  
CENTER 1.000E+00;SPAN 1.000E+00;;  
ANALYSIS:FFT1:HORIZONTAL:LRIGHT:  
RANGE 2.000E+00,1.000E+00;;ANALYSIS:  
FFT1:HORIZONTAL:MODE AUTO

**:ANALysis:FFT<x>:HORizontal:CSPan?**

**Function** Queries all settings related to the center and span of the horizontal axis of the FFT computation.

**Syntax** :ANALysis:FFT<x>:HORizontal:CSPan?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:HORIZONTAL:CSPAN?  
-> :ANALYSIS:FFT1:HORIZONTAL:CSPAN:  
CENTER 1.000E+00;SPAN 1.000E+00

**:ANALysis:FFT<x>:HORizontal:CSPan:  
CENTer**

**Function** Sets the horizontal center of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:HORizontal:CSPan:  
CENTer {<Frequency>}  
:ANALysis:FFT<x>:HORizontal:CSPan:  
CENTer?  
<x> = 1 or 2  
<Frequency> = 0 to 250 G (Hz)

**Example** :ANALYSIS:FFT1:HORIZONTAL:CSPAN:  
CENTER 1HZ  
:ANALYSIS:FFT1:HORIZONTAL:CSPAN:CENTER?  
-> :ANALYSIS:FFT1:HORIZONTAL:CSPAN:  
CENTER 1.000E+00

**:ANALysis:FFT<x>:HORizontal:CSPan:  
SPAN**

**Function** Sets the horizontal span of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:HORizontal:CSPan:  
SPAN {<Frequency>}  
:ANALysis:FFT<x>:HORizontal:CSPan:SPAN?  
<x> = 1 or 2  
<Frequency> = 0 to 250 G (Hz)

**Example** :ANALYSIS:FFT1:HORIZONTAL:CSPAN:  
SPAN 1HZ  
:ANALYSIS:FFT1:HORIZONTAL:CSPAN:SPAN?  
-> :ANALYSIS:FFT1:HORIZONTAL:CSPAN:  
SPAN 1.000E+00

**:ANALysis:FFT<x>:HORizontal:LRIGHT?**

**Function** Queries all settings related the left and right edges of the horizontal axis of the FFT computation.

**Syntax** :ANALysis:FFT<x>:HORizontal:LRIGHT?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:HORIZONTAL:LRIGHT?  
-> :ANALYSIS:FFT1:HORIZONTAL:LRIGHT:  
RANGE 2.000E+00,1.000E+00

### 5.3 ANALysis Group

#### **:ANALysis:FFT<x>:HORizontal:LRIGHT:**

##### **RANGe**

**Function** Sets the range of the horizontal left and right edges of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:HORizontal:LRIGHT:RANGe {<Frequency>,<Frequency>}  
:ANALysis:FFT<x>:HORizontal:LRIGHT:RANGe?  
<x> = 1 or 2  
<Frequency> = 0 to 250 G (Hz)

**Example** :ANALYSIS:FFT1:HORIZONTAL:LRIGHT:RANGE 1HZ,2HZ  
:ANALYSIS:FFT1:HORIZONTAL:LRIGHT:RANGE?  
-> :ANALYSIS:FFT1:HORIZONTAL:LRIGHT:RANGE 2.000E+00,1.000E+00

#### **:ANALysis:FFT<x>:HORizontal:MODE**

**Function** Sets the horizontal mode of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:HORizontal:MODE {AUTO|CSPan|LRIGHT}  
:ANALysis:FFT<x>:HORizontal:MODE?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:HORIZONTAL:MODE AUTO  
:ANALYSIS:FFT1:HORIZONTAL:MODE?  
-> :ANALYSIS:FFT1:HORIZONTAL:MODE AUTO

#### **:ANALysis:FFT<x>:IPART (Imag Part)**

**Function** Sets the source trace of the imaginary part of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:IPART {<Nrf>|DONTcare}  
:ANALysis:FFT<x>:IPART?  
<x> = 1 or 2  
<Nrf> = 1 to 8

**Example** :ANALYSIS:FFT1:IPART 1  
:ANALYSIS:FFT1:IPART? -> :ANALYSIS:FFT1:IPART 1

#### **:ANALysis:FFT<x>:LENGth**

**Function** Sets the number of FFT points of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:LENGth {<Nrf>}  
:ANALysis:FFT<x>:LENGth?  
<x> = 1 or 2  
<Nrf> = 2500, 6250, 12500, 25000, 62500, 125000, or 250000

**Example** :ANALYSIS:FFT1:LENGTH 2500  
:ANALYSIS:FFT1:LENGTH? -> :ANALYSIS:FFT1:LENGTH 2500

#### **:ANALysis:FFT<x>:MAXHold**

**Function** Turns ON/OFF the maximum value hold function of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:MAXHold {<Boolean>}  
:ANALysis:FFT<x>:MAXHold?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MAXHOLD ON  
:ANALYSIS:FFT1:MAXHOLD? -> :ANALYSIS:FFT1:MAXHOLD 1

#### **:ANALysis:FFT<x>:MEASure?**

**Function** Queries all settings related to the automated measurement of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE? -> :ANALYSIS:FFT1:MEASURE:MARKer:BASIC:DFREQUENCY:STATE 1;:ANALYSIS:FFT1:MEASURE:MARKer:BASIC:DV:STATE 1;:ANALYSIS:FFT1:MEASURE:MARKer:BASIC:FREQUENCY1:STATE 1;:ANALYSIS:FFT1:MEASURE:MARKer:BASIC:FREQUENCY2:STATE 1;:ANALYSIS:FFT1:MEASURE:MARKer:BASIC:POSITION1 1.000E+00;:ANALYSIS:FFT1:MEASURE:MARKer:BASIC:POSITION2 2.000E+00;V1:STATE 1;:ANALYSIS:FFT1:MEASURE:MARKer:BASIC:V2:STATE 1;:ANALYSIS:FFT1:MEASURE:MARKer:CALCULATION:DEFINE1 "V(F1)";DEFINE2 "V(F2)";DEFINE3 "V(F1)";DEFINE4 "V(F2)";STATE1 1;STATE2 1;STATE3 1;STATE4 1;:ANALYSIS:FFT1:MEASURE:MODE MARKer;PEAK:BASIC:DFREQUENCY:STATE 1;:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DV:STATE 1;:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:FREQUENCY1:STATE 1;:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:FREQUENCY2:STATE 1;:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:RANGE1 1.000E+00,0.000E+00;RANGE2 1.000E+00,0.000E+00;V1:STATE 1;:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:V2:STATE 1;:ANALYSIS:FFT1:MEASURE:PEAK:CALCULATION:DEFINE1 "V(P1)";DEFINE2 "V(P2)";DEFINE3 "V(P1)";DEFINE4 "V(P2)";STATE1 1;STATE2 1;STATE3 1;STATE4 1

**:ANALysis:FFT<x>:MEASure:MARKer?**

**Function** Queries all settings related to the marker cursor measurement of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:MARKer?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:MARKER?  
-> :ANALYSIS:FFT1:MEASURE:MARKer:BASIC:  
DFREQUENCY:STATE 1;:ANALYSIS:FFT1:  
MEASURE:MARKER:BASIC:DV:STATE 1;  
:ANALYSIS:FFT1:MEASURE:MARKER:BASIC:  
FREQUENCY1:STATE 1;:ANALYSIS:FFT1:  
MEASURE:MARKER:BASIC:FREQUENCY2:  
STATE 1;:ANALYSIS:FFT1:MEASURE:MARKER:  
BASIC:POSITION1 1.000E+00;:ANALYSIS:  
FFT1:MEASURE:MARKER:BASIC:  
POSITION2 2.000E+00;V1:STATE 1;  
:ANALYSIS:FFT1:MEASURE:MARKER:BASIC:  
V2:STATE 1;:ANALYSIS:FFT1:MEASURE:  
MARKER:CALCULATION:DEFINE1 "V(F1)";  
DEFINE2 "V(F2)";DEFINE3 "V(F1)";  
DEFINE4 "V(F2)";STATE1 1;STATE2 1;  
STATE3 1;STATE4 1

**:ANALysis:FFT<x>:MEASure:****MARKer:BASic?**

**Function** Queries all settings related to basic items of the marker cursor of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:  
MARKer:BASic?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:MARKER:BASIC?  
-> :ANALYSIS:FFT1:MEASURE:MARKer:BASIC:  
DFREQUENCY:STATE 1;:ANALYSIS:FFT1:  
MEASURE:MARKER:BASIC:DV:STATE 1;  
:ANALYSIS:FFT1:MEASURE:MARKER:BASIC:  
FREQUENCY1:STATE 1;:ANALYSIS:FFT1:  
MEASURE:MARKER:BASIC:FREQUENCY2:  
STATE 1;:ANALYSIS:FFT1:MEASURE:MARKER:  
BASIC:POSITION1 1.000E+00;:ANALYSIS:  
FFT1:MEASURE:MARKER:BASIC:  
POSITION2 2.000E+00;V1:STATE 1;  
:ANALYSIS:FFT1:MEASURE:MARKER:  
BASIC:V2:STATE 1

**:ANALysis:FFT<x>:MEASure:****MARKer[:BASic]:ALL**

**Function** Turns ON/OFF all basic items of the marker cursor of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:ALL {<Boolean>}  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:MARKER:BASIC:  
ALL ON

**:ANALysis:FFT<x>:MEASure:****MARKer[:BASic]:DFRequency?**

**Function** Queries all settings related to the frequency value between marker cursors of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:DFRequency?  
<x> = 1, 2

**Example** :ANALYSIS:FFT1:MEASURE:MARKer:BASIC:  
DFREQUENCY? -> :ANALYSIS:FFT1:MEASURE:  
MARKer:BASIC:DFREQUENCY:STATE 1

**:ANALysis:FFT<x>:MEASure:****MARKer[:BASic]:DFRequency:STATE**

**Function** Turns ON/OFF the frequency value between marker cursors of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:DFRequency:  
STATE {<Boolean>}  
:ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:DFRequency:STATE?  
<x> = 1, 2

**Example** :ANALYSIS:FFT1:MEASURE:MARKer:BASIC:  
DFREQUENCY:STATE ON  
:ANALYSIS:FFT1:MEASURE:MARKer:BASIC:  
DFREQUENCY:STATE? -> :ANALYSIS:FFT1:  
MEASURE:MARKer:BASIC:DFREQUENCY:STATE 1

**:ANALysis:FFT<x>:MEASure:****MARKer[:BASic]:DFRequency:VALue?**

**Function** Queries the frequency value between marker cursors of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:DFRequency:VALue?  
<x> = 1, 2

**Example** :ANALYSIS:FFT1:MEASURE:MARKer:BASIC:  
DFREQUENCY:VALUE? -> :ANALYSIS:FFT1:  
MEASURE:MARKer:BASIC:DFREQUENCY:  
VALUE 1.000E+00

### 5.3 ANALysis Group

#### **:ANALysis:FFT<x>:MEASure:**

##### **MARKer[:BASic]:DV?**

Function Queries all settings related to the power value between marker cursors of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:DV?  
<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:MARKER: BASIC:DV?  
-> :ANALYSIS:FFT1:MEASURE:MARKER: BASIC:  
DV:STATE 1

#### **:ANALysis:FFT<x>:MEASure:**

##### **MARKer[:BASic]:DV:STATE**

Function Turns ON/OFF the power value between marker cursors of the FFT computation or queries the current setting.

Syntax :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:DV:STATE {<Boolean>}  
:ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:DV:STATE?  
<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:MARKER: BASIC:DV:  
STATE ON  
:ANALYSIS:FFT1:MEASURE:MARKER: BASIC:DV:  
STATE? -> :ANALYSIS:FFT1:MEASURE:  
MARKER: BASIC:DV:STATE 1

#### **:ANALysis:FFT<x>:MEASure:**

##### **MARKer[:BASic]:DV:VALue?**

Function Queries the power value between marker cursors of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:DV:VALue?  
<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:MARKER: BASIC:DV:  
VALUE? -> :ANALYSIS:FFT1:MEASURE:  
MARKER: BASIC:DV:VALUE 1.000E+00

#### **:ANALysis:FFT<x>:MEASure:**

##### **MARKer[:BASic]:FREQuency<x>?**

Function Queries all settings related to the frequency value of the marker cursor of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:FREQuency<x>?  
<x> of FFT<x> = 1, 2  
<x> of FREQuency<x> = 1, 2

Example :ANALYSIS:FFT1:MEASURE:MARKER: BASIC:  
FREQUENCY1? -> :ANALYSIS:FFT1:MEASURE:  
MARKER: BASIC: FREQUENCY1: STATE 1

#### **:ANALysis:FFT<x>:MEASure:**

##### **MARKer[:BASic]:FREQuency<x>:STATe**

Function Turns ON/OFF the frequency value of the marker cursor of the FFT computation or queries the current setting.

Syntax :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:FREQuency<x>:  
STATe {<Boolean>}  
:ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:FREQuency<x>:STATe?  
<x> of FFT<x> = 1, 2  
<x> of FREQuency<x> = 1, 2

Example :ANALYSIS:FFT1:MEASURE:MARKER: BASIC:  
FREQUENCY1:STATE ON  
:ANALYSIS:FFT1:MEASURE:MARKER: BASIC:  
FREQUENCY1:STATE? -> :ANALYSIS:FFT1:  
MEASURE:MARKER: BASIC: FREQUENCY1:STATE 1

#### **:ANALysis:FFT<x>:MEASure:**

##### **MARKer[:BASic]:FREQuency<x>:VALue?**

Function Queries the frequency value of the marker cursor of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:FREQuency<x>:VALue?  
<x> of FFT<x> = 1, 2  
<x> of FREQuency<x> = 1, 2

Example :ANALYSIS:FFT1:MEASURE:MARKER: BASIC:  
FREQUENCY1:VALUE? -> :ANALYSIS:FFT1:  
MEASURE:MARKER: BASIC: FREQUENCY1:  
VALUE 1.000E+00

#### **:ANALysis:FFT<x>:MEASure:**

##### **MARKer[:BASic]:POSition<x> {<NRf>}**

Function Sets the marker cursor position of the FFT computation or queries the current setting.

Syntax :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:POSition<x> {<NRf>}  
:ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:POSition<x>?  
<x> of FFT<x> = 1, 2  
<x> of POSition<x> = 1, 2  
<NRf> = -5 to 5 (div)

Example :ANALYSIS:FFT1:MEASURE:MARKER: BASIC:  
POSITION1 1  
:ANALYSIS:FFT1:MEASURE:MARKER: BASIC:  
POSITION1? -> :ANALYSIS:FFT1:MEASURE:  
MARKER: BASIC: POSITION1 1.000E+00

**:ANALysis:FFT<x>:MEASure:****MARKer[:BASic]:V<x>?**

Function Queries all settings related to the power value of the marker cursor of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:V<x>?  
<x> of FFT<x> = 1 or 2  
<x> of V<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:MARKER:BASIC:V1?  
-> :ANALYSIS:FFT1:MEASURE:MARKER:  
BASIC:STATE 1

**:ANALysis:FFT<x>:MEASure:****MARKer[:BASic]:V<x>:STATE**

Function Turns ON/OFF the power value of the marker cursor of the FFT computation or queries the current setting.

Syntax :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:V<x>:STATE {<Boolean>}  
:ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:V<x>:STATE?  
<x> of FFT<x> = 1 or 2  
<x> of V<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:MARKER:BASIC:V1:  
STATE ON  
:ANALYSIS:FFT1:MEASURE:MARKER:BASIC:V1:  
STATE? -> :ANALYSIS:FFT1:MEASURE:  
MARKER:BASIC:V1:STATE 1

**:ANALysis:FFT<x>:MEASure:****MARKer[:BASic]:V<x>:VALue?**

Function Queries the power value of the marker cursor of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:  
MARKer[:BASic]:V<x>:VALue?  
<x> of FFT<x> = 1 or 2  
<x> of V<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:MARKER:BASIC:V1:  
VALUE? -> :ANALYSIS:FFT1:MEASURE:  
MARKER:BASIC:V1:VALUE 1.000E+00

**:ANALysis:FFT<x>:MEASure:MARKer:****CALCulation?**

Function Queries all settings related to calculation items of the marker cursor of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:MARKer:  
CALCulation?  
<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:MARKER:  
CALCULATION? -> :ANALYSIS:FFT1:MEASURE:  
MARKER:CALCULATION:DEFINE1 "V(F1)";  
DEFINE2 "V(F2)";DEFINE3 "V(F1)";  
DEFINE4 "V(F2)";STATE1 1;STATE2 1;  
STATE3 1;STATE4 1

**:ANALysis:FFT<x>:MEASure:MARKer:****CALCulation:ALL**

Function Turns ON/OFF all calculation items of the marker cursor of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:MARKer:  
CALCulation:ALL {<Boolean>}  
<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:MARKER:  
CALCULATION:ALL ON

**:ANALysis:FFT<x>:MEASure:MARKer:****CALCulation:DEFine<x>**

Function Sets the equation of the calculation items of the marker cursor of the FFT computation or queries the current setting.

Syntax :ANALysis:FFT<x>:MEASure:MARKer:  
CALCulation:DEFine<x> {<String>}  
:ANALysis:FFT<x>:MEASure:MARKer:  
CALCulation:DEFine<x>?  
<x> of FFT<x> = 1 or 2  
<x> of DEFine<x> = 1 to 4  
<String> = Up to 128 characters

Example :ANALYSIS:FFT1:MEASURE:MARKER:  
CALCULATION:DEFINE1 "V(F1)"  
:ANALYSIS:FFT1:MEASURE:MARKER:  
CALCULATION:DEFINE1? -> :ANALYSIS:FFT1:  
MEASURE:MARKER:CALCULATION:  
DEFINE1 "V(F1)"

**:ANALysis:FFT<x>:MEASure:MARKer:****CALCulation:STATE<x>**

Function Turns ON/OFF the calculation items of the marker cursor of the FFT computation or queries the current setting.

Syntax :ANALysis:FFT<x>:MEASure:MARKer:C  
ALCulation:STATE<x> {<Boolean>}  
:ANALysis:FFT<x>:MEASure:MARKer:  
CALCulation:STATE<x>?  
<x> of FFT<x> = 1 or 2  
<x> of STATE<x> = 1 to 4

Example :ANALYSIS:FFT1:MEASURE:MARKER:  
CALCULATION:STATE1 ON  
:ANALYSIS:FFT1:MEASURE:MARKER:  
CALCULATION:STATE1? -> :ANALYSIS:FFT1:  
MEASURE:MARKER:CALCULATION:STATE1 1



### 5.3 ANALysis Group

#### **:ANALysis:FFT<x>:MEASure:MARKer: CALCulation:VALue<x>?**

**Function** Queries the measured value of the calculation items of the marker cursor of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:MARKer:  
CALCulation:VALue<x>?  
<x> of FFT<x> = 1 or 2  
<x> of VALue<x> = 1 to 4

**Example** :ANALYSIS:FFT1:MEASURE:MARKER:  
CALCULATION:VALUE1? -> :ANALYSIS:FFT1:  
MEASURE:MARKER:CALCULATION:  
VALUE1 1.000E+00

#### **:ANALysis:FFT<x>:MEASure:MODE**

**Function** Sets the automated measurement mode of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:MEASure:MODE {MARKer|  
OFF|PEAK}  
:ANALysis:FFT<x>:MEASure:MODE?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:MODE MARKER  
:ANALYSIS:FFT1:MEASURE:MODE?  
-> :ANALYSIS:FFT1:MEASURE:MODE MARKER

#### **:ANALysis:FFT<x>:MEASure:PEAK?**

**Function** Queries all settings related to the peak value measurement of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:PEAK?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:PEAK?  
-> :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
DFREQUENCY:STATE 1;:ANALYSIS:FFT1:  
MEASURE:PEAK:BASIC:DV:STATE 1;:  
ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
FREQUENCY1:STATE 1;:ANALYSIS:FFT1:  
MEASURE:PEAK:BASIC:FREQUENCY2:STATE 1;:  
ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
RANGE1 1.000E+00,0.000E+00;  
RANGE2 1.000E+00,0.000E+00;V1:STATE 1;:  
ANALYSIS:FFT1:MEASURE:PEAK:BASIC:V2:  
STATE 1;:ANALYSIS:FFT1:MEASURE:PEAK:  
CALCULATION:DEFINE1 "V(P1)";  
DEFINE2 "V(P2)";DEFINE3 "V(P1)";  
DEFINE4 "V(P2)";STATE1 1;STATE2 1;  
STATE3 1;STATE4 1

#### **:ANALysis:FFT<x>:MEASure: PEAK:BASic?**

**Function** Queries all settings related to basic items of the peak value of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:PEAK:BASic?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:PEAK:BASIC?  
-> :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
DFREQUENCY:STATE 1;:ANALYSIS:FFT1:  
MEASURE:PEAK:BASIC:DV:STATE 1;  
:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
FREQUENCY1:STATE 1;:ANALYSIS:FFT1:  
MEASURE:PEAK:BASIC:FREQUENCY2:STATE 1;  
:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
RANGE1 1.000E+00,0.000E+00;  
RANGE2 1.000E+00,0.000E+00;V1:  
STATE 1;:ANALYSIS:FFT1:MEASURE:PEAK:  
BASIC:V2:STATE 1

#### **:ANALysis:FFT<x>:MEASure:**

##### **PEAK[:BASic]:ALL**

**Function** Turns ON/OFF all basic items of the peak value of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:  
PEAK[:BASic]:ALL {<Boolean>}  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
ALL ON

#### **:ANALysis:FFT<x>:MEASure:**

##### **PEAK[:BASic]:DFrequency?**

**Function** Queries all settings related to the frequency value between peak values of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:  
DFrequency?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
DFREQUENCY? -> :ANALYSIS:FFT1:MEASURE:  
PEAK:BASIC:DFREQUENCY:STATE 1

**:ANALysis:FFT<x>:MEASure:****PEAK[:BASic]:DFRequency:STATe**

Function Turns ON/OFF the frequency value between peak values of the FFT computation or queries the current setting.

Syntax :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DFRequency:STATe {<Boolean>}  
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DFRequency:STATe?  
<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DFREQUENCY:STATE ON  
:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DFREQUENCY:STATE? -> :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DFREQUENCY:STATE 1

**:ANALysis:FFT<x>:MEASure:****PEAK[:BASic]:DFRequency:VALue?**

Function Queries the frequency value between peak values of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DFRequency:VALue?  
<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DFREQUENCY:VALUE? -> :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DFREQUENCY:VALUE 1.000E+00

**:ANALysis:FFT<x>:MEASure:****PEAK[:BASic]:DV?**

Function Queries all settings related to the power value between peak values of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DV?  
<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DV? -> :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DV:STATE 1

**:ANALysis:FFT<x>:MEASure:****PEAK[:BASic]:DV:STATe**

Function Turns ON/OFF the power value between peak values of the FFT computation or queries the current setting.

Syntax :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DV:STATe {<Boolean>}  
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DV:STATe?  
<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DV:STATE ON  
:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DV:STATE? -> :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DV:STATE 1

**:ANALysis:FFT<x>:MEASure:****PEAK[:BASic]:DV:VALue?**

Function Queries the power value between peak values of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:DV:VALue?  
<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DV:VALUE? -> :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:DV:VALUE 1.000E+00

**:ANALysis:FFT<x>:MEASure:****PEAK[:BASic]:FREquency<x>?**

Function Queries all settings related to the peak frequency value of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:FREquency<x>?  
<x> of FFT<x> = 1 or 2  
<x> of FREquency<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:FREQUENCY1? -> :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:FREQUENCY1:STATE 1

**:ANALysis:FFT<x>:MEASure:****PEAK[:BASic]:FREquency<x>:STATe**

Function Turns ON/OFF the peak frequency value of the FFT computation or queries the current setting.

Syntax :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:FREquency<x>:STATe {<Boolean>}  
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:FREquency<x>:STATe?  
<x> of FFT<x> = 1 or 2  
<x> of FREquency<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:FREQUENCY1:STATE ON  
:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:FREQUENCY1:STATE? -> :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:FREQUENCY1:STATE 1

**:ANALysis:FFT<x>:MEASure:****PEAK[:BASic]:FREquency<x>:VALue?**

Function Queries the peak frequency value of the FFT computation.

Syntax :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:FREquency<x>:VALue?  
<x> of FFT<x> = 1 or 2  
<x> of FREquency<x> = 1 or 2

Example :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:FREQUENCY1:VALUE? -> :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:FREQUENCY1:VALUE 1.000E+00

### 5.3 ANALysis Group

#### **:ANALysis:FFT<x>:MEASure:**

##### **PEAK[:BASic]:RANGe<x>**

**Function** Sets the measurement range of the peak value of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:  
RANGe<x> {<Nrf>,<Nrf>}  
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:  
RANGe<x>?  
<x> of FFT<x> = 1 or 2  
<x> of RANGe<x> = 1 or 2  
<Nrf> = -5 to 5 div

**Example** :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
RANGE1 0,1  
:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
RANGE1? -> :ANALYSIS:FFT1:MEASURE:  
PEAK:BASIC:RANGE1 1.000E+00,0.000E+00

#### **:ANALysis:FFT<x>:MEASure:**

##### **PEAK[:BASic]:V<x>?**

**Function** Queries all settings related to the peak value of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:  
V<x>?  
<x> of FFT<x> = 1 or 2  
<x> of V<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:V1?  
-> :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:  
V1:STATE 1

#### **:ANALysis:FFT<x>:MEASure:**

##### **PEAK[:BASic]:V<x>:STATE**

**Function** Turns ON/OFF the peak value of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:  
V<x>:STATE {<Boolean>}  
:ANALysis:FFT<x>:MEASure:PEAK[:BASic]:  
V<x>:STATE?  
<x> of FFT<x> = 1 or 2  
<x> of V<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:V1:  
STATE ON  
:ANALYSIS:FFT1:MEASURE:PEAK:BASIC:V1:  
STATE? -> :ANALYSIS:FFT1:MEASURE:PEAK:  
BASIC:V1:STATE 1

#### **:ANALysis:FFT<x>:MEASure:**

##### **PEAK[:BASic]:V<x>:VALue?**

**Function** Queries the peak value of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:PEAK[:BASic]:  
V<x>:VALue?  
<x> of FFT<x> = 1 or 2  
<x> of V<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:PEAK:BASIC:V1:  
VALUE? -> :ANALYSIS:FFT1:MEASURE:PEAK:  
BASIC:V1:VALUE 1.000E+00

#### **:ANALysis:FFT<x>:MEASure:PEAK:**

##### **CALCulation?**

**Function** Queries all settings related to calculation items of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:PEAK:  
CALCulation?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:PEAK:  
CALCULATION? -> :ANALYSIS:FFT1:MEASURE:  
PEAK:CALCULATION:DEFINE1 "V(P1)";  
DEFINE2 "V(P2)";DEFINE3 "V(P1)";  
DEFINE4 "V(P2)";STATE1 1;STATE2 1;  
STATE3 1;STATE4 1

#### **:ANALysis:FFT<x>:MEASure:PEAK:**

##### **CALCulation:ALL**

**Function** Turns ON/OFF all calculation items of the FFT computation.

**Syntax** :ANALysis:FFT<x>:MEASure:PEAK:  
CALCulation:ALL {<Boolean>}  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:MEASURE:PEAK:  
CALCULATION:ALL ON

#### **:ANALysis:FFT<x>:MEASure:PEAK:**

##### **CALCulation:DEFine<x>**

**Function** Sets the equation of the calculation item of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:MEASure:PEAK:  
CALCulation:DEFine<x> {<String>}  
:ANALysis:FFT<x>:MEASure:PEAK:  
CALCulation:DEFine<x>?  
<x> of FFT<x> = 1 or 2  
<x> of DEFine<x> = 1 to 4  
<String> = Up to 128 characters

**Example** :ANALYSIS:FFT1:MEASURE:PEAK:  
CALCULATION:DEFINE1 "V(P1)"  
:ANALYSIS:FFT1:MEASURE:PEAK:  
CALCULATION:DEFINE1? -> :ANALYSIS:FFT1:  
MEASURE:PEAK:CALCULATION:  
DEFINE1 "V(P1)"

**:ANALYSIS:FFT<x>:MEASURE:PEAK:****CALCULATION:STATE<x>**

**Function** Turns ON/OFF the calculation items of the FFT computation or queries the current setting.

**Syntax** :ANALYSIS:FFT<x>:MEASURE:PEAK:  
CALCULATION:STATE<x> {<Boolean>}  
:ANALYSIS:FFT<x>:MEASURE:PEAK:  
CALCULATION:STATE<x>?  
<x> of FFT<x> = 1 or 2  
<x> of STATE<x> = 1 to 4

**Example** :ANALYSIS:FFT1:MEASURE:PEAK:  
CALCULATION:STATE1 ON  
:ANALYSIS:FFT1:MEASURE:PEAK:  
CALCULATION:STATE1? -> :ANALYSIS:FFT1:  
MEASURE:PEAK:CALCULATION:STATE1 1

**:ANALYSIS:FFT<x>:MEASURE:PEAK:****CALCULATION:VALUE<x>?**

**Function** Queries the measured value of the calculation item of the FFT computation.

**Syntax** :ANALYSIS:FFT<x>:MEASURE:PEAK:  
CALCULATION:VALUE<x>?  
<x> of FFT<x> = 1 or 2  
<x> of VALUE<x> = 1 to 4

**Example** :ANALYSIS:FFT1:MEASURE:PEAK:  
CALCULATION:VALUE1? -> :ANALYSIS:FFT1:  
MEASURE:PEAK:CALCULATION:  
VALUE1 1.000E+00

**:ANALYSIS:FFT<x>:RANGE**

**Function** Sets the measurement source window used in the FFT computation or queries the current setting.

**Syntax** :ANALYSIS:FFT<x>:RANGE {MAIN|Z1|Z2}  
:ANALYSIS:FFT<x>:RANGE?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:RANGE MAIN  
:ANALYSIS:FFT1:RANGE? -> :ANALYSIS:  
FFT1:RANGE MAIN

**:ANALYSIS:FFT<x>:RPART (Real Part)**

**Function** Sets the source trace of the real part of the FFT computation or queries the current setting.

**Syntax** :ANALYSIS:FFT<x>:RPART {<NRf>}  
:ANALYSIS:FFT<x>:RPART?  
<x> = 1 or 2  
<NRf> = 1 to 8

**Example** :ANALYSIS:FFT1:RPART 1  
:ANALYSIS:FFT1:RPART? -> :ANALYSIS:  
FFT1:RPART 1

**:ANALYSIS:FFT<x>:RPOSITION****(Ref Position)**

**Function** Sets the center point of magnification of the vertical axis of the FFT computation or queries the current setting.

**Syntax** :ANALYSIS:FFT<x>:RPOSITION {<NRf>}  
:ANALYSIS:FFT<x>:RPOSITION?  
<x> = 1 or 2  
<NRf> = -4 to 4 (div)

**Example** :ANALYSIS:FFT1:RPOSITION 1  
:ANALYSIS:FFT1:RPOSITION? -> :ANALYSIS:  
FFT1:RPOSITION 1.000E+00

**:ANALYSIS:FFT<x>:VERTICAL?**

**Function** Queries all settings related the vertical axis of the FFT computation.

**Syntax** :ANALYSIS:FFT<x>:VERTICAL?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:VERTICAL? -> :ANALYSIS:  
FFT1:VERTICAL:  
LEVEL 1.000E+00;MODE AUTO;  
SENSITIVITY 1.000E+00

**:ANALYSIS:FFT<x>:VERTICAL:LEVEL**

**Function** Sets the display position of the vertical axis of the FFT computation or queries the current setting.

**Syntax** :ANALYSIS:FFT<x>:VERTICAL:LEVEL {<NRf>}  
:ANALYSIS:FFT<x>:VERTICAL:LEVEL?  
<x> = 1 or 2  
<NRf> = -1.000E+31 to 1.000E+31 (dBV)

**Example** :ANALYSIS:FFT1:VERTICAL:LEVEL 1  
:ANALYSIS:FFT1:VERTICAL:LEVEL?  
-> :ANALYSIS:FFT1:VERTICAL:  
LEVEL 1.000E+00

**:ANALYSIS:FFT<x>:VERTICAL:MODE**

**Function** Sets the vertical axis mode of the FFT computation or queries the current setting.

**Syntax** :ANALYSIS:FFT<x>:VERTICAL:MODE {AUTO|  
MANUAL}  
:ANALYSIS:FFT<x>:VERTICAL:MODE?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:VERTICAL:MODE AUTO  
:ANALYSIS:FFT1:VERTICAL:MODE?  
-> :ANALYSIS:FFT1:VERTICAL:MODE AUTO

### 5.3 ANALysis Group

#### **:ANALysis:FFT<x>:VERTical:**

##### **SENSitivity**

**Function** Sets the vertical sensitivity of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:VERTical:SENSitivity  
{<Nrf>}  
:ANALysis:FFT<x>:VERTical:SENSitivity?  
<x> = 1 or 2  
<Nrf> = 0 to 1.000E+31 (dBV)

**Example** :ANALYSIS:FFT1:VERTICAL:SENSITIVITY 1  
:ANALYSIS:FFT1:VERTICAL:SENSITIVITY?  
-> :ANALYSIS:FFT1:VERTICAL:SENSITIVITY 1.000E+00

#### **:ANALysis:FFT<x>:WINDow**

**Function** Sets the window function of the FFT computation or queries the current setting.

**Syntax** :ANALysis:FFT<x>:WINDow {FLATtop|  
HANNing|RECTangle}  
:ANALysis:FFT<x>:WINDow?  
<x> = 1 or 2

**Example** :ANALYSIS:FFT1:WINDOW FLATTOP  
:ANALYSIS:FFT1:WINDOW? -> :ANALYSIS:  
FFT1:WINDOW FLATTOP

#### **:ANALysis:LSBus<x>?**

**Function** Queries all settings related to the logic serial bus signal function.

**Syntax** :ANALysis:LSBus<x>?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1? -> :ANALYSIS:LSBUS1:  
ANALYZE:I2CBUS:CLOCK A0;DTRACE A1;;  
ANALYSIS:LSBUS1:ANALYZE:LINBUS:  
BRATE 19200;REVISION LIN1\_3;  
SPOINT 18.8E+00;TRACE A0;;:ANALYSIS:  
LSBUS1:ANALYZE:LIST:DISPLAY 1;  
MODE DETAIL;SCROLL VERTICAL;;  
ANALYSIS:LSBUS1:ANALYZE:MODE;  
RPOINT TRIGGER;SPIBUS:CLOCK:  
POLARITY RISE;SOURCE A0;;:ANALYSIS:  
LSBUS1:ANALYZE:SPIBUS:CS:ACTIVE LOW;  
TRACE A3;;:ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:DATA1:ACTIVE HIGH;TRACE A1;;  
ANALYSIS:LSBUS1:ANALYZE:SPIBUS:DATA2:  
ACTIVE HIGH;TRACE A1;;:ANALYSIS:  
LSBUS1:ANALYZE:SPIBUSSETUP:  
BITORDER MSBFIRST;MODE WIRE3;;:ANALYSIS:  
LSBUS1:ANALYZE:UART:BITORDER LSBFIRST;  
BRATE 19200;FORMAT BIT7PARITY;  
PMODE EVEN;POLARITY NEGATIVE;  
SPOINT 18.8E+00;TRACE A0;;:ANALYSIS:  
LSBUS1:ZLINKAGE Z1

#### **:ANALysis:LSBus<x>[:ANALyze]?**

**Function** Queries all settings related to the logic serial bus signal.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE? -> :ANALYSIS:  
LSBUS1:ANALYZE:I2CBUS:CLOCK A0;  
DTRACE A1;;:ANALYSIS:LSBUS1:ANALYZE:  
LINBUS:BRATE 19200;REVISION LIN1\_3;  
SPOINT 18.8E+00;TRACE A0;;:ANALYSIS:  
LSBUS1:ANALYZE:LIST:DISPLAY 1;  
MODE DETAIL;SCROLL VERTICAL;;:ANALYSIS:  
LSBUS1:ANALYZE:MODE;RPOINT TRIGGER;  
SPIBUS:CLOCK:POLARITY RISE;SOURCE A0;;  
ANALYSIS:LSBUS1:ANALYZE:SPIBUS:CS:  
ACTIVE LOW;TRACE A3;;:ANALYSIS:LSBUS1:  
ANALYZE:SPIBUS:DATA1:ACTIVE HIGH;  
TRACE A1;;:ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:DATA2:ACTIVE HIGH;TRACE A1;;  
ANALYSIS:LSBUS1:ANALYZE:SPIBUSSETUP:  
BITORDER MSBFIRST;MODE WIRE3;;  
ANALYSIS:LSBUS1:ANALYZE:UART:  
BITORDER LSBFIRST;BRATE 19200;  
FORMAT BIT7PARITY;PMODE EVEN;  
POLARITY NEGATIVE;SPOINT 18.8E+00;  
TRACE A0

#### **:ANALysis:LSBus<x>[:ANALyze]:I2CBus?**

**Function** Queries all settings related to the logic I<sup>2</sup>C bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:I2CBus?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:  
I2CBUS? -> :ANALYSIS:LSBUS1:ANALYZE:  
I2CBUS:CLOCK A0;DTRACE A0

#### **:ANALysis:LSBus<x>[:ANALyze]:I2CBus: CLOCK**

**Function** Sets the clock channel of the logic I<sup>2</sup>C bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:I2CBus:  
CLOCK {A<y>}  
:ANALysis:LSBus<x>[:ANALyze]:I2CBus:  
CLOCK?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :ANALYSIS:LSBUS1:ANALYZE:I2CBUS:  
CLOCK A0  
:ANALYSIS:LSBUS1:ANALYZE:I2CBUS:  
CLOCK? -> :ANALYSIS:LSBUS1:ANALYZE:  
I2CBUS:CLOCK A0

**:ANALysis:LSBus<x>[:ANALyze]:I2Cbus:****DTRace**

**Function** Sets the data channel of the logic I<sup>2</sup>C bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:I2Cbus:  
DTRace {A<y>}  
:ANALysis:LSBus<x>[:ANALyze]:I2Cbus:  
DTRace?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :ANALYSIS:LSBUS1:ANALYZE:I2CBUS:  
DTRACE A0  
:ANALYSIS:LSBUS1:ANALYZE:I2CBUS:  
DTRACE? -> :ANALYSIS:LSBUS1:ANALYZE:  
I2CBUS:DTRACE A0

**:ANALysis:LSBus<x>[:ANALyze]:LINBus?**

**Function** Queries all settings related to the logic LIN bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LINBus?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:LINBUS?  
-> :ANALYSIS:LSBUS1:ANALYZE:LINBUS:  
BRATE 19200;REVISION LIN1\_3;  
SPOINT 18.8E+00;TRACE A0

**:ANALysis:LSBus<x>[:ANALyze]:LINBus:****BRATe**

**Function** Sets the bit rate (data transfer rate) of the logic LIN bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LINBus:  
BRATe {<Nrf>|USER,<Nrf>}  
:ANALysis:LSBus<x>[:ANALyze]:LINBus:  
BRATe?  
<x> = 1 or 2  
<Nrf> = 1200, 2400, 4800, 9600, or  
19200  
<Nrf> of USER = See the User's Manual  
(IM701361-01E).

**Example** :ANALYSIS:LSBUS1:ANALYZE:LINBUS:  
BRATE 19200  
:ANALYSIS:LSBUS1:ANALYZE:LINBUS:  
BRATE? -> :ANALYSIS:LSBUS1:ANALYZE:  
LINBUS:BRATE 19200

**:ANALysis:LSBus<x>[:ANALyze]:LINBus:****FJUMp:BR EAk**

**Function** Executes a field jump to the Break Field in the results of the logic LIN bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LINBus:  
FJUMp:BR EAk  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:LINBUS:FJUMP:  
BREAK

**:ANALysis:LSBus<x>[:ANALyze]:LINBus:****FJUMp:CSUM**

**Function** Executes a field jump to the Checksum Field in the results of the logic LIN bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LINBus:  
FJUMp:CSUM  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:LINBUS:FJUMP:  
CSUM

**:ANALysis:LSBus<x>[:ANALyze]:LINBus:****FJUMp:DATA**

**Function** Executes a field jump to the Data Field in the results of the logic LIN bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LINBus:  
FJUMp:DATA  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:LINBUS:FJUMP:  
DATA

**:ANALysis:LSBus<x>[:ANALyze]:LINBus:****FJUMp:IDENTifier**

**Function** Executes a field jump to the Identifier Field in the results of the logic LIN bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LINBus:  
FJUMp:IDENTifier  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:LINBUS:FJUMP:  
IDENTIFIER

**:ANALysis:LSBus<x>[:ANALyze]:LINBus:****FJUMp:SYNCh**

**Function** Executes a field jump to the Synch Field in the results of the logic LIN bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LINBus:  
FJUMp:SYNCh  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:LINBUS:FJUMP:  
SYNCH

### 5.3 ANALYSIS Group

#### **:ANALysis:LSBus<x>[:ANALyze]:LINBus:REVISION**

**Function** Sets the revision (1.3 or 2.0) of the logic LIN bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LINBus:REVISION {LIN1\_3|LIN2\_0}  
:ANALysis:LSBus<x>[:ANALyze]:LINBus:REVISION?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:LINBUS:REVISION LIN1\_3  
:ANALYSIS:LSBUS1:ANALYZE:LINBUS:REVISION? -> :ANALYSIS:LSBUS1:ANALYZE:LINBUS:REVISION LIN1\_3

#### **:ANALysis:LSBus<x>[:ANALyze]:LINBus:SPOINT**

**Function** Sets the logic LIN bus signal analysis sample point or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LINBus:SPOINT {<Nrf>}  
:ANALysis:LSBus<x>[:ANALyze]:LINBus:SPOINT?  
<x> = 1 or 2  
<Nrf> = 18.8 to 90.6(%)

**Example** :ANALYSIS:LSBUS1:ANALYZE:LINBUS:SPOINT 18.8  
:ANALYSIS:LSBUS1:ANALYZE:LINBUS:SPOINT? -> :ANALYSIS:LSBUS1:ANALYZE:LINBUS:SPOINT 18.8E+00

#### **:ANALysis:LSBus<x>[:ANALyze]:LINBus:TRACE**

**Function** Sets the trace of the logic LIN bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LINBus:TRACE {A<y>}  
:ANALysis:LSBus<x>[:ANALyze]:LINBus:TRACE?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :ANALYSIS:LSBUS1:ANALYZE:LINBUS:TRACE A0  
:ANALYSIS:LSBUS1:ANALYZE:LINBUS:TRACE? -> :ANALYSIS:LSBUS1:ANALYZE:LINBUS:TRACE A0.

#### **:ANALysis:LSBus<x>[:ANALyze]:LIST?**

**Function** Queries all settings related to the analysis result list of the logic serial bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LIST?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:LIST? -> :ANALYSIS:LSBUS1:ANALYZE:LIST:DISPLAY 1;MODE DETAIL;SCROLL HORIZONTAL

#### **:ANALysis:LSBus<x>[:ANALyze]:LIST:DISPlay**

**Function** Turns ON/OFF the analysis result list of the logic serial bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LIST:DISPlay {<Boolean>}  
:ANALysis:LSBus<x>[:ANALyze]:LIST:DISPlay?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:LIST:DISPlay ON  
:ANALYSIS:LSBUS1:ANALYZE:LIST:DISPlay? -> :ANALYSIS:LSBUS1:ANALYZE:LIST:DISPlay 1

#### **:ANALysis:LSBus<x>[:ANALyze]:LIST:ITEM?**

##### **ITEM?**

**Function** Queries all items displayed on the analysis result list of the logic serial bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LIST:ITEM?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:LIST:ITEM?  
-> :ANALYSIS:LSBUS1:ANALYZE:LIST:ITEM " No. , S/P, Hex, Form, R/W, ACK, "

**:ANALysis:LSBus<x>[:ANALyze]:LIST:****MODE**

**Function** Sets the mode of the analysis result list of the logic serial bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LIST:  
MODE {DETAil|SIMPlE}  
:ANALysis:LSBus<x>[:ANALyze]:LIST:MODE?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:LIST:  
MODE DETAIL  
:ANALYSIS:LSBUS1:ANALYZE:LIST:  
MODE? -> :ANALYSIS:LSBUS1:ANALYZE:LIST:  
MODE DETAIL

**:ANALysis:LSBus<x>[:ANALyze]:LIST:****SCROLL**

**Function** Sets the scroll method of the analysis result list of the logic serial bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LIST:  
SCROLL {HORizontal|VERTical}  
:ANALysis:LSBus<x>[:ANALyze]:LIST:  
SCROLL?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:LIST:  
SCROLL HORIZONTAL  
:ANALYSIS:LSBUS1:ANALYZE:LIST:  
SCROLL? -> :ANALYSIS:LSBUS1:ANALYZE:  
LIST:SCROLL HORIZONTAL

**:ANALysis:LSBus<x>[:ANALyze]:LIST:****VALUE?**

**Function** Queries the automated measured value of the specified analysis number in the analysis result list of the logic serial bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:LIST:  
VALue? {<NRf>|MAXimum|MINimum}  
<x> = 1 or 2  
<NRf> = -40000 to 40000  
(<NRf> = -2999 to 2999 for :ANALysis:SBUS<x>[:  
ANALyze]:MODE CANBus.)

**Example** :ANALYSIS:LSBUS1:ANALYZE:LIST:  
VALUE? 1  
-> :ANALYSIS:LSBUS1:ANALYZE:LIST:  
VALUE " 1, P, 00, A, , 0,"

**Description** Set the data to MAXimum or MINimum to specify the maximum list display number or the minimum list display number.

**:ANALysis:LSBus<x>[:ANALyze]:MODE**

**Function** Sets the logic serial bus signal analysis mode or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:  
MODE {I2CBus|LINBus|SPIBus|UART}  
:ANALysis:LSBus<x>[:ANALyze]:MODE?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:MODE I2CBUS  
:ANALYSIS:LSBUS1:ANALYZE:  
MODE? -> :ANALYSIS:LSBUS1:ANALYZE:  
MODE I2CBUS

**:ANALysis:LSBus<x>[:ANALyze]:RPOINT**

**Function** Sets the analysis reference point of the logic serial bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:  
RPOINT {<NRf>,MANual|TRIGger}  
:ANALysis:LSBus<x>[:ANALyze]:RPOINT?  
<x> = 1 or 2  
<NRf> = -5 to 5(div)

**Example** :ANALYSIS:LSBUS1:ANALYZE:RPOINT  
MANUAL,1  
:ANALYSIS:LSBUS1:ANALYZE:  
RPOINT? -> :ANALYSIS:LSBUS1:ANALYZE:  
RPOINT MANUAL, 1.00000E+00

**:ANALysis:LSBus<x>[:ANALyze]:SPIBUS?**

**Function** Queries all settings related to the logic SPI bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:SPIBUS?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS? -> :ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:CLOCK:POLARITY FALL;SOURCE A0;;  
ANALYSIS:LSBUS1:ANALYZE:SPIBUS:CS:  
ACTIVE HIGH;TRACE A0;;ANALYSIS:LSBUS1:  
ANALYZE:SPIBUS:DATA1:ACTIVE HIGH;  
TRACE A0;;ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:DATA2:ACTIVE HIGH;TRACE A2;;  
ANALYSIS:LSBUS1:ANALYZE:SPIBUSSETUP:  
BITORDER LSBFIRST;MODE WIRE3

**:ANALysis:LSBus<x>[:ANALyze]:SPIBUS:  
CLOCK?**

**Function** Queries all settings related to the clock signal channel of the logic SPI bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:SPIBUS:  
CLOCK?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:  
CLOCK? -> :ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:CLOCK:POLARITY FALL;SOURCE A0



### 5.3 ANALYSIS Group

#### **:ANALysis:LSBus<x>[:ANALyze]:SPIBUS: CLOCK:POLarity**

**Function** Sets the polarity of the clock signal channel of the logic SPI bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:SPIBUS:  
CLOCK:POLarity {FALL|RISE}  
:ANALysis:LSBus<x>[:ANALyze]:SPIBUS:  
CLOCK:POLarity?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:CLOCK:  
POLARITY FALL  
:ANALYSIS:LSBUS1:ANALYZE:SPIBUS:CLOCK:  
POLARITY? -> :ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:CLOCK:POLARITY FALL

#### **:ANALysis:LSBus<x>[:ANALyze]:SPIBUS: CLOCK:SOURce**

**Function** Sets the clock signal channel of the logic SPI bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:SPIBUS:  
CLOCK:SOURce {A<y>}  
:ANALysis:LSBus<x>[:ANALyze]:SPIBUS:  
CLOCK:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:CLOCK:  
SOURCE A0  
:ANALYSIS:LSBUS1:ANALYZE:SPIBUS:CLOCK:  
SOURCE? -> :ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:CLOCK:SOURCE A0

#### **:ANALysis:LSBus<x>[:ANALyze]:SPIBUS: CS?**

**Function** Queries all settings related to the chip select signal channel of the logic SPI bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:SPIBUS:CS?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:  
CS? -> :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:  
CS:ACTIVE HIGH;TRACE A0

#### **:ANALysis:LSBus<x>[:ANALyze]:SPIBUS: CS:ACTIve**

**Function** Sets the active level of the chip select signal channel of the logic SPI bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:SPIBUS:CS:  
ACTIve {HIGH|LOW}  
:ANALysis:LSBus<x>[:ANALyze]:SPIBUS:CS:  
ACTIve?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:CS:  
ACTIVE HIGH  
:ANALYSIS:LSBUS1:ANALYZE:SPIBUS:CS:  
ACTIVE? -> :ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:CS:ACTIVE HIGH

#### **:ANALysis:LSBus<x>[:ANALyze]:SPIBUS: CS:TRACe**

**Function** Sets the chip select signal channel of the logic SPI bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:SPIBUS:CS:  
TRACe {A<y>}  
:ANALysis:LSBus<x>[:ANALyze]:SPIBUS:CS:  
TRACe?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:CS:  
TRACE A0  
:ANALYSIS:LSBUS1:ANALYZE:SPIBUS:CS:  
TRACE? -> :ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:CS:TRACE A0

#### **:ANALysis:LSBus<x>[:ANALyze]:SPIBUS: DATA<x>?**

**Function** Queries all settings related to each data of the logic SPI bus signal analysis.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:SPIBUS:  
DATA<x>?  
<x> of LSBus<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:  
DATA1? -> :ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:DATA1:ACTIVE HIGH;TRACE A0

**:ANALysis:LSBus<x>[:ANALyze]:SPIBus:****DATA<x>:ACTive**

Function Sets the active level of each data of the logic SPI bus signal analysis or queries the current setting.

Syntax :ANALysis:LSBus<x>[:ANALyze]:SPIBus:  
DATA<x>:ACTive {HIGH|LOW}  
:ANALysis:LSBus<x>[:ANALyze]:SPIBus:  
DATA<x>:ACTive?  
<x> of LSBus<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

Example :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:DATA1:  
ACTIVE HIGH  
:ANALYSIS:LSBUS1:ANALYZE:SPIBUS:DATA1:  
ACTIVE? -> :ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:DATA1:ACTIVE HIGH

**:ANALysis:LSBus<x>[:ANALyze]:SPIBus:****DATA<x>:TRACe**

Function Sets the data channel of the logic SPI bus signal analysis or queries the current setting.

Syntax :ANALysis:LSBus<x>[:ANALyze]:SPIBus:  
DATA<x>:TRACe {A<y>}  
:ANALysis:LSBus<x>[:ANALyze]:SPIBus:  
DATA<x>:TRACe?  
<x> of LSBus<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<y> = 0 to 7

Example :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:DATA1:  
TRACE A0  
:ANALYSIS:LSBUS1:ANALYZE:SPIBUS:DATA1:  
TRACE? -> :ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:DATA1:TRACE A0

**:ANALysis:LSBus<x>[:ANALyze]:****SPIBus[:SETup]?**

Function Queries all settings related to the setup of the logic SPI bus signal analysis.

Syntax :ANALysis:LSBus<x>[:ANALyze]:  
SPIBus[:SETup]?  
<x> = 1 or 2

Example :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:  
SETUP? -> :ANALYSIS:LSBUS1:ANALYZE:  
:SPIBUS:SETUP:BITORDER LSBFIRST;MODE  
WIRE3

**:ANALysis:LSBus<x>[:ANALyze]:****SPIBus[:SETup]:BITOrder**

Function Sets the bit order of the logic SPI bus signal analysis or queries the current setting.

Syntax :ANALysis:LSBus<x>[:ANALyze]:  
SPIBus[:SETup]:  
BITOrder {LSBFirst|MSBFirst}  
:ANALysis:LSBus<x>[:ANALyze]:  
SPIBus[:SETup]:BITOrder?  
<x> = 1 or 2

Example :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:SETUP:  
BITORDER LSBFIRST  
:ANALYSIS:LSBUS1:ANALYZE:SPIBUS:SETUP:  
BITORDER? -> :ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:SETUP:BITORDER LSBFIRST

**:ANALysis:LSBus<x>[:ANALyze]:****SPIBus[:SETup]:MODE**

Function Sets the wiring system of the logic SPI bus signal analysis (three-wire or four-wire) or queries the current setting.

Syntax :ANALysis:LSBus<x>[:ANALyze]:  
SPIBus[:SETup]:MODE {WIRE3|WIRE4}  
:ANALysis:LSBus<x>[:ANALyze]:  
SPIBus[:SETup]:MODE?  
<x> = 1 or 2

Example :ANALYSIS:LSBUS1:ANALYZE:SPIBUS:SETUP:  
MODE WIRE3  
:ANALYSIS:LSBUS1:ANALYZE:SPIBUS:SETUP:  
MODE? -> :ANALYSIS:LSBUS1:ANALYZE:  
SPIBUS:SETUP:MODE WIRE3

**:ANALysis:LSBus<x>[:ANALyze]:UART?**

Function Queries all settings related to the logic UART bus signal analysis.

Syntax :ANALysis:LSBus<x>[:ANALyze]:UART?  
<x> = 1 or 2

Example :ANALYSIS:LSBUS1:ANALYZE:UART?  
-> :ANALYSIS:LSBUS1:ANALYZE:UART:  
BITORDER LSBFIRST;BRATE 19200;  
FORMAT BIT7PARITY;PMODE EVEN;P  
OLARITY NEGATIVE;SPOINT 18.8E+00;  
TRACE A0

### 5.3 ANALysis Group

#### **:ANALysis:LSBus<x>[:ANALyze]:UART:**

##### **BITOrder**

**Function** Sets the logic UART bus signal analysis bit order or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:UART:  
BITOrder {LSBFirst|MSBFirst}  
:ANALysis:LSBus<x>[:ANALyze]:UART:  
BITOrder?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:UART:  
BITORDER LSBFIRST  
:ANALYSIS:LSBUS1:ANALYZE:UART:BITORDER?  
-> :ANALYSIS:LSBUS1:ANALYZE:UART:  
BITORDER LSBFIRST

#### **:ANALysis:LSBus<x>[:ANALyze]:UART:**

##### **BRATe**

**Function** Sets the logic UART bus signal analysis bit rate (data transfer rate) or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:UART:BRATe  
{<NRf>|USER,<NRf>}  
:ANALysis:LSBus<x>[:ANALyze]:UART:  
BRATe?  
<x> = 1 or 2  
<NRf> = 1200, 2400, 4800, 9600, 19200, 38400,  
57600, or 115200  
<NRf> of USER = See the SB5000 User's Manual

**Example** :ANALYSIS:LSBUS1:ANALYZE:UART:BRATE  
19200  
:ANALYSIS:LSBUS1:ANALYZE:UART:BRATE?  
-> :ANALYSIS:LSBUS1:ANALYZE:UART:BRATE  
19200

#### **:ANALysis:LSBus<x>[:ANALyze]:UART:**

##### **FORMat**

**Function** Sets the logic UART bus signal analysis data format or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:UART:  
FORMat {BIT7parity|BIT8Noparity|  
BIT8Parity}  
:ANALysis:LSBus<x>[:ANALyze]:UART:  
FORMat?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:UART:  
FORMAT BIT7PARITY  
:ANALYSIS:LSBUS1:ANALYZE:UART:FORMAT?  
-> :ANALYSIS:LSBUS1:ANALYZE:UART:  
FORMAT BIT7PARITY

#### **:ANALysis:LSBus<x>[:ANALyze]:UART:**

##### **PMODE**

**Function** Sets the logic UART bus signal analysis parity mode or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:UART:  
PMODE {EVEN|ODD}  
:ANALysis:LSBus<x>[:ANALyze]:UART:  
PMODE?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:UART:  
PMODE EVEN  
:ANALYSIS:LSBUS1:ANALYZE:UART:PMODE?  
-> :ANALYSIS:LSBUS1:ANALYZE:UART:  
PMODE EVEN

#### **:ANALysis:LSBus<x>[:ANALyze]:UART:**

##### **POLarity**

**Function** Sets the logic UART bus signal analysis parity or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:UART:  
POLarity {NEGative|POSitive}  
:ANALysis:LSBus<x>[:ANALyze]:UART:  
POLarity?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ANALYZE:UART:  
POLARITY NEGATIVE  
:ANALYSIS:LSBUS1:ANALYZE:UART:  
POLARITY? -> :ANALYSIS:LSBUS1:ANALYZE:  
UART:POLARITY NEGATIVE

#### **:ANALysis:LSBus<x>[:ANALyze]:UART:**

##### **SPOint**

**Function** Sets the logic UART bus signal analysis sample point or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:UART:  
SPOint {<NRf>}  
:ANALysis:LSBus<x>[:ANALyze]:UART:  
SPOint?  
<x> = 1 or 2  
<NRf> = 18.8 to 90.6(%)

**Example** :ANALYSIS:LSBUS1:ANALYZE:UART:  
SPOINT 18.8  
:ANALYSIS:LSBUS1:ANALYZE:UART:SPOINT?  
-> :ANALYSIS:LSBUS1:ANALYZE:UART:  
SPOINT 18.8E+00

**:ANALysis:LSBus<x>[:ANALyze]:UART:****TRACe**

**Function** Sets the logic UART bus signal analysis trace or queries the current setting.

**Syntax** :ANALysis:LSBus<x>[:ANALyze]:UART:  
TRACe {A<y>}  
:ANALysis:LSBus<x>[:ANALyze]:UART:  
TRACe?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :ANALYSIS:LSBUS1:ANALYZE:UART:TRACE A0  
:ANALYSIS:LSBUS1:ANALYZE:UART:TRACE? ->  
:ANALYSIS:LSBUS1:ANALYZE:UART:TRACE A0

**:ANALysis:LSBus<x>:ZLINKage**

**Function** Sets the zoom link of the logic serial bus signal analysis or queries the current setting.

**Syntax** :ANALysis:LSBus<x>:ZLINKage {OFF|Z1|Z2}  
:ANALysis:LSBus<x>:ZLINKage?  
<x> = 1 or 2

**Example** :ANALYSIS:LSBUS1:ZLINKAGE OFF  
:ANALYSIS:LSBUS1:  
ZLINKAGE? -> :ANALYSIS:LSBUS1:  
ZLINKAGE OFF

**:ANALysis:SBUS<x>?**

**Function** Queries all settings related to the serial bus signal analysis function.

**Syntax** :ANALysis:SBUS<x>?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1? -> :ANALYSIS:SBUS1:  
ANALYZE:CANBUS:BRATE 500000;  
RECESSIVE HIGH;SIGNAL:MODE 1;;  
ANALYSIS:SBUS1:ANALYZE:CANBUS:  
SPOINT 62.5E+00;TRACE 1;;ANALYSIS:  
SBUS1:ANALYZE:DECODE 1;FLEXRAY:  
BRATE 5000000;SPOINT 5.00E+00;TRACE 1;;  
ANALYSIS:SBUS1:ANALYZE:I2CBUS:  
CLOCK 1;DTRACE 2;;ANALYSIS:SBUS1:  
ANALYZE:LINBUS:BRATE 19200;  
REVISION LIN1\_3;SPOINT 18.8E+00;  
TRACE 1;;ANALYSIS:SBUS1:ANALYZE:LIST:  
DISPLAY 1;MODE DETAIL;SCROLL VERTICAL;;  
ANALYSIS:SBUS1:ANALYZE:MODE CANBUS;  
RPOINT TRIGGER;SPIBUS:CLOCK:  
POLARITY RISE;SOURCE 1;;ANALYSIS:SBUS1:  
ANALYZE:SPIBUS:CS:ACTIVE LOW;TRACE 4;;  
ANALYSIS:SBUS1:ANALYZE:SPIBUS:DATA1:  
ACTIVE HIGH;TRACE 2;;ANALYSIS:SBUS1:  
ANALYZE:SPIBUS:DATA2:ACTIVE HIGH;  
TRACE 3;;ANALYSIS:SBUS1:ANALYZE:  
SPIBUSSETUP:BITORDER MSBFIRST;M  
ODE WIRE3;;ANALYSIS:SBUS1:ANALYZE:  
TRACE1:HYSTERESIS 300.00000E-03;  
LEVEL 0.0000000E+00.....

**:ANALysis:SBUS<x>:ANALyze?**

**Function** Queries all settings related to the serial bus signal analysis.

**Syntax** :ANALysis:SBUS<x>:ANALyze?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE? -> :ANALYSIS:  
SBUS1:ANALYZE:CANBUS:BRATE  
500000;RECESSIVE HIGH;SIGNAL:MODE 1;;  
ANALYSIS:SBUS1:ANALYZE:CANBUS:  
SPOINT 62.5E+00;TRACE 1;;ANALYSIS:  
SBUS1:ANALYZE:DECODE 1;FLEXRAY:  
BRATE 5000000;SPOINT 5.00E+00;TRACE 1;;  
ANALYSIS:SBUS1:ANALYZE:I2CBUS:CLOCK 1;  
DTRACE 2;;ANALYSIS:SBUS1:ANALYZE:  
LINBUS:BRATE 19200;REVISION LIN1\_3;  
SPOINT 18.8E+00;TRACE 1;;ANALYSIS:  
SBUS1:ANALYZE:LIST:DISPLAY 1;  
MODE DETAIL;SCROLL VERTICAL;;ANALYSIS:  
SBUS1:ANALYZE:MODE CANBUS;  
RPOINT TRIGGER;SPIBUS:CLOCK:P  
OLARITY RISE;SOURCE 1;;ANALYSIS:SBUS1:  
ANALYZE:SPIBUS:CS:ACTIVE LOW;TRACE 4;;  
ANALYSIS:SBUS1:ANALYZE:SPIBUS:DATA1:  
ACTIVE HIGH;TRACE 2;;ANALYSIS:SBUS1:  
ANALYZE:SPIBUS:DATA2:ACTIVE HIGH;  
TRACE 3.....

**:ANALysis:SBUS<x>[:ANALyze]:CANBus?**

**Function** Queries all settings related to the CAN bus signal analysis.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:CANBus?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:CANBUS?  
-> :ANALYSIS:SBUS1:ANALYZE:CANBUS:  
BRATE 500000;RECESSIVE HIGH;SIGNAL:  
MODE 1;;ANALYSIS:SBUS1:ANALYZE:CANBUS:  
SPOINT 62.5E+00;TRACE 1

### 5.3 ANALysis Group

#### **:ANALysis:SBUS<x>[:ANALyze]:CANBus:**

##### **BRATe**

**Function** Sets the bit rate (data transfer rate) of the CAN bus signal analysis or queries the current setting.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:CANBus:  
BRATe {<NRf>|USER,<NRf>}  
:ANALysis:SBUS<x>[:ANALyze]:CANBus:  
BRATe?  
<x> = 1 or 2  
<NRf> = 33300, 83300, 125000, 250000, 500000,  
1000000  
<NRf> of USER = See the User's Manual (IM701361-01E).

**Example** :ANALYSIS:SBUS1:ANALYZE:CANBUS:  
BRATE 83300  
:ANALYSIS:SBUS1:ANALYZE:CANBUS:  
BRATE?  
-> :ANALYSIS:SBUS1:ANALYZE:CANBUS:  
BRATE 83300

#### **:ANALysis:SBUS<x>[:ANALyze]:CANBus:**

##### **FJUMp:ACK**

**Function** Executes a field jump to the ACK Field in the results of the CAN bus signal analysis.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:CANBus:  
FJUMp:ACK  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:CANBUS:FJUMP:  
ACK

#### **:ANALysis:SBUS<x>[:ANALyze]:CANBus:**

##### **FJUMp:CONTRol**

**Function** Executes a field jump to the Control Field in the results of the CAN bus signal analysis.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:CANBus:  
FJUMp:CONTRol  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:CANBUS:FJUMP:  
CONTROL

#### **:ANALysis:SBUS<x>[:ANALyze]:CANBus:**

##### **FJUMp:CRc**

**Function** Executes a field jump to the CRC Field in the results of the CAN bus signal analysis.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:CANBus:  
FJUMp:CRc  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:CANBUS:FJUMP:  
CRC

#### **:ANALysis:SBUS<x>[:ANALyze]:CANBus:**

##### **FJUMp:DATA**

**Function** Executes a field jump to the Data Field in the results of the CAN bus signal analysis.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:CANBus:  
FJUMp:DATA  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:CANBUS:FJUMP:  
DATA

#### **:ANALysis:SBUS<x>[:ANALyze]:CANBus:**

##### **FJUMp:IDENTifier**

**Function** Executes a field jump to the Identifier Field in the results of the CAN bus signal analysis.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:CANBus:  
FJUMp:IDENTifier  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:CANBUS:FJUMP:  
IDENTIFIER

#### **:ANALysis:SBUS<x>[:ANALyze]:CANBus:**

##### **FJUMp:SOF**

**Function** Executes a field jump to the SOF Field in the results of the CAN bus signal analysis.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:CANBus:  
FJUMp:SOF  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:CANBUS:FJUMP:  
SOF

#### **:ANALysis:SBUS<x>[:ANALyze]:CANBus:**

##### **REcEssive**

**Function** Sets the recessive level (bus level) of the CAN bus signal analysis or queries the current setting.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:CANBus:  
REcEssive {HIGH|LOW}  
:ANALysis:SBUS<x>[:ANALyze]:CANBus:  
REcEssive?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:CANBUS:  
RECESSIVE HIGH  
:ANALYSIS:SBUS1:ANALYZE:CANBUS:  
RECESSIVE?  
-> :ANALYSIS:SBUS1:ANALYZE:CANBUS:  
RECESSIVE HIGH

**:ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: SIGNAL?**

Function Queries all settings related to the CAN bus signal analysis signal.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: SIGNAL?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:CANBUS:SIGNAL?  
-> :ANALYSIS:SBUS1:ANALYZE:CANBUS: SIGNAL:MODE 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: SIGNAL:LIST:ITEM**

Function Turns ON/OFF items to be displayed in the CAN bus signal analysis signal list.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: SIGNAL:LIST:ITEM {<String>,<String>,<Boolean>}  
<x> = 1 or 2  
<String> = Up to 32 characters

Example :ANALYSIS:SBUS1:ANALYZE:CANBUS:SIGNAL: LIST:ITEM "ENGINE","TEST",ON

Description The first string sets the signal, and the next string sets the message.

**:ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: SIGNAL:MODE**

Function Turns ON/OFF the CAN bus signal analysis signal or queries the current setting.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: SIGNAL:MODE {<Boolean>}  
:ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: SIGNAL:MODE?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:CANBUS:SIGNAL: MODE ON  
:ANALYSIS:SBUS1:ANALYZE:CANBUS:SIGNAL: MODE? -> :ANALYSIS:SBUS1:ANALYZE: CANBUS:SIGNAL:MODE 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: SIGNAL:TREND:ITEM**

Function Turns ON/OFF items of the CAN bus signal analysis signal to be trend-displayed.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: SIGNAL:TREND:ITEM {<String>,<String>}  
<x> = 1 or 2  
<String> = Up to 32 characters

Example :ANALYSIS:SBUS1:ANALYZE:CANBUS:SIGNAL: TREND:ITEM "ENGINE","TEST"

Description The first string sets the signal, and the next string sets the message.

**:ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: SPOINT**

Function Sets the sample point of the CAN bus signal analysis or queries the current setting.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: SPOINT {<Nrf>}  
:ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: SPOINT?  
<x> = 1 or 2  
<Nrf> = 18.8 to 90.6(%)

Example :ANALYSIS:SBUS1:ANALYZE:CANBUS: SPOINT 18.8  
:ANALYSIS:SBUS1:ANALYZE:CANBUS: SPOINT?  
-> :ANALYSIS:SBUS1:ANALYZE:CANBUS: SPOINT 18.8E+00

**:ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: TRACE**

Function Sets the trace of the CAN bus signal analysis or queries the current setting.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: TRACE {<Nrf>}  
:ANALYSIS:SBUS<x>[:ANALYZE]:CANBUS: TRACE?  
<x> = 1 or 2  
<Nrf> = 1 to 8

Example :ANALYSIS:SBUS1:ANALYZE:CANBUS:TRACE 1  
:ANALYSIS:SBUS1:ANALYZE:CANBUS: TRACE?  
-> :ANALYSIS:SBUS1:ANALYZE:CANBUS: TRACE 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:DECODE**

Function Turns the serial bus signal analysis decoding display ON/OFF or queries the current status.

Syntax ANALYSIS:SBUS<x>[:ANALYZE]: DECODE {<Boolean>}  
:ANALYSIS:SBUS<x>[:ANALYZE]:DECODE?  
<x>=1 or 2

Example ANALYSIS:SBUS1:ANALYZE:DECODE ON  
:ANALYSIS:SBUS1:ANALYZE:DECODE?  
-> :ANALYSIS:SBUS1:ANALYZE:DECODE 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:FLEXRAY?**

Function Queries all settings related to the FLEXRAY bus signal analysis.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:FLEXRAY?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:FLEXRAY? ->  
:ANALYSIS:SBUS1:ANALYZE:FLEXRAY:B RATE 5000000;SPOINT 5.00E+00;TRACE 1

### 5.3 ANALysis Group

#### **:ANALysis:SBUS<x>[:ANALyze]:FLEXray:**

##### **BRATe**

Function Sets the FLEXRAY bus signal analysis bit rate (data transfer rate) or queries the current setting.

Syntax :ANALysis:SBUS<x>[:ANALyze]:FLEXray:  
BRATe {<Nrf>}  
:ANALysis:SBUS<x>[:ANALyze]:FLEXray:  
BRATe?  
<x> = 1 or 2  
<Nrf> = 2500000, 5000000, or 10000000

Example :ANALYSIS:SBUS1:ANALYZE:FLEXRAY:  
BRATE 5000000  
:ANALYSIS:SBUS1:ANALYZE:FLEXRAY:BRATE?  
-> :ANALYSIS:SBUS1:ANALYZE:FLEXRAY:  
BRATE 5000000

#### **:ANALysis:SBUS<x>[:ANALyze]:FLEXray:**

##### **FJUMp:CCOunt**

Function Performs a field jump to the Cycle Count Field in the results of the FLEXRAY bus signal analysis.

Syntax :ANALysis:SBUS<x>[:ANALyze]:FLEXray:FJUMp:  
CCOunt  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:FLEXRAY:  
FJUMP:CCOUNT

#### **:ANALysis:SBUS<x>[:ANALyze]:FLEXray:**

##### **FJUMp:CRc**

Function Performs a field jump to the CRC Field in the results of the FLEXRAY bus signal analysis.

Syntax :ANALysis:SBUS<x>[:ANALyze]:FLEXray:  
FJUMp:CRc  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:FLEXRAY:FJUMP:  
CRc

#### **:ANALysis:SBUS<x>[:ANALyze]:FLEXray:**

##### **FJUMp:DATA**

Function Performs a field jump to the Data Field in the results of the FLEXRAY bus signal analysis.

Syntax :ANALysis:SBUS<x>[:ANALyze]:FLEXray:  
FJUMp:DATA  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:FLEXRAY:FJUMP:  
DATA

#### **:ANALysis:SBUS<x>[:ANALyze]:FLEXray:**

##### **FJUMp:HCRC**

Function Performs a field jump to the Header CRC Field in the results of the FLEXRAY bus signal analysis.

Syntax :ANALysis:SBUS<x>[:ANALyze]:FLEXray:  
FJUMp:HCRC  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:FLEXRAY:FJUMP:  
HCRC

#### **:ANALysis:SBUS<x>[:ANALyze]:FLEXray:**

##### **FJUMp:IDENtifier**

Function Performs a field jump to the Identifier Field in the results of the FLEXRAY bus signal analysis.

Syntax :ANALysis:SBUS<x>[:ANALyze]:FLEXray:  
FJUMp:IDENtifier  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:FLEXRAY:FJUMP:  
IDENtIFIER

#### **:ANALysis:SBUS<x>[:ANALyze]:FLEXray:**

##### **FJUMp:PLENgtH**

Function Performs a field jump to the Payload Length Field in the results of the FLEXRAY bus signal analysis.

Syntax :ANALysis:SBUS<x>[:ANALyze]:FLEXray:  
FJUMp:PLENgtH  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:FLEXRAY:FJUMP:  
PLENgtH

#### **:ANALysis:SBUS<x>[:ANALyze]:FLEXray:**

##### **SPOint**

Function Sets the FLEXRAY bus signal analysis sample point or queries the current setting.

Syntax :ANALysis:SBUS<x>[:ANALyze]:FLEXray:  
SPOint {<Nrf>}  
:ANALysis:SBUS<x>[:ANALyze]:FLEXray:  
SPOint?  
<x> = 1 or 2  
<Nrf> = 1 to 8

Example :ANALYSIS:SBUS1:ANALYZE:FLEXRAY:  
SPOINT 5  
:ANALYSIS:SBUS1:ANALYZE:FLEXRAY:SPOINT?  
-> :ANALYSIS:SBUS1:ANALYZE:FLEXRAY:  
SPOINT 5.00E+00

#### **:ANALysis:SBUS<x>[:ANALyze]:FLEXray:**

##### **TRAcE**

Function Sets the FLEXRAY bus signal analysis trace or queries the current setting.

Syntax :ANALysis:SBUS<x>[:ANALyze]:FLEXray:  
TRAcE {<Nrf>}  
:ANALysis:SBUS<x>[:ANALyze]:FLEXray:  
TRAcE?  
<x> = 1 or 2  
<Nrf> = 1 to 8

Example :ANALYSIS:SBUS1:ANALYZE:FLEXRAY:TRACE 1  
:ANALYSIS:SBUS1:ANALYZE:FLEXRAY:TRACE?  
-> :ANALYSIS:SBUS1:ANALYZE:FLEXRAY:  
TRACE 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:I2CBUS?**

**Function** Queries all settings related to the I<sup>2</sup>C bus signal analysis.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:I2CBUS?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:I2CBUS?  
-> :ANALYSIS:SBUS1:ANALYZE:I2CBUS:  
CLOCK 1;DTRACE 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:I2CBUS:****CLOCK**

**Function** Sets the clock channel of the I<sup>2</sup>C bus signal analysis or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:I2CBUS:  
CLOCK {<Nrf>}

:ANALYSIS:SBUS<x>[:ANALYZE]:I2CBUS:  
CLOCK?

<x> = 1 or 2

<Nrf> = 1 to 8

**Example** :ANALYSIS:SBUS1:ANALYZE:I2CBUS:CLOCK 1  
:ANALYSIS:SBUS1:ANALYZE:I2CBUS:CLOCK?  
-> :ANALYSIS:SBUS1:ANALYZE:I2CBUS:  
CLOCK 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:I2CBUS:****DTRACE**

**Function** Sets the data channel of the I<sup>2</sup>C bus signal analysis or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:I2CBUS:  
DTRACE {<Nrf>}

:ANALYSIS:SBUS<x>[:ANALYZE]:I2CBUS:  
DTRACE?

<x> = 1 or 2

<Nrf> = 1 to 8

**Example** :ANALYSIS:SBUS1:ANALYZE:I2CBUS:DTRACE 1  
:ANALYSIS:SBUS1:ANALYZE:I2CBUS:  
DTRACE?  
-> :ANALYSIS:SBUS1:ANALYZE:I2CBUS:  
DTRACE 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:LINBUS?**

**Function** Queries all settings related to the LIN bus signal analysis.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:LINBUS?  
<x>=1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:LINBUS?  
-> :ANALYSIS:SBUS1:ANALYZE:LINBUS:  
BRATE 19200;REVISION LIN1\_3;  
SPOINT 18.8E+00;TRACE 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:LINBUS:****BRATE**

**Function** Sets the LIN bus signal analysis bitrate (data transfer rate) or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:LINBUS:  
BRATE {<Nrf>|USER,<Nrf>}

:ANALYSIS:SBUS<x>[:ANALYZE]:LINBUS:  
BRATE?

<x>=1 or 2

<Nrf>=1200, 2400, 4800, 9600, 19200

USER <Nrf>=See this User's Manual.

**Example** :ANALYSIS:SBUS1:ANALYZE:LINBUS:  
BRATE 19200  
:ANALYSIS:SBUS1:ANALYZE:LINBUS:BRATE?  
-> :ANALYSIS:SBUS1:ANALYZE:LINBUS:  
BRATE 19200

**:ANALYSIS:SBUS<x>[:ANALYZE]:LINBUS:****FJUMP:BREAK**

**Function** Executes a field jump to the Break Field in the results of the LIN bus signal analysis.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:LINBUS:  
FJUMP:BREAK

<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:LINBUS:FJUMP:  
BREAK

**:ANALYSIS:SBUS<x>[:ANALYZE]:LINBUS:****FJUMP:CSUM**

**Function** Executes a field jump to the Checksum Field in the results of the LIN bus signal analysis.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:LINBUS:  
FJUMP:CSUM

<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:LINBUS:FJUMP:  
CSUM

**:ANALYSIS:SBUS<x>[:ANALYZE]:LINBUS:****FJUMP:DATA**

**Function** Executes a field jump to the Data Field in the results of the LIN bus signal analysis.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:LINBUS:  
FJUMP:DATA

<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:LINBUS:FJUMP:  
DATA



### 5.3 ANALysis Group

#### **:ANALysis:SBUS<x>[:ANALyze]:LINBus:**

##### **FJUMp:IDENtifier**

Function Executes a field jump to the Identifier Field in the results of the LIN bus signal analysis.

Syntax :ANALysis:SBUS<x>[:ANALyze]:LINBus:  
FJUMp:IDENtifier  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:LINBUS:FJUMP:  
IDENTIFIER

#### **:ANALysis:SBUS<x>[:ANALyze]:LINBus:**

##### **FJUMp:SYNCh**

Function Executes a field jump to the Synch Field in the results of the LIN bus signal analysis.

Syntax :ANALysis:SBUS<x>[:ANALyze]:LINBus:  
FJUMp:SYNCh  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:LINBUS:FJUMP:  
SYNCH

#### **:ANALysis:SBUS<x>[:ANALyze]:LINBus:**

##### **REVision**

Function Sets the LIN bus signal analysis revision (1.3 or 2.0) or queries the current setting.

Syntax :ANALysis:SBUS<x>[:ANALyze]:LINBus:  
REVision {LIN1\_3|LIN2\_0}  
:ANALysis:SBUS<x>[:ANALyze]:LINBus:  
REVision?  
<x>=1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:LINBUS:  
REVISION LIN1\_3  
:ANALYSIS:SBUS1:ANALYZE:LINBUS:  
REVISION? -> :ANALYSIS:SBUS1:ANALYZE:  
LINBUS:REVISION LIN1\_3

#### **:ANALysis:SBUS<x>[:ANALyze]:LINBus:**

##### **SPOint**

Function Sets the LIN bus signal analysis sample point or queries the current setting.

Syntax :ANALysis:SBUS<x>[:ANALyze]:LINBus:  
SPOint {<Nrf>}  
:ANALysis:SBUS<x>[:ANALyze]:LINBus:  
SPOint?  
<x> = 1 or 2  
<Nrf> = 18.8 to 90.6(%)

Example :ANALYSIS:SBUS1:ANALYZE:LINBUS:  
SPOINT 18.8  
:ANALYSIS:SBUS1:ANALYZE:LINBUS:SPOINT?  
-> :ANALYSIS:SBUS1:ANALYZE:LINBUS:  
SPOINT 18.8E+00

#### **:ANALysis:SBUS<x>[:ANALyze]:LINBus:**

##### **TRACe**

Function Sets the LIN bus signal analysis trace or queries the current setting.

Syntax :ANALysis:SBUS<x>[:ANALyze]:LINBus:  
TRACe {<Nrf>}  
:ANALysis:SBUS<x>[:ANALyze]:LINBus:  
TRACe?  
<x>=1 or 2  
<Nrf>=1-8

Example :ANALYSIS:SBUS1:ANALYZE:LINBUS:TRACE 1  
:ANALYSIS:SBUS1:ANALYZE:LINBUS:TRACE?  
-> :ANALYSIS:SBUS1:ANALYZE:LINBUS:  
TRACE 1

#### **:ANALysis:SBUS<x>[:ANALyze]:LIST?**

Function Queries all settings related to the list display of the serial bus signal analysis.

Syntax :ANALysis:SBUS<x>[:ANALyze]:LIST?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:LIST?  
-> :ANALYSIS:SBUS1:ANALYZE:LIST:  
DISPLAY 1;MODE DETAIL;SCROLL HORIZONTAL

#### **:ANALysis:SBUS<x>[:ANALyze]:LIST:**

##### **DISPlay**

Function Turns the serial bus signal analysis list display ON/OFF or queries the current status.

Syntax :ANALysis:SBUS<x>[:ANALyze]:LIST:  
DISPlay {<Boolean>}  
:ANALysis:SBUS<x>[:ANALyze]:LIST:  
DISPlay?  
<x>=1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:LIST:DISPLAY ON  
:ANALYSIS:SBUS1:ANALYZE:LIST:DISPLAY?  
-> :ANALYSIS:SBUS1:ANALYZE:LIST:  
DISPLAY 1

#### **:ANALysis:SBUS<x>[:ANALyze]:LIST:**

##### **ITEM?**

Function Queries the item in the list display of the serial bus signal analysis.

Syntax :ANALysis:SBUS<x>[:ANALyze]:LIST:ITEM?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:LIST:ITEM?  
-> :ANALYSIS:SBUS1:ANALYZE:LIST:  
ITEM " No. , S/P, Hex, Form, R/W, ACK, "

**:ANALYSIS:SBUS<x>[:ANALYZE]:LIST:****MODE**

**Function** Sets the mode of the list display of the serial bus signal analysis or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:LIST:  
MODE {DETAIL|SIMPLE}  
:ANALYSIS:SBUS<x>[:ANALYZE]:LIST:MODE?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:LIST:  
MODE DETAIL  
:ANALYSIS:SBUS1:ANALYZE:LIST:MODE?  
-> :ANALYSIS:SBUS1:ANALYZE:LIST:  
MODE DETAIL

**:ANALYSIS:SBUS<x>[:ANALYZE]:LIST:****SCROLL**

**Function** Sets the scroll method of the list display of the serial bus signal analysis or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:  
LIST:SCROLL {HORIZONTAL|VERTICAL}  
:ANALYSIS:SBUS<x>[:ANALYZE]:  
LIST:SCROLL?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:LIST:  
SCROLL HORIZONTAL  
:ANALYSIS:SBUS1:ANALYZE:LIST:SCROLL?  
-> :ANALYSIS:SBUS1:ANALYZE:LIST:  
SCROLL HORIZONTAL

**ANALYSIS:SBUS<x>[:ANALYZE]:LIST:VALUE?**

**Function** Queries the automated measured value of the specified analysis number in the analysis result list of the serial bus signal analysis.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:LIST:VALUE?  
{<NRf>|MAXIMUM|MINIMUM}  
<x> = 1 or 2  
<NRf> = -40000 to 40000  
(<NRf> = -2999 to 2999 for :ANALYSIS:SBUS<x>  
[:ANALYZE]:MODE CANBUS)

**Example** :ANALYSIS:SBUS1:ANALYZE:LIST:  
VALUE? 1  
-> :ANALYSIS:SBUS1:ANALYZE:LIST:  
VALUE "1, P, 00, A, , 0,"

**Description** Set the data to MAXIMUM or MINIMUM to specify the maximum list display number or the minimum list display number.

**:ANALYSIS:SBUS<x>[:ANALYZE]:MODE**

**Function** Sets the serial bus signal analysis mode or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:  
MODE {CANBUS|FLEXRAY|I2CBUS|LIN|SPIBUS|  
UART}  
:ANALYSIS:SBUS<x>[:ANALYZE]:MODE?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:MODE I2CBUS  
:ANALYSIS:SBUS1:ANALYZE:MODE?  
-> :ANALYSIS:SBUS1:ANALYZE:MODE I2CBUS

**:ANALYSIS:SBUS<x>[:ANALYZE]:RPOINT**

**Function** Sets the analysis reference point of the serial bus signal analysis or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:  
RPOINT {MANUAL,<NRf>|TRIGGER}  
:ANALYSIS:SBUS<x>[:ANALYZE]:RPOINT?  
<x> = 1 or 2  
<NRf> = -5 to 5 (div)

**Example** :ANALYSIS:SBUS1:ANALYZE:RPOINT MANUAL,1  
:ANALYSIS:SBUS1:ANALYZE:RPOINT?  
-> :ANALYSIS:SBUS1:ANALYZE:  
RPOINT MANUAL,1.00000E+00

**:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS?**

**Function** Queries all settings related to the SPI bus signal analysis.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:SPIBUS?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
CLOCK:POLARITY FALL;SOURCE 1;:ANALYSIS:  
SBUS1:ANALYZE:SPIBUS:CS:ACTIVE HIGH;  
TRACE 1;:ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
DATA1:ACTIVE HIGH;TRACE 1;:ANALYSIS:  
SBUS1:ANALYZE:SPIBUS:DATA2:ACTIVE HIGH;  
TRACE 1;:ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
SETUP:BITORDER LSBFIRST;MODE WIRE3

**:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:****CLOCK?**

**Function** Queries all settings related to the clock channel of the SPI bus signal analysis.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
CLOCK?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:SPIBUS:CLOCK?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
CLOCK:POLARITY FALL;SOURCE 1

### 5.3 ANALYSIS Group

#### **:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:**

##### **CLOCK:POLARITY**

**Function** Sets the polarity of the clock channel of the SPI bus signal analysis or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
CLOCK:POLARITY {FALL|RISE}  
:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
CLOCK:POLARITY?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
CLOCK:POLARITY FALL  
:ANALYSIS:SBUS1:ANALYZE:SPIBUS:CLOCK:  
POLARITY?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
CLOCK:POLARITY FALL

#### **:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:**

##### **CLOCK:SOURCE**

**Function** Sets the clock channel of the SPI bus signal analysis or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
CLOCK:SOURCE {<Nrf>}  
:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
CLOCK:SOURCE?  
<x> = 1 or 2  
<Nrf> = 1 to 8

**Example** :ANALYSIS:SBUS1:ANALYZE:SPIBUS:CLOCK:  
SOURCE 1  
:ANALYSIS:SBUS1:ANALYZE:SPIBUS:CLOCK:  
SOURCE?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
CLOCK:SOURCE 1

#### **:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:**

##### **CS?**

**Function** Queries all settings related to the chip select channel of the SPI bus signal analysis.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:CS?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:SPIBUS:CS?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:CS:  
ACTIVE HIGH;TRACE 1

#### **:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:**

##### **CS:ACTIVE**

**Function** Sets the active level of the chip select channel of the SPI bus signal analysis or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:CS:  
ACTIVE {HIGH|LOW}  
:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:CS:  
ACTIVE?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:SPIBUS:CS:  
ACTIVE HIGH  
:ANALYSIS:SBUS1:ANALYZE:  
SPIBUS:CS:ACTIVE?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:CS:  
ACTIVE HIGH

#### **:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:**

##### **CS:TRACE**

**Function** Sets the chip select channel of the SPI bus signal analysis or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
CS:TRACE {<Nrf>}  
:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
CS:TRACE?  
<x> = 1 or 2  
<Nrf> = 1 to 8

**Example** :ANALYSIS:SBUS1:ANALYZE:SPIBUS:CS:  
TRACE 1  
:ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
CS:TRACE?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:CS:  
TRACE 1

#### **:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:**

##### **DATA<x>?**

**Function** Queries all settings related to the data of the SPI bus signal analysis.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
DATA<x>?  
<x> of SBUS<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
DATA1?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
DATA1:ACTIVE HIGH;TRACE 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:****DATA<x>:ACTIVE**

Function Sets the active level of the data of the SPI bus signal analysis or queries the current setting.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
DATA<x>:ACTIVE {HIGH|LOW}  
:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
DATA<x>:ACTIVE?  
<x> of SBUS<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:SPIBUS:DATA1:  
ACTIVE HIGH  
:ANALYSIS:SBUS1:ANALYZE:SPIBUS:DATA1:  
ACTIVE?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
DATA1:ACTIVE HIGH

**:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:****DATA<x>:TRACE**

Function Sets the data channel of the SPI bus signal analysis or queries the current setting.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
DATA<x>:TRACE {<NRF>}  
:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
DATA<x>:TRACE?  
<x> of SBUS<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<NRF> = 1 to 8

Example :ANALYSIS:SBUS1:ANALYZE:SPIBUS:DATA1:  
TRACE 1  
:ANALYSIS:SBUS1:ANALYZE:SPIBUS:DATA1:  
TRACE?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
DATA1:TRACE 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:****SETUP?**

Function Queries all settings related to the SPI bus signal analysis setup.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:SPIBUS:  
SETUP?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:SPIBUS:SETUP?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
SETUP:BITORDER LSBFIRST;MODE WIRE3

**:ANALYSIS:SBUS<x>[:ANALYZE]:****SPIBUS[:SETUP]:BITORDER**

Function Sets the bit order of the SPI bus signal analysis or queries the current setting.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:  
SPIBUS[:SETUP]:  
BITORDER {LSBFirst|MSBFirst}  
:ANALYSIS:SBUS<x>[:ANALYZE]:  
SPIBUS[:SETUP]:BITORDER?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:SPIBUS:SETUP:  
BITORDER LSBFIRST  
:ANALYSIS:SBUS1:ANALYZE:SPIBUS:SETUP:  
BITORDER?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
SETUP:BITORDER LSBFIRST

**:ANALYSIS:SBUS<x>[:ANALYZE]:****SPIBUS[:SETUP]:MODE**

Function Sets the wiring system of the SPI bus signal analysis (three-wire or four-wire) or queries the current setting.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:  
SPIBUS[:SETUP]:MODE {WIRE3|WIRE4}  
:ANALYSIS:SBUS<x>[:ANALYZE]:  
SPIBUS[:SETUP]:MODE?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
SETUP:MODE WIRE3  
:ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
SETUP:MODE?  
-> :ANALYSIS:SBUS1:ANALYZE:SPIBUS:  
SETUP:MODE WIRE3

**:ANALYSIS:SBUS<x>[:ANALYZE]:****TRACE<x>?**

Function Queries all settings related to the threshold level of the source channel of the serial bus signal analysis.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:TRACE<x>?  
<x> of SBUS<x> = 1 or 2  
<x> of TRACE<x> = 1 to 8

Example :ANALYSIS:SBUS1:ANALYZE:TRACE1?  
-> :ANALYSIS:SBUS1:ANALYZE:TRACE1:  
HYSTERESIS 1.000E+00;LEVEL 1.000E+00

### 5.3 ANALysis Group

#### **:ANALysis:SBUS<x>[:ANALyze]:**

##### **TRACe<x>:HYSTeresis**

**Function** Sets the hysteresis of the threshold level of the source channel of the serial bus signal analysis or queries the current setting.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:TRACe<x>:  
HYSTeresis {<Nrf>}  
:ANALysis:SBUS<x>[:ANALyze]:TRACe<x>:  
HYSTeresis?  
<x> of SBUS<x> = 1 or 2  
<x> of TRACe<x> = 1 to 8  
<Nrf> = 0 to 4 (div)

**Example** :ANALYSIS:SBUS1:ANALYZE:TRACE1:  
HYSTERESIS 1  
:ANALYSIS:SBUS1:ANALYZE:TRACE1:  
HYSTERESIS?  
-> :ANALYSIS:SBUS1:ANALYZE:TRACE1:  
HYSTERESIS 1.000E+00

#### **:ANALysis:SBUS<x>[:ANALyze]:**

##### **TRACe<x>:LEVel**

**Function** Sets the level of the threshold level of the source channel of the serial bus signal analysis or queries the current setting.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:TRACe<x>:  
LEVel {<Nrf>|<Voltage>|<current>}  
:ANALysis:SBUS<x>[:ANALyze]:TRACe<x>:  
LEVel?  
<x> of SBUS<x> = 1 or 2  
<x> of TRACe<x> = 1 to 8  
<Nrf>, <Voltage>, and <Current> = See the User's  
Manual (IM701361-01E).

**Example** :ANALYSIS:SBUS1:ANALYZE:TRACE1:  
LEVEL 1V  
:ANALYSIS:SBUS1:ANALYZE:TRACE1:LEVEL?  
-> :ANALYSIS:SBUS1:ANALYZE:TRACE1:  
LEVEL 1.000E+00

#### **:ANALysis:SBUS<x>[:ANALyze]:TREND?**

**Function** Queries all settings related to the CAN bus signal analysis trend display.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:TREND?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:TREND? ->  
:ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR:  
C1:POSITION 1.0000000E+00;:ANALYSIS:  
SBUS1:ANALYZE:TREND:CURSOR:C2:  
POSITION 5.0000000E+00;:ANALYSIS:SBUS1:  
ANALYZE:TREND:CURSOR:DISPLAY 1;;  
ANALYSIS:SBUS1:ANALYZE:TREND:  
DISPLAY 1;SCALE:CENTER 1.0000000E+00;  
MODE AUTO;SENSITIVITY 1.0000000E+00

#### **:ANALysis:SBUS<x>[:ANALyze]:TREND:**

##### **CURSor?**

**Function** Queries all settings related to cursor measurement in the CAN bus signal analysis trend display.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:TREND:  
CURSor?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR?  
-> :ANALYSIS:SBUS1:ANALYZE:TREND:  
CURSOR:C1:POSITION 1.0000000E+00;;  
ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR:C2:  
POSITION 5.0000000E+00;:ANALYSIS:SBUS1:  
ANALYZE:TREND:CURSOR:DISPLAY 1

#### **:ANALysis:SBUS<x>[:ANALyze]:TREND:**

##### **CURSor:C<x>?**

**Function** Queries all settings related to each cursor measurement of the CAN bus signal analysis trend.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:TREND:  
CURSor:C<x>?  
<x> of SBUS<x> = 1 or 2  
<x> of C<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR:  
C1? -> :ANALYSIS:SBUS1:ANALYZE:TREND:  
CURSOR:C1:POSITION 1.0000000E+00

#### **:ANALysis:SBUS<x>[:ANALyze]:TREND:**

##### **CURSor:C<x>:POSition**

**Function** Sets each cursor position on the CAN bus signal analysis trend or queries the current setting.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:TREND:  
CURSor:C<x>:POSition {<Nrf>}  
:ANALysis:SBUS<x>[:ANALyze]:TREND:  
CURSor:C<x>:POSition?  
<x> of SBUS<x> = 1 or 2  
<x> of C<x> = 1 or 2  
<Nrf> = -5 to 5(div)

**Example** :ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR:  
C1:POSITION 1  
:ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR:  
C1:POSITION? -> :ANALYSIS:SBUS1:  
ANALYZE:TREND:CURSOR:C1:  
POSITION 1.0000000E+00

**:ANALYSIS:SBUS<x>[:ANALYZE]:TREND:****CURSOr:C<x>:VALue?**

Function Queries the measured value of each cursor on the CAN bus signal analysis trend.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:TREND:  
CURSOR:C<x>:VALue?  
<x> of SBUS<x> = 1 or 2  
<x> of C<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR:  
C1:VALue? -> :ANALYSIS:SBUS1:ANALYZE:  
TREND:CURSOR:C1:VALue 1.000E+00

**:ANALYSIS:SBUS<x>[:ANALYZE]:TREND:****CURSOr:DC:VALue?**

Function Queries the measured value between cursors on the CAN bus signal analysis trend.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:TREND:  
CURSOR:DC:VALue?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR:  
DC:VALue? -> :ANALYSIS:SBUS1:ANALYZE:  
TREND:CURSOR:DC:VALue 1.000E+00

**:ANALYSIS:SBUS<x>[:ANALYZE]:TREND:****CURSOr:DISPlay**

Function Turns ON/OFF each cursor on the CAN bus signal analysis trend or queries the current setting.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:TREND:  
CURSOR:DISPlay {<Boolean>}  
:ANALYSIS:SBUS<x>[:ANALYZE]:TREND:  
CURSOR:DISPlay?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR:  
DISPlay ON  
:ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR:  
DISPlay? -> :ANALYSIS:SBUS1:ANALYZE:  
TREND:CURSOR:DISPlay 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:TREND:****CURSOr:DT:VALue?**

Function Queries the  $\Delta T$  value of the cursor on the CAN bus signal analysis trend.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:TREND:  
CURSOR:DT:VALue?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR:  
DT:VALue? -> :ANALYSIS:SBUS1:ANALYZE:  
TREND:CURSOR:DT:VALue 1.000E+00

Description SBUS1 is linked to the Main vertical cursor.

**:ANALYSIS:SBUS<x>[:ANALYZE]:TREND:****CURSOr:PERDt:VALue?**

Function Queries the  $1/\Delta T$  value of the cursor on the CAN bus signal analysis trend.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:TREND:  
CURSOR:PERDt:VALue?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR:  
PERDt:VALue? -> :ANALYSIS:SBUS1:  
ANALYZE:TREND:CURSOR:PERDt:  
VALue 1.000E+00

Description SBUS1 is linked to the Main vertical cursor.

**:ANALYSIS:SBUS<x>[:ANALYZE]:TREND:****CURSOr:T<x>:VALue?**

Function Queries the time value of the cursor on the CAN bus signal analysis trend.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:TREND:  
CURSOR:T<x>:VALue?  
<x> of SBUS<x> = 1 or 2  
<x> of T<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:TREND:CURSOR:  
T1:VALue? -> :ANALYSIS:SBUS1:ANALYZE:  
TREND:CURSOR:T1:VALue 1.000E+00

Description SBUS1 is linked to the Main vertical cursor.

**:ANALYSIS:SBUS<x>[:ANALYZE]:TREND:****DISPlay**

Function Turns ON/OFF the CAN bus signal analysis trend display or queries the current setting.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:TREND:  
DISPlay {<Boolean>}  
:ANALYSIS:SBUS<x>[:ANALYZE]:TREND:  
DISPlay?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:TREND:  
DISPlay ON  
:ANALYSIS:SBUS1:ANALYZE:TREND:DISPlay?  
-> :ANALYSIS:SBUS1:ANALYZE:TREND:  
DISPlay 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:TREND:****SCALE?**

Function Queries all settings related to the scaling of the CAN bus signal analysis trend display.

Syntax :ANALYSIS:SBUS<x>[:ANALYZE]:TREND:  
SCALE?  
<x> = 1 or 2

Example :ANALYSIS:SBUS1:ANALYZE:TREND:  
SCALE? -> :ANALYSIS:SBUS1:ANALYZE:  
TREND:SCALE:CENTER 1.0000000E+00;  
MODE AUTO;SENSITIVITY 1.0000000E+00

### 5.3 ANALysis Group

#### **:ANALysis:SBUS<x>[:ANALyze]:TREND:**

##### **SCALE:CENTer**

**Function** Sets the offset of the CAN bus signal analysis trend display or queries the current setting.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:TREND:  
SCALE:CENTer {<NRf>|<Voltage>|  
<Current>}  
:ANALysis:SBUS<x>[:ANALyze]:TREND:  
SCALE:CENTer?  
<x> = 1 or 2  
<NRf>, <Voltage>, and <Current> = See the SB5000  
Use's Manual

**Example** :ANALYSIS:SBUS1:ANALYZE:TREND:SCALE:  
CENTER 1  
:ANALYSIS:SBUS1:ANALYZE:TREND:SCALE:  
CENTER? -> :ANALYSIS:SBUS1:ANALYZE:  
TREND:SCALE:CENTER 1.000E+00

#### **:ANALysis:SBUS<x>[:ANALyze]:TREND:**

##### **SCALE:MODE**

**Function** Sets the scaling method of the CAN bus signal analysis trend display or queries the current setting.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:TREND:  
SCALE:MODE {AUTO|MANual}  
:ANALysis:SBUS<x>[:ANALyze]:TREND:  
SCALE:MODE?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:TREND:SCALE:  
MODE AUTO  
:ANALYSIS:SBUS1:ANALYZE:TREND:SCALE:  
MODE? -> :ANALYSIS:SBUS1:ANALYZE:TREND:  
SCALE:MODE AUTO

#### **:ANALysis:SBUS<x>[:ANALyze]:TREND:**

##### **SCALE:SENSitivity**

**Function** Sets the vertical axis sensitivity of the CAN bus signal analysis trend display or queries the current setting.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:TREND:  
SCALE:SENSitivity {<NRf>|<Voltage>|  
<Current>}  
:ANALysis:SBUS<x>[:ANALyze]:TREND:  
SCALE:SENSitivity?  
<x> = 1 or 2  
<NRf>, <Voltage>, and <Current> = See the SB5000  
Use's Manual

**Example** :ANALYSIS:SBUS1:ANALYZE:TREND:SCALE:  
SENSITIVITY 1  
:ANALYSIS:SBUS1:ANALYZE:TREND:SCALE:  
SENSITIVITY? -> :ANALYSIS:SBUS1:  
ANALYZE:TREND:SCALE:  
SENSITIVITY 1.000E+00

#### **:ANALysis:SBUS<x>[:ANALyze]:UART?**

**Function** Queries all settings related to the UART bus signal analysis.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:UART?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:UART?  
-> :ANALYSIS:SBUS1:ANALYZE:UART:  
BITORDER LSBFIRST;BRATE 19200;F  
ORMAT BIT7PARITY;PMODE EVEN;P  
OLARITY NEGATIVE;SPOINT 18.8E+00;  
TRACE 1

#### **:ANALysis:SBUS<x>[:ANALyze]:UART:**

##### **BITorder**

**Function** Sets the UART bus signal analysis bit order or queries the current setting.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:UART:  
BITorder {LSBFirst|MSBFirst}  
:ANALysis:SBUS<x>[:ANALyze]:UART:  
BITorder?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:UART:  
BITORDER LSBFIRST  
:ANALYSIS:SBUS1:ANALYZE:UART:BITORDER?  
-> :ANALYSIS:SBUS1:ANALYZE:UART:  
BITORDER LSBFIRST

#### **:ANALysis:SBUS<x>[:ANALyze]:UART:BRATe**

**Function** Sets the UART bus signal analysis bit rate (data transfer rate) or queries the current setting.

**Syntax** :ANALysis:SBUS<x>[:ANALyze]:UART:  
BRATe {<NRf>|USER,<NRf>}  
:ANALysis:SBUS<x>[:ANALyze]:UART:BRATe?  
<x> = 1 or 2  
<NRf> = 1200, 2400, 4800, 9600, 19200, 38400,  
57600, or 115200  
<NRf> of USER = See the SB5000 Use's Manual

**Example** :ANALYSIS:SBUS1:ANALYZE:UART:  
BRATE 19200  
:ANALYSIS:SBUS1:ANALYZE:UART:BRATE?  
-> :ANALYSIS:SBUS1:ANALYZE:UART:  
BRATE 19200

**:ANALYSIS:SBUS<x>[:ANALYZE]:UART:****FORMat**

**Function** Sets the UART bus signal analysis data format or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:UART:  
FORMat {BIT7parity|BIT8Noparity|  
BIT8Parity}  
:ANALYSIS:SBUS<x>[:ANALYZE]:UART:  
FORMat?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:UART:  
FORMAT BIT7PARITY  
:ANALYSIS:SBUS1:ANALYZE:UART:FORMAT?  
-> :ANALYSIS:SBUS1:ANALYZE:UART:  
FORMAT BIT7PARITY

**:ANALYSIS:SBUS<x>[:ANALYZE]:UART:PMODE**

**Function** Sets the UART bus signal analysis parity mode or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:UART:  
PMODE {EVEN|ODD}  
:ANALYSIS:SBUS<x>[:ANALYZE]:UART:PMODE?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:UART:PMODE EVEN  
:ANALYSIS:SBUS1:ANALYZE:UART:PMODE? ->  
:ANALYSIS:SBUS1:ANALYZE:UART:PMODE EVEN

**:ANALYSIS:SBUS<x>[:ANALYZE]:UART:****POLarity**

**Function** Sets the UART bus signal analysis polarity or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:UART:  
POLarity {NEGative|POSitive}  
:ANALYSIS:SBUS<x>[:ANALYZE]:UART:  
POLarity?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:UART:  
POLARITY NEGATIVE  
:ANALYSIS:SBUS1:ANALYZE:UART:POLARITY?  
-> :ANALYSIS:SBUS1:ANALYZE:UART:  
POLARITY NEGATIVE

**:ANALYSIS:SBUS<x>[:ANALYZE]:UART:****SPOINT**

**Function** Sets the UART bus signal analysis sample point or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:UART:  
SPOINT {<Nrf>}  
:ANALYSIS:SBUS<x>[:ANALYZE]:UART:  
SPOINT?  
<x> = 1 or 2  
<Nrf> = 18.8 to 90.6(%)

**Example** :ANALYSIS:SBUS1:ANALYZE:UART:  
SPOINT 18.8  
:ANALYSIS:SBUS1:ANALYZE:UART:SPOINT?  
-> :ANALYSIS:SBUS1:ANALYZE:UART:  
SPOINT 18.8E+00

**:ANALYSIS:SBUS<x>[:ANALYZE]:UART:TRACe**

**Function** Sets the UART bus signal analysis trace or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:UART:  
TRACe {<Nrf>}  
:ANALYSIS:SBUS<x>[:ANALYZE]:UART:TRACe?  
<x> = 1 or 2  
<Nrf> = 1 to 8

**Example** :ANALYSIS:SBUS1:ANALYZE:UART:TRACE 1  
:ANALYSIS:SBUS1:ANALYZE:UART:TRACE? ->  
:ANALYSIS:SBUS1:ANALYZE:UART:TRACE 1

**:ANALYSIS:SBUS<x>[:ANALYZE]:WTYPE**

**Function** Sets the serial bus signal analysis window type or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>[:ANALYZE]:  
WTYPE {LIST|TREND}  
:ANALYSIS:SBUS<x>[:ANALYZE]:WTYPE?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ANALYZE:WTYPE LIST  
:ANALYSIS:SBUS1:ANALYZE:WTYPE? ->  
:ANALYSIS:SBUS1:ANALYZE:WTYPE LIST

**:ANALYSIS:SBUS<x>:ZLINKage**

**Function** Sets the zoom link of the serial bus signal analysis or queries the current setting.

**Syntax** :ANALYSIS:SBUS<x>:ZLINKage {OFF|Z1|Z2}  
:ANALYSIS:SBUS<x>:ZLINKage?  
<x> = 1 or 2

**Example** :ANALYSIS:SBUS1:ZLINKAGE OFF  
:ANALYSIS:SBUS1:ZLINKAGE?  
-> :ANALYSIS:SBUS1:ZLINKAGE OFF

**:ANALYSIS:TYPE<x>**

**Function** Sets the analysis function type or queries the current setting.

**Syntax** :ANALYSIS:TYPE<x> {AHISTogram|FFT|  
LSBUS|SBUS|WPARAMeter|XY}  
:ANALYSIS:TYPE<x>?  
<x> = 1 or 2

**Example** :ANALYSIS:TYPE1 AHISTOGRAM  
:ANALYSIS:TYPE1?  
-> :ANALYSIS:TYPE1 AHISTOGRAM



### 5.3 ANALYSIS Group

#### **:ANALysis:VTDisplay**

**Function** Turns ON/OFF the VT waveform display or queries the current setting.

**Syntax** :ANALysis:VTDisplay {<Boolean>  
:ANALysis:VTDisplay?

**Example** :ANALYSIS:VTDISPLAY ON  
:ANALYSIS:VTDISPLAY? -> :ANALYSIS:  
VTDISPLAY 1

#### **:ANALysis:WAIT<x>?**

**Function** Waits for the completion of the automated measurement with a timeout option.

**Syntax** ANALysis:WAIT<x>? {<Nrf>}  
<x> = 1 or 2  
<Nrf> = 1 to 360000 (timeout value, in units of 10 ms)

**Example** ANALYSIS:WAIT1? 100 ->:ANALYSIS:WAIT1 1

**Description** If the execution of the automated measurement completes within the timeout value, 0 is returned; if it is not complete or automated measurement is not being executed, 1 is returned. Even if the timeout value is set long, 0 is returned when the execution of the automated measurement is complete.

#### **:ANALysis:WPARAMeter<x>?**

**Function** Queries all settings related to the waveform parameter measurement function.

**Syntax** :ANALysis:WPARAMeter<x>?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1? -> :ANALYSIS:  
WPARAMETER1:FLEXRAY:BUS:TYPE BSS;;  
ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:MODE OFF;CURSOR:C1:  
POSITION -4.0000000E+00;STATE 1;;  
ANALYSIS:WPARAMETER1:HISTOGRAM:MEASURE:  
CURSOR:C2:POSITION 4.0000000E+00;  
STATE 1;;ANALYSIS:WPARAMETER1:  
HISTOGRAM:MEASURE:CURSOR:DC:STATE 1;;  
ANALYSIS:WPARAMETER1:HISTOGRAM:MEASURE:  
CURSOR:LINKAGE 0;;ANALYSIS:WPARAMETER1:  
HISTOGRAM:MEASURE:PARAMETER:MEAN:  
TATE 0;;ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:PEAK:STATE 0;;  
ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:SD3INTEG:STATE 0;;  
ANALYSIS:WPARAMETER1:HISTOGRAM:MEASURE:  
PARAMETER:SDEVIATION:STATE 0.....

#### **:ANALysis:WPARAMeter<x>:BIT<x>?**

**Function** Queries all settings related to each logic bit of logic waveform parameter measurement.

**Syntax** : ANALysis:WPARAMeter<x>:BIT<x>?  
<x> of WPARAMeter<x> = 1 or 2  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> =  
1 to 8 is valid.)

**Example** : ANALYSIS:WPARAMETER1:BIT1?  
->: ANALYSIS:WPARAMETER1:BIT1:AREA1:  
TYPE COUNT

#### **:ANALysis:WPARAMeter<x>:BIT<x>: AREA<x>?**

**Function** Queries all settings related to each area of logic waveform parameter measurement.

**Syntax** : ANALysis:WPARAMeter<x>:BIT<x>:  
AREA<x>?  
<x> of WPARAMeter<x> = 1 or 2  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> =  
1 to 8 is valid.).  
<x> of AREA<x> = 1 or 2

**Example** : ANALYSIS:WPARAMETER1:BIT1:AREA1?  
->: ANALYSIS:WPARAMETER1:BIT1:AREA1:  
TYPE COUNT

#### **:ANALysis:WPARAMeter<x>:BIT<x>:**

##### **AREA<x>:TYPE**

**Function** Sets the logic waveform parameters for logic waveform parameter measurement or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:BIT<x>:AREA<x>:  
TYPE {COUNT|DElay|DT|DUTYcycle|  
FREQuency|NWIDth|PERFrequency|PERiod|  
PWIDth}  
:ANALysis:WPARAMeter<x>:BIT<x>:AREA<x>:  
TYPE?  
<x> of WPARAMeter<x> = 1 or 2  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> =  
1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:BIT1:AREA1:  
TYPE COUNT  
:ANALYSIS:WPARAMETER1:BIT1:AREA1:TYPE?  
->: ANALYSIS:WPARAMETER1:BIT1:AREA1:  
TYPE COUNT

**:ANALysis:WPARAMeter<x>:CALCulation**

**Function** Sets the calculation items of the automated measurement of waveform parameters or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:CALCulation  
{<NRF>}  
:ANALysis:WPARAMeter<x>:CALCulation?  
<x> = 1 or 2  
<NRF> = 1 to 4

**Example** :ANALYSIS:WPARAMETER1:CALCULATION 1  
:ANALYSIS:WPARAMETER1:CALCULATION?  
-> :ANALYSIS:WPARAMETER1:CALCULATION 1

**:ANALysis:WPARAMeter<x>:FLEXray?**

**Function** Queries all settings related to the FLEXRAY bus for waveform parameter measurement.

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY? ->  
:ANALYSIS:WPARAMETER1:FLEXRAY:BUS:  
TYPE BSS

**:ANALysis:WPARAMeter<x>:FLEXray:BUS?**

**Function** Queries all settings related to bus waveforms of the FLEXRAY bus for waveform parameter measurement.

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray:BUS?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY:BUS? ->  
:ANALYSIS:WPARAMETER1:FLEXRAY:BUS:  
TYPE BSS

**:ANALysis:WPARAMeter<x>:FLEXray:BUS:TYPE**

**Function** Sets the bus waveform parameters for waveform parameter measurement or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray:BUS:  
TYPE {BSS|BSSFES|FBSS}  
:ANALysis:WPARAMeter<x>:FLEXray:BUS:  
TYPE?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY:BUS:  
TYPE BSS  
:ANALYSIS:WPARAMETER1:FLEXRAY:BUS:TYPE?  
-> :ANALYSIS:WPARAMETER1:FLEXRAY:BUS:  
TYPE BSS

**:ANALysis:WPARAMeter<x>:FLEXray:RECeiver?**

**Function** Queries all settings related to the receiver waveform of the FLEXRAY bus for waveform parameter measurement.

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray:  
RECeiver?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY:RECEIVER?  
-> :ANALYSIS:WPARAMETER1:FLEXRAY:  
RECEIVER:RXD:TYPE DBDRX01

**:ANALysis:WPARAMeter<x>:FLEXray:RECeiver:RXD?**

**Function** Queries all settings related to the receiver data waveforms of the FLEXRAY bus for waveform parameter measurement.

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray:  
RECeiver:RXD?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY:RECEIVER:  
RXD? -> :ANALYSIS:WPARAMETER1:FLEXRAY:  
RECEIVER:RXD:TYPE DBDRX01

**:ANALysis:WPARAMeter<x>:FLEXray:RECeiver:RXD:TYPE**

**Function** Sets the receiver data waveform parameters for waveform parameter measurement or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray:  
RECeiver:RXD:TYPE {DBDRX01|DBDRX10|  
DRXASYM}  
:ANALysis:WPARAMeter<x>:FLEXray:  
RECeiver:RXD:TYPE?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY:RECEIVER:  
RXD:TYPE DBDRX01  
:ANALYSIS:WPARAMETER1:FLEXRAY:RECEIVER:  
RXD:TYPE? -> :ANALYSIS:WPARAMETER1:  
FLEXRAY:RECEIVER:RXD:TYPE DBDRX01

**:ANALysis:WPARAMeter<x>:FLEXray:RECeiver:RXEN?**

**Function** Queries all settings related to the receiver enable waveform of the FLEXRAY bus for waveform parameter measurement.

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray:  
RECeiver:RXEN?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY:RECEIVER:  
RXEN? -> :ANALYSIS:WPARAMETER1:FLEXRAY:  
RECEIVER:RXEN:TYPE DBDRXAI

### 5.3 ANALysis Group

#### **:ANALysis:WPARAMeter<x>:FLEXray:**

##### **RECEiver:RXEN:TYPE**

**Function** Sets the receiver enable waveform parameters for waveform parameter measurement or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray:  
RECEiver:RXEN:TYPE {DBDRXAI|DBDRXIA}  
:ANALysis:WPARAMeter<x>:FLEXray:  
RECEiver:RXEN:TYPE?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY:RECEIVER:  
RXEN:TYPE DBDRXAI  
:ANALYSIS:WPARAMETER1:FLEXRAY:RECEIVER:  
RXEN:TYPE? -> :ANALYSIS:WPARAMETER1:  
FLEXRAY:RECEIVER:RXEN:TYPE DBDRXAI

#### **:ANALysis:WPARAMeter<x>:FLEXray:**

##### **TRANsmitter?**

**Function** Queries all settings related to the transmitter waveform of the FLEXRAY bus for waveform parameter measurement.

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray:  
TRANsmitter?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY:  
TRANSMITTER? -> :ANALYSIS:WPARAMETER1:  
FLEXRAY:TRANSMITTER:TXD:TYPE DBDTX01

#### **:ANALysis:WPARAMeter<x>:FLEXray:**

##### **TRANsmitter:TXD?**

**Function** Queries all settings related to the transmitter data waveforms of the FLEXRAY bus for waveform parameter measurement.

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray:  
TRANsmitter:TXD?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY:  
TRANSMITTER:TXD? -> :ANALYSIS:  
WPARAMETER1:FLEXRAY:TRANSMITTER:TXD:  
TYPE DBDTX01

#### **:ANALysis:WPARAMeter<x>:FLEXray:**

##### **TRANsmitter:TXD:TYPE**

**Function** Sets the transmitter data waveform parameters for waveform parameter measurement or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray:  
TRANsmitter:TXD:TYPE {DBDTX01|DBDTX10|  
DBUSTX01|DBUSTX10|DTXASYM|UBDTX}  
:ANALysis:WPARAMeter<x>:FLEXray:  
TRANsmitter:TXD:TYPE?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY:  
TRANSMITTER:TXD:TYPE DBDTX01  
:ANALYSIS:WPARAMETER1:FLEXRAY:  
TRANSMITTER:TXD:TYPE? -> :ANALYSIS:  
WPARAMETER1:FLEXRAY:TRANSMITTER:TXD:  
TYPE DBDTX01

#### **:ANALysis:WPARAMeter<x>:FLEXray:**

##### **TRANsmitter:TXEN?**

**Function** Queries all settings related to the transmitter enable waveform of the FLEXRAY bus for waveform parameter measurement.

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray:  
TRANsmitter:TXEN?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY:  
TRANSMITTER:TXEN? -> :ANALYSIS:  
WPARAMETER1:FLEXRAY:TRANSMITTER:TXEN:  
TYPE DBDTXAI

#### **:ANALysis:WPARAMeter<x>:FLEXray:**

##### **TRANsmitter:TXEN:TYPE**

**Function** Sets the transmitter enable waveform parameters for waveform parameter measurement or queries the current setting

**Syntax** :ANALysis:WPARAMeter<x>:FLEXray:  
TRANsmitter:TXEN:TYPE {DBDTXAI|DBDTXIA|  
DBUSTXAI|DBUSTXIA}  
:ANALysis:WPARAMeter<x>:FLEXray:  
TRANsmitter:TXEN:TYPE?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:FLEXRAY:  
TRANSMITTER:TXEN:TYPE DBDTXAI  
:ANALYSIS:WPARAMETER1:FLEXRAY:  
TRANSMITTER:TXEN:TYPE? -> :ANALYSIS:  
WPARAMETER1:FLEXRAY:TRANSMITTER:TXEN:  
TYPE DBDTXAI

**:ANALYSIS:WPARAMETER<x>:HISTOGRAM?**

**Function** Queries all settings related to the histogram display of the waveform parameter measurement.

**Syntax** :ANALYSIS:WPARAMETER<x>:HISTOGRAM?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:HISTOGRAM?  
-> :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:MODE CURSOR;CURSOR:C1:  
POSITION 1.000E+00;STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:C2:  
POSITION 2.000E+00;STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:DC:STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:LINKAGE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:MEAN:STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:PEAK:STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:SD3INTEG:STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:SDEVIATION:STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:SDINTEG:STATE 1

**:ANALYSIS:WPARAMETER<x>:HISTOGRAM:****MEASURE?**

**Function** Queries all settings related to the automated measurement of the histogram display of the waveform parameter measurement.

**Syntax** :ANALYSIS:WPARAMETER<x>:HISTOGRAM:  
MEASURE?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE? -> :ANALYSIS:WPARAMETER1:  
HISTOGRAM:  
MEASURE:MODE CURSOR;CURSOR:C1:  
POSITION 1.000E+00;STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:C2:POSITION 2.000E+00;  
STATE 1;;ANALYSIS:WPARAMETER1:  
HISTOGRAM:MEASURE:CURSOR:DC:STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:LINKAGE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:MEAN:STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:PEAK:STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:SD3INTEG:STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:SDEVIATION:STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:SDINTEG:STATE 1

**:ANALYSIS:WPARAMETER<x>:HISTOGRAM:****MEASURE:CURSOR?**

**Function** Queries all settings related to the cursor measurement on the histogram of the waveform parameter measurement.

**Syntax** :ANALYSIS:WPARAMETER<x>:HISTOGRAM:  
MEASURE:CURSOR?  
<x> = 1, 2

**Example** :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR? -> :ANALYSIS:  
WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:C1:POSITION 1.000E+00;  
STATE 1;;ANALYSIS:WPARAMETER1:  
HISTOGRAM:MEASURE:CURSOR:C2:  
POSITION 2.000E+00;STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:DC:STATE 1;  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:LINKAGE 1

### 5.3 ANALysis Group

#### **:ANALysis:WPARAmeter<x>:HISTogram:**

##### **MEASure:CURSor:ALL**

Function Turns ON/OFF all histogram cursors of waveform parameter measurement.

Syntax :ANALysis:WPARAmeter<x>:HISTogram:  
MEASure:CURSor:ALL {<Boolean>}  
<x> = 1, 2

Example :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:ALL ON

#### **:ANALysis:WPARAmeter<x>:HISTogram:**

##### **MEASure:CURSor:C<x>?**

Function Queries all settings related to the cursor measurement on the histogram of the waveform parameter measurement.

Syntax :ANALysis:WPARAmeter<x>:HISTogram:  
MEASure:CURSor:C<x>?  
<x> of WPARAmeter<x> = 1, 2  
<x> of C<x> = 1, 2

Example :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:C1? -> :ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:CURSOR:  
C1:POSITION 1.000E+00;STATE 1

#### **:ANALysis:WPARAmeter<x>:HISTogram:**

##### **MEASure:CURSor:C<x>:POSition**

Function Sets the cursor position on the trend of the waveform parameter measurement or queries the current setting.

Syntax :ANALysis:WPARAmeter<x>:HISTogram:  
MEASure:PARAmeter:C<x>:POSition {<NRf>}  
:ANALysis:WPARAmeter<x>:HISTogram:  
MEASure:PARAmeter:C<x>:POSition?  
<x> of WPARAmeter<x> = 1, 2  
<x> of C<x> = 1, 2  
<NRf> = -5 to 5 (div)

Example :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:C1:POSITION ON  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:C1:POSITION?  
-> :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:C1:POSITION 1.000E+00

#### **:ANALysis:WPARAmeter<x>:HISTogram:**

##### **MEASure:CURSor:C<x>:STATe**

Function Turns ON/OFF the cursor on the histogram of the waveform parameter measurement or queries the current setting.

Syntax :ANALysis:WPARAmeter<x>:HISTogram:  
MEASure:PARAmeter:C<x>:  
STATe {<Boolean>}  
:ANALysis:WPARAmeter<x>:HISTogram:  
MEASure:PARAmeter:C<x>:STATe?  
<x> of WPARAmeter<x> = 1, 2  
<x> of C<x> = 1, 2

Example :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:C1:STATE ON  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:C1:STATE? -> :ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:CURSOR:  
C1:STATE 1

#### **:ANALysis:WPARAmeter<x>:HISTogram:**

##### **MEASure:CURSor:C<x>:VALue?**

Function Queries the measured value of the cursor on the histogram of the waveform parameter measurement.

Syntax :ANALysis:WPARAmeter<x>:HISTogram:  
MEASure:CURSor:C<x>:VALue?  
<x> of WPARAmeter<x> = 1, 2  
<x> of C<x> = 1, 2

Example :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:C1:VALUE? -> :ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:CURSOR:  
C1:VALUE 1.000E+00

#### **:ANALysis:WPARAmeter<x>:HISTogram:**

##### **MEASure:CURSor:DC?**

Function Queries all settings related to the measurement between cursors on the histogram of the waveform parameter measurement.

Syntax :ANALysis:WPARAmeter<x>:HISTogram:  
MEASure:CURSor:DC?  
<x> = 1, 2

Example :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:DC? -> :ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:CURSOR:  
DC:STATE 1

**:ANALysis:WPARAMeter<x>:HISTogram:****MEASure:CURSor:DC:STATe**

Function Turns ON/OFF the measurement between cursors on the histogram of the waveform parameter measurement or queries the current setting.

Syntax :ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:PARAmeter:DC:STATe {<Boolean>}  
:ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:PARAmeter:DC:STATe?  
<x> = 1, 2

Example :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:DC:STATE ON  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:DC:STATE? -> :ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:CURSOR:  
DC:STATE 1

**:ANALysis:WPARAMeter<x>:HISTogram:****MEASure:CURSor:DC:VALue?**

Function Queries the measured value between cursors on the histogram of the waveform parameter measurement.

Syntax :ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:CURSor:DC:VALue?  
<x> = 1, 2

Example :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:DC:VALUE? -> :ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:CURSOR:  
DC:VALUE 1.000E+00

**:ANALysis:WPARAMeter<x>:HISTogram:****MEASure:CURSor:LINKage**

Function Turns ON/OFF the histogram cursor link of the waveform parameter measurement or queries the current setting.

Syntax :ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:CURSor:LINKage {<Boolean>}  
:ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:CURSor:LINKage?  
<x> = 1, 2

Example :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:LINKAGE ON  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:CURSOR:LINKAGE? -> :ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:CURSOR:  
LINKAGE 1

**:ANALysis:WPARAMeter<x>:HISTogram:****MEASure:MODE**

Function Sets the automated measurement mode of the histogram display of the waveform parameter measurement or queries the current setting.

Syntax :ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:MODE {CURSor|OFF|PARAMeter}  
:ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:MODE?  
<x> = 1 or 2

Example :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:MODE CURSOR  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:MODE? -> :ANALYSIS:WPARAMETER1:  
HISTOGRAM:MEASURE:MODE CURSOR

**:ANALysis:WPARAMeter<x>:HISTogram:****MEASure:PARAmeter?**

Function Queries all settings related to the automated measurement of histogram parameters of the waveform parameter measurement.

Syntax :ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:PARAmeter?  
<x> = 1 or 2

Example :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER? -> :ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:  
PARAMETER:MEAN:STATE 1;:ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:  
PARAMETER:PEAK:STATE 1;:ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:  
PARAMETER:SD3INTEG:STATE 1;:ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:  
PARAMETER:SDEVIATION:STATE 1;:ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:  
PARAMETER:SDINTEG:STATE 1

**:ANALysis:WPARAMeter<x>:HISTogram:****MEASure:PARAmeter:ALL**

Function Turn ON/OFF all histogram parameters of the waveform parameter measurement.

Syntax :ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:PARAmeter:ALL {<Boolean>}  
<x> = 1 or 2

Example :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:ALL ON

### 5.3 ANALysis Group

#### **:ANALysis:WPARAMeter<x>:HISTogram:**

##### **MEASure:PARAmeter:<Parameter>?**

Function Queries all settings related to the histogram parameter of the waveform parameter measurement.

Syntax :ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:PARAmeter:<Parameter>?  
<x> = 1 or 2

<Parameter> = {MEAN|PEAK|SD3integ|  
SDEViation|SDINteg}

Example (The following is an example for the average value.)

```
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:MEAN? -> :ANALYSIS:  
WPARAMETER1:HISTOGRAM:MEASURE:  
PARAMETER:MEAN:STATE 1
```

#### **:ANALysis:WPARAMeter<x>:HISTogram:**

##### **MEASure:PARAmeter:<Parameter>:STATE**

Function Turns ON/OFF the histogram parameter of the waveform parameter measurement or queries the current setting.

Syntax :ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:PARAmeter:<Parameter>:STATE  
{<Boolean>}  
:ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:PARAmeter:<Parameter>:STATE?  
<x> = 1 or 2

<Parameter> = {MEAN|PEAK|SD3integ|  
SDEViation|SDINteg}

Example (The following is an example for the average value.)

```
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:MEAN:STATE ON  
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:MEAN:STATE?  
-> :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:MEAN:STATE 1
```

#### **:ANALysis:WPARAMeter<x>:HISTogram:**

##### **MEASure:PARAmeter:<Parameter>:VALue?**

Function Queries the measured value of the histogram parameter of the waveform parameter measurement.

Syntax :ANALysis:WPARAMeter<x>:HISTogram:  
MEASure:PARAmeter:<Parameter>:VALue?  
<x> = 1 or 2

<Parameter> = {MEAN|PEAK|SD3integ|  
SDEViation|SDINteg}

Example (The following is an example for the average value.)

```
:ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:MEAN:VALUE?  
-> :ANALYSIS:WPARAMETER1:HISTOGRAM:  
MEASURE:PARAMETER:MEAN:VALUE 1.000E+00
```

#### **:ANALysis:WPARAMeter<x>:LIST?**

Function Queries all settings related to the list display of the waveform parameter measurement.

Syntax :ANALysis:WPARAMeter<x>:LIST?  
<x> = 1 or 2

Example :ANALYSIS:WPARAMETER1:LIST?  
-> :ANALYSIS:WPARAMETER1:LIST:  
MODE STATISTIC;SCROLL HORIZONTAL

#### **:ANALysis:WPARAMeter<x>:LIST:ITEM?**

Function Queries list display items of the waveform parameter measurement.

Syntax :ANALysis:WPARAMeter<x>:LIST:ITEM?  
<x> = 1 or 2

Example :ANALYSIS:WPARAMETER1:LIST:ITEM?  
-> :ANALYSIS:WPARAMETER1:LIST:  
ITEM "LOW(C1) "

#### **:ANALysis:WPARAMeter<x>:LIST:MODE**

Function Sets the list display mode of the waveform parameter measurement or queries the current setting.

Syntax :ANALysis:WPARAMeter<x>:LIST:  
MODE {STATistic|TREnd}  
:ANALysis:WPARAMeter<x>:LIST:MODE?  
<x>=1 or 2

Example :ANALYSIS:WPARAMETER1:LIST:MODE  
STATISTIC  
:ANALYSIS:WPARAMETER1:LIST:MODE?  
-> :ANALYSIS:WPARAMETER1:LIST:  
MODE STATISTIC

#### **:ANALysis:WPARAMeter<x>:LIST:SCRoll**

Function Sets the scroll direction of the list display of the waveform parameter measurement or queries the current setting.

Syntax :ANALysis:WPARAMeter<x>:LIST:SCRoll  
{HORizontal|VERTical}  
:ANALysis:WPARAMeter<x>:LIST:SCRoll?  
<x> = 1 or 2

Example :ANALYSIS:WPARAMETER1:LIST:  
SCROLL HORIZONTAL  
:ANALYSIS:WPARAMETER1:LIST:SCROLL?  
-> :ANALYSIS:WPARAMETER1:LIST:  
SCROLL HORIZONTAL

**:ANALYSIS:WPARAMETER<x>:LIST:VALUE?**

**Function** Queries the automated measured value of the list display number of the waveform parameter measurement.

**Syntax** :ANALYSIS:WPARAMETER<x>:LIST:VALUE? {<NRF>|MAXIMUM}  
<x> = 1 or 2  
<NRF> = 1 to 100000

**Example** :ANALYSIS:WPARAMETER1:LIST:VALUE? 1  
-> :ANALYSIS:WPARAMETER1:LIST:VALUE 1,1.000E+00

**Description**

- If the measurement is not possible, "NAN (Not A Number)" is returned.
- If the value of the list display number is not present, "NAN (Not A Number)" is returned.
- If MAXIMUM is specified, the maximum list display number is selected.

**:ANALYSIS:WPARAMETER<x>:MODE**

**Function** Sets the mode of the waveform parameter measurement or queries the current setting.

**Syntax** :ANALYSIS:WPARAMETER<x>:MODE {HISTOGRAM|LIST|TREND}  
:ANALYSIS:WPARAMETER<x>:MODE?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:MODE HISTOGRAM  
:ANALYSIS:WPARAMETER1:MODE?  
-> :ANALYSIS:WPARAMETER1:MODE HISTOGRAM

**:ANALYSIS:WPARAMETER<x>:TRACE<x>?**

**Function** Queries all settings related to the trace of the waveform parameter measurement.

**Syntax** :ANALYSIS:WPARAMETER<x>:TRACE<x>?  
<x> of WPARAMETER<x> = 1 or 2  
<x> of TRACE<x> = 1 to 8

**Example** :ANALYSIS:WPARAMETER1:TRACE1?  
-> :ANALYSIS:WPARAMETER1:TRACE1:AREA1:TYPE BURST

**:ANALYSIS:WPARAMETER<x>:TRACE<x>:AREA<x>?**

**Function** Queries all settings related to the area of the waveform parameter measurement.

**Syntax** :ANALYSIS:WPARAMETER<x>:TRACE<x>:AREA<x>?  
<x> of WPARAMETER<x> = 1 or 2  
<x> of TRACE<x> = 1 to 8  
<x> of AREA<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:TRACE1:AREA1?  
-> :ANALYSIS:WPARAMETER1:TRACE1:AREA1:TYPE BURST

**:ANALYSIS:WPARAMETER<x>:TRACE<x>:AREA<x>:TYPE**

**Function** Sets the waveform parameter of the waveform parameter measurement or queries the current setting.

**Syntax** :ANALYSIS:WPARAMETER<x>:TRACE<x>:AREA<x>:TYPE {<Parameter>}  
:ANALYSIS:WPARAMETER<x>:TRACE<x>:AREA<x>:TYPE?  
<x> of WPARAMETER<x> = 1 or 2  
<x> of TRACE<x> = 1 to 8  
<x> of AREA<x> = 1 or 2  
<Parameter> = {BURST|CMEAN|COUNT|CRMS|CSDIVISION|DELAY|DT|DUTYCYCLE|FALL|FREQUENCY|HIGH|HILow|LOW|MAXIMUM|MEAN|MINIMUM|NOVERSHOOT|NWIDTH|PERFREQUENCY|PERIOD|POVERSHOOT|PTOPEAK|PWIDTh|RISE|RMS|SDEVIATION|TYCINTEG|TYINTEG|V1|V2}

**Example** :ANALYSIS:WPARAMETER1:TRACE1:AREA1:TYPE BURST  
:ANALYSIS:WPARAMETER1:TRACE1:AREA1:TYPE? -> :ANALYSIS:WPARAMETER1:TRACE1:AREA1:TYPE BURST

**:ANALYSIS:WPARAMETER<x>:TREND?**

**Function** Queries all settings related to the trend display of the waveform parameter measurement.

**Syntax** :ANALYSIS:WPARAMETER<x>:TREND?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:TREND? -> :ANALYSIS:WPARAMETER1:TREND:HRANGE MAIN;HSPAN 1;MEASURE:CURSOR:C1:POSITION 1.000E+00;STATE 1;:ANALYSIS:WPARAMETER1:TREND:MEASURE:CURSOR:C2:POSITION 2.000E+00;STATE 1;:ANALYSIS:WPARAMETER1:TREND:MEASURE:CURSOR:DC:STATE 1;:ANALYSIS:WPARAMETER1:TREND:MEASURE:MODE CURSOR;:ANALYSIS:WPARAMETER1:TREND:VERTICAL 2.000E+00,1.000E+00



### 5.3 ANALYSIS Group

#### **:ANALYSIS:WPARAMETER<x>:TREND:**

##### **ASCALE[:EXECUTE]**

**Function** Executes the auto scaling of the trend display of the waveform parameter measurement.

**Syntax** :ANALYSIS:WPARAMETER<x>:TREND:  
ASCALE[:EXECUTE]  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:TREND:ASCALE:  
EXECUTE

#### **:ANALYSIS:WPARAMETER<x>:TREND:HRANGE**

**Function** Sets the target window for trend display of measured waveform parameters or queries the current setting.

**Syntax** :ANALYSIS:WPARAMETER<x>:TREND:  
HRANGE {MAIN|Z1|Z2}  
:ANALYSIS:WPARAMETER<x>:TREND:HRANGE?  
<x> = 1, 2

**Example** :ANALYSIS:WPARAMETER1:TREND:HRANGE MAIN  
:ANALYSIS:WPARAMETER1:TREND:HRANGE? ->  
:ANALYSIS:WPARAMETER1:TREND:HRANGE MAIN

#### **:ANALYSIS:WPARAMETER<x>:TREND:HSPAN**

**Function** Sets the horizontal span of the trend display of the waveform parameter measurement or queries the current setting.

**Syntax** :ANALYSIS:WPARAMETER<x>:TREND:HSPAN  
{<NRF>}  
:ANALYSIS:WPARAMETER<x>:TREND:HSPAN?  
<x> = 1 or 2  
<NRF> = 1 to 100000

**Example** :ANALYSIS:WPARAMETER1:TREND:HSPAN 1  
:ANALYSIS:WPARAMETER1:TREND:HSPAN?  
-> :ANALYSIS:WPARAMETER1:TREND:HSPAN 1

#### **:ANALYSIS:WPARAMETER<x>:TREND:**

##### **MEASURE?**

**Function** Queries all settings related to the automated measurement of the trend display of the waveform parameter measurement.

**Syntax** :ANALYSIS:WPARAMETER<x>:TREND:MEASURE?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:TREND:MEASURE?  
-> :ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:C1:POSITION 1.000E+00;STATE 1;  
:ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:C2:POSITION 2.000E+00;STATE 1;  
:ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:DC:STATE 1;:ANALYSIS:  
WPARAMETER1:TREND:MEASURE:MODE CURSOR

#### **:ANALYSIS:WPARAMETER<x>:TREND:**

##### **MEASURE:CURSOR?**

**Function** Queries all settings related to the cursor measurement of the trend of the waveform parameter measurement.

**Syntax** :ANALYSIS:WPARAMETER<x>:TREND:MEASURE:  
CURSOR?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR? -> :ANALYSIS:WPARAMETER1:TREND:  
MEASURE:CURSOR:C1:POSITION 1.000E+00;  
STATE 1;:ANALYSIS:WPARAMETER1:TREND:  
MEASURE:CURSOR:C2:POSITION 2.000E+00;  
STATE 1;:ANALYSIS:WPARAMETER1:TREND:  
MEASURE:CURSOR:DC:STATE 1

#### **:ANALYSIS:WPARAMETER<x>:TREND:**

##### **MEASURE:CURSOR:ALL**

**Function** Turns ON/OFF all cursors of the trend of the waveform parameter measurement.

**Syntax** :ANALYSIS:WPARAMETER<x>:TREND:MEASURE:  
CURSOR:ALL {<Boolean>}  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:ALL ON

#### **:ANALYSIS:WPARAMETER<x>:TREND:**

##### **MEASURE:CURSOR:C<x>?**

**Function** Queries all settings related to the measured value of the cursor of the trend of the waveform parameter measurement.

**Syntax** :ANALYSIS:WPARAMETER<x>:TREND:MEASURE:  
CURSOR:C<x>?  
<x> of WPARAMETER<x> = 1 or 2  
<x> of C<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:C1? -> :ANALYSIS:WPARAMETER1:  
TREND:MEASURE:CURSOR:C1:  
POSITION 1.000E+00;STATE 1

**:ANALysis:WPARAMeter<x>:TRENd:****MEASure:CURSor:C<x>:POSition**

**Function** Sets the cursor position of the trend of the waveform parameter measurement or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:TRENd:MEASure:  
CURSor:C<x>:POSition {<Nrf>}  
:ANALysis:WPARAMeter<x>:TRENd:MEASure:  
CURSor:C<x>:POSition?  
<x> of WPARAMeter<x> = 1 or 2  
<x> of C<x> = 1 or 2  
<Nrf> = -5 to 5 div

**Example** :ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:C1:POSITION 1  
:ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:C1:POSITION? -> :ANALYSIS:  
WPARAMETER1:TREND:MEASURE:  
CURSOR:C1:POSITION 1.000E+00  
CURSOR:C1:STATE? -> :ANALYSIS:  
WPARAMETER1:TREND:MEASURE:  
CURSOR:C1:STATE 1

**:ANALysis:WPARAMeter<x>:TRENd:****MEASure:CURSor:C<x>:STATE**

**Function** Turns ON/OFF the cursor of the trend of the waveform parameter measurement or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:TRENd:MEASure:  
CURSor:C<x>:STATE {<Boolean>}  
:ANALysis:WPARAMeter<x>:TRENd:MEASure:  
CURSor:C<x>:STATE?  
<x> of WPARAMeter<x> = 1 or 2  
<x> of C<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:C1:STATE ON  
:ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:C1:STATE? -> :ANALYSIS:  
WPARAMETER1:TREND:MEASURE:  
CURSOR:C1:STATE 1

**:ANALysis:WPARAMeter<x>:TRENd:****MEASure:CURSor:C<x>:VALue?**

**Function** Queries the measured value of the cursor of the trend of the waveform parameter measurement.

**Syntax** :ANALysis:WPARAMeter<x>:TRENd:MEASure:  
CURSor:C<x>:VALue?  
<x> of WPARAMeter<x> = 1 or 2  
<x> of C<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:C1:VALUE? -> :ANALYSIS:  
WPARAMETER1:TREND:MEASURE:  
CURSOR:C1:VALUE 1.000E+00

**:ANALysis:WPARAMeter<x>:TRENd:MEASure:****CURSor:DC?**

**Function** Queries all settings related to the measurement between cursors on the trend of the waveform parameter measurement.

**Syntax** :ANALysis:WPARAMeter<x>:TRENd:MEASure:  
CURSor:DC?  
<x> of WPARAMeter<x> = 1, 2

**Example** :ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:DC? -> :ANALYSIS:WPARAMETER1:  
TREND:MEASURE:CURSOR:DC:STATE 1

**:ANALysis:WPARAMeter<x>:TRENd:MEASure:****CURSor:DC:STATE**

**Function** Turns ON/OFF the measurement between cursors on the trend of the waveform parameter measurement or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:TRENd:MEASure:  
CURSor:DC:STATE {<Boolean>}  
:ANALysis:WPARAMeter<x>:TRENd:  
MEASure:CURSor:DC:STATE?  
<x> of WPARAMeter<x> = 1, 2

**Example** :ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:DC:STATE ON  
:ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:DC:STATE? -> :ANALYSIS:  
WPARAMETER1:TREND:MEASURE:CURSOR:DC:  
STATE 1

**:ANALysis:WPARAMeter<x>:TRENd:MEASure:****CURSor:DC:VALue?**

**Function** Sets the measured value between cursors on the trend of the waveform parameter measurement or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:TRENd:  
MEASure:CURSor:DC:VALue?  
<x> of WPARAMeter<x> = 1, 2

**Example** :ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:DC:VALUE? -> :ANALYSIS:  
WPARAMETER1:TREND:MEASURE:CURSOR:DC:  
VALUE 1.000E+00

### 5.3 ANALysis Group

#### **:ANALysis:WPARAMeter<x>:TREND:MEASure: CURSOR:LINKage**

**Function** Turns ON/OFF the trend cursor link of the waveform parameter measurement or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:TREND:MEASure:  
CURSOR:LINKage {<Boolean>}  
:ANALysis:WPARAMeter<x>:TREND:MEASure:  
CURSOR:LINKage?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:LINKAGE ON  
:ANALYSIS:WPARAMETER1:TREND:MEASURE:  
CURSOR:LINKAGE? -> :ANALYSIS:  
WPARAMETER1:TREND:MEASURE:CURSOR:  
LINKAGE 1

#### **:ANALysis:WPARAMeter<x>:TREND: MEASure:MODE**

**Function** Sets the automated measurement mode of the trend of the waveform parameter measurement or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:TREND:MEASure:  
MODE {CURSOR|OFF}  
:ANALysis:WPARAMeter<x>:TREND:MEASure:  
MODE?  
<x> = 1 or 2

**Example** :ANALYSIS:WPARAMETER1:TREND:MEASURE:  
MODE CURSOR  
:ANALYSIS:WPARAMETER1:TREND:MEASURE:  
MODE? -> :ANALYSIS:WPARAMETER1:TREND:  
MEASURE:MODE CURSOR

#### **:ANALysis:WPARAMeter<x>:TREND: VERTical**

**Function** Sets the vertical range of the trend of the waveform parameter measurement or queries the current setting.

**Syntax** :ANALysis:WPARAMeter<x>:TREND:VERTical  
{<Nrf>, <Nrf>}  
:ANALysis:WPARAMeter<x>:TREND:VERTical?  
<x> = 1 or 2  
<Nrf> = -1.000E+31 to 1.000E+31 (div)

**Example** :ANALYSIS:WPARAMETER1:TREND:  
VERTICAL 1,2  
:ANALYSIS:WPARAMETER1:TREND:VERTICAL?  
-> :ANALYSIS:WPARAMETER1:TREND:  
VERTICAL 2.000E+00,1.000E+00

#### **:ANALysis:XY<x>?**

**Function** Queries all settings related to the XY display function.

**Syntax** :ANALysis:XY<x>?  
<x> = 1 or 2

**Example** :ANALYSIS:XY1? -> :ANALYSIS:XY1:  
GATE:ALEVEL HIGH;HYSTERESIS1 1.000E+00;  
HYSTERESIS2 1.000E+00;  
HYSTERESIS3 1.000E+00;  
HYSTERESIS4 1.000E+00;  
HYSTERESIS5 1.000E+00;  
HYSTERESIS6 1.000E+00;  
HYSTERESIS7 1.000E+00;  
HYSTERESIS8 1.000E+00;LEVEL1 1.000E+00;  
LEVEL2 1.000E+00;LEVEL3 1.000E+00;  
LEVEL4 1.000E+00;LEVEL5 1.000E+00;  
LEVEL6 1.000E+00;LEVEL7 1.000E+00;  
LEVEL8 1.000E+00;TRACE 1;:ANALYSIS:XY1:  
MEASURE:CURSOR:X1:POSITION 1.000E+00;:  
ANALYSIS:XY1:MEASURE:CURSOR:X2:  
POSITION 2.000E+00;:ANALYSIS:XY1:  
MEASURE:CURSOR:XLINKAGE 1;Y1:  
POSITION 1.000E+00;:ANALYSIS:XY1:  
MEASURE:CURSOR:Y2:POSITION 2.000E+00;:  
ANALYSIS:XY1:MEASURE:CURSOR:  
YLINKAGE 1;:ANALYSIS:XY1:MEASURE:  
MODE CURSOR;XYINTEG:LOOP CLOSE;  
POLARITY CCW;:ANALYSIS:XY1:  
TRANGE 1.000E+00,0.000E+00;WINDOW MAIN;  
XTRACE 1;YTRACE 1

#### **:ANALysis:XY<x>:GATE?**

**Function** Queries all settings related to the gate function of the XY display.

**Syntax** :ANALysis:XY<x>:GATE?  
<x> = 1 or 2

**Example** :ANALYSIS:XY1:GATE? -> :ANALYSIS:XY1:  
GATE:ALEVEL HIGH;HYSTERESIS1 1.000E+00;  
HYSTERESIS2 1.000E+00;  
HYSTERESIS3 1.000E+00;  
HYSTERESIS4 1.000E+00;  
HYSTERESIS5 1.000E+00;  
HYSTERESIS6 1.000E+00;  
HYSTERESIS7 1.000E+00;  
HYSTERESIS8 1.000E+00;LEVEL1 1.000E+00;  
LEVEL2 1.000E+00;LEVEL3 1.000E+00;  
LEVEL4 1.000E+00;LEVEL5 1.000E+00;  
LEVEL6 1.000E+00;LEVEL7 1.000E+00;  
LEVEL8 1.000E+00;TRACE 1

**:ANALysis:XY<x>:GATE:ALEVEL**

**Function** Sets the active level of the gate of the XY display or queries the current setting.

**Syntax** :ANALysis:XY<x>:GATE:ALEVEL {HIGH|LOW}  
:ANALysis:XY<x>:GATE:ALEVEL?  
<x> = 1 or 2

**Example** :ANALYSIS:XY1:GATE:ALEVEL HIGH  
:ANALYSIS:XY1:GATE:ALEVEL?  
-> :ANALYSIS:XY1:GATE:ALEVEL HIGH

**:ANALysis:XY<x>:GATE:HYSTERESIS<x>**

**Function** Sets the hysteresis of the gate of the XY display or queries the current setting.

**Syntax** :ANALysis:XY<x>:GATE:HYSTERESIS<x>  
{<NRf>}  
:ANALysis:XY<x>:GATE:HYSTERESIS<x>?  
<x> of XY<x> = 1 or 2  
<x> of HYSTERESIS<x> = 1 to 8  
<NRf> = 0 to 4 (div)

**Example** :ANALYSIS:XY1:GATE:HYSTERESIS1 1  
:ANALYSIS:XY1:GATE:HYSTERESIS1?  
-> :ANALYSIS:XY1:GATE:  
HYSTERESIS1 1.000E+00

**:ANALysis:XY<x>:GATE:LEVEL<x>**

**Function** Sets the level of the gate of the XY display or queries the current setting.

**Syntax** :ANALysis:XY<x>:GATE:LEVEL<x> {<NRf>,<V  
oltage>,<Current>}  
:ANALysis:XY<x>:GATE:LEVEL<x>?  
<x> of XY<x> = 1 or 2  
<x> of LEVEL<x> = 1 to 8  
<NRf>,<Voltage>, and <Current> = See the SB5000  
User's Manual.

**Example** :ANALYSIS:XY1:GATE:LEVEL1 1  
:ANALYSIS:XY1:GATE:LEVEL1?  
-> :ANALYSIS:XY1:GATE:LEVEL1 1.000E+00

**:ANALysis:XY<x>:GATE:TRACe**

**Function** Sets the gate trace of the XY display or queries the current setting.

**Syntax** :ANALysis:XY<x>:GATE:TRACe {<NRf>|OFF}  
:ANALysis:XY<x>:GATE:TRACe?  
<x> = 1 or 2  
<NRf> = 1 to 8

**Example** :ANALYSIS:XY1:GATE:TRACE 1  
:ANALYSIS:XY1:GATE:TRACE? -> :ANALYSIS:  
XY1:GATE:TRACE 1

**:ANALysis:XY<x>:MEASure?**

**Function** Queries all settings related to the automated measurement of the XY display.

**Syntax** :ANALysis:XY<x>:MEASure?  
<x> = 1 or 2

**Example** :ANALYSIS:XY1:MEASURE? -> :ANALYSIS:  
XY1:MEASURE:CURSOR:X1:  
POSITION 1.000E+00;:ANALYSIS:XY1:  
MEASURE:CURSOR:X2:POSITION 2.000E+00;;  
ANALYSIS:XY1:MEASURE:CURSOR:XLINKAGE 1;  
Y1:POSITION 1.000E+00;:ANALYSIS:XY1:  
MEASURE:CURSOR:Y2:POSITION 2.000E+00;;  
ANALYSIS:XY1:MEASURE:CURSOR:  
YLINKAGE 1;:ANALYSIS:XY1:MEASURE:  
MODE CURSOR;XYINTEG:LOOP CLOSE;  
POLARITY CCW

**:ANALysis:XY<x>:MEASure:CURSOR?**

**Function** Queries all settings related to the cursor measurement of the XY display.

**Syntax** :ANALysis:XY<x>:MEASure:CURSOR?  
<x> = 1 or 2

**Example** :ANALYSIS:XY1:MEASURE:CURSOR?  
-> :ANALYSIS:XY1:MEASURE:CURSOR:X1:  
POSITION 1.000E+00;:ANALYSIS:XY1:  
MEASURE:CURSOR:X2:POSITION 2.000E+00;;  
ANALYSIS:XY1:MEASURE:CURSOR:XLINKAGE 1;  
Y1:POSITION 1.000E+00;:ANALYSIS:XY1:  
MEASURE:CURSOR:Y2:POSITION 2.000E+00;;  
ANALYSIS:XY1:MEASURE:CURSOR:YLINKAGE 1

### 5.3 ANALysis Group

#### **:ANALysis:XY<x>:MEASure:CURSor:**

##### **XLINKage**

**Function** Turns ON/OFF the horizontal cursor link on the XY display or queries the current setting.

**Syntax** :ANALysis:XY<x>:MEASure:CURSor:  
XLINKage {<Boolean>}  
:ANALysis:XY<x>:MEASure:CURSor:  
XLINKage?  
<x> = 1 or 2

**Example** :ANALYSIS:XY1:MEASURE:CURSOR:  
XLINKAGE ON  
:ANALYSIS:XY1:MEASURE:CURSOR:XLINKAGE?  
-> :ANALYSIS:XY1:MEASURE:CURSOR:  
XLINKAGE 1

#### **:ANALysis:XY<x>:MEASure:CURSor:X<x>?**

**Function** Queries all settings related to the horizontal cursor of the XY display.

**Syntax** :ANALysis:XY<x>:MEASure:CURSor:X<x>?  
<x> of XY<x> = 1 or 2  
<x> of X<x> = 1 or 2

**Example** :ANALYSIS:XY1:MEASURE:CURSOR:X1?  
-> :ANALYSIS:XY1:MEASURE:CURSOR:X1:  
POSITION 1.000E+00

#### **:ANALysis:XY<x>:MEASure:CURSor:X<x>:**

##### **POSition**

**Function** Sets the horizontal cursor position of the XY display or queries the current setting.

**Syntax** :ANALysis:XY<x>:MEASure:CURSor:X<x>:  
POSition {<NRF>}  
:ANALysis:XY<x>:MEASure:CURSor:X<x>:  
POSition?  
<x> of XY<x> = 1 or 2  
<x> of X<x> = 1 or 2  
<NRF> = -4 to 4 (div)

**Example** :ANALYSIS:XY1:MEASURE:CURSOR:X1:  
POSITION 1  
:ANALYSIS:XY1:MEASURE:CURSOR:X1:  
POSITION?  
-> :ANALYSIS:XY1:MEASURE:CURSOR:X1:  
POSITION 1.000E+00

#### **:ANALysis:XY<x>:MEASure:CURSor:X<x>:**

##### **VALue?**

**Function** Queries the voltage value at the horizontal cursor of the XY display.

**Syntax** :ANALysis:XY<x>:MEASure:CURSor:X<x>:  
VALue?  
<x> of XY<x> = 1 or 2  
<x> of X<x> = 1 or 2

**Example** :ANALYSIS:XY1:MEASURE:CURSOR:X1:VALUE?  
-> :ANALYSIS:XY1:MEASURE:CURSOR:X1:  
VALUE 1.000E+00

#### **:ANALysis:XY<x>:MEASure:CURSor:**

##### **YLINKage**

**Function** Turns ON/OFF the vertical cursor link on the XY display or queries the current setting.

**Syntax** :ANALysis:XY<x>:MEASure:CURSor:  
YLINKage {<Boolean>}  
:ANALysis:XY<x>:MEASure:CURSor:  
YLINKage?  
<x> = 1 or 2

**Example** :ANALYSIS:XY1:MEASURE:CURSOR:  
YLINKAGE ON  
:ANALYSIS:XY1:MEASURE:CURSOR:YLINKAGE?  
-> :ANALYSIS:XY1:MEASURE:CURSOR:  
YLINKAGE 1

#### **:ANALysis:XY<x>:MEASure:CURSor:Y<x>?**

**Function** Queries all settings related to the vertical cursor of the XY display.

**Syntax** :ANALysis:XY<x>:MEASure:CURSor:Y<x>?  
<x> of XY<x> = 1 or 2  
<x> of Y<x> = 1 or 2

**Example** :ANALYSIS:XY1:MEASURE:CURSOR:Y1?  
-> :ANALYSIS:XY1:MEASURE:CURSOR:Y1:  
POSITION 1.000E+00

#### **:ANALysis:XY<x>:MEASure:CURSor:Y<x>:**

##### **POSition**

**Function** Sets the vertical cursor position of the XY display or queries the current setting.

**Syntax** :ANALysis:XY<x>:MEASure:CURSor:Y<x>:  
POSition {<NRF>}  
:ANALysis:XY<x>:MEASure:CURSor:Y<x>:  
POSition?  
<x> of XY<x> = 1 or 2  
<x> of Y<x> = 1 or 2  
<NRF> = -4 to 4 (div)

**Example** :ANALYSIS:XY1:MEASURE:CURSOR:Y1:  
POSITION 1  
:ANALYSIS:XY1:MEASURE:CURSOR:Y1:  
POSITION? -> :ANALYSIS:XY1:MEASURE:  
CURSOR:Y1:POSITION 1.000E+00

**:ANALysis:XY<x>:MEASure:CURSor:Y<x>:****VALue?**

Function Queries the voltage value at the vertical cursor of the XY display.

Syntax :ANALysis:XY<x>:MEASure:CURSor:Y<x>:  
VALue?

<x> of XY<x> = 1 or 2

<x> of Y<x> = 1 or 2

Example :ANALYSIS:XY1:MEASURE:CURSOR:Y1:VALUE?  
-> :ANALYSIS:XY1:MEASURE:CURSOR:Y1:  
VALUE 1.000E+00

**:ANALysis:XY<x>:MEASure:MODE**

Function Sets the automated measurement mode of the XY display or queries the current setting.

Syntax :ANALysis:XY<x>:MEASure:MODE {CURSor|  
OFF|XYINteG}

:ANALysis:XY<x>:MEASure:MODE?

<x> = 1 or 2

Example :ANALYSIS:XY1:MEASURE:MODE CURSOR  
:ANALYSIS:XY1:MEASURE:MODE?  
-> :ANALYSIS:XY1:MEASURE:MODE CURSOR

**:ANALysis:XY<x>:MEASure:XYINteG?**

Function Queries all settings related to the integration of the XY display.

Syntax :ANALysis:XY<x>:MEASure:XYINteG?  
<x> = 1 or 2

Example :ANALYSIS:XY1:MEASURE:XYINTEG?  
-> :ANALYSIS:XY1:MEASURE:XYINTEG:  
LOOP CLOSE;POLARITY CCW

**:ANALysis:XY<x>:MEASure:XYINteG:LOOP**

Function Sets the integration mode of the XY display or queries the current setting.

Syntax :ANALysis:XY<x>:MEASure:XYINteG:LOOP  
{CLOSE|OPEN}

:ANALysis:XY<x>:MEASure:XYINteG:LOOP?

<x> = 1 or 2

Example :ANALYSIS:XY1:MEASURE:XYINTEG:  
LOOP CLOSE  
:ANALYSIS:XY1:MEASURE:XYINTEG:LOOP?  
-> :ANALYSIS:XY1:MEASURE:XYINTEG:  
LOOP CLOSE

**:ANALysis:XY<x>:MEASure:XYINteG:****POLarity**

Function Sets the integration polarity of the XY display or queries the current setting.

Syntax :ANALysis:XY<x>:MEASure:XYINteG:  
POLarity {CCW|CW}

:ANALysis:XY<x>:MEASure:XYINteG:

POLarity?

<x> = 1 or 2

Example :ANALYSIS:XY1:MEASURE:XYINTEG:  
POLARITY CCW  
:ANALYSIS:XY1:MEASURE:XYINTEG:POLARITY?  
-> :ANALYSIS:XY1:MEASURE:XYINTEG:  
POLARITY CCW

**:ANALysis:XY<x>:MEASure:XYINteG:****VALue?**

Function Queries the integral value of the XY display.

Syntax :ANALysis:XY<x>:MEASure:XYINteG:VALue?  
<x> = 1 or 2

Example :ANALYSIS:XY1:MEASURE:XYINTEG:VALUE?  
-> :ANALYSIS:XY1:MEASURE:XYINTEG:  
VALUE 1.000E+00

**:ANALysis:XY<x>:TRANge (Time Range)**

Function Sets the measurement range of the XY display or queries the current setting.

Syntax :ANALysis:XY<x>:TRANge {<NRf>,<NRf>}  
:ANALysis:XY<x>:TRANge?

<x> = 1 or 2

<NRf> = -5 to 5 div

**:ANALysis:XY<x>:WINDow**

Function Sets the measurement source window of the XY display or queries the current setting.

Syntax :ANALysis:XY<x>:WINDow {MAIN|Z1|Z2}  
:ANALysis:XY<x>:WINDow?

<x> = 1 or 2

Example :ANALYSIS:XY1:WINDOW MAIN  
:ANALYSIS:XY1:WINDOW? -> :ANALYSIS:XY1:  
WINDOW MAIN

### 5.3 ANALYSIS Group

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#### **:ANALYSIS:XY<x>:XTRace**

Function Sets the X-axis trace of the XY display or queries the current setting.

Syntax :ANALYSIS:XY<x>:YTRace {<NRf>}  
:ANALYSIS:XY<x>:YTRace?  
<x> = 1 or 2  
<NRf> = 1 to 8

Example :ANALYSIS:XY1:YTRACE 1  
:ANALYSIS:XY1:YTRACE? -> :ANALYSIS:XY1:  
YTRACE 1

#### **:ANALYSIS:XY<x>:YTRace**

Function Sets the Y-axis trace of the XY display or queries the current setting.

Syntax :ANALYSIS:XY<x>:YTRace {<NRf>}  
:ANALYSIS:XY<x>:YTRace?  
<x> = 1 or 2  
<NRf> = 1 to 8

Example :ANALYSIS:XY1:YTRACE 1  
:ANALYSIS:XY1:YTRACE? -> :ANALYSIS:XY1:  
YTRACE 1

---

## 5.4 ASETup Group

### **:ASETup:EXECute**

Function Execute auto setup.  
Syntax :ASETup:EXECute  
Example :ASETUP:EXECUTE

### **:ASETup:UNDO**

Function Cancels auto setup that has been executed.  
Syntax :ASETup:UNDO  
Example :ASETUP:UNDO

---

## 5.5 CALibrate Group

### **:CALibrate?**

Function Queries all settings related to the calibration.  
Syntax :CALibrate?  
Example :CALIBRATE? -> :CALIBRATE:MODE AUTO

### **:CALibrate:EXECute**

Function Executes calibration.  
Syntax :CALibrate:EXECute  
Example :CALIBRATE:EXECUTE

### **:CALibrate:MODE**

Function Turns ON/OFF the auto calibration or queries the current setting.  
Syntax :CALibrate:MODE {AUTO|OFF}  
:CALibrate:MODE?  
Example :CALIBRATE:MODE AUTO  
:CALIBRATE:MODE? -> :CALIBRATE:  
MODE AUTO



## 5.6 CHANnel Group

### **:CHANnel<x>?**

**Function** Queries all settings related to the channel.  
**Syntax** :CHANnel<x>?  
<x> = 1 to 4  
**Example** :CHANNEL1? -> :CHANNEL1:SELECT INPUT;  
DISPLAY 1;BWIDTh FULL;COUPLING DC;  
DESKEW 0.000E+00;INVERT 0;LABEL:  
DEFINE "CH1";MODE 1;:CHANNEL1:  
OCANCEL 0;OFFSEt 0.000E+00;  
POSITION 0.000E+00;PROBE:MODE 1;:  
CHANNEL1:SVALUE 0;VDIV 1.000E+00

### **:CHANnel<x>:AScale[:EXECute]**

**Function** Executes the auto scaling of the channel.  
**Syntax** CHANnel<x>:AScale[:EXECute]  
<x> = 1 to 4  
**Example** CHANNEL1:ASCALE:EXECUTE

### **:CHANnel<x>:BWIDTh**

**Function** Sets the input filter of the channel or queries the current setting.  
**Syntax** :CHANnel<x>:BWIDTh {<Frequency>|FULL}  
:CHANnel<x>:BWIDTh?  
<x> = 1 to 4  
<Frequency> = See the SB5000 User's Manual  
**Example** :CHANNEL1:BWIDTh FULL  
:CHANNEL1:BWIDTh? -> :CHANNEL1:  
BWIDTh FULL

### **:CHANnel<x>:COUPLing**

**Function** Sets the input coupling of the channel or queries the current setting.  
**Syntax** :CHANnel<x>:COUPLing {AC|DC|DC50|GND}  
:CHANnel<x>:COUPLing?  
<x> = 1 to 4  
**Example** :CHANNEL1:COUPLING GND  
:CHANNEL1:COUPLING? -> :CHANNEL1:  
COUPLING GND

### **:CHANnel<x>:DESKew**

**Function** Sets the skew correction of the channel or queries the current setting.  
**Syntax** :CHANnel<x>:DESKew {<Time>}  
:CHANnel<x>:DESKew?  
<x> = 1 to 4  
<Time> = -80 ns to 80 ns (10 ps steps)  
**Example** :CHANNEL1:DESKEW 1NS  
:CHANNEL1:DESKEW? -> :CHANNEL1:  
DESKEW 1.000E-09

### **:CHANnel<x>:DISPlay**

**Function** Turns ON/OFF the display of the channel or queries the current setting.  
**Syntax** :CHANnel<x>:DISPlay {<Boolean>}  
:CHANnel<x>:DISPlay?  
<x> = 1 to 4  
**Example** :CHANNEL1:DISPlay ON  
:CHANNEL1:DISPlay? -> :CHANNEL1:  
DISPlay 1

### **:CHANnel<x>:INVert**

**Function** Turns ON/OFF the inverted display of the channel or queries the current setting.  
**Syntax** :CHANnel<x>:INVert {<Boolean>}  
:CHANnel<x>:INVert?  
<x> = 1 to 4  
**Example** :CHANNEL1:INVert ON  
:CHANNEL1:INVert -> :CHANNEL1:INVert 1

### **:CHANnel<x>:LABel?**

**Function** Queries all settings related to the waveform label of the channel.  
**Syntax** :CHANnel<x>:LABel?  
<x> = 1 to 4  
**Example** :CHANNEL1:LABel? -> :CHANNEL1:LABel:  
DEFINE "CH1";MODE 0

### **:CHANnel<x>:LABel[:DEFine]**

**Function** Sets the waveform label of channel or queries the current setting.  
**Syntax** :CHANnel<x>:LABel[:DEFine] {<String>}  
:CHANnel<x>:LABel[:DEFine]?  
<x> = 1 to 4  
<String> = Up to 8 characters  
**Example** :CHANNEL1:LABel:DEFine "CH1"  
:CHANNEL1:LABel:DEFine? -> :CHANNEL1:  
LABel:DEFine "CH1"

### **:CHANnel<x>:LABel:MODE**

**Function** Turns ON/OFF the waveform label display of the channel or queries the current setting.  
**Syntax** :CHANnel<x>:LABel:MODE {<Boolean>}  
:CHANnel<x>:LABel:MODE?  
<x> = 1 to 4  
**Example** :CHANNEL1:LABel:MODE ON  
:CHANNEL1:LABel:MODE? -> :CHANNEL1:  
LABel:MODE 1

**:CHANnel<x>:OCANcel**

Function Turns ON/OFF the offset cancel of the channel or queries the current setting.

Syntax :CHANnel<x>:OCANcel {<Boolean>}  
:CHANnel<x>:OCANcel?  
<x> = 1 to 4

Example :CHANNEL1:OCANCEL ON  
:CHANNEL1:OCANCEL? -> :CHANNEL1:  
OCANCEL 1

**:CHANnel<x>:OFFSet**

Function Sets the offset voltage of the channel or queries the current setting.

Syntax :CHANnel<x>:OFFSet  
{<Voltage>|<Current>}  
:CHANnel<x>:OFFSet?  
<x> = 1 to 4

<Voltage> and <Current> = See the SB5000 User's Manual.

Example :CHANNEL1:OFFSET 1V  
:CHANNEL1:OFFSET? -> :CHANNEL1:  
OFFSET 1.000E+00

**:CHANnel<x>:POSition**

Function Sets the vertical position of the channel or queries the current setting.

Syntax :CHANnel<x>:POSition {<Nrf>}  
:CHANnel<x>:POSition?  
<x> = 1 to 4  
<Nrf> = -4 to 4 (div)

Example :CHANNEL1:POSITION 1  
:CHANNEL1:POSITION? -> :CHANNEL1:  
POSITION 1.000E+00

**:CHANnel<x>:PROBe?**

Function Queries all settings related to the probe attenuation of the channel.

Syntax :CHANnel<x>:PROBe?  
<x> = 1 to 4

Example :CHANNEL1:PROBE? -> :CHANNEL1:PROBE:  
MODE 1

**:CHANnel<x>:PROBe[:MODE]**

Function Sets the probe attenuation of the channel or queries the current setting.

Syntax :CHANnel<x>:PROBe[:MODE] {<Nrf>|AUTO|  
C1|C10|C100}  
:CHANnel<x>:PROBe[:MODE]?  
<x> = 1 to 4

<Nrf> = 1,2,5,10,20,50,100,200,500,1000

Example :CHANNEL1:PROBE:MODE 1  
:CHANNEL1:PROBE:MODE? -> :CHANNEL1:  
PROBE:MODE 1

**:ChanneL<x>:PROBe:AUTO?**

Function Queries the probe attenuation of the channel when set to AUTO.

Syntax :ChanneL<x>:PROBe:AUTO?  
<x> = 1 to 4

Example :CHANNEL1:PROBE:AUTO? -> :CHANNEL1:  
PROBE:AUTO 1

**:CHANnel<x>:SElect**

Function Sets the waveform (input/computation) to be assigned to the input channel or queries the current setting.

Syntax :CHANnel<x>:SElect {INPUT|MATH}  
:CHANnel<x>:SElect?  
<x> = 1 to 4

Example :CHANNEL1:SELECT INPUT  
:CHANNEL1:SELECT? -> :CHANNEL1:SELECT  
INPUT

**:CHANnel<x>:SVALue (Scale VALUE)**

Function Turns ON/OFF the scale display of the channel or queries the current setting.

Syntax :CHANnel<x>:SVALue {<Boolean>}  
:CHANnel<x>:SVALue?  
<x> = 1 to 4

Example :CHANNEL1:SVALUE ON  
:CHANNEL1:SVALUE? -> :CHANNEL1:SVALUE 1

**:CHANnel<x>:VDIV**

Function Sets the vertical sensitivity (V/div) of the channel or queries the current setting.

Syntax :CHANnel<x>:VDIV {<Voltage>|<Current>}  
:CHANnel<x>:VDIV?  
<x> = 1 to 4

<Voltage> and <Current> = See the SB5000 User's Manual.

Example :CHANNEL1:VDIV 5V  
:CHANNEL1:VDIV? -> :CHANNEL1:  
VDIV 5.000E+00

## 5.7 CLEar Group

### **:CLEar:ACCumulate**

Function Clears accumulated waveforms.  
Syntax :CLEar:ACCumulate  
Example :CLEAR:ACCUMULATE

### **:CLEar[:HISTory]**

Function Clears history waveforms.  
Syntax :CLEar[:HISTory]  
Example :CLEAR:HISTORY

### **:CLEar:SNAP**

Function Clears snapshot waveforms.  
Syntax :CLEar:SNAP  
Example :CLEAR:SNAP

## 5.8 COMMunicate Group

The commands in this group deal with communications. There are no front panel keys that correspond to the commands in this group.

### **:COMMunicate?**

Function Queries all settings related to communications.  
Syntax :COMMunicate?  
Example :COMMUNICATE? -> :COMMUNICATE:  
HEADER 1;OPSE 352;OVERLAP 352;VERBOSE 1

### **:COMMunicate:HEADer**

Function Sets whether to add a header to the response to a query (example CHANNEL1:VOLTAGE:PROBE 10) or not add the header (example 10) or queries the current setting.  
Syntax :COMMunicate:HEADer {<Boolean>}  
:COMMunicate:HEADer?  
Example :COMMUNICATE:HEADER ON  
:COMMUNICATE:HEADER? -> :COMMUNICATE:  
HEADER 1

### **:COMMunicate:LOCKout**

Function Sets or clears local lockout.  
Syntax :COMMunicate:LOCKout {<Boolean>}  
:COMMunicate:LOCKout?  
Example :COMMUNICATE:LOCKOUT ON  
:COMMUNICATE:LOCKOUT? -> :COMMUNICATE:  
LOCKOUT 1  
Description This command is dedicated to the USB and Ethernet interface (option).

### **:COMMunicate:OPSE**

#### **(Operation Pending Status Enable register)**

Function Sets the overlap command that is used by the \*OPC, \*OPC?, and \*WAI commands or queries the current setting.  
Syntax :COMMunicate:OPSE <Register>  
:COMMunicate:OPSE?  
<Register> = 0 to 65535, :COMMunicate:OVERlap  
See the command diagram.  
Example :COMMUNICATE:OPSE 65535  
:COMMUNICATE:OPSE? -> :COMMUNICATE:  
OPSE 2400

Description In the above example, all bits are set to 1 to make all overlap commands applicable. However, bits fixed to 0 are not set to 1. Thus, the response to the query indicates 1 for bits 5, 6, 8, and 11 only.

### **:COMMunicate:OPSR?**

#### **(Operation Pending Status Register)**

Function Queries the value of the operation pending status register.  
Syntax :COMMunicate:OPSR?  
Example :COMMUNICATE:OPSR? -> 0

Description For details on the operation pending status register, see the figure for the :COMMunicate:OVERlap command.

**:COMMunicate:OVERlap**

**Function** Sets the commands to operate as overlap commands or queries the current setting.

**Syntax** :COMMunicate:OVERlap <Register>  
:COMMunicate:OVERlap?  
<Register> = 0 to 65535

**Example** :COMMUNICATE:OVERLAP 65535  
:COMMUNICATE:OVERLAP? -> :COMMUNICATE:  
OVERLAP 2400

**Description**

- In the above example, all bits are set to 1 to make all overlap commands applicable. However, bits fixed to 0 are not set to 1. Thus, the response to the query indicates 1 for bits 5, 6, 8, and 11 only.
- For the description of how to synchronize the program using :COMMunicate:OVERlap, see page 4-7.
- In the above example, bits 5, 6, 8, and 11 are set to 1 to make all overlap commands applicable.

Operation pending status register/overlap enable register

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	0	0	SCH	0	0	HST	0	ACS	PRN	0	0	0	0	0

When bit 5 (PRN) = 1:

Built-in printer operation not complete

When bit 6 (ACS) = 1:

Access to the medium not complete.

When bit 8 (HST) = 1:

History search execution not complete

When bit 11 (SCH) = 1:

Search execution not complete

**:COMMunicate:REMote**

**Function** Sets remote or local. ON is remote mode.

**Syntax** :COMMunicate:REMote {<Boolean>}  
:COMMunicate:REMote?

**Example** :COMMUNICATE:REMOTE ON  
:COMMUNICATE:REMOTE? -> :COMMUNICATE:  
REMOTE 1

**Description** This command is dedicated to the USB and Ethernet interface (option).

**:COMMunicate:STATus?**

**Function** Queries line-specific status.

**Syntax** :COMMunicate:STATus?

**Example** :COMMUNICATE:STATUS? -> :COMMUNICATE:  
STATUS 0

**Description** The meaning of each status bit is as follows:

Bit	GP-IB
0	Unrecoverable transmission error
1	Always 0
2	Always 0
3 or greater	Always 0

For USB and Ethernet communications, 0 is always returned.

The status bit is set when the corresponding cause occurs and cleared when it is read.

**:COMMunicate:VERBoSe**

**Function** Sets whether to return the response to a query using full spelling (example CHANNEL1:VOLTAGE:PROBE 10) or using abbreviation (example CHAN:PROB 10) or queries the current setting.

**Syntax** :COMMunicate:VERBoSe {<Boolean>}  
:COMMunicate:VERBoSe?

**Example** :COMMUNICATE:VERBOSE ON  
:COMMUNICATE:VERBOSE? -> :COMMUNICATE:  
VERBOSE 1

**:COMMunicate:WAIT**

**Function** Waits for one of the specified extended events to occur.

**Syntax** :COMMunicate:WAIT <Register>  
<Register> = 0 to 65535 (extended event register, see page 6-4.)

**Example** :COMMUNICATE:WAIT 65535

**Description** For the description of how to synchronize the program using :COMMunicate:WAIT, see page 4-8.

**:COMMunicate:WAIT?**

**Function** Creates the response that is returned when the specified event occurs.

**Syntax** :COMMunicate:WAIT? <Register>  
<Register> = 0 to 65535 (extended event register, see page 6-4.)

**Example** :COMMUNICATE:WAIT? 65535 -> 1

## 5.9 CURSor Group

### :CURSor?

**Function** Queries all settings related to the cursor measurement.

**Syntax** :CURSor?

**Example** :CURSOR? -> :CURSOR:DISPLAY 1;  
 HORIZONTAL:BASIC:DV:STATE 1;:CURSOR:  
 HORIZONTAL:BASIC:LINKAGE 1;V1:  
 POSITION 1.000E+00;STATE 0;:CURSOR:  
 HORIZONTAL:BASIC:V2:POSITION 1.000E+00;  
 STATE 0;:CURSOR:HORIZONTAL:CALCULATION:  
 DEFINE1 "V1";DEFINE2 "V2";DEFINE3 "V1";  
 DEFINE4 "V2";STATE1 0;STATE2 0;  
 STATE3 0;STATE4 0;:CURSOR:HORIZONTAL:  
 TRACE 1;:CURSOR:MARKER:CALCULATION:  
 DEFINE1 "T2";DEFINE2 "V2";DEFINE3 "V3";  
 DEFINE4 "V4";STATE1 0;STATE2 0;  
 STATE3 0;STATE4 0;:CURSOR:MARKER:CM1:  
 DT2:STATE 1;:CURSOR:MARKER:CM1:DT3:  
 STATE 1;:CURSOR:MARKER:CM1:DT4:  
 STATE 1;:CURSOR:MARKER:CM1:DV2:  
 STATE 1;:CURSOR:MARKER:CM1:DV3:  
 STATE 1;:CURSOR:MARKER:CM1:DV4:  
 STATE 1;:CURSOR:MARKER:CM1:  
 POSITION 1.000E+00;T:STATE 1;:CURSOR:  
 MARKER:CM1:TRACE 1;V:STATE 1;:CURSOR:  
 MARKER:CM2:DT1:STATE 1;:CURSOR:MARKER:  
 CM2:DT3:STATE 1;:CURSOR:MARKER:CM2:DT4:  
 STATE 1;:CURSOR:MARKER:CM2:DV1:  
 STATE 1;:CURSOR:MARKER:CM2:DV3:  
 STATE .....

### :CURSor:DISPlay

**Function** Turns ON/OFF the cursor or queries the current setting.

**Syntax** :CURSor:DISPlay {<Boolean>}  
 :CURSor:DISPlay?

**Example** :CURSOR:DISPLAY ON  
 :CURSOR:DISPLAY? -> :CURSOR:DISPLAY 1

### :CURSor:HORizontal?

**Function** Queries all settings related to the horizontal cursors.

**Syntax** :CURSor:HORizontal?

**Example** :CURSOR:HORIZONTAL? -> :CURSOR:  
 HORIZONTAL:BASIC:DV:STATE 1;:  
 CURSOR:HORIZONTAL:BASIC:LINKAGE 1;V1:  
 POSITION 1.000E+00;STATE 0;:CURSOR:  
 HORIZONTAL:BASIC:V2:POSITION 1.000E+00;  
 STATE 0;:CURSOR:HORIZONTAL:  
 CALCULATION:DEFINE1 "V1";DEFINE2 "V2";  
 DEFINE3 "V1";DEFINE4 "V2";STATE1 0;  
 STATE2 0;STATE3 0;STATE4 0;:CURSOR:  
 HORIZONTAL:TRACE 1

### :CURSor:HORizontal:BASic?

**Function** Queries all settings related to basic items of the horizontal cursors.

**Syntax** :CURSor:HORizontal:BASic?

**Example** :CURSOR:HORIZONTAL:BASIC? -> :CURSOR:  
 HORIZONTAL:BASIC:DV:STATE 1;:  
 CURSOR:HORIZONTAL:BASIC:LINKAGE 1;V1:  
 POSITION 1.000E+00;STATE 0;:CURSOR:  
 HORIZONTAL:BASIC:V2:POSITION 1.000E+00;  
 STATE 0

### :CURSor:HORizontal[:BASic]:ALL

**Function** Turns ON/OFF all basic items of the horizontal cursors.

**Syntax** :CURSor:HORizontal[:BASic]:ALL  
 {<Boolean>}

**Example** :CURSOR:HORIZONTAL:BASIC:ALL ON

### :CURSor:HORizontal[:BASic]:DV?

**Function** Queries all settings related to the  $\Delta V$  measurement of the horizontal cursors.

**Syntax** :CURSor:HORizontal[:BASic]:DV?

**Example** :CURSOR:HORIZONTAL:BASIC:DV?  
 -> :CURSOR:HORIZONTAL:BASIC:DV:STATE 1

### :CURSor:HORizontal[:BASic]:DV:STATe

**Function** Turns ON/OFF the  $\Delta V$  measurement of the horizontal cursors or queries the current setting.

**Syntax** :CURSor:HORizontal[:BASic]:DV:STATe  
 {<Boolean>}  
 :CURSor:HORizontal[:BASic]:DV:STATe?

**Example** :CURSOR:HORIZONTAL:BASIC:DV:STATE ON  
 :CURSOR:HORIZONTAL:BASIC:DV:STATE?  
 -> :CURSOR:HORIZONTAL:BASIC:DV:STATE 1

### :CURSor:HORizontal[:BASic]:DV:VALUe?

**Function** Queries the voltage value between the horizontal cursors.

**Syntax** :CURSor:HORizontal[:BASic]:DV:VALUe?

**Example** :CURSOR:HORIZONTAL:BASIC:DV:VALUE?  
 -> :CURSOR:HORIZONTAL:BASIC:DV:  
 VALUE 1.000E+00

### :CURSor:HORizontal[:BASic]:LINKage

**Function** Turns ON/OFF the horizontal cursor link or queries the current setting.

**Syntax** :CURSor:HORizontal[:BASic]:

LINKage {<Boolean>}  
 :CURSor:HORizontal[:BASic]:LINKage?

**Example** :CURSOR:HORIZONTAL:BASIC:LINKAGE ON  
 :CURSOR:HORIZONTAL:BASIC:LINKAGE?  
 -> :CURSOR:HORIZONTAL:BASIC:LINKAGE 1

**:CURSor:HORizontal[:BASic]:V<x>?**

Function Queries all settings related to the horizontal cursor.

Syntax :CURSor:HORizontal[:BASic]:V<x>?  
<x> = 1 or 2

Example :CURSOR:HORIZONTAL:BASIC:V1?  
-> :CURSOR:HORIZONTAL:BASIC:V1:  
POSITION 1.000E+00;STATE 1

**:CURSor:HORizontal[:BASic]:V<x>:JUMP**

Function Jumps the horizontal cursor to the center position of the zoom waveform.

Syntax :CURSor:HORizontal[:BASic]:V<x>:  
JUMP {Z1|Z2}  
<x>=1 or 2

Example :CURSOR:HORIZONTAL:BASIC:V1:JUMP Z1

**:CURSor:HORizontal[:BASic]:V<x>:****POSITION**

Function Sets the horizontal cursor position or queries the current setting.

Syntax :CURSor:HORizontal[:BASic]:V<x>:  
POSITION {<NRf>}  
:CURSor:HORizontal[:BASic]:V<x>:  
POSITION?  
<x> = 1 or 2  
<NRf> = -4 to 4 (div)

Example :CURSOR:HORIZONTAL:BASIC:V1:POSITION 1  
:CURSOR:HORIZONTAL:BASIC:V1:POSITION?  
-> :CURSOR:HORIZONTAL:BASIC:V1:  
POSITION 1.000E+00

**:CURSor:HORizontal[:BASic]:V<x>:****STATE**

Function Turns ON/OFF the horizontal cursor or queries the current setting.

Syntax :CURSor:HORizontal[:BASic]:V<x>:STATE  
{<Boolean>}  
:CURSor:HORizontal[:BASic]:V<x>:STATE?  
<x> = 1 or 2

Example :CURSOR:HORIZONTAL:BASIC:V1:STATE ON  
:CURSOR:HORIZONTAL:BASIC:V1:STATE?  
-> :CURSOR:HORIZONTAL:BASIC:V1:STATE 1

**:CURSor:HORizontal[:BASic]:V<x>:****VALUE?**

Function Queries the voltage value at the horizontal cursor.

Syntax :CURSor:HORizontal[:BASic]:V<x>:VALUE?  
<x> = 1 or 2

Example :CURSOR:HORIZONTAL:BASIC:V1:VALUE?  
-> :CURSOR:HORIZONTAL:BASIC:V1:  
VALUE 1.000E+00

**:CURSor:HORizontal:CALCulation?**

Function Queries all settings related to calculation items of the horizontal cursors.

Syntax :CURSor:HORizontal:CALCulation?

Example :CURSOR:HORIZONTAL:CALCULATION?  
-> :CURSOR:HORIZONTAL:CALCULATION:  
DEFINE1 "V1";DEFINE2 "V2";DEFINE3 "V1";  
DEFINE4 "V2";STATE1 0;STATE2 0;  
STATE3 0;STATE4 0

**:CURSor:HORizontal:CALCulation:ALL**

Function Turns ON/OFF all calculation items of the horizontal cursors.

Syntax :CURSor:HORizontal:CALCulation:  
ALL {<Boolean>}

Example :CURSOR:HORIZONTAL:CALCULATION:ALL ON

**:CURSor:HORizontal:CALCulation:****DEFine<x>**

Function Sets the equation of the calculation item of the horizontal cursor or queries the current setting.

Syntax :CURSor:HORizontal:CALCulation:  
DEFine<x> {<String>}  
:CURSor:HORizontal:CALCulation:  
DEFine<x>?  
<x> = 1 to 4  
<String> = Up to 128 characters

Example :CURSOR:HORIZONTAL:CALCULATION:  
DEFINE1 "V1"  
:CURSOR:HORIZONTAL:CALCULATION:DEFINE1?  
-> :CURSOR:HORIZONTAL:CALCULATION:  
DEFINE1 "V1"

**:CURSor:HORizontal:CALCulation:****STATE<x>**

Function Turns ON/OFF the calculation item of the horizontal cursor or queries the current setting.

Syntax :CURSor:HORizontal:CALCulation:  
STATE<x> {<Boolean>}  
:CURSor:HORizontal:CALCulation:  
STATE<x>?  
<x> = 1 to 4

Example :CURSOR:HORIZONTAL:CALCULATION:  
STATE1 ON  
:CURSOR:HORIZONTAL:CALCULATION:STATE1?  
-> :CURSOR:HORIZONTAL:CALCULATION:  
STATE1 1

## 5.9 CURSOR Group

### :CURSOR:HORIZONTAL:CALCULATION:

#### VALUE<x>?

Function Queries the measured value of the calculation item of the horizontal cursor.

Syntax :CURSOR:HORIZONTAL:CALCULATION:  
VALUE<x>?  
<x> = 1 to 4

Example :CURSOR:HORIZONTAL:CALCULATION:VALUE1?  
-> :CURSOR:HORIZONTAL:CALCULATION:  
VALUE1 0.000E+00

### :CURSOR:HORIZONTAL:TRACE

Function Sets the source trace of the horizontal cursor or queries the current setting.

Syntax :CURSOR:HORIZONTAL:TRACE {<NRf>}  
:CURSOR:HORIZONTAL:TRACE?  
<NRf> = 1 to 8

Example :CURSOR:HORIZONTAL:TRACE 1  
:CURSOR:HORIZONTAL:TRACE? -> :CURSOR:  
HORIZONTAL:TRACE 1

### :CURSOR:MARKER?

Function Queries all settings related to the marker cursors.

Syntax :CURSOR:MARKER?

Example :CURSOR:MARKER? -> :CURSOR:MARKER:  
CALCULATION:DEFINE1 "T2";DEFINE2 "V2";  
DEFINE3 "V3";DEFINE4 "V4";STATE1 0;  
STATE2 0;STATE3 0;STATE4 0;:CURSOR:  
MARKER:CM1:DT2:STATE 1;:CURSOR:MARKER:  
CM1:DT3:STATE 1;:CURSOR:MARKER:CM1:DT4:  
STATE 1;:CURSOR:MARKER:CM1:DV2:  
STATE 1;:CURSOR:MARKER:CM1:DV3:  
STATE 1;:CURSOR:MARKER:CM1:DV4:  
STATE 1;:CURSOR:MARKER:CM1:  
POSITION 1.000E+00;T:STATE 1;:CURSOR:  
MARKER:CM1:TRACE 1;V:STATE 1;:CURSOR:  
MARKER:CM2:DT1:STATE 1;:CURSOR:MARKER:  
CM2:DT3:STATE 1;:CURSOR:MARKER:CM2:DT4:  
STATE 1;:CURSOR:MARKER:CM2:DV1:  
STATE 1;:CURSOR:MARKER:CM2:DV3:  
STATE 1;:CURSOR:MARKER:CM2:DV4:  
STATE 1;:CURSOR:MARKER:CM2:  
POSITION 1.000E+00;T:STATE 1;:CURSOR:  
MARKER:CM2:TRACE 1;V:STATE 1;:CURSOR:  
MARKER:CM3:DT1:STATE 1;:CURSOR:MARKER:  
CM3:DT2:STATE 1;:CURSOR:MARKER:CM3:DT4:  
STATE 1;:CURSOR:MARKER:CM3:DV1:  
STATE 1;:CURSOR:MARKER:CM3:DV2:  
STATE .....

### :CURSOR:MARKER:CALCULATION?

Function Queries all settings related to calculation items of the marker cursors.

Syntax :CURSOR:MARKER:CALCULATION?

Example :CURSOR:MARKER:CALCULATION? -> :CURSOR:  
MARKER:CALCULATION:DEFINE1 "T2";  
DEFINE2 "V2";DEFINE3 "V3";  
DEFINE4 "V4";STATE1 0;STATE2 0;  
STATE3 0;STATE4 0

### :CURSOR:MARKER:CALCULATION:ALL

Function Turns ON/OFF all calculation items of the marker cursors.

Syntax :CURSOR:MARKER:CALCULATION:  
ALL {<Boolean>}

Example :CURSOR:MARKER:CALCULATION:ALL ON

### :CURSOR:MARKER:CALCULATION:DEFINE<x>

Function Sets the equation of the calculation item of the marker cursors or queries the current setting.

Syntax :CURSOR:MARKER:CALCULATION:  
DEFINE<x> {<String>}  
:CURSOR:MARKER:CALCULATION:DEFINE<x>?  
<x> = 1 to 4  
<String> = Up to 128 characters

Example :CURSOR:MARKER:CALCULATION:DEFINE1 "T1"  
:CURSOR:MARKER:CALCULATION:DEFINE1?  
-> :CURSOR:MARKER:CALCULATION:  
DEFINE1 "T1"

### :CURSOR:MARKER:CALCULATION:STATE<x>

Function Turns ON/OFF the calculation item of the marker cursors or queries the current setting.

Syntax :CURSOR:MARKER:CALCULATION:STATE<x>  
{<Boolean>}  
:CURSOR:MARKER:CALCULATION:STATE<x>?  
<x> = 1 to 4

Example :CURSOR:MARKER:CALCULATION:STATE1 ON  
:CURSOR:MARKER:CALCULATION:STATE1?  
-> :CURSOR:MARKER:CALCULATION:STATE1 1

### :CURSOR:MARKER:CALCULATION:VALUE<x>?

Function Queries the measured value of the calculation item of the marker cursors.

Syntax :CURSOR:MARKER:CALCULATION:VALUE<x>?  
<x> = 1 to 4

Example :CURSOR:MARKER:CALCULATION:VALUE1?  
-> :CURSOR:MARKER:CALCULATION:VALUE1  
0.000E+00

### :CURSOR:MARKER:CM<x>?

Function Queries all settings related to the marker cursor.

Syntax :CURSOR:MARKER:CM<x>?  
<x> = 1 to 4

Example :CURSOR:MARKER:CM1? -> :CURSOR:MARKER:  
CM1:DT2:STATE 1;:CURSOR:  
MARKER:CM1:DT3:STATE 1;:CURSOR:MARKER:  
CM1:DT4:STATE 1;:CURSOR:MARKER:CM1:DV2:  
STATE 1;:CURSOR:MARKER:CM1:DV3:  
STATE 1;:CURSOR:MARKER:CM1:DV4:  
STATE 1;:CURSOR:MARKER:CM1:  
POSITION 1.000E+00;T:STATE 1;:CURSOR:  
MARKER:CM1:TRACE 1;V:STATE 1

**:CURSOR:MARKER:CM<x>:ALL**

Function Turns ON/OFF all items of the marker cursor.  
 Syntax :CURSOR:MARKER:CM<x>:ALL {<Boolean>}  
 <x> = 1 to 4  
 Example :CURSOR:MARKER:CM1:ALL ON

**:CURSOR:MARKER:CM<x>:DT<x>?**

Function Queries all settings related to the  $\Delta T$  measurement of the cursor marker.  
 Syntax :CURSOR:MARKER:CM<x>:DT<x>?  
 <x> of CM<x> = 1 to 4  
 <x> of DT<x> = 1 to 4  
 Example :CURSOR:MARKER:CM1:DT1? -> :CURSOR:MARKER:CM1:DT1:STATE 1

**:CURSOR:MARKER:CM<x>:DT<x>:STATE**

Function Turns ON/OFF the  $\Delta T$  measurement of the maker cursor or queries the current setting.  
 Syntax :CURSOR:MARKER:CM<x>:DT<x>:STATE {<Boolean>}  
 :CURSOR:MARKER:CM<x>:DT<x>:STATE?  
 <x> of CM<x> = 1 to 4  
 <x> of DT<x> = 1 to 4  
 Example :CURSOR:MARKER:CM1:DT2:STATE ON  
 :CURSOR:MARKER:CM1:DT2:STATE?  
 -> :CURSOR:MARKER:CM1:DT2:STATE 1

**:CURSOR:MARKER:CM<x>:DT<x>:VALUE?**

Function Queries the  $\Delta T$  value of the marker cursor.  
 Syntax :CURSOR:MARKER:CM<x>:DT<x>:VALUE?  
 <x> of CM<x> = 1 to 4  
 <x> of DT<x> = 1 to 4  
 Example :CURSOR:MARKER:CM1:DT2:VALUE?  
 -> :CURSOR:MARKER:CM1:DT2:VALUE 0.000E+00

**:CURSOR:MARKER:CM<x>:DV<x>?**

Function Queries all settings related to the  $\Delta V$  measurement of the cursor marker.  
 Syntax :CURSOR:MARKER:CM<x>:DV<x>?  
 <x> of CM<x> = 1 to 4  
 <x> of DV<x> = 1 to 4  
 Example :CURSOR:MARKER:CM1:DV2? -> :CURSOR:MARKER:CM1:DV2:STATE 1

**:CURSOR:MARKER:CM<x>:DV<x>:STATE**

Function Turns ON/OFF the  $\Delta V$  measurement of the maker cursor or queries the current setting.  
 Syntax :CURSOR:MARKER:CM<x>:DV<x>:STATE {<Boolean>}  
 :CURSOR:MARKER:CM<x>:DV<x>:STATE?  
 <x> of CM<x> = 1 to 4  
 <x> of DV<x> = 1 to 4  
 Example :CURSOR:MARKER:CM1:DV2:STATE ON  
 :CURSOR:MARKER:CM1:DV2:STATE?  
 -> :CURSOR:MARKER:CM1:DV2:STATE 1

**:CURSOR:MARKER:CM<x>:DV<x>:VALUE?**

Function Queries the  $\Delta V$  value of the marker cursor.  
 Syntax :CURSOR:MARKER:CM<x>:DV<x>:VALUE?  
 <x> of CM<x> = 1 to 4  
 <x> of DV<x> = 1 to 4  
 Example :CURSOR:MARKER:CM1:DV2:VALUE?  
 -> :CURSOR:MARKER:CM1:DV2:VALUE 0

**:CURSOR:MARKER:CM<x>:JUMP**

Function Jumps the marker cursor to the center position of the zoom waveform.  
 Syntax :CURSOR:MARKER:CM<x>:JUMP {Z1|Z2}  
 <x> = 1 to 4  
 Example :CURSOR:MARKER:CM1:JUMP Z1

**:CURSOR:MARKER:CM<x>:POSITION**

Function Sets the marker cursor position or queries the current setting.  
 Syntax :CURSOR:MARKER:CM<x>:POSITION {<NRF>}  
 :CURSOR:MARKER:CM<x>:POSITION?  
 <x> = 1 to 4  
 <NRF> = -5 to 5 div  
 Example :CURSOR:MARKER:CM1:POSITION 1  
 :CURSOR:MARKER:CM1:POSITION?  
 -> :CURSOR:MARKER:CM1:POSITION 1.000E+00

**:CURSOR:MARKER:CM<x>:T?**

Function Queries all settings related to the time measurement of the marker cursor.  
 Syntax :CURSOR:MARKER:CM<x>:T?  
 <x> = 1 to 4  
 Example :CURSOR:MARKER:CM1:T? -> :CURSOR:MARKER:CM1:T:STATE 1



## 5.9 CURSOR Group

### **:CURSOR:MARKER:CM<x>:T:STATE**

Function Turns ON/OFF the time measurement of the marker cursor or queries the current setting.

Syntax :CURSOR:MARKER:CM<x>:T:STATE  
{<Boolean>}  
:CURSOR:MARKER:CM<x>:T:STATE?  
<x> = 1 to 4

Example :CURSOR:MARKER:CM1:T:STATE ON  
:CURSOR:MARKER:CM1:T:STATE? -> :CURSOR:  
MARKER:CM1:T:STATE 1

### **:CURSOR:MARKER:CM<x>:T:VALUE?**

Function Queries the time value at the marker cursor position.

Syntax :CURSOR:MARKER:CM<x>:T:VALUE?  
<x> = 1 to 4

Example :CURSOR:MARKER:CM1:T:VALUE? -> :CURSOR:  
MARKER:CM1:T:VALUE 0.000E+00

### **:CURSOR:MARKER:CM<x>:TRACE**

Function Sets the source trace of the marker cursor or queries the current setting.

Syntax :CURSOR:MARKER:CM<x>:TRACE {<NRf>|OFF}  
:CURSOR:MARKER:CM<x>:TRACE?  
<x> = 1 to 4  
<NRf> = 1 to 8

Example :CURSOR:MARKER:CM1:TRACE 1  
:CURSOR:MARKER:CM1:TRACE? -> :CURSOR:  
MARKER:CM1:TRACE 1

### **:CURSOR:MARKER:CM<x>:V?**

Function Queries all settings related to the voltage measurement of the marker cursor.

Syntax :CURSOR:MARKER:CM<x>:V?  
<x> = 1 to 4

Example :CURSOR:MARKER:CM1:V? -> :CURSOR:  
MARKER:CM1:V:STATE 1

### **:CURSOR:MARKER:CM<x>:V:STATE**

Function Turns ON/OFF the voltage measurement of the marker cursor or queries the current setting.

Syntax :CURSOR:MARKER:CM<x>:V:STATE  
{<Boolean>}  
:CURSOR:MARKER:CM<x>:V:STATE?  
<x> = 1 to 4

Example :CURSOR:MARKER:CM1:V:STATE ON  
:CURSOR:MARKER:CM1:V:STATE? -> :CURSOR:  
MARKER:CM1:V:STATE 1

### **:CURSOR:MARKER:CM<x>:V:VALUE?**

Function Queries the voltage value at the marker cursor position.

Syntax :CURSOR:MARKER:CM<x>:V:VALUE?  
<x> = 1 to 4

Example :CURSOR:MARKER:CM1:V:VALUE? -> :CURSOR:  
MARKER:CM1:V:VALUE 0.000E+00

### **:CURSOR:MARKER:FORM**

Function Sets the marker cursor form or queries the current setting.

Syntax :CURSOR:MARKER:FORM {LINE|MARK}  
:CURSOR:MARKER:FORM?  
Example :CURSOR:MARKER:FORM LINE  
:CURSOR:MARKER:FORM?

-> :CURSOR:MARKER:FORM LINE

### **:CURSOR:SERIAL?**

Function Queries all settings related to the serial cursors.

Syntax :CURSOR:SERIAL?

Example :CURSOR:SERIAL? -> :CURSOR:SERIAL:  
SCURSOR1:ACTIVE HIGH;BCOUNT 8;  
BITRATE 10.00E+00;BITORDER MSBFIRST;  
FORMAT BINARY;HYSTERESIS 1.000E+00;  
LEVEL 0.000E+00;MODE 1;  
POSITION -4.000E+00;TRACE 1;TRACK OFF;;  
CURSOR:SERIAL:SCURSOR2:ACTIVE HIGH;  
BCOUNT 8;BITRATE 1.000E+00;  
BITORDER MSBFIRST;FORMAT BINARY;  
HYSTERESIS 3.000E+00;LEVEL 0.000E+00;  
MODE 0;POSITION -4.000E+00;TRACE 2;  
TRACK OFF

### **:CURSOR:SERIAL:SCURSOR<x>?**

Function Queries all settings related to the serial cursor.

Syntax :CURSOR:SERIAL:SCURSOR<x>?  
<x> = 1 or 2

Example :CURSOR:SERIAL:SCURSOR1? -> :CURSOR:  
SERIAL:SCURSOR1:ACTIVE HIGH;  
BCOUNT 8;BITRATE 1.25E+06;  
BITORDER MSBFIRST;FORMAT BINARY;  
HYSTERESIS 300.00E-03;LEVEL 0.000E+00;  
MODE 1;POSITION -4.00E+00;TRACE 1;  
TRACK OFF

### **:CURSOR:SERIAL:SCURSOR<x>:ACTIVE**

Function Sets the active level of the serial cursor or queries the current setting.

Syntax :CURSOR:SERIAL:SCURSOR<x>:ACTIVE {HIGH|  
LOW}  
:CURSOR:SERIAL:SCURSOR<x>:ACTIVE?  
<x> = 1 or 2

Example :CURSOR:SERIAL:SCURSOR1:ACTIVE HIGH  
:CURSOR:SERIAL:SCURSOR1:ACTIVE?  
-> :CURSOR:SERIAL:SCURSOR1:ACTIVE HIGH

**:CURSor:SErIAL:SCURsor<x>:BCOunt**

**Function** Sets the bit length of the serial cursor or queries the current setting.

**Syntax** :CURSor:SErIAL:SCURsor<x>:BCOunt  
{<Nrf>}  
:CURSor:SErIAL:SCURsor<x>:BCOunt?  
<x> = 1 or 2  
<Nrf> = 1 to 128 (bits)

**Example** :CURSOR:SERIAL:SCURSOR1:BCOUNT 8  
:CURSOR:SERIAL:SCURSOR1:BCOUNT?  
-> :CURSOR:SERIAL:SCURSOR1:BCOUNT 8

**:CURSor:SErIAL:SCURsor<x>:BITRate**

**Function** Sets the bit rate of the serial cursor or queries the current setting.

**Syntax** :CURSor:SErIAL:SCURsor<x>:BITRate  
{<Nrf>}  
:CURSor:SErIAL:SCURsor<x>:BITRate?  
<x> = 1 or 2  
<Nrf> = 1 to 1 G (bps)

**Example** :CURSOR:SERIAL:SCURSOR1:BITRATE 10  
:CURSOR:SERIAL:SCURSOR1:BITRATE?  
-> :CURSOR:SERIAL:SCURSOR1:  
BITRATE 10.00E+00

**:CURSor:SErIAL:SCURsor<x>:BITOrder**

**Function** Sets the bit order of the serial cursor or queries the current setting.

**Syntax** :CURSor:SErIAL:SCURsor<x>:BITOrder  
{LSBFirst|MSBFirst}  
:CURSor:SErIAL:SCURsor<x>:BITOrder?  
<x> = 1 or 2

**Example** :CURSOR:SERIAL:SCURSOR1:  
BITORDER LSBFIRST  
:CURSOR:SERIAL:SCURSOR1:BITORDER?  
-> :CURSOR:SERIAL:SCURSOR1:  
BITORDER LSBFIRST

**:CURSor:SErIAL:SCURsor<x>:FORMat**

**Function** Sets the display format of the serial cursor or queries the current setting.

**Syntax** :CURSor:SErIAL:SCURsor<x>:FORMat  
{BINary|HEXa}  
:CURSor:SErIAL:SCURsor<x>:FORMat?  
<x> = 1 or 2

**Example** :CURSOR:SERIAL:SCURSOR1:FORMAT HEXA  
:CURSOR:SERIAL:SCURSOR1:FORMAT?  
-> :CURSOR:SERIAL:SCURSOR1:FORMAT HEXA

**:CURSor:SErIAL:SCURsor<x>:HYSTeresis**

**Function** Sets the hysteresis of the serial cursor or queries the current setting.

**Syntax** :CURSor:SErIAL:SCURsor<x>:  
HYSTeresis {<Nrf>}  
:CURSor:SErIAL:SCURsor<x>:HYSTeresis?  
<x> = 1 or 2  
<Nrf> = 0 to 4 (div)

**Example** :CURSOR:SERIAL:SCURSOR1:HYSTERESIS 1  
:CURSOR:SERIAL:SCURSOR1:HYSTERESIS?  
-> :CURSOR:SERIAL:SCURSOR1:  
HYSTERESIS 1.000E+00

**:CURSor:SErIAL:SCURsor<x>:JUMP**

**Function** Moves the serial cursor to the specified direction.

**Syntax** :CURSor:SErIAL:SCURsor<x>:JUMP  
{BACK|FRONT}  
<x> = 1 or 2

**Example** :CURSOR:SERIAL:SCURSOR1:JUMP BACK

**:CURSor:SErIAL:SCURsor<x>:LEVel**

**Function** Sets the threshold level of the serial cursor or queries the current setting.

**Syntax** :CURSor:SErIAL:SCURsor<x>:  
LEVel {<Voltage>|<Current>}  
:CURSor:SErIAL:SCURsor<x>:LEVel?  
<x> = 1 or 2  
<Voltage> and <Current> = See the SB5000 User's  
Manual.

**Example** :CURSOR:SERIAL:SCURSOR1:LEVEL 0V  
:CURSOR:SERIAL:SCURSOR1:LEVEL?  
-> :CURSOR:SERIAL:SCURSOR1:  
LEVEL 0.000E+00

**:CURSor:SErIAL:SCURsor<x>:MODE**

**Function** Turns ON/OFF the serial cursor or queries the current setting.

**Syntax** :CURSor:SErIAL:SCURsor<x>:  
MODE {<Boolean>}  
:CURSor:SErIAL:SCURsor<x>:MODE?  
<x> = 1 or 2

**Example** :CURSOR:SERIAL:SCURSOR1:MODE ON  
:CURSOR:SERIAL:SCURSOR1:MODE?  
-> :CURSOR:SERIAL:SCURSOR1:MODE 1

**:CURSor:SErIAL:SCURsor<x>:POSition**

**Function** Sets the serial cursor position or queries the current setting.

**Syntax** :CURSor:SErIAL:SCURsor<x>:  
POSition {<Nrf>}  
:CURSor:SErIAL:SCURsor<x>:POSition?  
<x> = 1 or 2  
<Nrf> = -5 to 5 div

**Example** :CURSOR:SERIAL:SCURSOR1:POSITION 1  
:CURSOR:SERIAL:SCURSOR1:POSITION?  
-> :CURSOR:SERIAL:SCURSOR1:  
POSITION 1.000E+00

## 5.9 CURSOR Group

### **:CURSOR:SERIAL:SCURSOR<x>:TRACE**

**Function** Sets the trace of the serial cursor or queries the current setting.

**Syntax** :CURSOR:SERIAL:SCURSOR<x>:TRACE {<NRF>|A<y>|B<y>|C<y>|D<y>}  
:CURSOR:SERIAL:SCURSOR<x>:TRACE?  
<x> = 1 or 2  
<NRF> = 1 to 8  
<y> = 0 to 7

**Example** :CURSOR:SERIAL:SCURSOR1:TRACE 1  
:CURSOR:SERIAL:SCURSOR1:TRACE?  
-> :CURSOR:SERIAL:SCURSOR1:TRACE 1

**Description** For the SB5310, only {<NRF>|A<y>} are valid.

### **:CURSOR:SERIAL:SCURSOR<x>:TRACK**

**Function** Jumps the serial cursor onto the zoom waveform.

**Syntax** :CURSOR:SERIAL:SCURSOR<x>:TRACK {OFF|Z1|Z2}  
:CURSOR:SERIAL:SCURSOR<x>:TRACK?  
<x> = 1 or 2

**Example** :CURSOR:SERIAL:SCURSOR1:TRACK OFF  
:CURSOR:SERIAL:SCURSOR1:TRACK?  
-> :CURSOR:SERIAL:SCURSOR1:TRACK OFF

### **:CURSOR:SERIAL:SCURSOR<x>:VALUE?**

**Function** Queries the measured value of the serial cursor.

**Syntax** :CURSOR:SERIAL:SCURSOR<x>:VALUE?  
<x> = 1 or 2

**Example** :CURSOR:SERIAL:SCURSOR1:VALUE?  
-> :CURSOR:SERIAL:SCURSOR1:  
VALUE "11000111"

### **:CURSOR:TYPE**

**Function** Sets the cursor type or queries the current setting.

**Syntax** :CURSOR:TYPE {HORIZONTAL|HAVERTICAL|MARKER|SERIAL|VERTICAL|VT}  
:CURSOR:TYPE?

**Example** :CURSOR:TYPE HORIZONTAL  
:CURSOR:TYPE? -> :CURSOR:TYPE HORIZONTAL

### **:CURSOR:VERTICAL?**

**Function** Queries all settings related to the vertical cursors.

**Syntax** :CURSOR:VERTICAL?

**Example** :CURSOR:VERTICAL? -> :CURSOR:VERTICAL:  
BASIC:DT:STATE 1;:CURSOR:VERTICAL:  
BASIC:LINKAGE 1;PERDT:STATE 1;:CURSOR:  
VERTICAL:BASIC:T1:POSITION -4.000E+00;  
STATE 1;:CURSOR:VERTICAL:BASIC:T2:  
POSITION -4.000E+00;STATE 1;:CURSOR:  
VERTICAL:CALCULATION:DEFINE1 "T1";  
DEFINE2 "T2";DEFINE3 "T1";DEFINE4 "T2";  
STATE1 0;STATE2 0;STATE3 0;STATE4 0

### **:CURSOR:VERTICAL:BASIC?**

**Function** Queries all settings related to basic items of the vertical cursors.

**Syntax** :CURSOR:VERTICAL:BASIC?

**Example** :CURSOR:VERTICAL:BASIC? -> :CURSOR:  
VERTICAL:BASIC:DT:STATE 1;:  
CURSOR:VERTICAL:BASIC:LINKAGE 1;PERDT:  
STATE 1;:CURSOR:VERTICAL:BASIC:T1:  
POSITION -4.000E+00;STATE 1;:CURSOR:  
VERTICAL:BASIC:T2:POSITION -4.000E+00;  
STATE 1

### **:CURSOR:VERTICAL[:BASIC]:ALL**

**Function** Turns ON/OFF all basic items of the vertical cursors.

**Syntax** :CURSOR:VERTICAL[:BASIC]:  
ALL {<Boolean>}

**Example** :CURSOR:VERTICAL:BASIC:ALL ON

### **:CURSOR:VERTICAL[:BASIC]:DT?**

**Function** Queries all settings related to the  $\Delta T$  measurement of the vertical cursors.

**Syntax** :CURSOR:VERTICAL[:BASIC]:DT?

**Example** :CURSOR:VERTICAL:BASIC:DT? -> :CURSOR:  
VERTICAL:BASIC:DT:STATE 1

### **:CURSOR:VERTICAL[:BASIC]:DT:STATE**

**Function** Turns ON/OFF the  $\Delta T$  measurement of the vertical cursors or queries the current setting.

**Syntax** :CURSOR:VERTICAL[:BASIC]:DT:  
STATE {<Boolean>}

:CURSOR:VERTICAL[:BASIC]:DT:STATE?

**Example** :CURSOR:VERTICAL:BASIC:DT:STATE ON  
:CURSOR:VERTICAL:BASIC:DT:STATE?  
-> :CURSOR:VERTICAL:BASIC:DT:STATE 1

### **:CURSOR:VERTICAL[:BASIC]:DT:VALUE?**

**Function** Queries the  $\Delta T$  value of the vertical cursors.

**Syntax** :CURSOR:VERTICAL[:BASIC]:DT:VALUE?

**Example** :CURSOR:VERTICAL:BASIC:DT:VALUE?  
-> :CURSOR:VERTICAL:BASIC:DT:  
VALUE 1.000E+00

### **:CURSOR:VERTICAL[:BASIC]:LINKAGE**

**Function** Turns ON/OFF the vertical cursor link or queries the current setting.

**Syntax** :CURSOR:VERTICAL[:BASIC]:

LINKAGE {<Boolean>}

:CURSOR:VERTICAL[:BASIC]:LINKAGE?

**Example** :CURSOR:VERTICAL:BASIC:LINKAGE ON  
:CURSOR:VERTICAL:BASIC:LINKAGE?  
-> :CURSOR:VERTICAL:BASIC:LINKAGE 1

**:CURSOR:VERTICAL[:BASIC]:PERDT?**

Function Queries all settings related to the  $1/\Delta T$  measurement of the vertical cursors.

Syntax :CURSOR:VERTICAL[:BASIC]:PERDT?

Example :CURSOR:VERTICAL:BASIC:PERDT?  
-> :CURSOR:VERTICAL:BASIC:PERDT:STATE 1

**:CURSOR:VERTICAL[:BASIC]:PERDT:STATE**

Function Turns ON/OFF the  $1/\Delta T$  measurement of the vertical cursors or queries the current setting.

Syntax :CURSOR:VERTICAL[:BASIC]:PERDT:STATE  
{<Boolean>}

Example :CURSOR:VERTICAL:BASIC:PERDT:STATE ON  
:CURSOR:VERTICAL:BASIC:PERDT:STATE?  
-> :CURSOR:VERTICAL:BASIC:PERDT:STATE 1

**:CURSOR:VERTICAL[:BASIC]:PERDT:****VALUE?**

Function Queries the  $1/\Delta T$  value of the vertical cursors.

Syntax :CURSOR:VERTICAL[:BASIC]:PERDT:VALUE?

Example :CURSOR:VERTICAL:BASIC:PERDT:VALUE?  
-> :CURSOR:VERTICAL:BASIC:PERDT:  
VALUE 0.000E+00

**:CURSOR:VERTICAL[:BASIC]:T<x>?**

Function Queries all settings related to the vertical cursor.

Syntax :CURSOR:VERTICAL[:BASIC]:T<x>?  
<x> = 1 or 2

Example :CURSOR:VERTICAL:BASIC:T1? -> :CURSOR:  
VERTICAL:BASIC:T1:  
POSITION -4.000E+00;STATE 1

**:CURSOR:VERTICAL[:BASIC]:T<x>:JUMP**

Function Jumps to the center position of the zoom waveform of the vertical cursor.

Syntax :CURSOR:VERTICAL[:BASIC]:T<x>:JUMP {Z1 |  
Z2}  
<x> = 1 or 2

Example :CURSOR:VERTICAL:BASIC:T1:JUMP Z1

**:CURSOR:VERTICAL[:BASIC]:T<x>:****POSITION**

Function Sets the vertical cursor position or queries the current setting.

Syntax :CURSOR:VERTICAL[:BASIC]:T<x>:  
POSITION {<NRf>}  
:CURSOR:VERTICAL[:BASIC]:T<x>:POSITION?  
<x> = 1 or 2  
<NRf> = -5 to 5 (div)

Example :CURSOR:VERTICAL:BASIC:T1:POSITION 1  
:CURSOR:VERTICAL:BASIC:T1:POSITION?  
-> :CURSOR:VERTICAL:BASIC:T1:  
POSITION 1.000E+00

**:CURSOR:VERTICAL[:BASIC]:T<x>:STATE**

Function Turns ON/OFF the vertical cursor or queries the current setting.

Syntax :CURSOR:VERTICAL[:BASIC]:T<x>:STATE  
{<Boolean>}  
:CURSOR:VERTICAL[:BASIC]:T<x>:STATE?  
<x> = 1 or 2

Example :CURSOR:VERTICAL:BASIC:T1:STATE ON  
:CURSOR:VERTICAL:BASIC:T1:STATE?  
-> :CURSOR:VERTICAL:BASIC:T1:STATE 1

**:CURSOR:VERTICAL[:BASIC]:T<x>:VALUE?**

Function Queries the time value at the vertical cursor.

Syntax :CURSOR:VERTICAL[:BASIC]:T<x>:VALUE?  
<x> = 1 or 2

Example :CURSOR:VERTICAL:BASIC:T1:VALUE?  
-> :CURSOR:VERTICAL:BASIC:T1:  
VALUE 0.000E+00

**:CURSOR:VERTICAL:CALCULATION?**

Function Queries all settings related to calculation items of the vertical cursors.

Syntax :CURSOR:VERTICAL:CALCULATION?

Example :CURSOR:VERTICAL:CALCULATION?  
-> :CURSOR:VERTICAL:CALCULATION:  
DEFINE1 "T1";DEFINE2 "T2";DEFINE3 "T1";  
DEFINE4 "T2";STATE1 0;STATE2 0;  
STATE3 0;STATE4 0

**:CURSOR:VERTICAL:CALCULATION:ALL**

Function Turns ON/OFF all calculation items of the vertical cursors.

Syntax :CURSOR:VERTICAL:CALCULATION:ALL  
{<Boolean>}

Example :CURSOR:VERTICAL:CALCULATION:ALL ON

**:CURSOR:VERTICAL:CALCULATION:****DEFINE<x>**

Function Sets the equation of the calculation item of the vertical cursor or queries the current setting.

Syntax :CURSOR:VERTICAL:CALCULATION:  
DEFINE<x> {<String>}  
:CURSOR:VERTICAL:CALCULATION:DEFINE<x>?  
<x> = 1 to 4

<String> = Up to 128 characters  
Example :CURSOR:VERTICAL:CALCULATION:  
DEFINE1 "T1"  
:CURSOR:VERTICAL:CALCULATION:DEFINE1?  
-> :CURSOR:VERTICAL:CALCULATION:  
DEFINE1 "T1"

## 5.9 CURSOR Group

### :CURSOR:VERTICAL:CALCULATION:

#### STATE<x>

**Function** Turns ON/OFF the calculation item of the vertical cursor or queries the current setting.

**Syntax** :CURSOR:VERTICAL:CALCULATION:STATE<x> {<Boolean>}  
:CURSOR:VERTICAL:CALCULATION:STATE<x>? <x> = 1 to 4

**Example** :CURSOR:VERTICAL:CALCULATION:STATE1 ON  
:CURSOR:VERTICAL:CALCULATION:STATE1?  
-> :CURSOR:VERTICAL:CALCULATION:STATE1 1

### :CURSOR:VERTICAL:CALCULATION:

#### VALUE<x>?

**Function** Queries the measured value of the calculation item of the vertical cursor.

**Syntax** :CURSOR:VERTICAL:CALCULATION:VALUE<x>? <x> = 1 to 4

**Example** :CURSOR:VERTICAL:CALCULATION:VALUE1?  
-> :CURSOR:VERTICAL:CALCULATION:VALUE1 0.000E+00

### :CURSOR:VT?

**Function** Queries all settings related to the VT cursor.

**Syntax** :CURSOR:VT?

**Example** :CURSOR:VT? -> :CURSOR:VT: BASIC:GROUP1: BITORDER MSBFIRST;FORMAT HEXA; STATE1;:CURSOR:VT: BASIC:GROUP2: BITORDER MSBFIRST;FORMAT HEXA; STATE1;:CURSOR:VT: BASIC:GROUP3: BITORDER MSBFIRST;FORMAT HEXA; STATE1;:CURSOR:VT: BASIC:GROUP4: BITORDER MSBFIRST;FORMAT HEXA; STATE1;:CURSOR:VT: BASIC:GROUP5: BITORDER MSBFIRST;FORMAT HEXA; STATE 1;:CURSOR:VT: BASIC: POSITION 0.000E+00;T:STATE 1; :CURSOR:VT: BASIC:V1: STATE 1; :CURSOR:VT: BASIC:V2: STATE 1; :CURSOR:VT: BASIC:V3: STATE1; :CURSOR:VT: BASIC:V4: STATE 1; :CURSOR:VT: BASIC:V5: STATE 1; :CURSOR:VT: BASIC:V6: STATE 1; :CURSOR:VT: BASIC:V7: STATE 1; :CURSOR:VT: BASIC:V8: STATE 1; :CURSOR:VT: CALCULATION: DEFINE1 "T1";DEFINE2 "V(C1)"; DEFINE3 "V(C2)";DEFINE4 "V(C3)"; STATE1 0;STATE2 0;STATE3 0;STATE4 0

### :CURSOR:VT:Basic?

**Function** Queries all settings related to basic items of the VT cursor.

**Syntax** :CURSOR:VT:Basic?

**Example** :CURSOR:VT:Basic? -> :CURSOR:VT:Basic: GROUP1:BITORDER MSBFIRST;FORMAT HEXA; STATE1;:CURSOR:VT:Basic:GROUP2: BITORDER MSBFIRST;FORMAT HEXA;STATE1; :CURSOR:VT:Basic:GROUP3: BITORDER MSBFIRST;FORMAT HEXA;STATE1; :CURSOR:VT:Basic:GROUP4: BITORDER MSBFIRST;FORMAT HEXA;STATE1; :CURSOR:VT:Basic:GROUP5: BITORDER MSBFIRST;FORMAT HEXA;STATE 1; :CURSOR:VT:Basic:POSITION 0.000E+00;T: STATE 1;:CURSOR:VT:Basic:V1:STATE 1;: CURSOR:VT:Basic:V2:STATE 1;:CURSOR:VT: Basic:V3:STATE 1;:CURSOR:VT:Basic:V4: STATE 1;:CURSOR:VT:Basic:V5:STATE 1;: CURSOR:VT:Basic:V6:STATE 1;:CURSOR:VT: Basic:V7:STATE 1;:CURSOR:VT:Basic:V8: STATE 1

### :CURSOR:VT[:Basic]:ALL

**Function** Turns ON/OFF all basic items of the VT cursor.

**Syntax** :CURSOR:VT[:Basic]:ALL {<Boolean>}

**Example** :CURSOR:VT:Basic:ALL ON

### :CURSOR:VT[:Basic]:GROUP<x>?

**Function** Queries all settings related to the logic group of the VT cursor.

**Syntax** :CURSOR:VT[:Basic]:GROUP<x>? <x> = 1 to 5

**Example** :CURSOR:VT:Basic:GROUP1? -> :CURSOR:VT: Basic:GROUP1:BITORDER MSBFIRST; FORMAT HEXA;STATE 1

### :CURSOR:VT[:Basic]:GROUP<x>:BITOrder

**Function** Sets the measurement bit order of the logic group of the VT cursor or queries the current setting.

**Syntax** :CURSOR:VT[:Basic]:GROUP<x>: BITOrder {LSBFirst|MSBFirst}  
:CURSOR:VT[:Basic]:GROUP<x>:BITOrder? <x> = 1 to 5

**Example** :CURSOR:VT:Basic:GROUP1: BITORDER LSBFIRST  
:CURSOR:VT:Basic:GROUP1:BITORDER?  
-> :CURSOR:VT:Basic:GROUP1: BITORDER LSBFIRST

**:CURSOR:VT[:BASiC]:GRoup<x>:FORMat**

**Function** Sets the display format of the measured value of the logic group of the VT cursor or queries the current setting.

**Syntax** :CURSOR:VT[:BASiC]:GRoup<x>:  
FORMat {BINary|HEXa}  
:CURSOR:VT[:BASiC]:GRoup<x>:FORMat?  
<x> = 1 to 5

**Example** :CURSOR:VT:BASiC:GRoup1:FORMat HEXA  
:CURSOR:VT:BASiC:GRoup1:FORMat?  
-> :CURSOR:VT:BASiC:GRoup1:FORMat HEXA

**:CURSOR:VT[:BASiC]:GRoup<x>:STATe**

**Function** Turns ON/OFF the measured value of the logic group of the VT cursor or queries the current setting.

**Syntax** :CURSOR:VT[:BASiC]:GRoup<x>:  
STATe {<Boolean>}  
:CURSOR:VT[:BASiC]:GRoup<x>:STATe?  
<x> = 1 to 5

**Example** :CURSOR:VT:BASiC:GRoup1:STATe ON  
:CURSOR:VT:BASiC:GRoup1:STATe?  
-> :CURSOR:VT:BASiC:GRoup1:STATe 1

**:CURSOR:VT[:BASiC]:GRoup<x>:VALue?**

**Function** Queries the measured value of the logic group of the VT cursor.

**Syntax** :CURSOR:VT[:BASiC]:GRoup<x>:VALue?  
<x> = 1 to 5

**Example** :CURSOR:VT:BASiC:GRoup1:VALue?  
-> :CURSOR:VT:BASiC:GRoup1:  
VALue 4294967295

**:CURSOR:VT[:BASiC]:POSitiON**

**Function** Sets the VT cursor position or queries the current setting.

**Syntax** :CURSOR:VT[:BASiC]:POSitiON {<NRf>}  
:CURSOR:VT[:BASiC]:POSitiON?  
<NRf> = -5 to 5 (div)

**Example** :CURSOR:VT:BASiC:POSitiON 1  
:CURSOR:VT:BASiC:POSitiON? -> :CURSOR:  
VT:BASiC:POSitiON 1.000E+00

**:CURSOR:VT[:BASiC]:T?**

**Function** Queries all settings related to the time value of the VT cursor.

**Syntax** :CURSOR:VT[:BASiC]:T?  
**Example** :CURSOR:VT:BASiC:T? -> :CURSOR:VT:  
BASiC:T:STATe 1

**:CURSOR:VT[:BASiC]:T:STATe**

**Function** Turns ON/OFF the time value of the VT cursor or queries the current setting.

**Syntax** :CURSOR:VT[:BASiC]:T:STATe {<Boolean>}  
:CURSOR:VT[:BASiC]:T:STATe?

**Example** :CURSOR:VT:BASiC:T:STATe ON  
:CURSOR:VT:BASiC:T:STATe? -> :CURSOR:  
VT:BASiC:T:STATe 1

**:CURSOR:VT[:BASiC]:T:VALue?**

**Function** Queries the time value at the VT cursor.

**Syntax** :CURSOR:VT[:BASiC]:T:VALue?

**Example** :CURSOR:VT:BASiC:T:VALue? -> :CURSOR:  
VT:BASiC:T:VALue 0.000E+00

**:CURSOR:VT[:BASiC]:V<x>?**

**Function** Queries all settings related to the voltage value of the VT cursor.

**Syntax** :CURSOR:VT[:BASiC]:V<x>?  
<x> = 1 to 8

**Example** :CURSOR:VT:BASiC:V1? -> :CURSOR:VT:  
BASiC:V1:STATe 1

**:CURSOR:VT[:BASiC]:V<x>:STATe**

**Function** Turns ON/OFF the voltage value of the VT cursor or queries the current setting.

**Syntax** :CURSOR:VT[:BASiC]:V<x>:  
STATe {<Boolean>}  
:CURSOR:VT[:BASiC]:V<x>:STATe?  
<x> = 1 to 8

**Example** :CURSOR:VT:BASiC:V1:STATe ON  
:CURSOR:VT:BASiC:V1:STATe? -> :CURSOR:  
VT:BASiC:V1:STATe 1

**:CURSOR:VT[:BASiC]:V<x>:VALue?**

**Function** Queries the voltage value at the VT cursor.

**Syntax** :CURSOR:VT[:BASiC]:V<x>:VALue?  
<x> = 1 to 8

**Example** :CURSOR:VT:BASiC:V1:VALue? -> :CURSOR:  
VT:BASiC:V1:VALue 0.000E+00

**:CURSOR:VT:CALCulation?**

**Function** Queries all settings related to calculation items of the VT cursor.

**Syntax** :CURSOR:VT:CALCulation?  
**Example** :CURSOR:VT:CALCulation? -> :CURSOR:VT:  
CALCulation:DEFiNE1 "T1";  
DEFiNE2 "V(C1)";DEFiNE3 "V(C2)";  
DEFiNE4 "V(C3)";STATe1 0;STATe2 0;  
STATe3 0;STATe4 0

## 5.9 CURSOR Group

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### **:CURSOR:VT:CALCulation:ALL**

Function Turns ON/OFF all calculation items of the VT cursor.

Syntax :CURSOR:VT:CALCulation:ALL {<Boolean>}

Example :CURSOR:VT:CALCULATION:ALL ON

### **:CURSOR:VT:CALCulation:DEFine<x>**

Function Sets the equation of the calculation item of the VT cursor or queries the current setting.

Syntax :CURSOR:VT:CALCulation:  
DEFine<x> {<String>}  
:CURSOR:VT:CALCulation:DEFine<x>?  
<x> = 1 to 4  
<String> = Up to 128 characters

Example :CURSOR:VT:CALCULATION:DEFINE1 "T1"  
:CURSOR:VT:CALCULATION:DEFINE1?  
-> :CURSOR:VT:CALCULATION:DEFINE1 "T1"

### **:CURSOR:VT:CALCulation:STate<x>**

Function Turns ON/OFF the calculation item of the VT cursor or queries the current setting.

Syntax :CURSOR:VT:CALCulation:  
STate<x> {<Boolean>}  
:CURSOR:VT:CALCulation:STate<x>?  
<x> = 1 to 4

Example :CURSOR:VT:CALCULATION:STATE1 ON  
:CURSOR:VT:CALCULATION:STATE1?  
-> :CURSOR:VT:CALCULATION:STATE1 0

### **:CURSOR:VT:CALCulation:VALue<x>?**

Function Queries the measured value of the calculation item of the VT cursor.

Syntax :CURSOR:VT:CALCulation:VALue<x>?  
<x> = 1 to 4

Example :CURSOR:VT:CALCULATION:VALUE1?  
-> :CURSOR:VT:CALCULATION:  
VALUE1 0.000E+00

### **:CURSOR:VT:JUMP**

Function Jumps the VT cursor to the center position of the zoom waveform.

Syntax :CURSOR:VT:JUMP {Z1|Z2}

Example :CURSOR:VT:JUMP Z1

## 5.10 DISPlay Group

### :DISPlay?

**Function** Queries all settings related to the display.

**Syntax** :DISPlay?

**Example** :DISPLAY? -> :DISPLAY:ACCUMULATE:  
GRADE INTENSITY;MODE 0;PERSISTENCE:  
COUNT INFINITY;MODE COUNT;  
TIME 1.000E+00;:DISPLAY:BLIGHT:  
AUTOOFF 0;BRIGHTNESS 1;LCD 1;TIMEOUT 1;  
:DISPLAY:COLOR:CHANNEL1 BLUE;  
CHANNEL2 BGREEN;CHANNEL3 CYAN;  
CHANNEL4 DBLUE;LOGIC YELLOW;  
LSTATE GREEN;MATH1 GRAY;MATH2 GREEN;  
MATH3 LBLUE;MATH4 LGREEN;  
REFERENCE1 MAGENTA;REFERENCE2 MGREEN;  
REFERENCE3 ORANGE;REFERENCE4 PINK;  
:DISPLAY:FORMAT SINGLE;GRATICULE GRID;  
INTENSITY:WAVEFORM 10;CURSOR 10;  
GRID 10;MARKER 10;ZBOX 10;  
:DISPLAY:INTERPOLATE SINE;MAPPING:  
MODE AUTO;TRACE1 1;TRACE2 1;TRACE3 1;  
TRACE4 1;TRACE5 1;TRACE6 1;TRACE7 1;  
TRACE8 1

### :DISPlay:ACCumulate?

**Function** Queries all settings related to the accumulated display of waveforms.

**Syntax** :DISPlay:ACCumulate?

**Example** :DISPLAY:ACCUMULATE? -> :DISPLAY:  
ACCUMULATE:GRADE INTENSITY;  
MODE 0;PERSISTENCE:COUNT INFINITY;  
MODE COUNT;TIME 1.000E+00

### :DISPlay:ACCumulate:GRADe

**Function** Sets the accumulate mode or queries the current setting.

**Syntax** :DISPlay:ACCumulate:GRADe {COLor|  
INTensity}

**Example** :DISPLAY:ACCUMULATE:GRADE INTENSITY  
:DISPLAY:ACCUMULATE:GRADE? -> :DISPLAY:  
ACCUMULATE:GRADE INTENSITY

### :DISPlay:ACCumulate:MODE

**Function** Turns ON/OFF the accumulate mode or queries the current setting.

**Syntax** :DISPlay:ACCumulate:MODE {<Boolean>}

**Example** :DISPLAY:ACCUMULATE:MODE ON  
:DISPLAY:ACCUMULATE:MODE? -> :DISPLAY:  
ACCUMULATE:MODE 1

### :DISPlay:ACCumulate:PERSistence?

**Function** Queries all settings related to persistence.

**Syntax** :DISPlay:ACCumulate:PERSistence?

**Example** :DISPLAY:ACCUMULATE:PERSISTENCE?  
-> :DISPLAY:ACCUMULATE:PERSISTENCE:  
COUNT INFINITY;MODE COUNT;  
TIME 1.000E+00

### :DISPlay:ACCumulate:PERSistence:

#### COUNT

**Function** Sets the persistence count or queries the current setting.

**Syntax** :DISPlay:ACCumulate:PERSistence:COUNT  
{<Nrf>|INFINITY}

**Example** :DISPLAY:ACCUMULATE:PERSISTENCE:  
COUNT INFINITY  
:DISPLAY:ACCUMULATE:PERSISTENCE:COUNT?  
-> :DISPLAY:ACCUMULATE:PERSISTENCE:  
COUNT INFINITY

<Nrf> = 1 to (the maximum number of history pages at the current record length)

### :DISPlay:ACCumulate:PERSistence:MODE

**Function** Sets the persistence mode or queries the current setting.

**Syntax** :DISPlay:ACCumulate:PERSistence:MODE  
{COUNT|TIME}

**Example** :DISPLAY:ACCUMULATE:PERSISTENCE:  
MODE COUNT  
:DISPLAY:ACCUMULATE:PERSISTENCE:MODE?  
-> :DISPLAY:ACCUMULATE:PERSISTENCE:  
MODE COUNT

### :DISPlay:ACCumulate:PERSistence:TIME

**Function** Sets the persistence time or queries the current setting.

**Syntax** :DISPlay:ACCumulate:PERSistence:TIME  
{<Time>|INFINITY}

**Example** :DISPLAY:ACCUMULATE:PERSISTENCE:TIME 1S  
:DISPLAY:ACCUMULATE:PERSISTENCE:TIME?  
-> :DISPLAY:ACCUMULATE:PERSISTENCE:  
TIME 1.000E+00

<Time> = 100 ms to 1 s (100 ms steps), 1 s to 10 s (200 ms steps), 10 s to 100 s (2 s steps)



## 5.10 DISPLAY Group

### **:DISPlay:BLIGHT?**

Function Queries all settings related to the backlight.  
Syntax :DISPlay:BLIGHT?  
Example :DISPLAY:BLIGHT? -> :DISPLAY:BLIGHT:  
AUTOFF 0;BRIGHTNESS 1;LCD 1;TIMEOUT 1

### **:DISPlay:BLIGHT:AUTOoff**

Function Sets the function that automatically turns the backlight off or queries the current setting.  
Syntax :DISPlay:BLIGHT:AUTOoff {<Boolean>}  
:DISPlay:BLIGHT:AUTOoff?  
Example :DISPLAY:BLIGHT:AUTOFF ON  
:DISPLAY:BLIGHT:AUTOFF? -> :DISPLAY:  
BLIGHT:AUTOFF 1

### **:DISPlay:BLIGHT:BRIGHTness**

Function Sets the brightness of the backlight or queries the current setting.  
Syntax :DISPlay:BLIGHT:BRIGHTness {<Nrf>}  
:DISPlay:BLIGHT:BRIGHTness?  
<Nrf> = 1 to 8  
Example :DISPLAY:BLIGHT:BRIGHTNESS 1  
:DISPLAY:BLIGHT:BRIGHTNESS?  
-> :DISPLAY:BLIGHT:BRIGHTNESS 1

### **:DISPlay:BLIGHT:LCD**

Function Turns ON/OFF the backlight or queries the current setting.  
Syntax :DISPlay:BLIGHT:LCD {<Boolean>}  
:DISPlay:BLIGHT:LCD?  
Example :DISPLAY:BLIGHT:LCD ON  
:DISPLAY:BLIGHT:LCD? -> :DISPLAY:  
BLIGHT:LCD 1

### **:DISPlay:BLIGHT:TIMEout**

Function Sets the timeout of the backlight or queries the current setting.  
Syntax :DISPlay:BLIGHT:TIMEout {<Nrf>}  
:DISPlay:BLIGHT:TIMEout?  
<Nrf> = 1 to 60 (minutes)  
Example :DISPLAY:BLIGHT:TIMEOUT 60  
:DISPLAY:BLIGHT:TIMEOUT? -> :DISPLAY:  
BLIGHT:TIMEOUT 60

### **:DISPlay:COLor?**

Function Queries all settings related to the waveform display color.  
Syntax :DISPlay:COLor?  
Example :DISPLAY:COLOR? -> :DISPLAY:COLOR:  
CHANNEL1 BLUE;CHANNEL2 BGREEN;  
CHANNEL3 CYAN;CHANNEL4 DBLUE;  
LOGIC YELLOW;LSTATE GREEN;MATH1 GRAY;  
MATH2 GREEN;MATH3 LBLUE;MATH4 LGREEN;  
REFERENCE1 MAGENTA;REFERENCE2 MGREEN;  
REFERENCE3 ORANGE;REFERENCE4 PINK

### **:DISPlay:COLor:{CHANnel<x>|LOGic|LState|MATH<x>|REFeRence<x>}**

Function Sets the color of the waveform or queries the current setting.  
Syntax :DISPlay:COLor:{CHANnel<x>|LOGic|LState|MATH<x>|REFeRence<x>} {BLUE|BGreen|CYAN|DBLue|GRAY|GReen|LBLue|LGreen|MAGenta|MGRreen|ORANge|PINK|PURPle|RED|SPINK|YELLow}  
:DISPlay:COLor:{CHANnel<x>|LOGic|LState|MATH<x>|REFeRence<x>}?  
<x> of CHANnel<x> = 1 to 4  
<x> of MATH<x> = 1 to 4  
<x> of REFeRence<x> = 1 to 4  
Example :DISPLAY:COLOR:CHANNEL1 BLUE  
:DISPLAY:COLOR:CHANNEL1? -> :DISPLAY:  
COLOR:CHANNEL1 BLUE

### **:DISPlay:FORMat**

Function Sets the display format or queries the current setting.  
Syntax :DISPlay:FORMat {DUAL|QUAD|SINGLE|TRIad}  
:DISPlay:FORMat?  
Example :DISPLAY:FORMAT SINGLE  
:DISPLAY:FORMAT? -> :DISPLAY:  
FORMAT SINGLE

### **:DISPlay:GRATicule**

Function Sets the graticule (grid) or queries the current setting.  
Syntax :DISPlay:GRATicule {CROSShair|FRAME|GRID|LINE}  
:DISPlay:GRATicule?  
Example :DISPLAY:GRATICULE CROSSHAIR  
:DISPLAY:GRATICULE? -> :DISPLAY:  
GRATICULE CROSSHAIR

**:DISPLAY:INTENSITY?**

Function Queries all settings related to the intensity of the displayed items.

Syntax :DISPLAY:INTENSITY?  
:DISPLAY:INTENSITY? ->

Example :DISPLAY:INTENSITY? -> :DISPLAY:  
INTENSITY:WAVEFORM 10;CURSOR 10;  
GRID 10;MARKER 10

**:DISPLAY:INTENSITY[:WAVEFORM]**

Function Sets the intensity of the waveform or queries the current setting.

Syntax :DISPLAY:INTENSITY[:WAVEFORM] {<NRf>}  
:DISPLAY:INTENSITY[:WAVEFORM]?  
<NRf> = 1 to 20

Example :DISPLAY:INTENSITY:WAVEFORM 10  
:DISPLAY:INTENSITY:WAVEFORM?  
-> :DISPLAY:INTENSITY:WAVEFORM 10

**:DISPLAY:INTENSITY:{CURSOR|GRID|MARKER|ZBOX}**

Function Sets the intensity of the display item or queries the current setting.

Syntax :DISPLAY:INTENSITY:{CURSOR|GRID|  
MARKER|ZBOX} {<NRf>}  
:DISPLAY:INTENSITY:{CURSOR|GRID|  
MARKER|ZBOX}?  
<NRf> = 0 to 31

Example :DISPLAY:INTENSITY:CURSOR 10  
:DISPLAY:INTENSITY:CURSOR?  
-> :DISPLAY:INTENSITY:CURSOR 10

**:DISPLAY:INTERPOLATE**

Function Sets the display interpolation format or queries the current setting.

Syntax :DISPLAY:INTERPOLATE {LINE|OFF|PULSE|  
SINE}  
:DISPLAY:INTERPOLATE?

Example :DISPLAY:INTERPOLATE SINE  
:DISPLAY:INTERPOLATE? -> :DISPLAY:  
INTERPOLATE SINE

**:DISPLAY:MAPPING?**

Function Queries all settings related to the waveform mapping to the split screen.

Syntax :DISPLAY:MAPPING?

Example :DISPLAY:MAPPING? -> :DISPLAY:MAPPING:  
MODE AUTO;TRACE1 1;TRACE2 1;TRACE3 1;  
TRACE4 1;TRACE5 1;TRACE6 1;TRACE7 1;  
TRACE8 1

**:DISPLAY:MAPPING[:MODE]**

Function Sets the waveform mapping mode for the split screen or queries the current setting.

Syntax :DISPLAY:MAPPING[:MODE] {AUTO|MANUAL}  
:DISPLAY:MAPPING[:MODE]?

Example :DISPLAY:MAPPING:MODE AUTO  
:DISPLAY:MAPPING:MODE? -> :DISPLAY:  
MAPPING:MODE AUTO

**:DISPLAY:MAPPING:TRACE<x>**

Function Sets the mapping of the waveform to the split screen or queries the current setting.

Syntax :DISPLAY:MAPPING:TRACE<x> {<NRf>}  
:DISPLAY:MAPPING:TRACE<x>?  
<x> = 1 to 8  
<NRf> = 1 to 4

Example :DISPLAY:MAPPING:TRACE1 3  
:DISPLAY:MAPPING:TRACE1? -> :DISPLAY:  
MAPPING:TRACE1 3

**:DISPLAY:TRANSLUCENT**

Function Turns ON/OFF the translucent mode or queries the current setting.

Syntax :DISPLAY:TRANSLUCENT {<Booleanf>}  
:DISPLAY:TRANSLUCENT?

Example :DISPLAY:TRANSLUCENT ON  
:DISPLAY:TRANSLUCENT? -> :DISPLAY:  
TRANSLUCENT 1

## 5.11 EYEDiagram Group

### :EYEDiagram?

**Function** Queries all settings related to the eye diagram.

**Syntax** :EYEDiagram?

**Example** :EYEDIAGRAM? -> :EYEDIAGRAM:DISPLAY 1;  
FLEXRAY:CONTINUOUS:COUNT INFINITY;;  
EYEDIAGRAM:FLEXRAY:CYCLE:COUNT 1;  
TRANGE 0.0000000E+00,-5.0000000E+00;;  
EYEDIAGRAM:FLEXRAY:FITEM:EHEIGHT:  
STATE 1;;EYEDIAGRAM:FLEXRAY:FITEM:  
EWIDTH:STATE 1;;EYEDIAGRAM:FLEXRAY:  
FITEM:FALL:STATE 1;;EYEDIAGRAM:FLEXRAY:  
FITEM:JITTER:STATE 1;;EYEDIAGRAM:  
FLEXRAY:FITEM:PCROSSING:STATE 1;;  
EYEDIAGRAM:FLEXRAY:FITEM:PDUTYCYCLE:  
STATE 1;;EYEDIAGRAM:FLEXRAY:FITEM:  
PSPCOUNT:STATE 0;;EYEDIAGRAM:FLEXRAY:  
FITEM:PWCOUNT:STATE 0;;EYEDIAGRAM:  
FLEXRAY:FITEM:QFACTOR:STATE 1;;  
EYEDIAGRAM:FLEXRAY:FITEM:RISE:STATE 1;;  
EYEDIAGRAM:FLEXRAY:FITEM:SDBASE:  
STATE 1;;EYEDIAGRAM:FLEXRAY:FITEM:  
SDTOP:STATE 1;;EYEDIAGRAM:FLEXRAY:  
FITEM:SPCOUNT:STATE 0;;EYEDIAGRAM:  
FLEXRAY:FITEM:T1CROSSING:STATE 1;;  
EYEDIAGRAM:FLEXRAY:FITEM:T2CROSSING:  
STATE 1;;EYEDIAGRAM:FLEXRAY:FITEM:  
TLEVELS:MODE PERCENT;PERCENT 90,10;  
UNIT 1.0000000E+00,0.0000000E+00;;  
EYEDIAGRAM:FLEXRAY:FITEM:VBASE:  
STATE 1;;EYEDIAGRAM:FLEXRAY:FITEM:  
VCROSSING:STATE 1;;EYEDIAGRAM:FLEXRAY:  
FITEM:VDARK 1.0000000E+00;VTOP:  
STATE 1;;EYEDIAGRAM:FLEXRAY:  
FITEM:WCOUNT:STATE 0;;EYEDIAGRAM:  
FLEXRAYSETUP:BRATE 5000000;DMODE 1;  
FTRACE 1;RX10:LRIGHT 800.00000E-09,  
770.00000E-09;RPOINT -3.00000E+00;  
ULOWER 400.0E-03,-400.0E-03;  
WIDTH 0.0000000E+00;;EYEDIAGRAM:  
FLEXRAY:SETUP:RX2\_5:  
LRIGHT 272.00000E-09,0.0000000E+00.....

### :EYEDiagram:DISPlay

**Function** Turns ON/OFF the eye diagram display or queries the current setting.

**Syntax** :EYEDiagram:DISPlay {<Boolean>}  
:EYEDiagram:DISPlay?

**Example** :EYEDIAGRAM:DISPLAY ON  
:EYEDIAGRAM:DISPLAY? -> :EYEDIAGRAM:  
DISPLAY 1

### :EYEDiagram:FLEXray?

**Function** Queries all settings related to the FLEXRAY eye diagram.

**Syntax** :EYEDiagram:FLEXray?

**Example** :EYEDIAGRAM:FLEXRAY? -> :EYEDIAGRAM:  
FLEXRAY:CONTINUOUS:COUNT INFINITY;;  
EYEDIAGRAM:FLEXRAY:CYCLE:COUNT 1;T  
RANGE 0.0000000E+00,-5.0000000E+00;;  
EYEDIAGRAM:FLEXRAY:FITEM:EHEIGHT:  
STATE 1;;EYEDIAGRAM:FLEXRAY:FITEM:  
EWIDTH:STATE 1;;EYEDIAGRAM:FLEXRAY:  
FITEM:FALL:STATE 1;;EYEDIAGRAM:FLEXRAY:  
FITEM:JITTER:STATE 1;;EYEDIAGRAM:  
FLEXRAY:FITEM:PCROSSING:STATE 1;;  
EYEDIAGRAM:FLEXRAY:FITEM:PDUTYCYCLE:  
STATE 1;;EYEDIAGRAM:FLEXRAY:FITEM:  
PSPCOUNT:STATE 0;;EYEDIAGRAM:FLEXRAY:  
FITEM:PWCOUNT:STATE 0;;EYEDIAGRAM:  
FLEXRAY:FITEM:QFACTOR:STATE 1;;  
EYEDIAGRAM:FLEXRAY:FITEM:RISE:STATE 1;;  
EYEDIAGRAM:FLEXRAY:FITEM:SDBASE:  
STATE 1;;EYEDIAGRAM:FLEXRAY:FITEM:  
SDTOP:STATE 1;;EYEDIAGRAM:FLEXRAY:  
FITEM:SPCOUNT:STATE 0;;EYEDIAGRAM:  
FLEXRAY:FITEM:T1CROSSING:STATE 1;;  
EYEDIAGRAM:FLEXRAY:FITEM:T2CROSSING:  
STATE 1;;EYEDIAGRAM:FLEXRAY:FITEM:  
TLEVELS:MODE PERCENT;PERCENT 90,10.....

### :EYEDiagram:FLEXray:CONTInuous?

**Function** Queries all settings related to the FLEXRAY eye diagram CONTInuous Statistics.

**Syntax** :EYEDiagram:FLEXray:CONTInuous?

**Example** :EYEDIAGRAM:FLEXRAY:CONTINUOUS?  
-> :EYEDIAGRAM:FLEXRAY:CONTINUOUS:  
COUNT INFINITY

**:EYEDiagram:FLEXray:CONTinuous:ADJust**

Function Executes automatic adjustment of FLEXRAY eye diagram CONTinuous Statistics.

Syntax :EYEDiagram:FLEXray:CONTinuous:ADJust

Example :EYEDIAGRAM:FLEXRAY:CONTINUOUS:ADJUST

**:EYEDiagram:FLEXray:CONTinuous:COUNT**

Function Sets the count for FLEXRAY eye diagram CONTinuous Statistics or queries the current setting.

Syntax :EYEDiagram:FLEXray:CONTinuous:

COUNT {<Nrf>|INFINITY}

:EYEDiagram:FLEXray:CONTinuous:COUNT?

<Nrf> = 1 to (max. no. of history pages at the current record length)

Example :EYEDIAGRAM:FLEXRAY:CONTINUOUS:COUNT

INFINITY

:EYEDIAGRAM:FLEXRAY:CONTINUOUS:COUNT?

-> :EYEDIAGRAM:FLEXRAY:CONTINUOUS:

COUNT INFINITY

**:EYEDiagram:FLEXray:CYCLE?**

Function Queries all settings related to FLEXRAY eye diagram Cycle Statistics.

Syntax :EYEDiagram:FLEXray:CYCLE?

Example :EYEDIAGRAM:FLEXRAY:CYCLE? ->

:EYEDIAGRAM:FLEXRAY:CYCLE:COUNT 1;

TRANGE 0.0000000E+00, -5.0000000E+00

**:EYEDiagram:FLEXray:CYCLE:COUNT**

Function Sets the count for FLEXRAY eye diagram Cycle Statistics or queries the current setting.

Syntax :EYEDiagram:FLEXray:CYCLE:COUNT {<Nrf>}

:EYEDiagram:FLEXray:CYCLE:COUNT?

<Nrf> = 1 to 5000

Example :EYEDIAGRAM:FLEXRAY:CYCLE:COUNT 1

:EYEDIAGRAM:FLEXRAY:CYCLE:COUNT? ->

:EYEDIAGRAM:FLEXRAY:CYCLE:COUNT 1

**:EYEDiagram:FLEXray:CYCLE:EXECute**

Function Executes FLEXRAY eye diagram Cycle Statistics.

Syntax :EYEDiagram:FLEXray:CYCLE:EXECute

Example :EYEDIAGRAM:FLEXRAY:CYCLE:EXECUTE

**:EYEDiagram:FLEXray:CYCLE:TRANGE**

Function Sets the measurement range for FLEXRAY eye diagram Cycle Statistics or queries the current setting.

Syntax :EYEDiagram:FLEXray:CYCLE:TRANGE

{<Nrf>, <Nrf>}

:EYEDiagram:FLEXray:CYCLE:TRANGE?

<Nrf> = -5 to 5 (div)

Example :EYEDIAGRAM:FLEXRAY:CYCLE:TRANGE -5, 0

:EYEDIAGRAM:FLEXRAY:CYCLE:TRANGE?

-> :EYEDIAGRAM:FLEXRAY:CYCLE:

TRANGE 0.0000000E+00, -5.0000000E+00

**:EYEDiagram:FLEXray:FITem?**

Function Queries all settings related to FLEXRAY eye diagram parameters.

Syntax :EYEDiagram:FLEXray:FITem?

Example :EYEDIAGRAM:FLEXRAY:FITEM? ->

:EYEDIAGRAM:FLEXRAY:FITEM:EHEIGHT:

STATE 1; :EYEDIAGRAM:FLEXRAY:FITEM:

EWIDTH:STATE 1; :EYEDIAGRAM:FLEXRAY:

FITEM:FALL:STATE 1; :EYEDIAGRAM:FLEXRAY:

FITEM:JITTER:STATE 1; :EYEDIAGRAM:

FLEXRAY:FITEM:PCROSSING:STATE 1; :

EYEDIAGRAM:FLEXRAY:FITEM:PDUTYCYCLE:

STATE 1; :EYEDIAGRAM:FLEXRAY:FITEM:

PSPCOUNT:STATE 0; :EYEDIAGRAM:FLEXRAY:

FITEM:PWCOUNT:STATE 0; :EYEDIAGRAM:

FLEXRAY:FITEM:QFACTOR:STATE 1; :

EYEDIAGRAM:FLEXRAY:FITEM:RISE:STATE 1; :

EYEDIAGRAM:FLEXRAY:FITEM:SDBASE:

STATE 1; :EYEDIAGRAM:FLEXRAY:FITEM:

SDTOP:STATE 1; :EYEDIAGRAM:FLEXRAY:

FITEM:SPCOUNT:STATE 0; :EYEDIAGRAM:

FLEXRAY:FITEM:T1CROSSING:STATE 1; :

EYEDIAGRAM:FLEXRAY:FITEM:T2CROSSING:

STATE 1.....

**:EYEDiagram:FLEXray:FITem:ALL**

Function Turns ON/OFF all FLEXRAY eye diagram parameters.

Syntax :EYEDiagram:FLEXray:FITem:

ALL {<Boolean>}

Example :EYEDIAGRAM:FLEXRAY:FITEM:ALL ON

**:EYEDiagram:FLEXray:FITem:<Parameter>?**

Function Queries all settings related to FLEXRAY eye diagram waveform parameters.

Syntax :EYEDiagram:FLEXray:FITem:<Parameter>?

<Parameter>={EHeight|EWidth|Fall|Jitter|

PCrossing|PDutyCycle|PSPCount|PWCount|

QFactor|RISE|SDBase|SDTop|SPCount|

T1Crossing|T2Crossing|VBase|VCrossing|VTop|

WCount}

Example (The following is an example with EHeight.)

:EYEDIAGRAM:FLEXRAY:FITEM:EHEIGHT? ->

:EYEDIAGRAM:FLEXRAY:FITEM:EHEIGHT:

STATE 1

Description • For the correspondence between communication commands and the parameters used, see appendix 4.

- See the main unit user's manual for details about parameters.

## 5.11 EYEDiagram Group

### **:EYEDiagram:FLEXray:FITem:<Parameter>:**

#### **STATE**

**Function** Turns ON/OFF FLEXRAY eye diagram waveform parameters or queries the current setting.

**Syntax** :EYEDiagram:FLEXray:FITem:<Parameter>:  
STATE {<Boolean>}  
:EYEDiagram:FLEXray:FITem:<Parameter>:  
STATE?  
<Parameter>={EHEight|EWIDth|FALL|JITTer|  
PCROSSing|PDUtycycle|PSPCount|PWCount|  
QFACTOR|RISe|SDBase|SDTop|SPCount|  
T1CRossing|T2CRossing|VBASe|VCRossing|VTOp|  
WCOunt}

**Example** (The following is an example with EHEight.)  
:EYEDIAGRAM:FLEXRAY:FITEM:EHEIGHT:  
STATE ON  
:EYEDIAGRAM:FLEXRAY:FITEM:EHEIGHT:  
STATE? → :EYEDIAGRAM:FLEXRAY:FITEM:  
EHEIGHT:STATE 1

### **:EYEDiagram:FLEXray:FITem:<Parameter>:**

#### **VALue?**

**Function** Queries FLEXRAY eye diagram waveform parameter values.

**Syntax** :EYEDiagram:FLEXray:FITem:<Parameter>:  
VALue?  
<Parameter>={EHEight|EWIDth|FALL|JITTer|  
PCROSSing|PDUtycycle|PSPCount|PWCount|  
QFACTOR|RISe|SDBase|SDTop|SPCount|  
T1CRossing|T2CRossing|VBASe|VCRossing|VTOp|  
WCOunt}

**Example** (The following is an example with EHEight.)  
:EYEDIAGRAM:FLEXRAY:FITEM:EHEIGHT:  
VALUE? → :EYEDIAGRAM:FLEXRAY:FITEM:  
EHEIGHT:VALUE 1.000E+00

### **:EYEDiagram:FLEXray:FITem:TLEVELs?**

**Function** Queries all settings related to the FLEXRAY eye diagram threshold level.

**Syntax** :EYEDiagram:FLEXray:FITem:TLEVELs?

**Example** :EYEDIAGRAM:FLEXRAY:FITEM:TLEVELS? ->  
:EYEDIAGRAM:FLEXRAY:FITEM:TLEVELS:  
MODE PERCENT;PERCENT 90,10;  
UNIT 1.0000000E+00,0.0000000E+00

### **:EYEDiagram:FLEXray:FITem:TLEVELs:MODE**

**Function** Sets the unit of the FLEXRAY eye diagram threshold level or queries the current setting.

**Syntax** :EYEDiagram:FLEXray:FITem:TLEVELs:  
MODE {PERCent|UNIT}  
:EYEDiagram:FLEXray:FITem:TLEVELs:MODE?  
**Example** :EYEDIAGRAM:FLEXRAY:FITEM:TLEVELS:  
MODE PERCENT  
:EYEDIAGRAM:FLEXRAY:FITEM:TLEVELS:MODE?  
-> :EYEDIAGRAM:FLEXRAY:FITEM:TLEVELS:  
MODE PERCENT

### **:EYEDiagram:FLEXray:FITem:TLEVELs:**

#### **PERCent**

**Function** Sets the FLEXRAY eye diagram threshold level to a percentage (%) or queries the current setting.

**Syntax** :EYEDiagram:FLEXray:FITem:TLEVELs:  
PERCent {<NRf>,<NRf>}  
:EYEDiagram:FLEXray:FITem:TLEVELs:  
PERCent?  
<NRf>=0 to 100(%)

**Example** :EYEDIAGRAM:FLEXRAY:FITEM:TLEVELS:  
PERCENT 90,10  
:EYEDIAGRAM:FLEXRAY:FITEM:TLEVELS:  
PERCENT? -> :EYEDIAGRAM:FLEXRAY:FITEM:  
TLEVELS:PERCENT 90,10

### **:EYEDiagram:FLEXray:FITem:TLEVELs:UNIT**

**Function** Sets the FLEXRAY eye diagram threshold level in UNIT or queries the current setting.

**Syntax** :EYEDiagram:FLEXray:FITem:TLEVELs:  
UNIT {<NRf>,<NRf>|<Voltage>,<Voltage>|  
<Current>|<Current>}  
:EYEDiagram:FLEXray:FITem:TLEVELs:UNIT?  
<NRf>,<Voltage>, and <Current> = See the SB5000  
User's Manual

**Example** :EYEDIAGRAM:FLEXRAY:FITEM:TLEVELS:  
UNIT 1,0  
:EYEDIAGRAM:FLEXRAY:FITEM:TLEVELS:UNIT?  
-> :EYEDIAGRAM:FLEXRAY:FITEM:TLEVELS:  
UNIT 1.0000000E+00,0.0000000E+00

**:EYEDiagram:FLEXray[:SETup]?**

**Function** Queries all settings related to FLEXRAY eye diagram setup.

**Syntax** :EYEDiagram:FLEXray[:SETup]?

**Example** :EYEDIAGRAM:FLEXRAY:SETUP?  
 -> :EYEDIAGRAM:FLEXRAY:SETUP:  
 BRATE 5000000;DMODE 1;FTRACE 1;RX10:  
 LRIGHT 800.00000E-09,770.00000E-09;  
 RPOINT -3.00000E+00;ULOWER 400.0E-03,  
 -400.0E-03;WIDTH 0.0000000E+00;:  
 EYEDIAGRAM:FLEXRAY:SETUP:RX2\_5:  
 LRIGHT 272.00000E-09,  
 0.0000000E+00;RPOINT -3.00000E+00;  
 ULOWER 400.0E-03,-400.0E-03;  
 WIDTH 258.00000E-09;:EYEDIAGRAM:  
 FLEXRAY:SETUP:RX5:  
 LRIGHT 144.00000E-09,  
 0.0000000E+00;RPOINT -3.00000E+00;  
 ULOWER 400.0E-03,-400.0E-03;  
 WIDTH 130.00000E-09;:EYEDIAGRAM:  
 FLEXRAY:SETUP:SELECT RECEIVER;TRACE1:  
 HYSTERESIS 1.00000E+00;  
 LEVEL 0.0000000E+00;:EYEDIAGRAM:  
 FLEXRAY:SETUP:TRACE2:  
 HYSTERESIS 600.000E-03;  
 LEVEL 0.0000000E+00;:EYEDIAGRAM:  
 FLEXRAY:SETUP:TRACE3:  
 HYSTERESIS 600.000E-03.....

**:EYEDiagram:FLEXray[:SETup]:BRATe**

**Function** Sets the FLEXRAY eye diagram bit rate (data transfer rate) or queries the current setting.

**Syntax** :EYEDiagram:FLEXray[:SETup]:BRATe

{<NRf>}  
 :EYEDiagram:FLEXray[:SETup]:BRATe?  
 <NRf> = 2500000, 5000000, or 10000000  
**Example** :EYEDIAGRAM:FLEXRAY:SETUP:BRATE 5000000  
 :EYEDIAGRAM:FLEXRAY:SETUP:BRATE? ->  
 :EYEDIAGRAM:FLEXRAY:SETUP:BRATE 5000000

**:EYEDiagram:FLEXray[:SETup]:DMODe**

**Function** Turns ON/OFF the diagram of the FLEXRAY eye diagram or queries the current setting.

**Syntax** :EYEDiagram:FLEXray[:SETup]:DMODe  
 {<Boolean>}

:EYEDiagram:FLEXray[:SETup]:DMODe?  
**Example** :EYEDIAGRAM:FLEXRAY:SETUP:DMODE ON  
 :EYEDIAGRAM:FLEXRAY:SETUP:DMODE? ->  
 :EYEDIAGRAM:FLEXRAY:SETUP:DMODE 1

**:EYEDiagram:FLEXray[:SETup]:FTRace**

**Function** Sets the FLEXRAY eye diagram trace or queries the current setting.

**Syntax** :EYEDiagram:FLEXray[:SETup]:

FTRace {<NRf>}  
 :EYEDiagram:FLEXray[:SETup]:FTRace?  
 <NRf> = 1 to 8

**Example** :EYEDIAGRAM:FLEXRAY:SETUP:FTRACE 1  
 :EYEDIAGRAM:FLEXRAY:SETUP:FTRACE? ->  
 :EYEDIAGRAM:FLEXRAY:SETUP:FTRACE 1

**:EYEDiagram:FLEXray[:SETup]:****<Parameter>?**

**Function** Queries all settings related to the diagram of the FLEXRAY eye diagram.

**Syntax** :EYEDiagram:FLEXray[:SETup]:

<Parameter>?  
 <Parameter>={RX10|RX2\_5|RX5|TX10|TX2\_5|TX5}

**Example** (The following is an example with RX10.)  
 :EYEDIAGRAM:FLEXRAY:SETUP:RX10? ->  
 :EYEDIAGRAM:FLEXRAY:SETUP:RX10:  
 LRIGHT 800.00000E-09,770.00000E-09;  
 RPOINT -3.00000E+00;ULOWER 400.0E-03,  
 -400.0E-03;WIDTH 0.0000000E+00

**:EYEDiagram:FLEXray[:****SETup]:<Parameter>:LRIGHt**

**Function** Turns ON/OFF the diagram of the FLEXRAY eye diagram or queries the current setting.

**Syntax** :EYEDiagram:FLEXray[:SETup]:

<Parameter>:LRIGHt {<Time>,<Time>}  
 :EYEDiagram:FLEXray[:SETup]:  
 <Parameter>:LRIGHt?

<Parameter>={RX10|RX2\_5|RX5|TX10|TX2\_5|TX5}  
 <Time> = See the SB5000 User's Manual

**Example** (The following is an example with RX10.)  
 :EYEDIAGRAM:FLEXRAY:SETUP:RX10:  
 LRIGHT 1US,2US  
 :EYEDIAGRAM:FLEXRAY:SETUP:RX10:LRIGHT?  
 -> :EYEDIAGRAM:FLEXRAY:SETUP:RX10:  
 LRIGHT 2.000E-06,1.000E-06

**:EYEDiagram:FLEXray[:****SETup]:<Parameter>:RESet**

**Function** Resets the diagram of the FLEXRAY eye diagram.

**Syntax** :EYEDiagram:FLEXray[:SETup]:

<Parameter>:RESet  
 <Parameter>={RX10|RX2\_5|RX5|TX10|TX2\_5|TX5}

**Example** (The following is an example with RX10.)  
 :EYEDIAGRAM:FLEXRAY:SETUP:RX10:RESET

## 5.11 EYEDiagram Group

### **:EYEDiagram:FLEXray[:SETup]:**

#### **<Parameter>:RPOint**

**Function** Sets the reference point of the diagram of the FLEXRAY eye diagram or queries the current setting.

**Syntax** :EYEDiagram:FLEXray[:SETup]:  
 <Parameter>:RPOint {<Nrf>}  
 :EYEDiagram:FLEXray[:SETup]:  
 <Parameter>:RPOint?  
 <Parameter>={RX10|RX2\_5|RX5|TX10|TX2\_5|TX5}  
 <Nrf> = -5 to 5(div)

**Example** (The following is an example with RX10.)  
 :EYEDIAGRAM:FLEXRAY:SETUP:RX10:RPOINT 1  
 :EYEDIAGRAM:FLEXRAY:SETUP:RX10:RPOINT?  
 -> :EYEDIAGRAM:FLEXRAY:SETUP:RX10:  
 RPOINT 1.00000E+00

### **:EYEDiagram:FLEXray[:SETup]:**

#### **<Parameter>:ULOWer**

**Function** Sets the upper and lower limits of the diagram of the FLEXRAY eye diagram or queries the current setting.

**Syntax** :EYEDiagram:FLEXray[:SETup]:  
 <Parameter>:ULOWer {<Nrf>,<Nrf>|  
 <Voltage>,<Voltage>|<Current>|  
 <Current>}  
 :EYEDiagram:FLEXray[:SETup]:  
 <Parameter>:ULOWer?  
 <Parameter>={RX10|RX2\_5|RX5|TX10|TX2\_5|TX5}  
 <Nrf>,<Voltage>,<Current> = See the SB5000  
 User's Manual

**Example** (The following is an example with RX10.)  
 :EYEDIAGRAM:FLEXRAY:SETUP:RX10:  
 ULOWER 1,2  
 :EYEDIAGRAM:FLEXRAY:SETUP:RX10:ULOWER?  
 -> :EYEDIAGRAM:FLEXRAY:SETUP:RX10:  
 ULOWER 2.000E+00,1.000E+00

### **:EYEDiagram:FLEXray[:SETup]:**

#### **<Parameter>:WIDTh**

**Function** Sets the width of the diagram of the FLEXRAY eye diagram or queries the current setting.

**Syntax** :EYEDiagram:FLEXray[:  
 SETup]:<Parameter>:WIDTh {<Time>}  
 :EYEDiagram:FLEXray[:SETup]:  
 <Parameter>:WIDTh?  
 <Parameter>={RX10|RX2\_5|RX5|TX10|TX2\_5|TX5}  
 <Time> = See the SB5000 User's Manual

**Example** (The following is an example with RX10.)  
 :EYEDIAGRAM:FLEXRAY:SETUP:RX10:  
 WIDTH 1US  
 :EYEDIAGRAM:FLEXRAY:SETUP:RX10:WIDTH?  
 -> :EYEDIAGRAM:FLEXRAY:SETUP:RX10:  
 WIDTH 1.000E-06

### **:EYEDiagram:FLEXray[:SETup]:SElect**

**Function** Sets the FLEXRAY eye diagram or queries the current setting.

**Syntax** :EYEDiagram:FLEXray[:SETup]:  
 SElect {RECeiver|TRANsmitter}  
 :EYEDiagram:FLEXray[:SETup]:SElect?

**Example** :EYEDIAGRAM:FLEXRAY:SETUP:  
 Eelect RECEIVER  
 :EYEDIAGRAM:FLEXRAY:SETUP:SElect?  
 -> :EYEDIAGRAM:FLEXRAY:SETUP:  
 SElect RECEIVER

### **:EYEDiagram:FLEXray[:SETup]:TRACe<x>?**

**Function** Queries all settings related to the FLEXRAY eye diagram trace.

**Syntax** :EYEDiagram:FLEXray[:SETup]:TRACe<x>?  
 <x> = 1 to 8

**Example** :EYEDIAGRAM:FLEXRAY:SETUP:TRACE1?  
 -> :EYEDIAGRAM:FLEXRAY:SETUP:  
 TRACE1:HYSTERESIS 1.00000E+00;  
 LEVEL 0.0000000E+00

### **:EYEDiagram:FLEXray[:SETup]:TRACe<x>: HYSTEResis**

**Function** Sets the hysteresis of each trace of the FLEXRAY eye diagram or queries the current setting.

**Syntax** :EYEDiagram:FLEXray[:SETup]:TRACe<x>:  
 HYSTEResis {<Nrf>}  
 :EYEDiagram:FLEXray[:SETup]:TRACe<x>:  
 HYSTEResis?  
 <x> = 1 to 8  
 <Nrf> = 0 to 4 (div, in 0.1 div steps)

**Example** :EYEDIAGRAM:FLEXRAY:SETUP:TRACE1:  
 HYSTERESIS 1  
 :EYEDIAGRAM:FLEXRAY:SETUP:TRACE1:  
 HYSTERESIS? -> :EYEDIAGRAM:FLEXRAY:  
 SETUP:TRACE1:HYSTERESIS 1.00000E+00

**:EYEDiagram:FLEXray[:SETup]:TRACe<x>:****LEVel**

**Function** Sets the level of each trace of the FLEXRAY eye diagram or queries the current setting.

**Syntax** :EYEDiagram:FLEXray[:SETup]:TRACe<x>:  
LEVel {<NRf>|<Voltage>|<Current>}  
:EYEDiagram:FLEXray[:SETup]:TRACe<x>:  
LEVel?

<x> = 1 to 8

<NRf>, <Voltage>, <Current> = See the SB5000 User's Manual

**Example** :EYEDIAGRAM:FLEXRAY:SETUP:TRACE1:  
LEVEL 0  
:EYEDIAGRAM:FLEXRAY:SETUP:TRACE1:LEVEL?  
-> :EYEDIAGRAM:FLEXRAY:SETUP:TRACE1:  
LEVEL 0.0000000E+00

**:EYEDiagram:FLEXray[:SETup]:VTDisPlay**

**Function** Turns ON/OFF the FLEXRAY eye diagram VT waveform display or queries the current setting.

**Syntax** :EYEDiagram:FLEXray[:SETup]:  
VTDisPlay {<Boolean>}  
:EYEDiagram:FLEXray[:SETup]:VTDisPlay?

**Example** :EYEDIAGRAM:FLEXRAY:SETUP:VTDISPLAY ON  
:EYEDIAGRAM:FLEXRAY:SETUP:VTDISPLAY? ->  
:EYEDIAGRAM:FLEXRAY:SETUP:VTDISPLAY 1

**:EYEDiagram:FLEXray:TMODe**

**Function** Sets the FLEXRAY eye diagram test mode or queries the current setting.

**Syntax** :EYEDiagram:FLEXray:TMODe {CONTInuous|  
CYCLe}  
:EYEDiagram:FLEXray:TMODe?

**Example** :EYEDIAGRAM:FLEXRAY:TMODE CONTINUOUS  
:EYEDIAGRAM:FLEXRAY:TMODE? ->  
:EYEDIAGRAM:FLEXRAY:TMODE CONTINUOUS

**:EYEDiagram:MODe**

**Function** Sets the eye diagram mode or queries the current setting.

**Syntax** :EYEDiagram:MODe {FLEXray|TELecomtest}  
:EYEDiagram:MODe?

**Example** :EYEDIAGRAM:MODE FLEXRAY  
:EYEDIAGRAM:MODE? -> :EYEDIAGRAM:  
MODE FLEXRAY

**:EYEDiagram:TELecomtest?**

**Function** Queries all settings related to the telecom test.

**Syntax** :EYEDiagram:TELecomtest?

**Example** :EYEDIAGRAM:TELECOMTEST? ->  
:EYEDIAGRAM:TELECOMTEST:CATEGORY MASK;  
DISPLAY 1;EYEPATTERN:DBERATE:STATE 1;;  
EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
EHEIGHT:STATE 1;;EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:EWIDTH:  
STATE 1;;EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:FALL:STATE 1;;EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:JITTER:  
STATE 1;;EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:PCROSSING:STATE 1;;  
EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
PDUTYCYCLE:STATE 1;;EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:QFACTOR:  
STATE 1;;EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:RISE:STATE 1;;EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:SDBASE:  
STATE 1;;EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:SDTOP:STATE 1;;EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:T1CROSSING:  
STATE 1;;EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:T2CROSSING:STATE 1;;  
EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
TLEVELS:MODE PERCENT,PERCENT 90,10;  
UNIT 1.0000000E+00,0.0000000E+00....

**:EYEDiagram:TELecomtest:CATegory**

**Function** Sets the telecom test type or queries the current setting.

**Syntax** :EYEDiagram:TELecomtest:  
CATegory {EYEPattern|MASK}  
:EYEDiagram:TELecomtest:CATegory?

**Example** :EYEDIAGRAM:TELECOMTEST:  
CATEGORY EYEPATTERN  
:EYEDIAGRAM:TELECOMTEST:CATEGORY?  
-> :EYEDIAGRAM:TELECOMTEST:  
CATEGORY EYEPATTERN

**:EYEDiagram:TELecomtest:DISPlay**

**Function** Turns ON/OFF the telecom test display or queries the current setting.

**Syntax** :EYEDiagram:TELecomtest:  
DISPlay {<Boolean>}  
:EYEDiagram:TELecomtest:DISPlay?

**Example** :EYEDIAGRAM:TELECOMTEST:DISPLAY ON  
:EYEDIAGRAM:TELECOMTEST:DISPLAY? ->  
:EYEDIAGRAM:TELECOMTEST:DISPLAY 1



## 5.11 EYEDiagram Group

### **:EYEDiagram:TELecomtest:EYEPattern?**

**Function** Queries all settings related to the eye pattern.

**Syntax** :EYEDiagram:TELecomtest:EYEPattern?

**Example** :EYEDIAGRAM:TELECOMTEST:EYEPATTERN? →  
:EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
DBERATE:STATE 1;:EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:EHEIGHT:  
STATE 1;:EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:EWIDTH:STATE 1;:EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:FALL:STATE 1;:  
EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
JITTER:STATE 1;:EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:PCROSSING:STATE 1;:  
EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
PDUZYCYCLE:STATE 1;:EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:QFACTOR:  
STATE 1;:EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:RISE:STATE 1;:EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:SDBASE:S  
TATE 1;:EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:SDTOP:STATE 1;:EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:T1CROSSING:  
STATE 1.....

### **:EYEDiagram:TELecomtest:EYEPattern:ALL**

**Function** Turns ON/OFF all eye pattern parameters.

**Syntax** :EYEDiagram:TELecomtest:EYEPattern:  
ALL {<Boolean>}

**Example** :EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
ALL ON

### **:EYEDiagram:TELecomtest:EYEPattern:**

#### **<Parameter>?**

**Function** Queries all settings related to eye pattern waveform parameters.

**Syntax** :EYEDiagram:TELecomtest:  
EYEPattern:<Parameter>?  
<Parameter>={DBERate|EHEight|EWIDTH|FALL|  
JITTer|PCROSSing|PDUZYcycle|QFACTOR|RISE|  
SDBase|SDTop|T1CROSSing|T2CROSSing|VBASel|  
VCROSSing|VTOP}

**Example** (The following is an example regarding DBERate.)  
:EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
DBERATE? → :EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:DBERATE:STATE 1

**Description** • For the correspondence between communication commands and the parameters used, see appendix 4.  
• See the main unit user's manual for details about parameters.

### **:EYEDiagram:TELecomtest:EYEPattern:**

#### **<Parameter>:STATE**

**Function** Turns ON/OFF eye pattern waveform parameters or queries the current setting.

**Syntax** :EYEDiagram:TELecomtest:EYEPattern:  
<Parameter>:STATE {<Boolean>}  
:EYEDiagram:TELecomtest:EYEPattern:  
<Parameter>:STATE?

<Parameter>={DBERate|EHEight|EWIDTH|FALL|  
JITTer|PCROSSing|PDUZYcycle|QFACTOR|RISE|  
SDBase|SDTop|T1CROSSing|T2CROSSing|VBASel|  
VCROSSing|VTOP}

**Example** (The following is an example regarding DBERate.)  
:EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
DBERATE:STATE ON  
:EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
DBERATE:STATE? → :EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:DBERATE:STATE 1

### **:EYEDiagram:TELecomtest:EYEPattern:**

#### **<Parameter>:VALUE?**

**Function** Queries eye pattern waveform parameter values.

**Syntax** :EYEDiagram:TELecomtest:EYEPattern:  
<Parameter>:VALUE?  
<Parameter>={DBERate|EHEight|EWIDTH|FALL|  
JITTer|PCROSSing|PDUZYcycle|QFACTOR|RISE|  
SDBase|SDTop|T1CROSSing|T2CROSSing|VBASel|  
VCROSSing|VTOP}

**Example** (The following is an example regarding DBERate.)  
:EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
DBERATE:VALUE? → :EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:DBERATE:  
VALUE 1.000E+00

### **:EYEDiagram:TELecomtest:EYEPattern:**

#### **TLEVELS?**

**Function** Queries all settings related to eye pattern threshold level.

**Syntax** :EYEDiagram:TELecomtest:EYEPattern:  
TLEVELS?

**Example** :EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
TLEVELS? → :EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:TLEVELS:MODE PERCENT;  
PERCENT 90,10;UNIT 1.0000000E+00,  
0.0000000E+00

**:EYEDiagram:TELEcomtest:EYEPattern:  
TLEVELs:MODE**

**Function** Sets the unit of the eye pattern threshold level or queries the current setting.

**Syntax** :EYEDiagram:TELEcomtest:EYEPattern:  
TLEVELs:MODE {PERCent|UNIT}  
:EYEDiagram:TELEcomtest:EYEPattern:  
TLEVELs:MODE?

**Example** :EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
TLEVELS:MODE PERCENT  
:EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
TLEVELS:MODE? → :EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:TLEVELS:  
MODE PERCENT

**:EYEDiagram:TELEcomtest:EYEPattern:  
TLEVELs:PERCent**

**Function** Sets the eye pattern threshold level to a percentage (%) or queries the current setting.

**Syntax** :EYEDiagram:TELEcomtest:EYEPattern:  
TLEVELs:PERCent {<NRf>,<NRf>}  
:EYEDiagram:TELEcomtest:EYEPattern:  
TLEVELs:PERCent?  
<NRf>=0 to 100(%)

**Example** :EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
TLEVELS:PERCENT 90,10  
:EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
TLEVELS:PERCENT? → :EYEDIAGRAM:  
TELECOMTEST:EYEPATTERN:TLEVELS:  
PERCENT 90,10

**:EYEDiagram:TELEcomtest:EYEPattern:  
TLEVELs:UNIT**

**Function** Sets the eye pattern threshold level in UNIT or queries the current setting.

**Syntax** :EYEDiagram:TELEcomtest:EYEPattern:  
TLEVELs:UNIT {<NRf>,<NRf>|<Voltage>,  
<Voltage>|<Current>,<Current>}  
:EYEDiagram:TELEcomtest:EYEPattern:  
TLEVELs:UNIT?

<NRf>,<Voltage>, and <Current> = See the SB5000  
User's Manual  
**Example** :EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
TLEVELS:UNIT 1,0  
:EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
TLEVELS:UNIT? → :EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:TLEVELS:UNIT 1.0000000E+00,  
0.0000000E+00

**:EYEDiagram:TELEcomtest:EYEPattern:  
VDARK**

**Function** Sets the dark level (zero light level) of the eye pattern or queries the current setting.

**Syntax** :EYEDiagram:TELEcomtest:EYEPattern:  
VDARK {<NRf>|<Voltage>|<Current>}  
:EYEDiagram:TELEcomtest:EYEPattern:  
VDARK?

<NRf>,<Voltage>,<Current> = See the SB5000  
User's Manual

**Example** :EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
VDARK 1.000E+00  
:EYEDIAGRAM:TELECOMTEST:EYEPATTERN:  
VDARK? → :EYEDIAGRAM:TELECOMTEST:  
EYEPATTERN:VDARK 1.0000000E+00

**:EYEDiagram:TELEcomtest:MASK?**

**Function** Queries all settings related to the mask test.

**Syntax** :EYEDiagram:TELEcomtest:MASK?

**Example** :EYEDIAGRAM:TELECOMTEST:MASK? ->  
:EYEDIAGRAM:TELECOMTEST:MASK:ELEMENT1:  
PSPCOUNT:STATE 1;:EYEDIAGRAM:  
TELECOMTEST:MASK:ELEMENT1:PWCOUNT:  
STATE 1;:EYEDIAGRAM:TELECOMTEST:MASK:  
ELEMENT1:SPCOUNT:STATE 1;:EYEDIAGRAM:  
TELECOMTEST:MASK:ELEMENT1:WCOUNT:  
STATE 1;:EYEDIAGRAM:TELECOMTEST:MASK:  
ELEMENT2:PSPCOUNT:STATE 0;:EYEDIAGRAM:  
TELECOMTEST:MASK:ELEMENT2:PWCOUNT:  
STATE 0;:EYEDIAGRAM:TELECOMTEST:MASK:  
ELEMENT2:SPCOUNT:STATE 0;:EYEDIAGRAM:  
TELECOMTEST:MASK:ELEMENT2:WCOUNT:  
STATE 0;:EYEDIAGRAM:TELECOMTEST:MASK:  
ELEMENT3:PSPCOUNT:STATE 0;:EYEDIAGRAM:  
TELECOMTEST:MASK:ELEMENT3:PWCOUNT:  
STATE 0;:EYEDIAGRAM:TELECOMTEST:MASK:  
ELEMENT3:SPCOUNT:STATE 0.....

## 5.11 EYEDiagram Group

### **:EYEDiagram:TELecomtest:MASK:**

#### **ELEMent<x>?**

Function Queries all settings related to each element used in the mask test.

Syntax :EYEDiagram:TELecomtest:MASK:  
ELEMent<x>?  
<x> = 1 to 4

Example :EYEDIAGRAM:TELECOMTEST:MASK:ELEMENT1?  
-> :EYEDIAGRAM:TELECOMTEST:MASK:  
ELEMENT1:PSPCOUNT:STATE 1;:EYEDIAGRAM:  
TELECOMTEST:MASK:ELEMENT1:PWCount:  
STATE 1;:EYEDIAGRAM:TELECOMTEST:MASK:  
ELEMENT1:SPCOUNT:STATE 1;:EYEDIAGRAM:  
TELECOMTEST:MASK:ELEMENT1:WCount:  
STATE 1

### **:EYEDiagram:TELecomtest:MASK:**

#### **ELEMent<x>:ALL**

Function Turns ON/OFF all items of each element all at once.

Syntax :EYEDiagram:TELecomtest:MASK:  
ELEMent<x>:ALL {<Boolean>}  
<x> = 1 to 4

Example :EYEDIAGRAM:TELECOMTEST:MASK:ELEMENT1:  
ALL ON

### **:EYEDiagram:TELecomtest:MASK:**

#### **ELEMent<x>:<Parameter>?**

Function Queries settings related to waveform parameters of each element.

Syntax :EYEDiagram:TELecomtest:MASK:  
ELEMent<x>:<Parameter>?  
<x> = 1 to 4  
<Parameter>={PSPCount|PWCount|SPCount|  
WCount}

Example (The following is an example with PSPCount.)  
:EYEDIAGRAM:TELECOMTEST:MASK:ELEMENT1:  
PSPCOUNT? -> :EYEDIAGRAM:TELECOMTEST:  
MASK:ELEMENT1:PSPCOUNT:STATE 1

Description • For the correspondence between communication commands and the parameters used, see appendix 4.  
• See the main unit user's manual for details about parameters.

### **:EYEDiagram:TELecomtest:MASK:**

#### **ELEMent<x>:<Parameter>:STATE**

Function Turns ON/OFF waveform parameters of each element or queries the current setting.

Syntax :EYEDiagram:TELecomtest:MASK:  
ELEMent<x>:<Parameter>:  
STATE {<Boolean>}  
:EYEDiagram:TELecomtest:MASK:  
ELEMent<x>:<Parameter>:STATE?  
<x> = 1 to 4

Example (The following is an example with PSPCount.)  
:EYEDIAGRAM:TELECOMTEST:MASK:ELEMENT1:  
PSPCOUNT:STATE ON  
:EYEDIAGRAM:TELECOMTEST:MASK:ELEMENT1:  
PSPCOUNT:STATE? -> :EYEDIAGRAM:  
TELECOMTEST:MASK:ELEMENT1:PSPCOUNT:  
STATE 1

### **:EYEDiagram:TELecomtest:MASK:**

#### **ELEMent<x>:<Parameter>:VALUE?**

Function Queries waveform parameters of each element.

Syntax :EYEDiagram:TELecomtest:MASK:  
ELEMent<x>:<Parameter>:VALUE?  
<x> = 1 to 4

Example (The following is an example with PSPCount.)  
:EYEDIAGRAM:TELECOMTEST:MASK:ELEMENT1:  
PSPCOUNT:VALUE? -> :EYEDIAGRAM:  
TELECOMTEST:MASK:ELEMENT1:PSPCOUNT:  
VALUE 1.000E+00

### **:EYEDiagram:TELecomtest:MMode**

Function Turns ON/OFF mask display or queries the current setting.

Syntax :EYEDiagram:TELecomtest:  
MMode {<Boolean>}  
:EYEDiagram:TELecomtest:MMode?

Example :EYEDIAGRAM:TELECOMTEST:MMode ON  
:EYEDIAGRAM:TELECOMTEST:MMode? ->  
:EYEDIAGRAM:TELECOMTEST:MMode 1

### **:EYEDiagram:TELecomtest:TRACe**

Function Sets the telecom test trace or queries the current setting.

Syntax :EYEDiagram:TELecomtest:TRACe {<NRf>}  
:EYEDiagram:TELecomtest:TRACe?  
<NRf> = 1 to 8

Example :EYEDIAGRAM:TELECOMTEST:TRACE 1  
:EYEDIAGRAM:TELECOMTEST:TRACE? ->  
:EYEDIAGRAM:TELECOMTEST:TRACE 1

**:EYEDiagram:TELEcomtest:TRANge (Time Range)**

**Function** Sets the telecom test measuring range or queries the current setting.

**Syntax** :EYEDiagram:TELEcomtest:  
 TRANge {<NRf>, <NRf>}  
 :EYEDiagram:TELEcomtest:TRANge?  
 <NRf> = -5 to 5(div)

**Example** :EYEDIAGRAM:TELECOMTEST:TRANGE -5,0  
 :EYEDIAGRAM:TELECOMTEST:TRANGE?  
 -> :EYEDIAGRAM:TELECOMTEST:  
 TRANGE 0.000E+00,-5.000E+00

**:EYEDiagram:TELEcomtest:WINDow**

**Function** Sets the window of the telecom test or queries the current setting.

**Syntax** :EYEDiagram:TELEcomtest:  
 WINDow {MAIN|Z1|Z2}  
 :EYEDiagram:TELEcomtest:WINDow?

**Example** :EYEDIAGRAM:TELECOMTEST:WINDOW MAIN  
 :EYEDIAGRAM:TELECOMTEST:WINDOW? ->  
 :EYEDIAGRAM:TELECOMTEST:WINDOW MAIN

## 5.12 FILE Group

### **:FILE?**

**Function** Queries all settings related to the specified storage medium or internal memory.

**Syntax** :FILE?

**Example** :FILE? -> : FILE:DIRECTORY:CDIRECTORY  
"\FlashMem\HOME";:FILE:INTERNAL:STORE:  
BINARY:TRACE 1;:FILE:INTERNAL:STORE:  
DMEMORY:TRACE 1;:FILE:INTERNAL:STORE:  
SETUP:COMMENT1 "WAVE1";COMMENT2 "";  
COMMENT3 "";COMMENT4 "";COMMENT5 "";  
COMMENT6 "";COMMENT7 "";COMMENT8 "";  
COMMENT9 "";COMMENT10 "";COMMENT11 "";  
COMMENT12 "";LOCK1 1;LOCK2 0;LOCK3 0;  
LOCK4 0;LOCK5 0;LOCK6 0;LOCK7 0;  
LOCK8 0;LOCK9 0;LOCK10 0;LOCK11 0;  
LOCK12 0;:FILE:LOAD:BINARY:  
REFERENCE 1;:FILE:LOAD:ZPOLYGON:  
ZONE 1;:FILE:LOAD:ZWAVE:ZONE1;:FILE:  
SAVE:AHISTOGRAM:ANALYSIS 1;:FILE:SAVE:  
ANAMING DATE;ASCII:  
COMPRESSION DECIMATION;HISTORY ONE;  
LENGTH 2500;RANGE MAIN;TRACE 1;:  
FILE:SAVE:BINARY:  
COMPRESSION DECIMATION;HISTORY ONE;  
LENGTH 2500;TRACE 1;:FILE:SAVE:  
COMMENT "THIS IS TEST";DMEMORY:  
TRACE 1;:FILE:SAVE:FFT:ANALYSIS 1;:  
FILE:SAVE:FLOAT:  
COMPRESSION DECIMATION;HISTORY ONE;  
LENGTH 2500;TRACE 1;:FILE:SAVE:  
NAME "SB5000";SBUS:ANALYSIS 1;:  
FILE:SAVE:ZWAVE:ZONE 1

### **:FILE:DIRectory?**

**Function** Queries all settings related to the specified storage medium.

**Syntax** :FILE:DIRectory?

**Example** :FILE:DIRectory? -> :FILE:DIRectory:  
CDIRECTORY "\Flash Mem\HOME"

### **:FILE[:DIRectory]:CDIRECTORY (Change Directory)**

**Function** Sets the current directory or queries the current setting.

**Syntax** :FILE[:DIRectory]:CDIRECTORY {<String>}  
:FILE[:DIRectory]:CDIRECTORY?  
<String> = Up to 259 characters

**Example** :FILE:DIRectory:CDIRECTORY "\Flash Mem\  
DIR1\DIR2"

(Absolute path designation)

:FILE:DIRectory:CDIRECTORY "DIR2"

(Relative path designation)

:FILE:DIRectory:CDIRECTORY "\"

(Root directory designation)

:FILE:DIRectory:CDIRECTORY? -> :FILE:  
DIRectory:

CDIRECTORY "\Flash Mem\DIR1\DIR2"

**Description** • Data files cannot be saved to the root directory.

Specify a save destination drive for the save directory.

The following five drives are selectable.

- Internal hard disk: "HD"
- Internal memory: "Flash Mem"
- Network drive: "Network"
- PC card: "Storage Card<x>"
- USB storage device: "USB Storage<x>"  
<x> = 1 to 4 (however, only a total of four "Storage Card" and "USB Storage" designations are supported (including partitions))
- Sets the specified directory the current directory for saving and loading.
- Absolute and relative path designations are possible.
- To specify an absolute path, enter a backslash at the front of the path.
- Relative path to higher level directories is not allowed.

### **:FILE[:DIRectory]:FREE?**

**Function** Queries the free disk space in bytes on the specified storage medium.

**Syntax** :FILE[:DIRectory]:FREE?

**Example** :FILE:DIRectory:FREE?-> :FILE:  
DIRectory:FREE 65536

**Description** • Returns the size of the current directory.

- If the current directory is the root directory, "0" is returned.

**:FILE[:DIReCTory]:MDIRectory****(Make Directory)**

**Function** Creates a directory under the specified directory. This is an overlap command.

**Syntax** :FILE[:DIReCTory]:MDIRectory {<String>}  
<String> = Up to 259 characters

**Example** :FILE:DIRECTORY:  
MDIRECTORY "\Flash Mem\DIR1\DIR2"  
(Absolute path designation)  
:FILE:DIRECTORY:MDIRECTORY "DIR2"  
(Relative path designation)

**Description** For details on the <String> parameter, see the description in FILE[:DIReCTory]:CDIRectory.

**:FILE:INTernal?**

**Function** Queries all settings related to the internal memory.

**Syntax** :FILE:INTernal?

**Example** :FILE:INTERNAL? -> :FILE:INTERNAL:  
STORE:BINARy:TRACe 1;  
:FILE:INTERNAL:STORE:DMEMORy:TRACe 1;  
:FILE:INTERNAL:STORE:SETUP:  
COMMENT1 "WAVE1";COMMENT2 " "  
COMMENT3 " ";COMMENT4 " ";COMMENT5 " "  
COMMENT6 " ";COMMENT7 " ";COMMENT8 " "  
COMMENT9 " ";COMMENT10 " ";COMMENT11 " "  
COMMENT12 " ";LOCK1 1;LOCK2 0;LOCK3 0;  
LOCK4 0;LOCK5 0;LOCK6 0;LOCK7 0;  
LOCK8 0;LOCK9 0;LOCK10 0;LOCK11 0;  
LOCK12 0

**:FILE:INTernal:RECall:****DMEMORy[:EXECute]**

**Function** Executes the loading of the accumulated data from the internal memory. This is an overlap command.

**Syntax** :FILE:INTernal:RECall:DMEMORy  
[:EXECute] {<NRf>}  
<NRf> = 1 to 4

**Example** :FILE:INTERNAL:RECALL:DMEMORY:EXECUTE 1

**:FILE:INTernal:RECall:SETUp[:EXECute]**

**Function** Executes the loading of the setup data from the internal memory. This is an overlap command.

**Syntax** :FILE:INTernal:RECall:  
SETUp[:EXECute] {<NRf>}  
<NRf> = 1 to 12

**Example** :FILE:INTERNAL:RECALL:SETUP:EXECUTE 1

**:FILE:INTernal:STORE?**

**Function** Queries all settings related to the saving to the internal memory.

**Syntax** :FILE:INTernal:STORE?

**Example** :FILE:INTERNAL:STORE? -> :FILE:  
INTERNAL:STORE:BINARy:TRACe 1;  
:FILE:INTERNAL:STORE:DMEMORy:TRACe 1;  
:FILE:INTERNAL:STORE:SETUP:  
COMMENT1 "WAVE1";COMMENT2 " "  
COMMENT3 " ";COMMENT4 " ";COMMENT5 " "  
COMMENT6 " ";COMMENT7 " ";COMMENT8 " "  
COMMENT9 " ";COMMENT10 " ";COMMENT11 " "  
COMMENT12 " ";LOCK1 1;LOCK2 0;LOCK3 0;  
LOCK4 0;LOCK5 0;LOCK6 0;LOCK7 0;  
LOCK8 0;LOCK9 0;LOCK10 0;LOCK11 0;  
LOCK12 0

**:FILE:INTernal:STORE:BINARy?**

**Function** Queries all settings related to the saving of the binary data to the internal memory.

**Syntax** :FILE:INTernal:STORE:BINARy?

**Example** :FILE:INTERNAL:STORE:BINARy? -> :FILE:  
INTERNAL:STORE:BINARy:TRACe 1

**:FILE:INTernal:STORE:BINARy[:EXECute]**

**Function** Executes the saving of the binary data to the internal memory. This is an overlap command.

**Syntax** :FILE:INTernal:STORE:BINARy  
[:EXECute] {<NRf>}  
<NRf> = 1 to 4

**Example** :FILE:INTERNAL:STORE:BINARy:EXECUTE 1

**:FILE:INTernal:STORE:BINARy:TRACe**

**Function** Sets the trace to be saved in binary data to the internal memory or queries the current setting.

**Syntax** :FILE:INTernal:STORE:BINARy:  
TRACe {<NRf>}  
:FILE:INTernal:STORE:BINARy:TRACe?  
<NRf> = 1 to 8

**Example** :FILE:INTERNAL:STORE:BINARy:TRACe 1  
:FILE:INTERNAL:STORE:BINARy:TRACe?  
-> :FILE:INTERNAL:STORE:BINARy:TRACe 1

**:FILE:INTernal:STORE:DMEMORy?**

**Function** Queries all settings related to the saving of the accumulated data to the internal memory.

**Syntax** :FILE:INTernal:STORE:DMEMORy?

**Example** :FILE:INTERNAL:STORE:DMEMORY? -> :FILE:  
INTERNAL:STORE:DMEMORy:TRACe 1

## 5.12 FILE Group

### **:FILE:INTERNAL:STORE:DMEMORY[:EXECUTE]**

**Function** Executes the saving of the accumulated data to the internal memory. This is an overlap command.

**Syntax** :FILE:INTERNAL:STORE:  
DMEMORY[:EXECUTE] {<Nrf>}  
<Nrf> = 1 to 4

**Example** :FILE:INTERNAL:STORE:DMEMORY:EXECUTE 1

### **:FILE:INTERNAL:STORE:DMEMORY:TRACE**

**Function** Sets the trace to be saved in accumulated data to the internal memory or queries the current setting.

**Syntax** :FILE:INTERNAL:STORE:DMEMORY:  
TRACE {<Nrf>|ALL|XY1|XY2}  
:FILE:INTERNAL:STORE:DMEMORY:TRACE?  
<Nrf> = 1 to 8

**Example** :FILE:INTERNAL:STORE:DMEMORY:TRACE 1  
:FILE:INTERNAL:STORE:DMEMORY:TRACE?  
-> :FILE:INTERNAL:STORE:DMEMORY:TRACE 1

### **:FILE:INTERNAL:STORE:SETUP?**

**Function** Queries all settings related to the saving of the setup data to the internal memory.

**Syntax** :FILE:INTERNAL:STORE:SETUP?

**Example** :FILE:INTERNAL:STORE:SETUP? -> :FILE:  
INTERNAL:STORE:SETUP:COMMENT1 "WAVE1";  
COMMENT2 " ";COMMENT3 " ";COMMENT4 " ";  
COMMENT5 " ";COMMENT6 " ";COMMENT7 " ";  
COMMENT8 " ";COMMENT9 " ";COMMENT10 " ";  
COMMENT11 " ";COMMENT12 " ";LOCK1 1;  
LOCK2 0;LOCK3 0;LOCK4 0;LOCK5 0;  
LOCK6 0;LOCK7 0;LOCK8 0;LOCK9 0;  
LOCK10 0;LOCK11 0;LOCK12 0

### **:FILE:INTERNAL:STORE:SETUP:COMMENT<x>**

**Function** Sets the comment to the setup data to be saved to the internal memory or queries the current setting.

**Syntax** :FILE:INTERNAL:STORE:SETUP:  
COMMENT<x> {<String>}  
:FILE:INTERNAL:STORE:SETUP:COMMENT<x>?  
<x> = 1 to 12  
<String> = Up to 16 characters

**Example** :FILE:INTERNAL:STORE:SETUP:  
COMMENT1 "WAVE1"  
:FILE:INTERNAL:STORE:SETUP:COMMENT1?  
-> :FILE:INTERNAL:STORE:SETUP:  
COMMENT1 "WAVE1"

### **:FILE:INTERNAL:STORE:SETUP:DATE<x>?**

**Function** Queries the date/time when the setup data was saved to the internal memory.

**Syntax** :FILE:INTERNAL:STORE:SETUP:DATE<x>?  
<x> = 1 to 12

**Example** :FILE:INTERNAL:STORE:SETUP:DATE1?  
-> :FILE:INTERNAL:STORE:SETUP:  
DATE1 "2007/01/12 14:58:02"

### **:FILE:INTERNAL:STORE:SETUP[:EXECUTE]**

**Function** Executes the saving of the setup data to the internal memory. This is an overlap command.

**Syntax** :FILE:INTERNAL:STORE:SETUP  
[:EXECUTE] {<Nrf>}  
<Nrf> = 1 to 12

**Example** :FILE:INTERNAL:STORE:SETUP:EXECUTE 1

### **:FILE:INTERNAL:STORE:SETUP:LOCK<x>**

**Function** Turns ON/OFF the read-only attribute of the setup data in the internal memory or queries the current setting.

**Syntax** :FILE:INTERNAL:STORE:SETUP:  
LOCK<x> {<Boolean>}  
:FILE:INTERNAL:STORE:SETUP:LOCK<x>?  
<x> = 1 to 12

**Example** :FILE:INTERNAL:STORE:SETUP:LOCK1 ON  
:FILE:INTERNAL:STORE:SETUP:LOCK1?  
-> :FILE:INTERNAL:STORE:SETUP:LOCK1 1

### **:FILE:INTERNAL:UNLOAD:**

#### **DMEMORY[:EXECUTE]**

**Function** Clears the loaded accumulated data.

**Syntax** :FILE:INTERNAL:UNLOAD:DMEMORY[:EXECUTE]

**Example** :FILE:INTERNAL:UNLOAD:DMEMORY:EXECUTE

### **:FILE:LOAD?**

**Function** Queries all settings related to the loading of files on the specified storage medium.

**Syntax** :FILE:LOAD?

**Example** :FILE:LOAD? -> :FILE:LOAD:BINARy:  
REFERENCE 1;;FILE:LOAD:ZPOLYGON:ZONE 1;  
:FILE:LOAD:ZWAVE:ZONE 1

### **:FILE:LOAD:{BINARy|ZPOLYGON|ZWAVE}?**

**Function** Queries all settings related to the loading of specific data.

**Syntax** :FILE:LOAD:{BINARy|ZPOLYGON|ZWAVE}?

**Example** (The following is an example for binary data.)  
:FILE:LOAD:BINARy? -> :FILE:LOAD:  
BINARy:REFERENCE 1

**: FILE:LOAD: { BINARY | DMEemory | MASK | SETUP | SYMBOL | ZPOLygon | ZWAVE } : ABORT**

Function Aborts the loading of specific data.

Syntax : FILE:LOAD: { BINARY | DMEemory | MASK | SETUP | SYMBOL | ZPOLygon | ZWAVE } : ABORT

Example (The following is an example for binary data.)  
: FILE:LOAD: BINARY: ABORT

**: FILE:LOAD: { BINARY | DMEemory | MASK | SETUP | SYMBOL | ZPOLygon | ZWAVE } [ : EXECute]**

Function Executes the loading of specific data. This is an overlap command.

Syntax : FILE:LOAD: { BINARY | DMEemory | MASK | SETUP | SYMBOL | ZPOLygon | ZWAVE } [ : EXECute] { <String>

<String> = Up to 259 characters

Example (The following is an example for binary data.)

```
: FILE:LOAD: BINARY:
EXECUTE "\Flash Mem\DIR\DATA"
(Absolute path designation)
: FILE:LOAD: BINARY: EXECUTE "DATA"
(Relative path designation)
```

Description For details on the <String> parameter, see the description in FILE[:DIRectory]:CDIRectory.

**: FILE:LOAD: BINARY: REFERENCE**

Function Sets the load destination of the binary data or queries the current setting.

Syntax : FILE:LOAD: BINARY: REFERENCE { <NRf> | ACQMemory }  
: FILE:LOAD: BINARY: REFERENCE?  
<NRf> = 1 to 4

Example : FILE:LOAD: BINARY: REFERENCE 1  
: FILE:LOAD: BINARY: REFERENCE? -> : FILE:LOAD: BINARY: REFERENCE 1

**: FILE:LOAD: { ZPOLygon | ZWAVE } : ZONE**

Function Sets the load destination of the zone data of specific data or queries the current setting.

Syntax : FILE:LOAD: { ZPOLygon | ZWAVE } : ZONE { <NRf> }  
: FILE:LOAD: { ZPOLygon | ZWAVE } : ZONE?  
<NRf> = 1 to 4

Example (The following is an example for ZONE WAVE data.)

```
: FILE:LOAD: ZWAVE: ZONE 1
: FILE:LOAD: ZWAVE: ZONE? -> : FILE:LOAD: ZWAVE: ZONE 1
```

**: FILE:SAVE?**

Function Queries all settings related to the saving of data.

Syntax : FILE:SAVE?

Example : FILE:SAVE? -> : FILE:SAVE: AHISTOGRAM: ANALYSIS 1; : FILE:SAVE: ANAMING DATE; ASCII: COMPRESSION DECIMATION; HISTORY ONE; LENGTH 2500; RANGE MAIN; TRACE 1; : FILE:SAVE: BINARY: COMPRESSION DECIMATION; HISTORY ONE; LENGTH 2500; TRACE 1; : FILE:SAVE: COMMENT "THIS IS TEST"; DMEemory: TRACE 1; : FILE:SAVE: FFT: ANALYSIS 1; : FILE:SAVE: FLOAT: COMPRESSION DECIMATION; HISTORY ONE; LENGTH 2500; TRACE 1; : FILE:SAVE: NAME "SB5000"; SBUS: ANALYSIS 1; : FILE:SAVE: ZWAVE: ZONE 1

**: FILE:SAVE: { AHISTogram | ASCii | BINARY | DMEemory | FFT | FLOat | SBUS | ZWAVE }?**

Function Queries all settings related to the saving of specific data.

Syntax : FILE:SAVE: { AHISTogram | ASCii | BINARY | DMEemory | FFT | FLOat | SBUS | ZWAVE }?

Example (The following is an example for binary data.)

```
: FILE:SAVE: BINARY? -> : FILE:SAVE: BINARY: COMPRESSION DECIMATION; HISTORY ONE; LENGTH 2500; TRACE 1
```

**: FILE:SAVE: { AHISTogram | ASCii | BINARY | DMEemory | FFT | FLOat | SETUP | SBUS | WPARAmeter | ZWAVE } : ABORT**

Function Aborts the save operation of specific data.

Syntax : FILE:SAVE: { AHISTogram | ASCii | BINARY | DMEemory | FFT | FLOat | SETUP | SBUS | WPARAmeter | ZWAVE } : ABORT

Example (The following is an example for binary data.)

```
: FILE:SAVE: BINARY: ABORT
```



## 5.12 FILE Group

**:FILE:SAVE:{AHISTogram|AScii|BINary|DMEemory|FFT|FLOat|SETup|SBUS|WPARAMeter|ZWAVE}{:EXECute}**

**Function** Executes the saving of specific data by specifying a file name. This is an overlap command.

**Syntax** :FILE:SAVE:{AHISTogram|AScii|BINary|DMEemory|FFT|FLOat|SETup|SBUS|WPARAMeter|ZWAVE}{:EXECute} {<String>}  
<String> = Up to 259 characters

**Example** (The following is an example for binary data.)

```
:FILE:SAVE:BINARY:EXECUTE
:FILE:SAVE:BINARY:
EXECUTE "\Flash Mem\DIR\DATA"
(Absolute path designation)
:FILE:SAVE:BINARY:EXECUTE "DATA"
(Relative path designation)
```

**Description**

- If the path is not specified, the data is saved to the file name specified by :FILE:SAVE:NAME.
- If the path is specified, the auto naming function is disabled.
- For details on the <String> parameter, see the description in FILE[:DIRectory]:CDIRectory.

**:FILE:SAVE:{AHISTogram|FFT|SBUS}:**

### ANALysis

**Function** Sets the trace of specific data to be saved or queries the current setting.

**Syntax** FILE:SAVE:{AHISTogram|FFT|SBUS}:  
ANALysis {<Nrf>}  
FILE:SAVE:{AHISTogram|FFT|SBUS}:  
ANALysis?  
<Nrf> = 1 to 2

**Example** (The following is an example for FFT data.)

```
:FILE:SAVE:FFT:ANALYSIS 1
:FILE:SAVE:FFT:ANALYSIS? -> :FILE:SAVE:
FFT:ANALYSIS 1
```

### :FILE:SAVE:ANAMing

**Function** Sets the type of auto naming of file names of the saved data or queries the current setting.

**Syntax** :FILE:SAVE:ANAMing {DATE|NUMBERing|OFF}  
:FILE:SAVE:ANAMing?

**Example** :FILE:SAVE:ANAMING DATE  
:FILE:SAVE:ANAMING? -> :FILE:SAVE:  
ANAMING DATE

**:FILE:SAVE:{AScii|BINary|FLOat}:**

### COMPReSSion

**Function** Sets the compression method for saving specific data or queries the current setting.

**Syntax** :FILE:SAVE:{AScii|BINary|FLOat}:  
COMPReSSion {DECimation|OFF|PTOPeak  
|STATe}  
:FILE:SAVE:{AScii|BINary|FLOat}:  
COMPReSSion?

**Example** (The following is an example for binary data.)

```
:FILE:SAVE:BINARY:
COMPReSSion DECIMATION
:FILE:SAVE:BINARY:COMPReSSion?
-> :FILE:SAVE:BINARY:
COMPReSSion DECIMATION
```

**Description** {DECimation} is invalid if :FILE:SAVE:  
{AScii|BINary}:TRACe LOGic.  
{STATe} is invalid for other than :FILE:SAVE:  
AScii:TRACe LOGic.

**:FILE:SAVE:{AScii|BINary|FLOat}:**

### HISTory

**Function** Sets whether to save the entire data or the selected data of specific data or queries the current setting.

**Syntax** :FILE:SAVE:{AScii|BINary|FLOat}:  
HISTory {ALL|ONE}  
:FILE:SAVE:{AScii|BINary|FLOat}:  
HISTory?

**Example** (The following is an example for binary data.)

```
:FILE:SAVE:BINARY:HISTory ALL
:FILE:SAVE:BINARY:HISTory? -> :FILE:
SAVE:BINARY:HISTory ALL
```

**:FILE:SAVE:{AScii|BINary|FLOat}:LENGth**

**Function** Sets the size of waveform data to save for each type of data or queries the current setting.

**Syntax** :FILE:SAVE:{AScii|BINary|FLOat}:  
LENGth {<Nrf>}  
:FILE:SAVE:{AScii|BINary|FLOat}:LENGth?  
<Nrf> = See the main unit User's Manual.

**Example** (The following is an example with binary data.)

```
:FILE:SAVE:BINARY:LENGth 2500
:FILE:SAVE:BINARY:LENGth? -> :FILE:
SAVE:BINARY:LENGth 2500
```

### :FILE:SAVE:AScii:RANGe

**Function** Sets the ASCII data saving range or queries the current setting.

**Syntax** :FILE:SAVE:AScii:RANGe {MAIN|Z1|Z2}  
:FILE:SAVE:AScii:RANGe?

**Example** :FILE:SAVE:AScii:RANGe MAIN  
:FILE:SAVE:AScii:RANGe?  
-> :FILE:SAVE:AScii:RANGe MAIN

**:FILE:SAVE:{ASCIi|BINary|FLOat}:TRACe**

**Function** Sets the trace of specific data to be saved or queries the current setting.

**Syntax** :FILE:SAVE:{ASCIi|BINary|FLOat}:  
TRACe {<NRf>|ALL|LOGic}  
:FILE:SAVE:{ASCIi|BINary|FLOat}:TRACe?  
<NRf> = 1 to 8

**Example** (The following is an example for binary data.)

```
:FILE:SAVE:BINARy:TRACe 1
:FILE:SAVE:BINARy:TRACe? -> :FILE:SAVE:
BINARy:TRACe 1
```

**Description** The source waveform {LOGic} is invalid if :FILE:SAVE:{FLOat}:TRACe.

**:FILE:SAVE:COMMeNt**

**Function** Sets the comment of data to be saved or queries the current setting.

**Syntax** :FILE:SAVE:COMMeNt {<String>}  
:FILE:SAVE:COMMeNt?  
<String> = Up to 160 characters

**Example** :FILE:SAVE:COMMeNt "THIS IS TEST"  
:FILE:SAVE:COMMeNt? -> :FILE:SAVE:  
COMMeNt "THIS IS TEST"

**:FILE:SAVE:DMEMOry:TRACe**

**Function** Sets the trace to be saved as accumulated data or queries the current setting.

**Syntax** :FILE:SAVE:DMEMOry:TRACe {<NRf>|ALL|  
XY1|XY2}  
:FILE:SAVE:DMEMOry:TRACe?  
<NRf> = 1 to 8

**Example** :FILE:SAVE:DMEMOry:TRACe 1  
:FILE:SAVE:DMEMOry:TRACe? -> :FILE:  
SAVE:DMEMOry:TRACe 1

**:FILE:SAVE:NAME**

**Function** Sets the name of the data file to be saved or queries the current setting.

**Syntax** :FILE:SAVE:NAME {<Filename>}  
:FILE:SAVE:NAME?

**Example** :FILE:SAVE:NAME "SB5000"  
:FILE:SAVE:NAME? -> :FILE:SAVE:  
NAME "SB5000"

**:FILE:SAVE:ZWAVE:ZONE**

**Function** Sets the zone of the zone data to be saved or queries the current setting.

**Syntax** :FILE:SAVE:ZWAVE:ZONE {<NRf>}  
:FILE:SAVE:ZWAVE:ZONE?  
<NRf> = 1 to 4

**Example** :FILE:SAVE:ZWAVE:ZONE 1  
:FILE:SAVE:ZWAVE:ZONE? -> :FILE:SAVE:  
ZWAVE:ZONE 1

## 5.13 GONogo Group

### :GONogo?

**Function** Queries all settings related to GO/NO-GO determination.

**Syntax** :GONogo?

**Example** :GONOGO? -> :GONOGO:ACTION:BUZZER 0;  
HCOPY 0;MAIL:INTERVAL OFF;MODE 0;:  
GONOGO:ACTION:SAVE 0;:GONOGO:  
CONDITION1 DONTCARE;CONDITION2 DONTCARE;  
CONDITION3 DONTCARE;CONDITION4 DONTCARE;  
EYEDIAGRAM:SELECT1:FLEXRAY:  
EHEIGHT 2.000000E+00,1.000000E+00;:  
GONOGO:EYEDIAGRAM:SELECT2:FLEXRAY:  
EHEIGHT 0.000000E+00,0.000000E+00;:  
GONOGO:EYEDIAGRAM:SELECT3:FLEXRAY:  
EHEIGHT 0.000000E+00,0.000000E+00;:  
GONOGO:EYEDIAGRAM:SELECT4:FLEXRAY:  
EHEIGHT 0.000000E+00,0.000000E+00;:  
GONOGO:LOGIC AND;MODE EYEDIAGRAM;  
SCONDITION:NGCOUNT 1;STOPCOUNT 1;:  
GONOGO:ZPARAMETER:SELECT1:  
MODE PARAMETER;PARAMETER:  
CATEGORY MEASURE;FFT1:PEAK:  
FREQUENCY1 2.000000E+00,  
1.000000E+00;:GONOGO:ZPARAMETER:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS:  
TYPE:BSS 2.000000E+00,1.000000E+00;:  
GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:STATISTIC MAXIMUM:XY1:  
XYINTEG 2.000000E+00,1.000000E+00;:  
GONOGO:ZPARAMETER:SELECT1:RECTANGLE:  
HORIZONTAL -2.500000E+00,  
-3.000000E+00;VERTICAL 500.00000E-03,  
-500.00000E-03;:GONOGO:ZPARAMETER:  
SELECT1:TRACE 1;WAVE:  
TRANGE 5.000000E+00,-5.000000E+00;:  
GONOGO:ZPARAMETER:SELECT1:WINDOW MAIN;:  
GONOGO:ZPARAMETER:SELECT2:  
MODE RECTANGLE;PARAMETER:  
CATEGORY MEASURE;FFT1:PEAK:  
FREQUENCY1 0.000000E+00,  
0.000000E+00;:GONOGO:ZPARAMETER:  
SELECT2:PARAMETER:MEASURE:FLEXRAY:BUS:  
TYPE:BSS 0.000000E+00,0.000000E+00...

### :GONogo:ABORT

**Function** Aborts the GO/NO-GO determination.

**Syntax** :GONogo:ABORT

**Example** :GONOGO:ABORT

### :GONogo:ACTion?

**Function** Queries all settings related to the action taken when the determination result is NO-GO and the criteria values.

**Syntax** :GONogo:ACTion?

**Example** :GONOGO:ACTION? -> :GONOGO:ACTION:  
BUZZER 0;HCOPY 0;MAIL:INTERVAL OFF;  
MODE 0;:GONOGO:ACTION:SAVE 0

### :GONogo:ACTion:BUZZer

**Function** Sets whether to sound a buzzer when the determination result is NO-GO or queries the current setting.

**Syntax** :GONogo:ACTion:BUZZer {<Boolean>}  
:GONogo:ACTion:BUZZer?

**Example** :GONOGO:ACTION:BUZZER ON  
:GONOGO:ACTION:BUZZER? -> :GONOGO:  
ACTION:BUZZER 1

### :GONogo:ACTion:HCOpy

**Function** Sets whether to print the screen image on the printer when the determination result is NO-GO or queries the current setting.

**Syntax** :GONogo:ACTion:HCOpy {<Boolean>}  
:GONogo:ACTion:HCOpy?

**Example** :GONOGO:ACTION:HCOpy ON  
:GONOGO:ACTION:HCOpy? -> :GONOGO:  
ACTION:HCOpy 1

### :GONogo:ACTion:MAIL?

**Function** Queries all settings related to the mail transmission when the determination is NO-GO.

**Syntax** :GONogo:ACTion:MAIL?

**Example** :GONOGO:ACTION:MAIL? -> :GONOGO:  
ACTION:MAIL:INTERVAL 10;MODE 1

### :GONogo:ACTion:MAIL:INTerval

**Function** Sets the interval at which to send mail when the determination is NO-GO or queries the current setting.

**Syntax** :GONogo:ACTion:MAIL:INTerval  
{OFF|<NRf>}  
:GONogo:ACTion:MAIL:INTerval?  
<NRf> = 1 to 1440 (min)

**Example** :GONOGO:ACTION:MAIL:INTERVAL 10  
:GONOGO:ACTION:MAIL:INTERVAL?  
-> :GONOGO:ACTION:MAIL:INTERVAL 10

**:GONogo:ACTion:MAIL:MODE**

**Function** Sets whether to send mail when the determination is NO-GO or queries the current setting.

**Syntax** :GONogo:ACTion:MAIL:MODE {<Boolean>}  
:GONogo:ACTion:MAIL:MODE?

**Example** :GONOGO:ACTION:MAIL:MODE ON  
:GONOGO:ACTION:MAIL:MODE? -> :GONOGO:  
ACTION:MAIL:MODE 1

**:GONogo:ACTion:SAVE**

**Function** Sets whether to save the waveform data to the storage medium when the determination result is NO-GO or queries the current setting.

**Syntax** :GONogo:ACTion:SAVE {<Boolean>}  
:GONogo:ACTion:SAVE?

**Example** :GONOGO:ACTION:SAVE ON  
:GONOGO:ACTION:SAVE? -> :GONOGO:ACTION:  
SAVE 1

**:GONogo:CONDition<x>**

**Function** Sets the GO/NO-GO determination criteria or queries the current setting.

**Syntax** :GONogo:CONDition<x> {DONTcare|IN|OUT}  
:GONogo:CONDition<x>?  
<x> = 1 to 4

**Example** :GONOGO:CONDITION1 DONTCARE  
:GONOGO:CONDITION1? -> :GONOGO:  
CONDITION1 DONTCARE

**:GONogo:COUNT?**

**Function** Queries the actual number of GO/NO-GO determinations.

**Syntax** :GONogo:COUNT?

**Example** :GONOGO:COUNT? -> :GONOGO:COUNT 1

**:GONogo:EXECute**

**Function** Executes the GO/NO-GO determination. This is an overlap command.

**Syntax** :GONogo:EXECute

**Example** :GONOGO:EXECUTE

**:GONogo:EYEDiagram?**

**Function** Queries all settings related to eye diagram judgment.

**Syntax** :GONogo:EYEDiagram?

**Example** :GONOGO:EYEDIAGRAM? -> :GONOGO:  
EYEDIAGRAM:SELECT1:FLEXRAY:  
EHEIGHT 2.0000000E+00,1.0000000E+00;;  
GONOGO:EYEDIAGRAM:SELECT2:FLEXRAY:  
EHEIGHT 0.0000000E+00,0.0000000E+00;;  
GONOGO:EYEDIAGRAM:SELECT3:FLEXRAY:  
EHEIGHT 0.0000000E+00,0.0000000E+00;;  
GONOGO:EYEDIAGRAM:SELECT4:FLEXRAY:  
EHEIGHT 0.0000000E+00,0.0000000E+00

**:GONogo:EYEDiagram:SELEct<x>?**

**Function** Queries all settings related to each condition of eye diagram judgment.

**Syntax** :GONogo:EYEDiagram:SELEct<x>?  
<x> = 1 to 4

**Example** :GONOGO:EYEDIAGRAM:SELECT1? ->  
:GONOGO:EYEDIAGRAM:SELECT1:FLEXRAY:  
EHEIGHT 2.0000000E+00,1.0000000E+00

**:GONogo:EYEDiagram:SELEct<x>:FLEXray?**

**Function** Queries all settings related to FLEXRAY eye diagram judgment.

**Syntax** :GONogo:EYEDiagram:SELEct<x>:FLEXray?  
<x> = 1 to 4

**Example** :GONOGO:EYEDIAGRAM:SELECT1:FLEXRAY? ->  
:GONOGO:EYEDIAGRAM:SELECT1:FLEXRAY:  
EHEIGHT 2.0000000E+00,1.0000000E+00

**:GONogo:EYEDiagram:SELEct<x>:  
FLEXray:<Parameter>**

**Function** Sets the upper and lower limits of the waveform parameters of the FLEXRAY eye diagram judgment or queries the current setting.

**Syntax** :GONogo:EYEDiagram:SELEct<x>:FLEXray:  
<Parameter> {<Nrf>,<Nrf>}  
:GONogo:EYEDiagram:SELEct<x>:FLEXray:  
<Parameter>?

<x> = 1 to 4  
<Parameter>={EHeight|EWidth|FALL|JITter|  
PCROssing|PDUtYcycle|PSPCount|PWCount|  
QFActor|RISE|SDBase|SDTop|SPCount|  
T1CRossing|T2CRossing|VBASe|VCrossing|VTOp|  
WCOunt}

<Nrf>,<Voltage>,<Current>,<time> = See the  
SB5000 User's Manual

**Example** (The following is an example with EHeight.)

```
:GONOGO:EYEDIAGRAM:SELECT1:FLEXRAY:
EHEIGHT 1,2
:GONOGO:EYEDIAGRAM:SELECT1:FLEXRAY:
EHEIGHT? -> :GONOGO:EYEDIAGRAM:SELECT1:
FLEXRAY:EHEIGHT 2.0000000E+00,
1.0000000E+00
```

**Description** • For the correspondence between communication commands and the parameters used, see appendix 4.

- See the main unit user's manual for details about parameters.

### 5.13 GONogo Group

#### **:GONogo: EYEDiagram: SElect<x>:**

##### **TELecomtest?**

Function Queries all settings related to telecom test judgment.

Syntax :GONogo: EYEDiagram: SElect<x>:  
TELecomtest?  
<x> = 1 to 4

Example :GONOGO: EYEDIAGRAM: SELECT1: TELECOMTEST?  
-> :GONOGO: EYEDIAGRAM: SELECT1:  
TELECOMTEST: EYEPATTERN:  
DBERATE 2.0000000E+00, 1.0000000E+00

#### **:GONogo: EYEDiagram: SElect<x>:**

##### **TELecomtest: EYEPattern?**

Function Queries all settings related to eye pattern judgment of each condition.

Syntax :GONogo: EYEDiagram: SElect<x>:  
TELecomtest: EYEPattern?  
<x> = 1 to 4

Example :GONOGO: EYEDIAGRAM: SELECT1: TELECOMTEST:  
EYEPATTERN? -> :GONOGO: EYEDIAGRAM:  
SELECT1: TELECOMTEST: EYEPATTERN:  
DBERATE 2.0000000E+00, 1.0000000E+00

#### **:GONogo: EYEDiagram: SElect<x>:**

##### **TELecomtest: EYEPattern: <Parameter>**

Function Sets the upper and lower limits of the waveform parameters of eye pattern judgment or queries the current setting.

Syntax :GONogo: EYEDiagram: SElect<x>:  
TELecomtest: EYEPattern:  
<Parameter> {<NRf>, <NRf>|<Voltage>,  
<Voltage>|<Current>, <Current>|<time>,  
<time>}  
:GONogo: EYEDiagram: SElect<x>:  
TELecomtest: EYEPattern: <Parameter>?  
<x> of SElect<x> = 1 to 4

<Parameter>={DBERate|EHEight|EWIDth|FALL|  
JITTer|PCROSSing|PDUtycycle|QFACTOR|RISE|  
SDBase|SDTop|T1CRossing|T2CRossing|VBASe|  
VCrossing|VTOP}  
<NRf>, <Voltage>, <Current>, <time> = See the  
SB5000 User's Manual

Example (The following is an example regarding DBERate.)  
:GONOGO: EYEDIAGRAM: SELECT1: TELECOMTEST:  
EYEPATTERN: DBERATE 1, 2  
:GONOGO: EYEDIAGRAM: SELECT1: TELECOMTEST:  
EYEPATTERN: DBERATE? -> :GONOGO:  
EYEDIAGRAM: SELECT1: TELECOMTEST:  
EYEPATTERN: DBERATE 2.0000000E+00,  
1.0000000E+00

Description • For the correspondence between communication commands and the parameters used, see appendix 4.  
• See the main unit user's manual for details about parameters.

#### **:GONogo: EYEDiagram: SElect<x>:**

##### **TELecomtest: MASK?**

Function Queries all settings related to mask judgment of each condition.

Syntax :GONogo: EYEDiagram: SElect<x>:  
TELecomtest: MASK?  
<x> = 1 to 4

Example :GONOGO: EYEDIAGRAM: SELECT1: TELECOMTEST:  
MASK? -> :GONOGO: EYEDIAGRAM: SELECT1:  
TELECOMTEST: MASK: ELEMENT1:  
PSPCOUNT 2.0000000E+00, 1.0000000E+00

#### **:GONogo: EYEDiagram: SElect<x>:**

##### **TELecomtest: MASK: ELEMENT<x>?**

Function Queries all settings related to each element used in the mask judgment.

Syntax :GONogo: EYEDiagram: SElect<x>:  
TELecomtest: MASK: ELEMENT<x>?  
<x> of SElect<x> = 1 to 4  
<x> of ELEMENT<x> = 1 to 4

Example :GONOGO: EYEDIAGRAM: SELECT1: TELECOMTEST:  
MASK: ELEMENT1? -> :GONOGO: EYEDIAGRAM:  
SELECT1: TELECOMTEST: MASK: ELEMENT1:  
PSPCOUNT 2.0000000E+00, 1.0000000E+00

#### **:GONogo: EYEDiagram:**

##### **SElect<x>: TELecomtest: MASK:**

##### **ELEMENT<x>: <Parameter>**

Function Sets the upper and lower limits of the error rate per number of sample data of each element.

Syntax :GONogo: EYEDiagram: SElect<x>:  
TELecomtest: MASK: ELEMENT<x>:  
<Parameter> {<NRf>, <NRf>}  
:GONogo: EYEDiagram: SElect<x>:  
TELecomtest: MASK: ELEMENT<x>:  
<Parameter>?  
<x> of SElect<x> = 1 to 4  
<x> of ELEMENT<x> = 1 to 4

<Parameter>={PSPCount|PWCount|SPCount|  
WCount}  
<NRf> = See the SB5000 User's Manual  
Example (The following is an example with PSPCount.)  
:GONOGO: EYEDIAGRAM: SELECT1: TELECOMTEST:  
MASK: ELEMENT1: PSPCOUNT 1, 2  
:GONOGO: EYEDIAGRAM: SELECT1: TELECOMTEST:  
MASK: ELEMENT1: PSPCOUNT? -> :GONOGO:  
EYEDIAGRAM: SELECT1: TELECOMTEST: MASK:  
ELEMENT1: PSPCOUNT 2.0000000E+00, 1.00000  
00E+00

Description • For the correspondence between communication commands and the parameters used, see appendix 4.  
• See the main unit user's manual for details about parameters.

**:GONogo:LOGic**

**Function** Sets the GO/NO-GO determination logic or queries the current setting.

**Syntax** :GONogo:LOGic {AND|OR}  
:GONogo:LOGic?

**Example** :GONOGO:LOGIC AND  
:GONOGO:LOGIC? -> :GONOGO:LOGIC AND

**:GONogo:MODE**

**Function** Sets the GO/NO-GO determination type or queries the current setting.

**Syntax** GONogo:MODE {EYEDiagram|OFF|ZPARAmeter|ZPARAmeter}  
:GONogo:MODE?

**Example** GONOGO:MODE EYEDIAGRAM  
:GONOGO:MODE? -> :GONOGO:MODE EYEDIAGRAM

**:GONogo:NGCount?**

**Function** Queries the actual number of NO-GOs of the GO/NO-GO determination.

**Syntax** :GONogo:NGCount?

**Example** :GONOGO:NGCOUNT? -> :GONOGO:NGCOUNT 1

**:GONogo:SCONdition?****(Stop Condition)**

**Function** Queries all settings related to the determination termination condition.

**Syntax** :GONogo:SCONdition?

**Example** :GONOGO:SCONDITION? -> :GONOGO:  
SCONDITION:NGCOUNT 1;  
STOPCOUNT 1

**:GONogo[:SCONdition]:NGCount**

**Function** Sets the number of NO-GOs that terminates the GO/NO-GO determination or queries the current setting.

**Syntax** :GONogo[:SCONdition]:NGCount {<NRf>|INFinite}  
:GONogo[:SCONdition]:NGCount?  
<NRf> = 1 to 1000

**Example** :GONOGO:SCONDITION:NGCOUNT 1  
:GONOGO:SCONDITION:NGCOUNT? -> :GONOGO:  
SCONDITION:NGCOUNT 1

**:GONogo[:SCONdition]:STOPcount**

**Function** Sets the acquisition count that terminates the GO/NO-GO determination or queries the current setting.

**Syntax** :GONogo[:SCONdition]:STOPcount {<NRf>|INFinite}  
:GONogo[:SCONdition]:STOPcount?  
<NRf> = 1 to 1000000

**Example** :GONOGO:SCONDITION:STOPCOUNT 1  
:GONOGO:SCONDITION:STOPCOUNT?  
-> :GONOGO:SCONDITION:STOPCOUNT 1

**:GONogo:ZPARAmeter?**

**Function** Queries all settings related to zone/parameter determination.

**Syntax** :GONogo:ZPARAmeter?

**Example** :GONOGO:ZPARAMETER? -> :GONOGO:  
ZPARAMETER:SELECT1:MODE PARAMETER;  
PARAMETER:CATEGORY MEASURE;FFT1:  
PEAK:FREQUENCY1 2.0000000E+00,  
1.0000000E+00;:GONOGO:ZPARAMETER:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS:  
TYPE:BSS 2.0000000E+00,1.0000000E+00;:  
GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:STATISTIC MAXIMUM:XY1:  
XYINTEG 2.0000000E+00,1.0000000E+00;:  
GONOGO:ZPARAMETER:SELECT1:RECTANGLE:  
HORIZONTAL -2.5000000E+00,  
-3.0000000E+00;VERTICAL 500.00000E-03,  
-500.00000E-03;:GONOGO:ZPARAMETER:  
SELECT1:TRACE 1;WAVE:  
TRANGE 5.0000000E+00,-5.0000000E+00;:  
GONOGO:ZPARAMETER:SELECT1:WINDOW MAIN;:  
GONOGO:ZPARAMETER:SELECT2:  
MODE RECTANGLE;PARAMETER:  
CATEGORY MEASURE;FFT1:PEAK:  
FREQUENCY1 0.0000000E+00,  
0.0000000E+00;:GONOGO:ZPARAMETER:  
SELECT2:PARAMETER:MEASURE:FLEXRAY:BUS:  
TYPE:BSS 0.0000000E+00,0.0000000E+00;:  
GONOGO:ZPARAMETER:SELECT2:PARAMETER:  
MEASURE:STATISTIC MAXIMUM.....

**:GONogo:ZPARAmeter:SELEct<x>?**

**Function** Queries all settings related to the condition of the zone/parameter determination.

**Syntax** :GONogo:ZPARAmeter:SELEct<x>?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1? -> :GONOGO:  
ZPARAMETER:SELECT1:MODE PARAMETER;  
PARAMETER:CATEGORY MEASURE;FFT1:PEAK:  
FREQUENCY1 2.0000000E+00,  
1.0000000E+00;:GONOGO:ZPARAMETER:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS:  
TYPE:BSS 2.0000000E+00,1.0000000E+00;:  
GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:STATISTIC MAXIMUM:XY1:  
XYINTEG 2.0000000E+00,1.0000000E+00;:  
GONOGO:ZPARAMETER:SELECT1:RECTANGLE:  
HORIZONTAL -2.5000000E+00,  
-3.0000000E+00;VERTICAL 500.00000E-03,  
-500.00000E-03;:GONOGO:ZPARAMETER:  
SELECT1:TRACE 1;WAVE:  
TRANGE 5.0000000E+00,-5.0000000E+00;:  
GONOGO:ZPARAMETER:SELECT1:WINDOW MAIN

## 5.13 GONogo Group

### **:GONogo:ZPARAMeter:SElect<x>:MODE**

**Function** Sets the mode of the condition or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:  
MODE {PARAMeter|POLYgon|RECTangle|WAVE}  
:GONogo:ZPARAMeter:SElect<x>:MODE?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:MODE WAVE  
:GONOGO:ZPARAMETER:SELECT1:MODE?  
-> :GONOGO:ZPARAMETER:SELECT1:MODE WAVE

### **:GONogo:ZPARAMeter:SElect<x>:**

#### **PARAMeter?**

**Function** Queries all settings related to the condition parameter.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER?  
-> :GONOGO:ZPARAMETER:SELECT1:  
PARAMETER:CATEGORY MEASURE;FFT1:PEAK:  
FREQUENCY1 2.0000000E+00,  
1.0000000E+00;:GONOGO:ZPARAMETER:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS:  
TYPE:BSS 2.0000000E+00,1.0000000E+00;:  
GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:STATISTIC MAXIMUM:XY1:  
XYINTEG 2.0000000E+00,1.0000000E+00

### **:GONogo:ZPARAMeter:SElect<x>:**

#### **PARAMeter:CATegory**

**Function** Sets the parameter category or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
CATegory {FFT|MEASure|XY}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
CATegory?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
CATEGORY FFT  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
CATEGORY? -> :GONOGO:ZPARAMETER:  
SELECT1:PARAMETER:CATEGORY FFT

**Description** This command is valid when :MEASURE:MODE  
CYCLE.

### **:GONogo:ZPARAMeter:SElect<x>:**

#### **PARAMeter:FFT<x>?**

**Function** Queries all settings related to the FFT determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
FFT<x>?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
FFT1? -> :GONOGO:ZPARAMETER:SELECT1:  
PARAMETER:FFT1:PEAK:  
FREQUENCY1 0.000E+00,0.000E+00

### **:GONogo:ZPARAMeter:SElect<x>:**

#### **PARAMeter:FFT<x>:CALCulation<x>**

**Function** Sets the upper and lower limits of the calculation item of the FFT determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
FFT<x>:CALCulation<x> {<Nrf>,<Nrf>}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
FFT<x>:CALCulation<x>?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2  
<x> of CALCulation<x> = 1 to 4  
<Nrf> = -4 to 4 (div)

**Example** GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
FFT1:CALCULATION1 0,1  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
FFT1:CALCULATION1? -> :GONOGO:  
ZPARAMETER:SELECT1:PARAMETER:  
FFT1:CALCULATION1 1.000E+00,0.000E+00

### **:GONogo:ZPARAMeter:SElect<x>:**

#### **PARAMeter:FFT<x>:PEAK?**

**Function** Queries all settings related to the peak value of the FFT determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
FFT<x>:PEAK?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
FFT1:PEAK? -> :GONOGO:ZPARAMETER:  
SELECT1:PARAMETER:FFT1:PEAK:  
FREQUENCY1 1.000E+00,0.000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:FFT<x>:PEAK:DFREquency**

**Function** Sets the upper and lower limits between the peak frequencies of the FFT determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
FFT<x>:PEAK:DFREquency {<Frequency>,  
<Frequency>}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
FFT<x>:PEAK:DFREquency?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2  
<Frequency> = See the SB5000 User's Manual

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
FFT1:PEAK:DFREQUENCY 0,1  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
FFT1:PEAK:DFREQUENCY? -> :GONOGO:  
ZPARAMETER:SELECT1:PARAMETER:FFT1:PEAK:  
DFREQUENCY 1.000E+00,0.000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:FFT<x>:PEAK:DV**

**Function** Sets the upper and lower limits between the peak voltages of the FFT determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
FFT<x>:PEAK:DV {<Nrf>,<Nrf>}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
FFT<x>:PEAK:DV?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2  
<Nrf> = -4 to 4 (div)

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
FFT1:PEAK:DV 0,1  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
FFT1:PEAK:DV? -> :GONOGO:ZPARAMETER:  
SELECT1:PARAMETER:FFT1:PEAK:  
DV 1.000E+00,0.000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:FFT<x>:PEAK:FREquency<x>**

**Function** Sets the upper and lower limits of the peak frequency of the FFT determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
FFT<x>:PEAK:FREquency<x> {<Frequency>,  
<Frequency>}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
FFT<x>:PEAK:FREquency<x>?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2  
<x> of FREquency<x> = 1 or 2  
<Frequency> = See the SB5000 User's Manual

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
FFT1:PEAK:FREQUENCY1 0,1  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
FFT1:PEAK:FREQUENCY1? -> :GONOGO:  
ZPARAMETER:SELECT1:PARAMETER:FFT1:  
PEAK:FREQUENCY1 1.000E+00,0.000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:FFT<x>:PEAK:V<x>**

**Function** Sets the upper and lower limits of the peak voltage of the FFT determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
FFT<x>:PEAK:V<x> {<Nrf>,<Nrf>}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
FFT<x>:PEAK:V<x>?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2  
<x> of V<x> = 1 or 2  
<Nrf> = -4 to 4 (div)

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
FFT1:PEAK:V1 1,2  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
FFT1:PEAK:V1? -> :GONOGO:ZPARAMETER:  
SELECT1:PARAMETER:FFT1:PEAK:  
V1 2.000E+00,1.000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure?**

**Function** Queries all settings related to the determination using automated measurement of waveform parameters (measure determination).

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE? -> :GONOGO:ZPARAMETER:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:BUS:TYPE:  
BSS 2.0000000E+00,1.0000000E+00;:  
GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:STATISTIC MAXIMUM



### 5.13 GONogo Group

#### **:GONogo:ZPARAMeter:SElect<x>:**

##### **PARAMeter:MEASure:BIT<x>?**

**Function** Queries all settings related to each logic bit of measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:BIT<x>?  
<x> of SElect<x> = 1 to 4  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:BIT1?  
-> :GONOGO:ZPARAMETER:SELECT1:  
PARAMETER:MEASURE:BIT1:AREA1:TYPE:  
COUNT 2.000E+00,1.000E+00

#### **:GONogo:ZPARAMeter:SElect<x>:**

##### **PARAMeter:MEASure:BIT<x>:AREA<x>?**

**Function** Queries all settings related to each area of measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:BIT<x>:AREA<x>?  
<x> of SElect<x> = 1 to 4  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2

**Example** :GONOGO:ZPARAMETER:SELECT1:  
PARAMETER:MEASURE:BIT1:AREA1?  
-> :GONOGO:ZPARAMETER:SELECT1:  
PARAMETER:MEASURE:BIT1:AREA1:TYPE:  
COUNT 2.000E+00,1.000E+00

#### **:GONogo:ZPARAMeter:SElect<x>:**

##### **PARAMeter:MEASure:BIT<x>:AREA<x>:TYPE?**

**Function** Queries all settings related to logic waveform parameters of measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:BIT<x>:AREA<x>:TYPE?  
<x> of BIT<x> = 1 to 4  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2

**Example** :GONOGO:ZPARAMETER:SELECT1:  
PARAMETER:MEASURE:BIT1:AREA1:TYPE?  
-> :GONOGO:ZPARAMETER:SELECT1:  
PARAMETER:MEASURE:BIT1:AREA1:TYPE:  
COUNT 2.000E+00,1.000E+00

#### **:GONogo:ZPARAMeter:SElect<x>:**

##### **PARAMeter:MEASure:BIT<x>:AREA<x>:TYPE: <parameter>**

**Function** Sets the upper and lower limits of the logic waveform of measure determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:BIT<x>:AREA<x>:  
TYPE:<parameter> {<Nrf>,<Nrf>|  
<time>,<time>|<frequency>,<frequency>}  
:GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:BIT<x>:AREA<x>:TYPE:  
<parameter>  
<x> of SElect<x> = 1 to 4  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2

<parameter>=(COUNT|DElay|DT|DUTYcycle|  
FREQuency|NWIDTH|PERFrequency|PERiod|  
PWIDth)  
<Nrf>,<time>,<frequency> = see main unit user's  
manual.

**Example** (The following is an example of the count with trace 1 area 1.)

```
:GONOGO:ZPARAMETER:SELECT1:
PARAMETER:MEASURE:BIT1:AREA1:TYPE:
COUNT 1,2
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:
MEASURE:BIT1:AREA1:TYPE:COUNT?
-> :GONOGO:ZPARAMETER:SELECT1:
PARAMETER:MEASURE:BIT1:AREA1:TYPE:
COUNT 2.000E+00,1.000E+00
```

**Description** This command applies to cycle statistical processing when :MEASURE:MODE CYCLE.

#### **:GONogo:ZPARAMeter:SElect<x>:**

##### **PARAMeter:MEASure:CALCulation<x>**

**Function** Sets the upper and lower limits of the calculation item of the measure determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:CALCulation<x> {<Nrf>,<Nrf>}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:CALCulation<x>?  
<x> of SElect<x> = 1 to 4  
<x> of CALCulation<x> = 1 to 4  
<Nrf> = -4 to 4 (div)

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:CALCULATION1 1,2  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:CALCULATION1? -> :GONOGO:  
ZPARAMETER:SELECT1:PARAMETER:MEASURE:  
CALCULATION1 2.000E+00,1.000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:FLEXray?**

**Function** Queries all settings related to FLEXRAY of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:FLEXray?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY? -> :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS:TYPE:BSS 2.0000000E+00,1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:FLEXray:BUS?**

**Function** Queries all settings related to the FLEXRAY bus of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:FLEXray:BUS?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS? -> :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS:TYPE:BSS 2.0000000E+00,1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:FLEXray:BUS:TYPE?**

**Function** Queries all settings related to the FLEXRAY bus waveform parameters of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:FLEXray:BUS:TYPE?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS:TYPE? -> :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS:TYPE:BSS 2.0000000E+00,1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:FLEXray:BUS:****TYPE:<Parameter>**

**Function** Sets the upper and lower limits of the FLEXRAY bus waveform parameters of the measure determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:FLEXray:BUS:TYPE:<Parameter> {<Nrf>,<Nrf>|<Voltage>,<Voltage>|<Current>,<Current>|<time>,<time>|<Frequency>,<Frequency>}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:FLEXray:BUS:TYPE:<Parameter>?<x> of SElect<x> = 1 to 4  
<Parameter> = {BSS|BSSFES|FBSS}<Nrf>,<Voltage>,<Current>,<time>,<Frequency>  
= See the SB5000 User's Manual

**Example** (The following is an example with BSS.)

```
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS:TYPE:BSS 1,2
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS:TYPE:BSS? ->
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS:TYPE:
BSS 2.0000000E+00,1.0000000E+00
```

**Description** For MEASURE:FLEXRAY:TYPE BUS, it is targeted for cycle statistics.

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:FLEXray:RECeiver?**

**Function** Queries all settings related to the FLEXRAY receiver of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:FLEXray:RECeiver?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER? -> :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXD:TYPE:DBDRX01 2.0000000E+00,1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:FLEXray:RECeiver:****RXD?**

**Function** Queries all settings related to the FLEXRAY receiver data of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:FLEXray:RECeiver:RXD?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXD? -> :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXD:TYPE:DBDRX01 2.0000000E+00,1.0000000E+00

### 5.13 GONogo Group

**:GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:FLEXray:RECeiver:  
RXD:TYPE?**

**Function** Queries all settings related to the FLEXRAY receiver waveform data parameters of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:FLEXray:RECeiver:RXD:TYPE?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXD:TYPE? ->  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXD:TYPE:DBDRX01 2.0000000E+00,1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:FLEXray:RECeiver:  
RXD:TYPE:<Parameter>**

**Function** Sets the upper and lower limits of the FLEXRAY receiver waveform data parameters of the measure determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:FLEXray:RECeiver:RXD:TYPE:<Parameter> {<NRf>,<NRf>|<Voltage>,<Voltage>|<Current>,<Current>|<time>,<time>|<Frequency>,<Frequency>}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:FLEXray:RECeiver:RXD:TYPE:<Parameter>?  
<x> of SElect<x> = 1 to 4  
<Parameter> = {DBDRX01|DBDRX10|DRXASYM}  
<NRf>,<Voltage>,<Current>,<time>,<frequency> = See the SB5000 User's Manual

**Example** (The following is an example with DBDRX01.)  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXD:TYPE:DBDRX01 1,2  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXD:TYPE:DBDRX01? -> :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXD:TYPE:DBDRX01 2.0000000E+00,1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:FLEXray:RECeiver:  
RXEN?**

**Function** Queries all settings related to the FLEXRAY receiver enable data of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:FLEXray:RECeiver:RXEN?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXEN? ->  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXEN:TYPE:DBDRXAI 2.0000000E+00,1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:FLEXray:RECeiver:  
RXEN:TYPE?**

**Function** Queries all settings related to the FLEXRAY receiver waveform enable data parameters of the measure determination

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:FLEXray:RECeiver:RXEN:TYPE?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXEN:TYPE? ->  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXEN:TYPE:DBDRXAI 2.0000000E+00,1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:FLEXray:RECEiver:  
RXEN:TYPE:<Parameter>**

**Function** Sets the upper and lower limits of the FLEXRAY receiver waveform enable data parameters of the measure determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:FLEXray:RECEiver:RXEN:  
TYPE:<Parameter> {<Nrf>,<Nrf>|  
<Voltage>,<Voltage>|<Current>,  
<Current>|<time>,<time>|<Frequency>,  
<Frequency>}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:FLEXray:RECEiver:RXEN:TYPE:  
<Parameter>?

<x> of SElect<x> = 1 to 4

<Parameter> = {DBDRXAI|DBDRXIA}

<Nrf>, <Voltage>, <Current>, <time>, <Frequency>

= See the SB5000 User's Manual

**Example** (The following is an example with DBDRXAI.)

```
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:
MEASURE:FLEXRAY:RECEIVER:RXEN:TYPE:
DBDRXAI 1,2
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:
MEASURE:FLEXRAY:RECEIVER:RXEN:TYPE:
DBDRXAI? -> :GONOGO:ZPARAMETER:SELECT1:
PARAMETER:MEASURE:FLEXRAY:RECEIVER:
RXEN:TYPE:DBDRXAI 2.0000000E+00,
1.0000000E+00
```

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:FLEXray:TRANsmitter?**

**Function** Queries all settings related to the FLEXRAY transmitter of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:FLEXray:TRANsmitter?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:FLEXRAY:TRANSMITTER? ->  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:FLEXRAY:TRANSMITTER:TXD:TYPE:  
DBDTX01 2.0000000E+00,1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXD?**

**Function** Queries all settings related to the FLEXRAY transmitter data of the measure determination

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:FLEXray:TRANsmitter:TXD?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:FLEXRAY:TRANSMITTER:TXD? ->  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:FLEXRAY:TRANSMITTER:TXD:TYPE:  
DBDTX01 2.0000000E+00,1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXD:TYPE?**

**Function** Queries all settings related to the FLEXRAY transmitter waveform data parameters of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:FLEXray:TRANsmitter:TXD:TYPE?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:FLEXRAY:TRANSMITTER:TXD:  
TYPE? -> :GONOGO:ZPARAMETER:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXD:TYPE:DBDTX01 2.0000000E+00,  
1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXD:TYPE:<Parameter>**

**Function** Sets the upper and lower limits of the FLEXRAY transmitter waveform data parameters of the measure determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:FLEXray:TRANsmitter:TXD:TYPE:  
<Parameter> {<Nrf>,<Nrf>|<Voltage>,  
<Voltage>|<Current>,<Current>|<time>,  
<time>|<Frequency>,<Frequency>}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:FLEXray:TRANsmitter:TXD:TYPE:  
<Parameter>?

<x> of SElect<x> = 1 to 4

<Parameter> = {DBDTX01|DBDTX10|DBUSTX01|

DBUSTX10|DTXASYM|UBDTX}

<Nrf>, <Voltage>, <Current>, <time>, <Frequency>

= See the SB5000 User's Manual

**Example** (The following is an example with DBDTX01.)

```
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:
MEASURE:FLEXRAY:TRANSMITTER:TXD:TYPE:
DBDTX01 1,2
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:
MEASURE:FLEXRAY:TRANSMITTER:TXD:TYPE:
DBDTX01? -> :GONOGO:ZPARAMETER:SELECT1:
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:
TXD:TYPE:DBDTX01 2.0000000E+00,
1.0000000E+00
```

### 5.13 GONogo Group

**:GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXEN?**

**Function** Queries all settings related to the FLEXRAY transmitter enable data of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:FLEXray:TRANsmitter:TXEN?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:FLEXRAY:TRANSMITTER:TXEN? ->  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:FLEXRAY:TRANSMITTER:TXEN:TYPE:  
DBDTXAI 2.0000000E+00,1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXEN:TYPE?**

**Function** Queries all settings related to the FLEXRAY transmitter waveform enable data parameters of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:FLEXray:TRANsmitter:TXEN:TYPE?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
TYPE? -> :GONOGO:ZPARAMETER:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXEN:TYPE:DBDTXAI 2.0000000E+00,  
1.0000000E+00

**:GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXEN:TYPE:<Parameter>**

**Function** Sets the upper and lower limits of the FLEXRAY transmitter waveform enable data parameters of the measure determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:FLEXray:TRANsmitter:TXEN:TYPE:  
<Parameter> {<Nrf>,<Nrf>|<Voltage>,  
<Voltage>|<Current>,<Current>|<time>,  
<time>|<Frequency>,<Frequency>}

:GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:FLEXray:TRANsmitter:TXEN:TYPE:  
<Parameter>?  
<x> of SElect<x> = 1 to 4

<Parameter> = {DBDTXAI|DBDTXIA|DBUSTXAI|  
DBUSTXIA}  
<Nrf>,<Voltage>,<Current>,<time>,<Frequency>  
= See the SB5000 User's Manual

**Example** (The following is an example with DBDTXAI.)  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:FLEXRAY:TRANSMITTER:TXEN:TYPE:  
DBDTXAI 1,2  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:FLEXRAY:TRANSMITTER:TXEN:TYPE:  
DBDTXAI? -> :GONOGO:ZPARAMETER:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXEN:TYPE:DBDTXAI 2.0000000E+00,1.00000  
00E+00

**:GONogo:ZPARAMeter:SElect<x>:  
PARAMeter:MEASure:STATistics**

**Function** Sets the statistical value of the measure determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:STATistics {MAXimum|MEAN|  
MINimum|SIGMa}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:  
MEASure:STATistics?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:STATISTICS MAXIMUM  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:STATISTICS? -> :GONOGO:  
ZPARAMETER:SELECT1:PARAMETER:  
MEASURE:STATISTICS MAXIMUM

**Description** This command is valid when :MEASURE:MODE  
CYCLE.

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:TRACe<x>?**

**Function** Queries all settings related to the trace of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:TRACe<x>?

<x> of SElect<x> = 1 to 4

<x> of TRACe<x> = 1 to 8

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:TRACE1? -> :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:TRACE1:AREA1:TYPE:MAXIMUM 2.000E+00,1.000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:TRACe<x>:AREA<x>?**

**Function** Queries all settings related to the area of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:TRACe<x>:AREA<x>?

<x> of SElect<x> = 1 to 4

<x> of TRACe<x> = 1 to 8

<x> of AREA<x> = 1 or 2

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:TRACE1:AREA1? -> :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:TRACE1:AREA1:TYPE:MAXIMUM 2.000E+00,1.000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:TRACe<x>:AREA<x>:****TYPE?**

**Function** Queries all settings related to the waveform parameters of the measure determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:TRACe<x>:AREA<x>:TYPE?

<x> of SElect<x> = 1 to 4

<x> of TRACe<x> = 1 to 8

<x> of AREA<x> = 1 or 2

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:TRACE1:AREA1:TYPE? -> :GONOGO:ZPARAMETER:SELECT1:PARAMETER:MEASURE:TRACE1:AREA1:TYPE:MAXIMUM 2.000E+00,1.000E+00

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:MEASure:TRACe<x>:AREA<x>:****TYPE:<Parameter>**

**Function** Sets the upper and lower limits of the waveform parameter of the measure determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:MEASure:TRACe<x>:AREA<x>:TYPE:

<Parameter> {<NRf>, <NRf> |

<Voltage>, <Voltage> |

<Current>, <Current> | <Time>, <Time> |

<Frequency>, <Frequency>}

:GONogo:ZPARAMeter:SElect<x>:PARAMeter:

MEASure:TRACe<x>:AREA<x>:TYPE:

<Parameter>?

<x> of SElect<x> = 1 to 4

<x> of TRACe<x> = 1 to 8

<x> of AREA<x> = 1 or 2

<Parameter> = {BURSt|CMEan|COUNT|CRMS|CSDeviation|DElay|DT|DUTYcycle|FALL|FREQuency|HIGH|HILow|LOW|MAXimum|MEAN|MINimum|NOVershoot|NWIDTH|PERFrequency|PERiod|POVershoot|PTOPeak|PWIDth|RISE|RMS|SDEviation|TYCInteg|TYINteg|V1|V2}<NRf>, <Voltage>, <Current>, <Time>, and <Frequency> = See the SB5000 User's Manual.

**Example** (The following is an example for the maximum value of trace 1 and area 1.)

:GONOGO:ZPARAMETER:SELECT1:PARAMETER:

MEASURE:TRACE1:AREA1:TYPE:MAXIMUM 1,2

:GONOGO:ZPARAMETER:SELECT1:PARAMETER:

MEASURE:TRACE1:AREA1:TYPE:MAXIMUM?

-> :GONOGO:ZPARAMETER:SELECT1:

PARAMETER:MEASURE:TRACE1:AREA1:TYPE:

MAXIMUM 2.000E+00,1.000E+00

**Description** This command applies to cycle statistical processing when :MEASURE:MODE CYCLE.

**:GONogo:ZPARAMeter:SElect<x>:****PARAMeter:XY<x>?**

**Function** Queries all settings related to the XY determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:XY<x>?

<x> of SElect<x> = 1 to 4

<x> of XY<x> = 1 or 2

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:

XY1? -> :GONOGO:ZPARAMETER:SELECT1:

PARAMETER:XY1:

XYINTEG 2.000E+00,1.000E+00

## 5.13 GONogo Group

### **:GONogo:ZPARAMeter:SElect<x>:**

#### **PARAMeter:XY<x>:XYINteG**

**Function** Sets the upper and lower limits integral value of the XY determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:PARAMeter:XY<x>:XYINteG {<NRf>,<NRf>}  
:GONogo:ZPARAMeter:SElect<x>:PARAMeter:XY<x>:XYINteG?  
<x> of SElect<x> = 1 to 4  
<x> of XY<x> = 1 or 2  
<NRf> = -4 to 4 (div)

**Example** :GONOGO:ZPARAMETER:SELECT1:PARAMETER:XY1:XYINTEG 1,2  
:GONOGO:ZPARAMETER:SELECT1:PARAMETER:XY1:XYINTEG? -> :GONOGO:ZPARAMETER:SELECT1:PARAMETER:XY1:XYINTEG 2.000E+00,1.000E+00

### **:GONogo:ZPARAMeter:SElect<x>:**

#### **RECTangle?**

**Function** Queries all settings related to the rectangle determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:RECTangle?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:RECTANGLE?  
-> :GONOGO:ZPARAMETER:SELECT1:RECTANGLE:HORIZONTAL 1.000E+00,0.000E+00;VERTICAL 1.000E+00,0.000E+00

### **:GONogo:ZPARAMeter:SElect<x>:**

#### **RECTangle:HORizontal**

**Function** Sets the horizontal position of the rectangle used in the rectangle determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:RECTangle:HORizontal {<NRf>,<NRf>}  
:GONogo:ZPARAMeter:SElect<x>:RECTangle:HORizontal?  
<x> = 1 to 4  
<NRf> = -5 to 5 div

**Example** :GONOGO:ZPARAMETER:SELECT1:RECTANGLE:HORIZONTAL 0,1  
:GONOGO:ZPARAMETER:SELECT1:RECTANGLE:HORIZONTAL? -> :GONOGO:ZPARAMETER:SELECT1:RECTANGLE:HORIZONTAL 1.000E+00,0.000E+00

### **:GONogo:ZPARAMeter:SElect<x>:**

#### **RECTangle:VERTical**

**Function** Sets the vertical position of the rectangle used in the rectangle determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:RECTangle:VERTical {<NRf>,<NRf>}  
:GONogo:ZPARAMeter:SElect<x>:RECTangle:VERTical?  
<x> = 1 to 4  
<NRf> = -4 to 4 (div)

**Example** :GONOGO:ZPARAMETER:SELECT1:RECTANGLE:VERTICAL 0,1  
:GONOGO:ZPARAMETER:SELECT1:RECTANGLE:VERTICAL? -> :GONOGO:ZPARAMETER:SELECT1:RECTANGLE:VERTICAL 1.000E+00,0.000E+00

### **:GONogo:ZPARAMeter:SElect<x>:TRACe**

**Function** Sets the source trace of the zone/parameter determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:TRACe {<NRf>}  
:GONogo:ZPARAMeter:SElect<x>:TRACe?  
<x> = 1 to 4  
<NRf> = 1 to 8

**Example** :GONOGO:ZPARAMETER:SELECT1:TRACE 1  
:GONOGO:ZPARAMETER:SELECT1:TRACE?  
-> :GONOGO:ZPARAMETER:SELECT1:TRACE 1

### **:GONogo:ZPARAMeter:SElect<x>:WAVE?**

**Function** Queries all settings related to the wave determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:WAVE?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:WAVE?  
-> :GONOGO:ZPARAMETER:SELECT1:WAVE:TRANGE 2.000E+00,1.000E+00

### **:GONogo:ZPARAMeter:SElect<x>:WAVE:**

#### **EDIT<x>:EXIT**

**Function** Exits the edit menu of the wave determination zone.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:WAVE:EDIT<x>:EXIT {<NRf>|QUIT}  
<x> of SElect<x> = 1 to 4  
<x> of EDIT<x> = 1 to 13 (1 to 8 are traces and 9 to 13 are internal memories)  
<NRf> = 1 to 4 (internal memories)

**Example** :GONOGO:ZPARAMETER:SELECT1:WAVE:EDIT1:EXIT 1

**Description** • An error occurs if this command is issued when the zone is not being edited.

- Saves the zone waveform to the internal memory specified by <NRf>.

**:GONogo:ZPARAMeter:SElect<x>:WAVE:****EDIT<x>:PART**

**Function** Editing the portion of the zone of the wave determination.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:WAVE:  
EDIT<x>:PART {<NRf>, <NRf>, <NRf>, <NRf>}  
<x> of SElect<x> = 1 to 4  
<x> of EDIT<x> = 1 to 13 (1 to 8 are traces. 9 to 12 are internal memories. 13 is the zone waveform that is currently displayed)  
<NRf> = -5 to 5 (div: partial editing time axis cursor  
1 and 2)  
-8 to 8 (div: up and down) (in the order  
partial editing time axis cursor 1, 2, ↑, and ↓)

**Example** :GONOGO:ZPARAMETER:SELECT1:WAVE:EDIT1:  
PART 1,2,3,4

**Description** The amount of movement upward or downward is a relative value with respect to the zone waveform that is currently displayed.

**:GONogo:ZPARAMeter:SElect<x>:WAVE:****EDIT<x>:WHOLe**

**Function** Sets the editing of the entire zone of the waveform zone.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:WAVE:  
EDIT<x>:WHOLe {<NRf>, <NRf>, <NRf>, <NRf>}  
<x> of SElect<x> = 1 to 4  
<x> of EDIT<x> = 1 to 13 (1 to 8 are traces. 9 to 12 are internal memories. 13 is the zone waveform that is currently displayed)  
<NRf> = 0 to 5 (div: left and right)  
0 to 8 (div: up and down)  
(In the order ←, →, ↑, and ↓)

**Example** :GONOGO:ZPARAMETER:SELECT1:WAVE:EDIT1:  
WHOLE 1,2,3,4

**Description** The amount of movement is a relative value with respect to the reference waveform.

**:GONogo:ZPARAMeter:SElect<x>:WAVE:****TRANge**

**Function** Sets the determination range of the zone determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:WAVE:  
TRANge {<NRf>, <NRf>}  
:GONogo:ZPARAMeter:SElect<x>:WAVE:  
TRANge?  
<x> = 1 to 4  
<NRf> = -5 to 5 (div)

**Example** :GONOGO:ZPARAMETER:SELECT1:WAVE:  
TRANge 1,2  
:GONOGO:ZPARAMETER:SELECT1:WAVE:TRANge?  
-> :GONOGO:ZPARAMETER:SELECT1:WAVE:  
TRANge 2.000E+00,1.000E+00

**:GONogo:ZPARAMeter:SElect<x>:WINDow**

**Function** Sets the source window of the zone determination or queries the current setting.

**Syntax** :GONogo:ZPARAMeter:SElect<x>:WINDow  
{MAIN|XY1|XY2|Z1|Z2}  
:GONogo:ZPARAMeter:SElect<x>:WINDow?  
<x> = 1 to 4

**Example** :GONOGO:ZPARAMETER:SELECT1:WINDow MAIN  
:GONOGO:ZPARAMETER:SELECT1:WINDow?  
-> :GONOGO:ZPARAMETER:SELECT1:  
WINDow MAIN



## 5.14 HCOPY Group

### **:HCOPY? (Hard COPY)**

**Function** Queries all settings related to the output of screen data.

**Syntax** :HCOPY?

**Example** :HCOPY? -> :HCOPY:DIRECTION EXTPRINTER;  
EXTPRINTER:TONE 1;TYPE EINKJET;;HCOPY:  
FILE:FORMAT BMP;SAVE:ANAMING DATE;  
CDIRECTORY "\Flash Mem\DIR1\DIR2";  
NAME "SAMPLE";:HCOPY:FILE:TONE COLOR;;  
HCOPY:NETPRINT:TONE 1;TYPE HINKJET;;  
HCOPY:PRINTER:HRMODE 1

### **:HCOPY:ABORT**

**Function** Aborts data output and paper feeding.

**Syntax** :HCOPY:ABORT

**Example** :HCOPY:ABORT

**Description** This command is valid for :HCOPY:DIRection  
EXTPrinter|PRINter.

### **:HCOPY:DIRection**

**Function** Sets the data output destination or queries the current setting.

**Syntax** :HCOPY:DIRection {EXTPrinter|FILE|  
NETPrint|PRINter}  
:HCOPY:DIRection?

**Example** :HCOPY:DIRECTION EXTPRINTER  
:HCOPY:DIRECTION? -> :HCOPY:DIRECTION  
EXTPRINTER

### **:HCOPY:EXECute**

**Function** Executes the data output. This is an overlap command.

**Syntax** :HCOPY:EXECute {<String>}  
<String> = Up to 259 characters

**Example** :HCOPY:EXECUTE  
:HCOPY:EXECUTE "\Flash Mem\DIR\DATA"  
(Absolute path designation)  
:HCOPY:EXECUTE "DATA"  
(Relative path designation)

**Description**

- If the path is not specified, the data is saved to the file name specified by :HCOPY:FILE:SAVE:NAME.
- If the path is specified, the auto naming function is disabled.
- For details on the <String> parameter, see the description in :HCOPY:FILE:SAVE:CDIRectory.

### **:HCOPY:EXTPrinter?**

**Function** Queries all settings related to the external printer output.

**Syntax** :HCOPY:EXTPrinter?

**Example** :HCOPY:EXTPRINTER? -> :HCOPY:EXTPRINTER:  
TONE 1;TYPE EINKJET

### **:HCOPY:EXTPrinter:TONE**

**Function** Sets the half tone of the external printer output or queries the current setting.

**Syntax** :HCOPY:EXTPrinter:TONE {<Boolean>}  
:HCOPY:EXTPrinter:TONE?

**Example** :HCOPY:EXTPRINTER:TONE ON  
:HCOPY:EXTPRINTER:TONE? -> :HCOPY:  
EXTPRINTER:TONE 1

### **:HCOPY:EXTPrinter:TYPE**

**Function** Sets the type of output commands to send to the external printer or queries the current setting.

**Syntax** :HCOPY:EXTPrinter:TYPE {EINKjet|  
HINKjet}  
:HCOPY:EXTPrinter:TYPE?

**Example** :HCOPY:EXTPRINTER:TYPE EINKJET  
:HCOPY:EXTPRINTER:TYPE? -> :HCOPY:  
EXTPRINTER:TYPE EINKJET

### **:HCOPY:FILE?**

**Function** Queries all settings related to file output.

**Syntax** :HCOPY:FILE?

**Example** :HCOPY:FILE? -> :HCOPY:FILE:FORMAT BMP;  
SAVE:ANAMING DATE;  
CDIRECTORY "\Flash Mem\DIR1\DIR2";  
NAME "SAMPLE";:HCOPY:FILE:TONE COLOR

### **:HCOPY:FILE:FORMat**

**Function** Sets the file output image format or queries the current setting.

**Syntax** :HCOPY:FILE:FORMat {BMP|JPEG|PNG}  
:HCOPY:FILE:FORMat?

**Example** :HCOPY:FILE:FORMAT BMP  
:HCOPY:FILE:FORMAT? -> :HCOPY:FILE:  
FORMAT BMP

### **:HCOPY:FILE:SAVE?**

**Function** Queries all settings related to the saving of file output.

**Syntax** :HCOPY:FILE:SAVE?

**Example** :HCOPY:FILE:SAVE? -> :HCOPY:FILE:SAVE:  
ANAMING DATE;  
CDIRECTORY "\Flash Mem\DIR1\DIR2";  
NAME "SAMPLE"

**:HCOpy:FILE:SAVE:ANAMing**

**Function** Sets the type of auto naming of save destination file names or queries the current setting.

**Syntax** :HCOpy:FILE:SAVE:ANAMing {DATE|NUMBERing|OFF}  
:HCOpy:FILE:SAVE:ANAMing?

**Example** :HCOpy:FILE:SAVE:ANAMING DATE  
:HCOpy:FILE:SAVE:ANAMING? -> :HCOpy:FILE:SAVE:ANAMING DATE

**:HCOpy:FILE:SAVE:CDIRectory****(Change Directory)**

**Function** Sets the save destination directory name or queries the current setting.

**Syntax** :HCOpy:FILE:SAVE:CDIRectory {<String>}  
:HCOpy:FILE:SAVE:CDIRectory?  
<String> = Up to 259 characters

**Example** :HCOpy:FILE:SAVE:CDIRECTORY "\Flash Mem\DIR1\DIR2"  
(Absolute path designation)  
:HCOpy:FILE:SAVE:CDIRECTORY "DIR2"  
(Relative path designation)  
:HCOpy:FILE:SAVE:CDIRECTORY "\"  
(Root directory designation)  
:HCOpy:FILE:SAVE:CDIRECTORY? -> :HCOpy:FILE:SAVE:CDIRECTORY "\Flash Mem\DIR1\DIR2"

**Description**

- Data files cannot be saved to the root directory. Specify a save destination drive for the current directory. The following five drives are selectable.
  - Internal hard disk: "HD"
  - Internal memory: "Flash Mem"
  - Network drive: "Network"
  - PC card: "Storage Card<x>"
  - USB storage device: "USB Storage<x>"
- <x> = 1 to 4 (however, only a total of four "Storage Card" and "USB Storage" designations are supported (including partitions))
- Sets the specified directory the current directory for saving and loading.
- Absolute and relative path designations are possible.
- To specify an absolute path, enter a backslash at the front of the path.
- Relative path to higher level directories is not allowed.

**:HCOpy:FILE:SAVE:NAME**

**Function** Sets the save destination file name or queries the current setting.

**Syntax** :HCOpy:FILE:SAVE:NAME <Filename>  
:HCOpy:FILE:SAVE:NAME?

**Example** :HCOpy:FILE:SAVE:NAME "SAMPLE"  
:HCOpy:FILE:SAVE:NAME? -> :HCOpy:FILE:SAVE:NAME "SAMPLE"

**:HCOpy:NETPrint?**

**Function** Queries all settings related to network printer output or queries the current setting.

**Syntax** :HCOpy:NETPrint?  
**Example** :HCOpy:NETPRINT? -> :HCOpy:NETPRINT:TONE 1;TYPE HINKJET

**:HCOpy:NETPrint:TONE**

**Function** Sets the half tone for the network printer or queries the current setting.

**Syntax** :HCOpy:NETPrint:TONE {<Boolean>}  
:HCOpy:NETPrint:TONE?

**Example** :HCOpy:NETPRINT:TONE ON  
:HCOpy:NETPRINT:TONE? -> :HCOpy:NETPRINT:TONE 1

**Description** Cannot be turned {ON} when :HCOpy:NETPrint:TYPE HLASer is used.

**:HCOpy:NETPrint:TYPE**

**Function** Sets the output command type for the network printer or queries the current setting.

**Syntax** :HCOpy:NETPrint:TYPE {HINKjet|HLASer}  
:HCOpy:NETPrint:TYPE?

**Example** :HCOpy:NETPRINT:TYPE HINKJET  
:HCOpy:NETPRINT:TYPE? -> :HCOpy:NETPRINT:TYPE HINKJET

**:HCOpy:PRINter?**

**Function** Queries all settings related to the built-in printer output.

**Syntax** :HCOpy:PRINter?  
**Example** :HCOpy:PRINTER? -> :HCOpy:PRINTER:HRMODE 1

**:HCOpy:PRINter:HRMode**

**Function** Turns ON/OFF the high resolution mode of the built-in printer output or queries the current setting.

**Syntax** :HCOpy:PRINter:HRMode {<Boolean>}  
:HCOpy:PRINter:HRMode?

**Example** :HCOpy:PRINTER:HRMODE ON  
:HCOpy:PRINTER:HRMODE? -> :HCOpy:PRINTER:HRMODE 1

## 5.15 HISTory Group

### :HISTory?

**Function** Queries all settings related to the history function.

**Syntax** :HISTory?

**Example** :HISTORY? -> :HISTORY:CURRENT:  
DISPLAY 0,-21;DMODE ONE;MODE RECORD;  
RECORD 0;REPLAY:SPEED PER10;:HISTORY:  
CURRENTSEARCH:LOGIC AND;SELECT1:  
CONDITION DONTCARE;MODE PARAMETER;  
PARAMETER:CATEGORY MEASURE;FFT1:PEAK:  
FREQUENCY1 1.000000E+00,  
0.000000E+00;:HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:BUS:  
TYPE:BSS 1.000000E+00,0.000000E+00;:  
HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:XY1:XYINTEG 1.000000E+00,  
0.000000E+00;:HISTORY:CURRENT:SEARCH:  
SELECT1:RECTANGLE:  
HORIZONTAL -2.500000E+00,  
-3.000000E+00;VERTICAL 500.00000E-03,  
-500.00000E-03;:HISTORY:CURRENT:  
SEARCH:SELECT1:TRACE 1;WAVE:  
TRANGE 5.000000E+00,-5.000000E+00;:  
HISTORY:CURRENT:SEARCH:SELECT1:  
WINDOW MAIN;:HISTORY:CURRENT:SEARCH:  
SELECT2:CONDITION DONTCARE;  
MODE RECTANGLE;PARAMETER:  
CATEGORY MEASURE;FFT1:PEAK:  
FREQUENCY1 0.000000E+00,  
0.000000E+00;:HISTORY:CURRENT:SEARCH:  
SELECT2:PARAMETER:MEASURE:FLEXRAY:  
BUS:TYPE:BSS 0.000000E+00,  
0.000000E+00;:HISTORY:CURRENT:SEARCH:  
SELECT2:PARAMETER:XY1:  
XYINTEG 0.000000E+00,0.000000E+00;:  
HISTORY:CURRENT:SEARCH:SELECT2:  
RECTANGLE:HORIZONTAL -500.00000E-03,  
-1.000000E+00;VERTICAL 500.00000E-03,  
-500.00000E-03;:HISTORY:CURRENT:  
SEARCH:SELECT2:TRACE 1;WAVE:  
TRANGE 5.000000E+00,-5.000000E+00;:  
HISTORY:CURRENT:SEARCH:SELECT2:  
WINDOW MAIN;:HISTORY:CURRENT:SEARCH:  
SELECT3:CONDITION DONTCARE....

### :HISTory:CURRent?

**Function** Queries all settings related to the history function of the current waveform (CH1 to 4, M1 to 8).

**Syntax** :HISTory:CURRent?

**Example** :HISTORY:CURRENT? -> :HISTORY:CURRENT:  
DISPLAY 0,-21;DMODE ONE;MODE RECORD;  
RECORD 0;REPLAY:SPEED PER10;:HISTORY:  
CURRENTSEARCH:LOGIC AND;SELECT1:  
CONDITION DONTCARE;MODE PARAMETER;  
PARAMETER:CATEGORY MEASURE;FFT1:PEAK:  
FREQUENCY1 1.000000E+00,  
0.000000E+00;:HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:  
BUS:TYPE:BSS 1.000000E+00,  
0.000000E+00;:HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:XY1:  
XYINTEG 1.000000E+00,0.000000E+00;:  
HISTORY:CURRENT:SEARCH:SELECT1:  
RECTANGLE:HORIZONTAL -2.500000E+00,  
-3.000000E+00;VERTICAL 500.00000E-03,  
-500.00000E-03;:HISTORY:CURRENT:  
SEARCH:SELECT1:TRACE 1;WAVE:  
TRANGE 5.000000E+00,-5.000000E+00;:  
HISTORY:CURRENT:SEARCH:SELECT1:  
WINDOW MAIN;:HISTORY:CURRENT:SEARCH:  
SELECT2:CONDITION DONTCARE;  
MODE RECTANGLE;PARAMETER:  
CATEGORY MEASURE;FFT1:PEAK:  
FREQUENCY1 0.000000E+00,  
0.000000E+00....

### :HISTory[:CURRent]:DISPlay

**Function** Sets the start number and end number of the display record of the history waveform or queries the current setting.

**Syntax** :HISTory[:CURRent]:DISPlay  
{<NRf>,<NRf>}  
:HISTory[:CURRent]:DISPlay?  
<NRf> = See the SB5000 User's Manual.

**Example** :HISTORY:CURRENT:DISPLAY 0,-10  
:HISTORY:CURRENT:DISPLAY? -> :HISTORY:  
CURRENT:DISPLAY 0,-10

**:HISToRY[:CURRENT]:DMODE****(Display Mode)**

**Function** Sets the display mode of the history waveform or queries the current setting.

**Syntax** :HISToRY[:CURRENT]:DMODE {ACOLor|AHTone|AINTensity|ONE}  
:HISToRY[:CURRENT]:DMODE?

**Example** :HISTORY:CURRENT:DMODE ONE  
:HISTORY:CURRENT:DMODE? -> :HISTORY:CURRENT:DMODE ONE

**:HISToRY[:CURRENT]:MODE**

**Function** Sets the highlight display mode of the history waveform or queries the current setting.

**Syntax** :HISToRY[:CURRENT]:MODE {AVERage|RECOrd}  
:HISToRY[:CURRENT]:MODE?

**Example** :HISTORY:CURRENT:MODE RECORD  
:HISTORY:CURRENT:MODE? -> :HISTORY:CURRENT:MODE RECORD

**:HISToRY[:CURRENT]:RECOrd**

**Function** Sets the target record of the history waveform or queries the current setting.

**Syntax** :HISToRY[:CURRENT]:RECOrd {<Nrf>|MINimum}  
:HISToRY[:CURRENT]:RECOrd?  
<Nrf> = See the SB5000 User's Manual.

**Example** :HISTORY:CURRENT:RECORD 0  
:HISTORY:CURRENT:RECORD? -> :HISTORY:CURRENT:RECORD 0

**Description** Specifying MINimum sets the record to the minimum record number.

**:HISToRY[:CURRENT]:RECOrd? MINimum**

**Function** Queries the minimum record number of the history waveform.

**Syntax** :HISToRY[:CURRENT]:RECOrd? MINimum  
**Example** :HISTORY:CURRENT:RECORD? MINIMUM  
-> :HISTORY:CURRENT:RECORD -1

**Description** Specifying MINimum sets the record to the minimum record number.

**:HISToRY[:CURRENT]:REPLay?**

**Function** Queries all settings related to the replay function of the history function.

**Syntax** :HISToRY[:CURRENT]:REPLay?  
**Example** :HISTORY:CURRENT:REPLAY? -> :HISTORY:CURRENT:REPLAY:SPEED 1

**:HISToRY[:CURRENT]:REPLay:JUMP**

**Function** Jumps the history waveform to the specified record number.

**Syntax** :HISToRY[:CURRENT]:REPLay:JUMP {MAXimum|MINimum}

**Example** :HISTORY:CURRENT:REPLAY:JUMP MAXIMUM

**:HISToRY[:CURRENT]:REPLay:SPEEd**

**Function** Sets the replay speed of the history waveform or queries the current setting.

**Syntax** :HISToRY[:CURRENT]:REPLay:SPEEd {<Nrf>|PER3|PER10|PER30|PER60}  
:HISToRY[:CURRENT]:REPLay:SPEEd?  
<Nrf> = 1, 3, 10

**Example** :HISTORY:CURRENT:REPLAY:SPEED 1  
:HISTORY:CURRENT:REPLAY:SPEED?  
-> :HISTORY:CURRENT:REPLAY:SPEED 1

**:HISToRY[:CURRENT]:REPLay:START**

**Function** Starts the replay of the history waveform in the specified direction.

**Syntax** :HISToRY[:CURRENT]:REPLay:START {MAXimum|MINimum}

**Example** :HISTORY:CURRENT:REPLAY:START MAXIMUM

**:HISToRY[:CURRENT]:REPLay:STOP**

**Function** Stops the replay of the history waveform.

**Syntax** :HISToRY[:CURRENT]:REPLay:STOP  
**Example** :HISTORY:CURRENT:REPLAY:STOP

## 5.15 HISTory Group

### **:HISTory[:CURRent]:SEARCh?**

**Function** Queries all settings related to the history search function.

**Syntax** :HISTory[:CURRent]:SEARCh?

**Example** :HISTORY:CURRENT:SEARCH? -> :HISTORY:  
CURRENT:SEARCH:LOGIC AND;SELECT1:  
CONDITION DONTCARE;MODE PARAMETER;  
PARAMETER:CATEGORY MEASURE;FFT1:PEAK:  
FREQUENCY1 1.0000000E+00,  
0.0000000E+00;:HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:  
BUS:TYPE:BSS 1.0000000E+00,  
0.0000000E+00;:HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:XY1:  
XYINTEG 1.0000000E+00,0.0000000E+00;:  
HISTORY:CURRENT:SEARCH:SELECT1:  
RECTANGLE:HORIZONTAL -2.5000000E+00,  
-3.0000000E+00;VERTICAL 500.00000E-03,  
-500.00000E-03;:HISTORY:CURRENT:  
SEARCH:SELECT1:TRACE 1;WAVE:  
TRANGE 5.0000000E+00,-5.0000000E+00;:  
HISTORY:CURRENT:SEARCH:SELECT1:  
WINDOW MAIN;:HISTORY:CURRENT:SEARCH:  
SELECT2:CONDITION DONTCARE....

### **:HISTory[:CURRent][:SEARCh]:ABORT**

**Function** Aborts the history search.

**Syntax** :HISTory[:CURRent][:SEARCh]:ABORT

**Example** :HISTORY:CURRENT:SEARCH:ABORT

### **:HISTory[:CURRent][:SEARCh]:EXECute**

**Function** Executes the history search. This is an overlap command.

**Syntax** :HISTory[:CURRent][:SEARCh]:EXECute

**Example** :HISTORY:CURRENT:SEARCH:EXECUTE

### **:HISTory[:CURRent][:SEARCh]:LOGic**

**Function** Sets the history search logic or queries the current setting.

**Syntax** :HISTory[:CURRent][:SEARCh]:LOGic {AND|OR}

:HISTory[:CURRent][:SEARCh]:LOGic?

**Example** :HISTORY:CURRENT:SEARCH:LOGIC AND  
:HISTORY:CURRENT:SEARCH:LOGIC?  
-> :HISTORY:CURRENT:SEARCH:LOGIC AND

### **:HISTory[:CURRent][:SEARCh]:RESet**

**Function** Resets the search conditions of the history search.

**Syntax** :HISTory[:CURRent][:SEARCh]:RESet

**Example** :HISTORY:CURRENT:SEARCH:RESET

### **:HISTory[:CURRent][:SEARCh]:**

#### **SElect<x>?**

**Function** Queries all settings related to the history search condition.

**Syntax** :HISTory[:CURRent][:SEARCh]:SElect<x>?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1? ->  
:HISTORY:CURRENT:SEARCH:SELECT1:  
CONDITION DONTCARE;MODE PARAMETER;  
PARAMETER:CATEGORY MEASURE;FFT1:PEAK:  
FREQUENCY1 1.0000000E+00,  
0.0000000E+00;:HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:  
BUS:TYPE:BSS 1.0000000E+00,  
0.0000000E+00;:HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:XY1:  
XYINTEG 1.0000000E+00,0.0000000E+00;:  
HISTORY:CURRENT:SEARCH:SELECT1:  
RECTANGLE:HORIZONTAL -2.5000000E+00,  
-3.0000000E+00;VERTICAL 500.00000E-03,  
-500.00000E-03;:HISTORY:CURRENT:  
SEARCH:SELECT1:TRACE 1;WAVE:  
TRANGE 5.0000000E+00,-5.0000000E+00;:  
HISTORY:CURRENT:SEARCH:SELECT1:  
WINDOW MAIN

### **:HISTory[:CURRent][:SEARCh]:**

#### **SElect<x>:CONDition**

**Function** Sets determination criteria of the history search condition or queries the current setting.

**Syntax** :HISTory[:CURRent][:SEARCh]:SElect<x>:  
CONDition {DONTcare|IN|OUT}  
:HISTory[:CURRent][:SEARCh]:SElect<x>:  
CONDition?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
CONDITION IN  
:HISTORY:CURRENT:SEARCH:SELECT1:  
CONDITION? -> :HISTORY:CURRENT:SEARCH:  
SELECT1:CONDITION IN

**:HISTory[:CURRENT][:SEARCH]:****SElect<x>:MODE**

Function Sets the mode of the history search condition or queries the current setting.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
MODE {PARAMeter|POLYgon|RECTangle|WAVE}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
MODE?  
<x> = 1 to 4

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
MODE WAVE  
:HISTORY:CURRENT:SEARCH:SELECT1:MODE?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
MODE WAVE

**:HISTory[:CURRENT][:SEARCH]:****SElect<x>:PARAMeter?**

Function Queries all settings related to the parameter of the history search condition.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter?  
<x> = 1 to 4

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER? -> :HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:CATEGORY MEASURE;  
FFT1:PEAK:FREQUENCY1 1.0000000E+00,  
0.0000000E+00;:HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:  
BUS:TYPE:BSS 1.0000000E+00,  
0.0000000E+00;:HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:XY1:  
XYINTEG 1.0000000E+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:****SElect<x>:PARAMeter:CATegory**

Function Sets the parameter category or queries the current setting.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:CATegory {FFT|MEASure|XY}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:CATegory?  
<x> = 1 to 4

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:CATEGORY MEASURE  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:CATEGORY? -> :HISTORY:  
CURRENT:SEARCH:SELECT1:PARAMETER:  
CATEGORY MEASURE

**:HISTory[:CURRENT][:SEARCH]:S****ELect<x>:PARAMeter:FFT<x>?**

Function Queries all settings related to the FFT search.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:FFT<x>?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1? -> :HISTORY:CURRENT:  
SEARCH:SELECT1:PARAMETER:FFT1:  
CALCULATION1 2.000E+00,1.000E+00

**:HISTory[:CURRENT][:SEARCH]:****SElect<x>:PARAMeter:FFT<x>:****CALCulation<x>**

Function Sets the upper and lower limits of the calculation item of the FFT search or queries the current setting.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:FFT<x>:  
CALCulation<x> {<NRF>,<NRF>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:FFT<x>:CALCulation<x>?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2  
<x> of CALCulation<x> = 1 to 4  
<NRF> = See the SB5000 User's Manual.

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:CALCULATION1 1,2  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:CALCULATION1?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:CALCULATION1 2.000E+00,  
1.000E+00

**:HISTory[:CURRENT][:SEARCH]:****SElect<x>:PARAMeter:FFT<x>:PEAK?**

Function Queries all settings related to the peak value of the FFT search.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:FFT<x>:PEAK?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:PEAK? -> :HISTORY:  
CURRENT:SEARCH:SELECT1:PARAMETER:FFT1:  
PEAK:DV 2.000E+00,1.000E+00

## 5.15 HISTory Group

### **:HISTory[:CURRENT][:SEARCH]:**

#### **SElect<x>:PARAMeter:FFT<x>:PEAK:**

#### **DFREquency**

**Function** Sets the upper and lower limits between the peak frequencies of the FFT search or queries the current setting.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:FFT<x>:PEAK:DFREquency {<Frequency>,<Frequency>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:FFT<x>:PEAK:DFREquency?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2  
<Frequency> = See the SB5000 User's Manual

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:PEAK:DFREQUENCY 1,10  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:PEAK:DFREQUENCY?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:PEAK:  
DFREQUENCY 10.00E+00,1.000E+00

### **:HISTory[:CURRENT][:SEARCH]:**

#### **SElect<x>:PARAMeter:FFT<x>:PEAK:DV**

**Function** Sets the upper and lower limits between the peak voltages of the FFT search or queries the current setting.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:FFT<x>:PEAK:DV {<NRf>,<NRf>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:FFT<x>:PEAK:DV?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2  
<NRf> = -4 to 4 (div)

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:PEAK:DV 1,2  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:PEAK:DV? -> :HISTORY:  
CURRENT:SEARCH:SELECT1:PARAMETER:FFT1:  
PEAK:DV 2.000E+00,1.000E+00

### **:HISTory[:CURRENT][:SEARCH]:**

#### **SElect<x>:PARAMeter:FFT<x>:PEAK:**

#### **FREquency<x>**

**Function** Sets the upper and lower limits of the peak frequency of the FFT search or queries the current setting.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:FFT<x>:PEAK:FREquency<x>:  
{<Frequency>,<Frequency>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:FFT<x>:PEAK:FREquency<x>?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2  
<x> of FREquency<x> = 1 or 2  
<Frequency> = See the SB5000 User's Manual

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:PEAK:FREQUENCY1 1,2  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:PEAK:FREQUENCY1?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:PEAK:  
FREQUENCY1 2.000E+00,1.000E+00

### **:HISTory[:CURRENT][:SEARCH]:**

#### **SElect<x>:PARAMeter:FFT<x>:PEAK:V<x>**

**Function** Sets the upper and lower limits of the peak voltage of the FFT search or queries the current setting.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:FFT<x>:PEAK:V<x>:  
{<NRf>,<NRf>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:FFT<x>:PEAK:V<x>?  
<x> of SElect<x> = 1 to 4  
<x> of FFT<x> = 1 or 2  
<x> of V<x> = 1 or 2  
<NRf> = -4 to 4 (div)

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:PEAK:V1 1,2  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:FFT1:PEAK:V1? -> :HISTORY:  
CURRENT:SEARCH:SELECT1:PARAMETER:FFT1:  
PEAK:V1 2.000E+00,1.000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:****PARAMeter:MEASure?**

Function Queries all settings related to the search using automated measurement of waveform parameters (measure search).

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure?  
<x> = 1 to 4

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE? -> :HISTORY:CURRENT:  
SEARCH:SELECT1:PARAMETER:MEASURE:  
FLEXRAY:BUS:TYPE:BSS 1.0000000E+00,  
0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:****PARAMeter:MEASure:BIT<x>?**

Function Queries all settings related to each logic bit of measure search.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:BIT<x>?  
<x> of SElect<x> = 1 to 4  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> =  
1 to 8 is valid.)

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:BIT1?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:BIT1:AREA1:TYPE:  
COUNT 1.000E+00,0.000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:****PARAMeter:MEASure:BIT<x>:AREA<x>?**

Function Queries all settings related to each area of measure search.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:BIT<x>:AREA<x>?  
<x> of SElect<x> = 1 to 4  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> =  
1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:BIT1:AREA1?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:BIT1:AREA1:TYPE:  
COUNT 1.000E+00,0.000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:****PARAMeter:MEASure:BIT<x>:AREA<x>:TYPE?**

Function Queries all settings related to logic waveform parameters of measure search.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:BIT<x>:AREA<x>:TYPE?  
<x> of SElect<x> = 1 to 4  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> =  
1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:BIT1:AREA1:TYPE?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:BIT1:AREA1:TYPE:  
COUNT 1.000E+00,0.000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:****PARAMeter:MEASure:BIT<x>:AREA<x>:****TYPE:<parameter>**

Function Sets the upper and lower limits of the logic waveform of measure search or queries the current setting.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:BIT<x>:AREA<x>:  
TYPE:<parameter> {(<Nrf>,<Nrf>) |  
(<time>,<time>) |  
(<frequency>,<frequency>)}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:BIT<x>:AREA<x>:  
TYPE:<parameter>?  
<x> of SElect<x> = 1 to 4  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> =  
1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2  
<parameter>={COUNT|DElay|DT|DUTYcycle|  
FREQuency|NWIDth|PERFrequency|PERiod|  
PWIDth}  
<Nrf>, <time>, <frequency> = see main unit user's  
manual.

Example (The following is an example of the count with trace 1 area 1.)

```
:HISTORY:CURRENT:SEARCH:SELECT1:
PARAMETER:MEASURE:BIT1:AREA1:TYPE:
COUNT 0,1
: HISTORY:CURRENT:SEARCH:SELECT1:
PARAMETER:MEASURE:BIT1:AREA1:TYPE:
COUNT?
-> :HISTORY:CURRENT:SEARCH:SELECT1:
PARAMETER:MEASURE:BIT1:AREA1:TYPE:
COUNT 1.000E+00,0.000E+00
```



## 5.15 HISTory Group

**:HISTory[:CURRENT][:SEARCH]:  
SElect<x>:PARAMeter:MEASure:  
CALCulation<x>**

**Function** Sets the upper and lower limits of the calculation item of the measure search or queries the current setting.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:  
CALCulation<x> {<NRf>,<NRf>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:CALCulation<x>?  
<x> of SElect<x> = 1 to 4  
<x> of CALCulation<x> = 1 to 4  
<NRf> = -4 to 4 (div)

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:CALCULATION1 1,2  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:CALCULATION1?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:  
CALCULATION1 2.000E+00,1.000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray?**

**Function** Queries all settings related to the FLEXRAY of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY? -> :HISTORY:  
CURRENT:SEARCH:SELECT1:PARAMETER:  
MEASURE:FLEXRAY:BUS:TYPE:BSS 1.0000000E  
+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:BUS?**

**Function** Queries all settings related to the FLEXRAY bus of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:BUS?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:BUS? -> :  
HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:BUS:TYPE:BSS  
1.0000000E+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:BUS:TYPE?**

**Function** Queries all settings related to the waveform parameters of the FLEXRAY bus of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:BUS:TYPE?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:BUS:TYPE?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:BUS:TYPE:BSS  
1.0000000E+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:BUS:  
TYPE:<Parameter>**

**Function** Sets the upper and lower limits waveform parameters of the FLEXRAY bus of the measure search or queries the current setting.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:BUS:  
TYPE:<Parameter> {<NRf>,<NRf>|<Voltage>  
,<Voltage>|<Current>,<Current>|<Time>,<  
Time>|<Frequency>,<Frequency>}}  
:HISTory[:CURRENT][:SEARCH]:  
SElect<x>:PARAMeter:MEASure:FLEXray:  
BUS:TYPE:<Parameter>?  
<x> of SElect<x> = 1 to 44

<Parameter> = {BSS|BSSFES|FBSS}  
<NRf>,<Voltage>,<Current>,<Time>,<Frequency>  
= See the SB5000 User's Manual

**Example** (The following is an example regarding BSS)  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:BUS:TYPE:BSS  
0,1  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:BUS:TYPE:  
BSS? -> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:BUS:TYPE:BSS  
1.0000000E+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:RECeiver?**

**Function** Queries all settings related to the FLEXRAY receiver of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:RECeiver?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:RECEIVER?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXD:  
TYPE:DBDRX01 1.0000000E+00,0.0000000E+0  
0

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:**

**PARAmeter:MEASure:FLEXray:RECeiver:**

**RXD?**

**Function** Queries all settings related to the FLEXRAY receiver data of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAmeter:MEASure:FLEXray:RECeiver:RXD?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXD?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXD:  
TYPE:DBDRX01 1.0000000E+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:**

**PARAmeter:MEASure:FLEXray:RECeiver:**

**RXD:TYPE?**

**Function** Queries all settings related to the FLEXRAY receiver waveform data parameters of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAmeter:MEASure:FLEXray:RECeiver:RXD:  
TYPE?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:RECEIVER:  
RXD:TYPE? -> :HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:  
RECEIVER:RXD:TYPE:DBDRX01 1.0000000E+00  
,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:**

**PARAmeter:MEASure:FLEXray:RECeiver:**

**RXD:TYPE:<Parameter>**

**Function** Sets the upper and lower limits of the FLEXRAY receiver waveform data parameters of the measure search or queries the current setting.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAmeter:MEASure:FLEXray:RECeiver:RXD:  
TYPE:<Parameter> {<NRf>,<NRf>|<Voltage>  
,<Voltage>|<Current>,<Current>|<Time>,<  
Time>|<Frequency>,<Frequency>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAmeter:MEASure:FLEXray:RECeiver:RXD:  
TYPE:<Parameter>?  
<x> of SElect<x> = 1 to 4  
<Parameter> = {DBDRX01|DBDRX10|DRXASYM}  
<NRf>,<Voltage>,<Current>,<Time>,<Frequency>  
= See the SB5000 User's Manual

**Example** (The following is an example regarding DBDTX01.)  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:RECEIVER:RXD:  
TYPE:DBDRX01 0,1  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:RECEIVER:  
RXD:TYPE:DBDRX01? -> :HISTORY:CURRENT:  
SEARCH:SELECT1:PARAMETER:MEASURE:  
FLEXRAY:RECEIVER:RXD:TYPE:DBDRX01 1.000  
0000E+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:**

**SElect<x>:PARAmeter:MEASure:FLEXray:**

**RECeiver:RXEN?**

**Function** Queries all settings related to the FLEXRAY receiver enable data of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAmeter:MEASure:FLEXray:RECeiver:  
RXEN?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:RECEIVER:  
RXEN? -> :HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:  
RECEIVER:RXEN:TYPE:  
DBDRXAI 1.0000000E+00,0.0000000E+00

## 5.15 HISTory Group

**:HISTory[:CURRENT][:SEARCH]:**

**SElect<x>:PARAmeter:MEASure:FLEXray:  
RECeiver:RXEN:TYPE?**

**Function** Queries all settings related to the FLEXRAY receiver waveform enable data parameters of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAmeter:MEASure:FLEXray:RECeiver:  
RXEN:TYPE?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:RECEIVER:  
RXEN:TYPE? -> :HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:  
RECEIVER:RXEN:TYPE:  
DBDRXAI 1.0000000E+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:**

**SElect<x>:PARAmeter:MEASure:FLEXray:  
RECeiver:RXEN:TYPE:<Parameter>**

**Function** Sets the upper and lower limits of the FLEXRAY receiver waveform enable data parameters of the measure search or queries the current setting.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAmeter:MEASure:FLEXray:RECeiver:  
RXEN:TYPE:<Parameter> {<Nrf>,<Nrf>|  
<Voltage>,<Voltage>|<Current>,  
<Current>|<Time>,<Time>|<Frequency>,  
<Frequency>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAmeter:MEASure:FLEXray:RECeiver:  
RXEN:TYPE:<Parameter>?  
<x> of SElect<x> = 1 to 4

<Parameter> = {DBDRXAI|DBDRXIA}  
<Nrf>,<Voltage>,<Current>,<Time>,<Frequency>  
= See the SB5000 User's Manual

**Example** (The following is an example regarding DBDRXAI.)  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:RECEIVER:  
RXEN:TYPE:DBDRXAI 0,1  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:RECEIVER:  
RXEN:TYPE:DBDRXAI? -> :HISTORY:CURRENT:  
SEARCH:SELECT1:PARAMETER:MEASURE:  
FLEXRAY:RECEIVER:RXEN:TYPE:  
DBDRXAI 1.0000000E+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:**

**SElect<x>:PARAmeter:MEASure:FLEXray:  
TRANSmittter?**

**Function** Queries all settings related to the FLEXRAY transmitter of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAmeter:MEASure:FLEXray:TRANSmittter?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXD:TYPE:DBDTX01 1.0000000E+00,  
0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:**

**SElect<x>:PARAmeter:MEASure:FLEXray:  
TRANSmittter:TXD?**

**Function** Queries all settings related to the FLEXRAY transmitter data of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAmeter:MEASure:FLEXray:TRANSmittter:  
TXD?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXD? -> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXD:TYPE:DBDTX01 1.0000000E+00,  
0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:**

**SElect<x>:PARAmeter:MEASure:FLEXray:  
TRANSmittter:TXD:TYPE?**

**Function** Queries all settings related to the FLEXRAY transmitter waveform data parameters of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAmeter:MEASure:FLEXray:TRANSmittter:  
TXD:TYPE?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXD:TYPE? -> :HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:  
TRANSMITTER:TXD:TYPE:  
DBDTX01 1.0000000E+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:**

**SElect<x>:PARAMeter:MEASure:FLEXray:  
TRANsmitter:TXD:TYPE:<Parameter>**

**Function** Sets the upper and lower limits of the FLEXRAY transmitter waveform data parameters of the measure search or queries the current setting.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXD:TYPE:<Parameter> {<Nrf>,<Nrf>|  
<Voltage>,<Voltage>|<Current>,  
<Current>|<Time>,<Time>|<Frequency>,  
<Frequency>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXD:TYPE:<Parameter>?  
<x> of SElect<x> = 1 to 4  
<Parameter> = {DBDTX01|DBDTX10|DBUSTX01|  
DBUSTX10|DTXASYM|UBDTX}  
<Nrf>, <Voltage>, <Current>, <Time>, <Frequency>

**Example** (The following is an example regarding DBDTX01.)  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXD:TYPE:DBDTX01 0,1  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXD:TYPE:DBDTX01? -> :HISTORY:CURRENT:  
SEARCH:SELECT1:PARAMETER:MEASURE:  
FLEXRAY:TRANSMITTER:TXD:TYPE:DBDTX01  
1.0000000E+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXEN?**

**Function** Queries all settings related to the FLEXRAY transmitter enable data of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXEN?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXEN? -> :HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:  
TRANSMITTER:TXEN:TYPE:  
DBDTXAI 1.0000000E+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:**

**SElect<x>:PARAMeter:MEASure:FLEXray:  
TRANsmitter:TXEN:TYPE?**

**Function** Queries all settings related to the FLEXRAY transmitter waveform enable data parameters of the measure search.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXEN:TYPE?  
<x> = 1 to 4

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXEN:TYPE? -> :HISTORY:CURRENT:SEARCH:  
SELECT1:PARAMETER:MEASURE:FLEXRAY:  
TRANSMITTER:TXEN:TYPE:  
DBDTXAI 1.0000000E+00,0.0000000E+00

**:HISTory[:CURRENT][:SEARCH]:**

**SElect<x>:PARAMeter:MEASure:FLEXray:  
TRANsmitter:TXEN:TYPE:<Parameter>**

**Function** Sets the upper and lower limits of the FLEXRAY transmitter waveform enable data parameters of the measure search or queries the current setting.

**Syntax** :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXEN:TYPE:<Parameter> {<Nrf>,<Nrf>|  
<Voltage>,<Voltage>|<Current>,  
<Current>|<Time>,<Time>|<Frequency>,  
<Frequency>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:MEASure:FLEXray:TRANsmitter:  
TXEN:TYPE:<Parameter>?  
<x> of SElect<x> = 1 to 4  
<Parameter> = {DBDTXAI|DBDTXIA|DBUSTXAI|DB  
USTXIA}  
<Nrf>, <Voltage>, <Current>, <Time>, <Frequency>  
= See the SB5000 User's Manual

**Example** (The following is an example regarding DBDRXAI  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXEN:TYPE:DBDTXAI 0,1  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:FLEXRAY:TRANSMITTER:  
TXEN:TYPE:DBDTXAI? -> :HISTORY:CURRENT:  
SEARCH:SELECT1:PARAMETER:MEASURE:  
FLEXRAY:TRANSMITTER:TXEN:TYPE:  
DBDTXAI 1.0000000E+00,0.0000000E+00

## 5.15 HISTory Group

**:HISTory[:CURRent][:SEARCh]:  
SElect<x>:PARAmeter:MEASure:  
TRACe<x>?**

**Function** Queries all settings related to the trace of the measure search.

**Syntax** :HISTory[:CURRent][:SEARCh]:SElect<x>:  
PARAmeter:MEASure:TRACe<x>?  
<x> of SElect<x> = 1 to 4  
<x> of TRACe<x> = 1 to 8

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:TRACE1? -> :HISTORY:  
CURRENT:SEARCH:SELECT1:PARAMETER:  
MEASURE:TRACE1:AREA1:TYPE:  
BURST 2.000E+00,1.000E+00

**:HISTory[:CURRent][:SEARCh]:  
SElect<x>:PARAmeter:MEASure:  
TRACe<x>:AREA<x>?**

**Function** Queries all settings related to the area of the measure search.

**Syntax** :HISTory[:CURRent][:SEARCh]:SElect<x>:  
PARAmeter:MEASure:TRACe<x>:AREA<x>?  
<x> of SElect<x> = 1 to 4  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:TRACE1:AREA1?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:TRACE1:AREA1:TYPE:  
BURST 2.000E+00,1.000E+00SElect<x>:  
PARAmeter:MEASure:TRACe<x>:AREA<x>:  
TYPE?

**:HISTory[:CURRent][:SEARCh]:  
SElect<x>:PARAmeter:MEASure:  
TRACe<x>:AREA<x>:TYPE?**

**Function** Queries all settings related to the waveform parameters of the measure search.

**Syntax** :HISTory[:CURRent][:SEARCh]:SElect<x>:  
PARAmeter:MEASure:TRACe<x>:AREA<x>:  
TYPE?  
<x> of SElect<x> = 1 to 4  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2

**Example** :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:TRACE1:AREA1:TYPE?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:MEASURE:TRACE1:AREA1:TYPE:  
BURST 2.000E+00,1.000E+00

**:HISTory[:CURRent][:SEARCh]:  
SElect<x>:PARAmeter:MEASure:  
TRACe<x>:AREA<x>:TYPE:<PARAmeter>**

**Function** Sets the upper and lower limits of the waveform parameter of the measure search or queries the current setting.

**Syntax** :HISTory[:CURRent][:SEARCh]:SElect<x>:  
PARAmeter:MEASure:TRACe<x>:AREA<x>:  
TYPE:<PARAmeter> {(<NRf>,<NRf>)|  
(<Voltage>,<Voltage>)|  
(<Current>,<Current>)|(<Time>,<Time>)|  
(<Frequency>,<Frequency>)}  
<x> of SElect<x> = 1 to 4  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2

<PARAmeter> = {BURSt|CMean|COUNT|CRMS|  
CSDeviation|DElay|DT|DUTYcycle|FALL|  
FREQuency|HIGH|HILow|LOW|MAXimum|MEAN|  
MINimum|NOVershoot|NWIDTH|PERFrequency|  
PERiod|POVershoot|PTOPeak|PWIDth|RISE|  
RMS|SDEViation|TYCInteg|TYINteg|V1|V2}  
<NRf>, <Voltage>, <Current>, <Time>, and  
<Frequency> = See the SB5000 User's Manual.

**Example** (The following is an example for the maximum value of trace 1 and area 1.)

```
:HISTORY:CURRENT:SEARCH:SELECT1:
PARAMETER:MEASURE:TRACE1:AREA1:TYPE:
MAXIMUM 0,1
:HISTORY:CURRENT:SEARCH:SELECT1:
PARAMETER:MEASURE:TRACE1:AREA1:TYPE:
MAXIMUM? -> :HISTORY:CURRENT:SEARCH:
SELECT1:PARAMETER:MEASURE:TRACE1:AREA1:
TYPE:MAXIMUM 1.000E+00,0.000E+00
```

**:HISTory[:CURRENT][:SEARCH]:****SElect<x>:PARAMeter:XY<x>?**

Function Queries all settings related to the XY search.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:XY<x>?  
<x> of SElect<x> = 1 to 4  
<x> of XY<x> = 1 or 2

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:XY1? -> :HISTORY:CURRENT:  
SEARCH:SELECT1:PARAMETER:XY1:  
XYINTEG 2.000E+00,1.000E+00

**:HISTory[:CURRENT][:SEARCH]:****SElect<x>:PARAMeter:XY<x>:XYINteG**

Function Sets the upper and lower limits integral value of the XY search or queries the current setting.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:XY<x>:XYINteG {<NRf>,<NRf>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
PARAMeter:XY<x>:XYINteG?  
<x> of SElect<x> = 1 to 4  
<x> of XY<x> = 1 or 2  
<NRf> = -4 to 4 (div)

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:XY1:XYINTEG 1,2  
:HISTORY:CURRENT:SEARCH:SELECT1:  
PARAMETER:XY1:XYINTEG? -> :HISTORY:  
CURRENT:SEARCH:SELECT1:  
PARAMETER:XY1:  
XYINTEG 2.000E+00,1.000E+00

**:HISTory[:CURRENT][:SEARCH]:****SElect<x>:RECTangle?**

Function Queries all settings related to the rectangle search.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
RECTangle?  
<x> = 1 to 4

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
RECTANGLE? -> :HISTORY:CURRENT:SEARCH:  
SELECT1:RECTANGLE:HORIZONTAL 2.000E+00,  
1.000E+00;VERTICAL 2.000E+00,1.000E+00

**:HISTory[:CURRENT][:SEARCH]:****SElect<x>:RECTangle:HORizontal**

Function Sets the horizontal position of the rectangle used in the rectangle search or queries the current setting.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
RECTangle:HORizontal {<NRf>,<NRf>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
RECTangle:HORizontal?  
<x> = 1 to 4  
<NRf> = -5 to 5 (div)

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
RECTANGLE:HORIZONTAL 1,2  
:HISTORY:CURRENT:SEARCH:SELECT1:  
RECTANGLE:HORIZONTAL? -> :HISTORY:  
CURRENT:SEARCH:SELECT1:  
RECTANGLE:HORIZONTAL 2.000E+00,  
1.000E+00

**:HISTory[:CURRENT][:SEARCH]:****SElect<x>:RECTangle:VERTical**

Function Sets the vertical position of the rectangle used in the rectangle search or queries the current setting.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
RECTangle:VERTical {<NRf>,<NRf>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
RECTangle:VERTical?  
<x> = 1 to 4  
<NRf> = -4 to 4 (div)

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
RECTANGLE:VERTICAL 1,2  
:HISTORY:CURRENT:SEARCH:SELECT1:  
RECTANGLE:VERTICAL? -> :HISTORY:  
CURRENT:SEARCH:SELECT1:RECTANGLE:  
VERTICAL 2.000E+00,1.000E+00

**:HISTory[:CURRENT][:SEARCH]:****SElect<x>:TRACe**

Function Sets the source trace of the history search or queries the current setting.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
TRACe {<NRf>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
TRACe?  
<x> = 1 to 4  
<NRf> = 1 to 8

Example :HISTORY:CURRENT:SEARCH:SELECT1:TRACE 1  
:HISTORY:CURRENT:SEARCH:SELECT1:TRACE?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
TRACE 1

Description This command is invalid when Window is XY.

## 5.15 HISTory Group

### **:HISTory[:CURRENT][:SEARCH]:**

#### **SElect<x>:WAVE?**

Function Queries all settings related to the search in the waveform zone (wave search).

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
WAVE?  
<x> = 1 to 4

Example :HISTORY:CURRENT:SEARCH:SELECT1:WAVE?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
WAVE:TRANGE 2.000E+00,1.000E+00

### **:HISTory[:CURRENT][:SEARCH]:**

#### **SElect<x>:WAVE:EDIT<x>:EXIT**

Function Exits the zone edit menu of the wave search.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
WAVE:EDIT<x>:EXIT {<Nrf>|QUIT}  
<x> of SElect<x> = 1 to 4  
<x> of EDIT<x> = 1 to 13  
<Nrf> = 1 to 4 (internal memories)

Example :HISTORY:CURRENT:SEARCH:SELECT1:WAVE:  
EDIT1:EXIT 1

Description • An error occurs if this command is issued when the zone is not being edited.  
• Saves the zone waveform to the internal memory specified by <Nrf>.

### **:HISTory[:CURRENT][:SEARCH]:**

#### **SElect<x>:WAVE:EDIT<x>:PART**

Function Sets the editing of the portion of the zone of the wave search.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
WAVE:EDIT<x>:PART {<Nrf>,<Nrf>,<Nrf>,<Nrf>}  
<x> of SElect<x> = 1 to 4  
<x> of EDIT<x> = 1 to 13 (1 to 8 are traces. 9 to 12 are internal memories. 13 is the zone waveform that is currently displayed)  
<Nrf> = -5 to 5 (div: partial editing time axis cursor 1 and 2)  
-8 to 8 (div: up and down) (in the order partial editing time axis cursor 1, 2, ↑, and ↓)

Example :HISTORY:CURRENT:SEARCH:SELECT1:WAVE:  
EDIT1:PART 1,2,3,4

Description The amount of movement upward or downward is a relative value with respect to the zone waveform that is currently displayed.

### **:HISTory[:CURRENT][:SEARCH]:**

#### **SElect<x>:WAVE:EDIT<x>:WHOLE**

Function Sets the editing of the entire zone of the wave search.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
WAVE:EDIT<x>:  
WHOLE {<Nrf>,<Nrf>,<Nrf>,<Nrf>}  
<x> of SElect<x> = 1 to 4  
<x> of EDIT<x> = 1 to 13 (1 to 8 are traces. 9 to 12 are internal memories. 13 is the zone waveform that is currently displayed)  
<Nrf> = 0 to 5 (div: left and right)  
0 to 8 (div: up and down)  
(In the order ←, →, ↑, and ↓)

Example :HISTORY:CURRENT:SEARCH:SELECT1:WAVE:  
EDIT1:WHOLE 1,2,3,4

Description The amount of movement is a relative value with respect to the reference waveform.

### **:HISTory[:CURRENT][:SEARCH]:**

#### **SElect<x>:WAVE:TRANGE**

Function Sets the range over which to perform the wave search or queries the current setting.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
WAVE:TRANGE {<Nrf>,<Nrf>}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
WAVE:TRANGE?  
<x> = 1 to 4  
<Nrf> = -5 to 5 (div)

Example :HISTORY:CURRENT:SEARCH:SELECT1:WAVE:  
TRANGE 1,2  
:HISTORY:CURRENT:SEARCH:SELECT1:WAVE:  
TRANGE? -> :HISTORY:CURRENT:SEARCH:  
SELECT1:WAVE:TRANGE 2.000E+00,1.000E+00

### **:HISTory[:CURRENT][:SEARCH]:**

#### **SElect<x>:WINDOW**

Function Sets the source window of the history search or queries the current setting.

Syntax :HISTory[:CURRENT][:SEARCH]:SElect<x>:  
WINDOW {MAIN|XY1|XY2|Z1|Z2}  
:HISTory[:CURRENT][:SEARCH]:SElect<x>:  
WINDOW?  
<x> = 1 to 4

Example :HISTORY:CURRENT:SEARCH:SELECT1:  
WINDOW MAIN  
:HISTORY:CURRENT:SEARCH:SELECT1:WINDOW?  
-> :HISTORY:CURRENT:SEARCH:SELECT1:  
WINDOW MAIN

Description XY1 and XY2 are valid only for a rectangular polygon.

**:HISTory[:CURRENT]:TIME?**

**Function** Queries the time of the source record number of the history waveform.

**Syntax** :HISTory[:CURRENT]:TIME? {<NRF>|MINimum}

**Example** :HISTORY:CURRENT:TIME? -1 -> :HISTORY:CURRENT:TIME "-1 10:20:30.10"

**Description** Specifying MINimum sets the record to the minimum record number.

**:HISTory:REfERENCE<x>?**

**Function** Queries all settings related to the history function of the reference.

**Syntax** :HISTory:REfERENCE<x>?<x> = 1 to 4

**Example** :HISTORY:REFERENCE1? -> HISTORY:REFERENCE1:DMODE ACOLOR;MODE AVERAGE;RECORD 1;REPLAY:SPEED 1

**:HISTory:REfERENCE<x>:DMODE****(Display Mode)**

**Function** Sets the display mode of the history waveform of the reference or queries the current setting.

**Syntax** :HISTory:REfERENCE<x>:DMODE {ACOLor|AHTone|AINTensity|ONE}:HISTory:REfERENCE<x>:DMODE?<x> = 1 to 4

**Example** :HISTORY:REFERENCE1:DMODE ACOLOR:HISTORY:REFERENCE1:DMODE? -> :HISTORY:REFERENCE1:DMODE ACOLOR

**:HISTory:REfERENCE<x>:MODE**

**Function** Sets the highlight display mode of the history waveform of the reference or queries the current setting.

**Syntax** :HISTory:REfERENCE<x>:MODE {AVERAge|RECORD}:HISTory:REfERENCE<x>:MODE?<x> = 1 to 4

**Example** :HISTORY:REFERENCE1:MODE AVERAGE:HISTORY:REFERENCE1:MODE? -> :HISTORY:REFERENCE1:MODE AVERAGE

**:HISTory:REfERENCE<x>:RECORD**

**Function** Sets the source record of the history waveform of the reference or queries the current setting.

**Syntax** :HISTory:REfERENCE<x>:RECORD {<NRF>|MINimum}:HISTory:REfERENCE<x>:RECORD?<x> = 1 to 4

<NRF> = See the SB5000 User's Manual.

**Example** :HISTORY:REFERENCE1:RECORD 1:HISTORY:REFERENCE1:RECORD?-> :HISTORY:REFERENCE1:RECORD 1

**:HISTory:REfERENCE<x>:RECORD? MINimum**

**Function** Queries the minimum record number of the history waveform of the reference.

**Syntax** :HISTory:REfERENCE<x>:RECORD? {MINimum}<x> = 1 to 4

**Example** :HISTORY:REFERENCE1:RECORD? MINIMUM-> :HISTORY:REFERENCE1:RECORD -1

**Description** Specifying MINimum sets the record to the minimum record number.

**:HISTory:REfERENCE<x>:REPLAy?**

**Function** Queries all settings related to the replay function of the history function of the reference.

**Syntax** :HISTory:REfERENCE<x>:REPLAy?<x> = 1 to 4

**Example** :HISTORY:REFERENCE1:REPLAY?-> :HISTORY:REFERENCE1:REPLAY:SPEED 1

**:HISTory:REfERENCE<x>:REPLAy:JUMP**

**Function** Jumps to the specified record number of the history waveform of the reference.

**Syntax** :HISTory:REfERENCE<x>:REPLAy:JUMP {MAXimum|MINimum}<x> = 1 to 4

**Example** :HISTORY:REFERENCE1:REPLAY:JUMP MAXIMUM

**:HISTory:REfERENCE<x>:REPLAy:SPEEd**

**Function** Sets the replay speed of the history waveform of the reference or queries the current setting.

**Syntax** :HISTory:REfERENCE<x>:REPLAy:SPEEd {<NRF>|PER3|PER10|PER30|PER60}:HISTory:REfERENCE<x>:REPLAy:SPEEd?<x> = 1 to 4<NRF> = 1,3,10

**Example** :HISTORY:REFERENCE1:REPLAY:SPEED 1:HISTORY:REFERENCE1:REPLAY:SPEED?-> :HISTORY:REFERENCE1:REPLAY:SPEED 1

**:HISTory:REfERENCE<x>:REPLAy:START**

**Function** Starts the replay of the history waveform of the reference.

**Syntax** :HISTory:REfERENCE<x>:REPLAy:START {MAXimum|MINimum}<x> = 1 to 4

**Example** :HISTORY:REFERENCE1:REPLAY:START MAXIMUM

**:HISTory:REfERENCE<x>:REPLAy:STOP**

**Function** Stops the replay of the history waveform of the reference.

**Syntax** :HISTory:REfERENCE<x>:REPLAy:STOP<x> = 1 to 4

**Example** :HISTORY:REFERENCE1:REPLAY:STOP



## 5.15 HISTory Group

---

### **:HISTory:REFErence<x>:TIME?**

**Function** Queries the time of the source record number of the reference waveform.

**Syntax** :HISTory:REFErence<x>:TIME? {<NRf>|  
MINimum}  
<x> = 1 to 4

**Example** :HISTORY:REFERENCE1:TIME? -1  
-> :HISTORY:REFERENCE1:  
TIME "-1 10:20:30.10"

**Description** Specifying MINimum sets the record to the minimum record number.

## 5.16 IMAGE Group

### **:IMAGE?**

**Function** Queries all settings related to the output of screen image data.

**Syntax** :IMAGE?

**Example** :IMAGE? -> :IMAGE:FORMAT BMP;TONE COLOR

### **:IMAGE:FORMAT**

**Function** Sets the output format of the screen image data or queries the current setting.

**Syntax** :IMAGE:FORMAT {BMP|JPEG|PNG}

:IMAGE:FORMAT?

**Example** :IMAGE:FORMAT BMP

:IMAGE:FORMAT? -> :IMAGE:FORMAT BMP

### **:IMAGE:SEND?**

**Function** Queries the screen image data.

**Syntax** :IMAGE:SEND?

**Example** :IMAGE:SEND? -> #6 (number of bytes, 6 digits) (data byte sequence) (block data)

**Description** For details on <Block data>, see page 4-6.

### **:IMAGE:TONE**

**Function** Sets the tone of the screen image data or queries the current setting.

**Syntax** :IMAGE:TONE {COLOR|GRAY|OFF|REVERSE}

:IMAGE:TONE?

**Example** :IMAGE:TONE COLOR

:IMAGE:TONE? -> :IMAGE:TONE COLOR

**Description** If ":IMAGE:FORMAT JPEG" is specified, OFF cannot be selected.

## 5.17 INITialize Group

### **:INITialize:EXECute**

**Function** Execute the initialization.

**Syntax** :INITialize:EXECute

**Example** :INITIALIZE:EXECUTE

### **:INITialize:UNDO**

**Function** Cancels the initialization that was executed.

**Syntax** :INITialize:UNDO

**Example** :INITIALIZE:UNDO

## 5.18 LOGic Group

### :LOGic?

Function Queries all settings related to the logic.

Syntax :LOGic?

```
Example :LOGIC? -> :LOGIC:AWINDOW:DISPLAY 1;
RATIO 50;:LOGIC:DESKEW 0.00000E+00;
GROUP1:BUNDLE:FORMAT HEXA;MODE 0;:
LOGIC:GROUP1:DISPLAY 0;
MAPPING "A7A6A5A4A3A2A1A0";ORDER 1;
STATE 0;:LOGIC:GROUP2:BUNDLE:
FORMAT HEXA;MODE 0;:LOGIC:GROUP2:
DISPLAY 0;MAPPING "B7B6B5B4B3B2B1B0";
ORDER 2;STATE 0;:LOGIC:GROUP3:BUNDLE:
FORMAT HEXA;MODE 0;:LOGIC:GROUP3:
DISPLAY 0;MAPPING "C7C6C5C4C3C2C1C0";
ORDER 3;STATE 0;:LOGIC:GROUP4:BUNDLE:
FORMAT HEXA;MODE 0;:LOGIC:GROUP4:
DISPLAY 0;MAPPING "D7D6D5D4D3D2D1D0";
ORDER 4;STATE 0;:LOGIC:GROUP5:BUNDLE:
FORMAT HEXA;MODE 0;:LOGIC:GROUP5:
DISPLAY 0;MAPPING "";ORDER 5;STATE 0;:
LOGIC:LABEL:BNAME:A0 "A0";A1 "A1";
A2 "A2";A3 "A3";A4 "A4";A5 "A5";
A6 "A6";A7 "A7";B0 "B0";B1 "B1";
B2 "B2";B3 "B3";B4 "B4";B5 "B5";
B6 "B6";B7 "B7";C0 "C0";C1 "C1";
C2 "C2";C3 "C3";C4 "C4";C5 "C5";
C6 "C6";C7 "C7";D0 "D0";D1 "D1";
D2 "D2";D3 "D3";D4 "D4";D5 "D5";
D6 "D6";D7 "D7";:LOGIC:LABEL:LNAME:
GROUP1 "Group1";GROUP2 "Group2";
GROUP3 "Group3";GROUP4 "Group4";
GROUP5 "Group5";:LOGIC:LABEL:MODE 1;:
LOGIC:MODE 0;POSITION 0;SCLOCK:
POLARITY RISE;SOURCE A0;:LOGIC:
SIZE MEDIUM;THRESHOLD:PODA:TYPE CMOS5;
USERLEVEL 0.000E+00;:LOGIC:THRESHOLD:
PODB:TYPE CMOS5;USERLEVEL 0.000E+00;:
LOGIC:THRESHOLD:PODC:TYPE CMOS5;
USERLEVEL 0.000E+00;:LOGIC:THRESHOLD:
PODD:TYPE CMOS5;USERLEVEL 0.000E+00;:
LOGIC:WINDOW:ANALOG 1;RATIO A1_L1
```

### :LOGic:AWINDOW?

Function Queries all settings related to analog waveform display.

Syntax :LOGic:AWINDOW?

```
Example :LOGIC:AWINDOW?
-> :LOGIC:AWINDOW:DISPLAY 1;RATIO 50
```

### :LOGic:AWINDOW[:DISPLAY]

Function Turns ON/OFF the analog waveform display or queries the current setting.

Syntax :LOGic:AWINDOW[:DISPLAY] {<Boolean>}  
:LOGic:AWINDOW[:DISPLAY]?

```
Example :LOGIC:AWINDOW:DISPLAY ON
:LOGIC:AWINDOW:DISPLAY?
-> :LOGIC:AWINDOW:DISPLAY 1
```

### :LOGic:AWINDOW:RATIO

Function Sets the analog waveform display ratio or queries the current setting.

Syntax :LOGic:AWINDOW:RATIO {<NRf>}  
:LOGic:AWINDOW:RATIO?  
<NRf>=25(%),50(%),75(%)

```
Example :LOGIC:AWINDOW:RATIO 25
:LOGIC:AWINDOW:RATIO?
-> :LOGIC:AWINDOW:RATIO 25
```

### :LOGic:DESKew

Function Sets the skew correction of the logic signal or queries the current setting.

Syntax :LOGic:DESKew {<Time>}  
:LOGic:DESKew?  
<Time> = -80 ns to 80 ns (10 ps steps)

```
Example :LOGIC:DESKEW 1NS
:LOGIC:DESKEW?
-> :LOGIC:DESKEW 1.000E-09
```

### :LOGic:GROup<x>?

Function Queries all settings related to the logic group.

Syntax :LOGic:GROup<x>?  
<x> = 1 to 5

```
Example :LOGIC:GROUP1? -> :LOGIC:GROUP1:BUNDLE:
FORMAT HEXA;MODE 0;:LOGIC:GROUP1:
DISPLAY 0;MAPPING "A7A6A5A4A3A2A1A0";
ORDER 1;STATE 0
```

### :LOGic:GROup<x>:BUNDLE?

Function Queries all settings related to the bundle of the logic group.

Syntax :LOGic:GROup<x>:BUNDLE?  
<x> = 1 to 5

```
Example :LOGIC:GROUP1:BUNDLE? -> :LOGIC:GROUP1:
BUNDLE:FORMAT HEXA;MODE 0
```

**:LOGic:GROup<x>:BUNDle:FORMat**

**Function** Sets the display format (bus display) of the bundled value of the logic group or queries the current setting.

**Syntax** :LOGic:GROup<x>:BUNDle:  
FORMat {BINary|HEXa|SYMBol}  
:LOGic:GROup<x>:BUNDle:FORMat?  
<x> = 1 to 5

**Example** :LOGIC:GROUP1:BUNDLE:FORMAT HEXA  
:LOGIC:GROUP1:BUNDLE:FORMAT? -> :LOGIC:  
GROUP1:BUNDLE:FORMAT HEXA

**:LOGic:GROup<x>:BUNDle:MODE**

**Function** Sets the bundle mode of the logic group or queries the current setting.

**Syntax** :LOGic:GROup<x>:BUNDle:MODE {<Boolean>}  
:LOGic:GROup<x>:BUNDle:MODE?  
<x> = 1 to 5

**Example** :LOGIC:GROUP1:BUNDLE:MODE ON  
:LOGIC:GROUP1:BUNDLE:MODE? -> :LOGIC:  
GROUP1:BUNDLE:MODE 1

**:LOGic:GROup<x>:BUNDle:SYMBol**

**Function** Sets the symbol item of the bundle value of each logic group.

**Syntax** :LOGic:GROup<x>:BUNDle:  
SYMBol {<String>,<Boolean>}  
<x> = 1 to 5  
<String> = Up to 16 characters

**Example** :LOGIC:GROUP1:BUNDLE:SYMBOL "TEST",ON

**:LOGic:GROup<x>:DISPlay**

**Function** Turns ON/OFF the display of the logic group or queries the current setting.

**Syntax** :LOGic:GROup<x>:DISPlay {<Boolean>}  
:LOGic:GROup<x>:DISPlay?  
<x> = 1 to 5

**Example** :LOGIC:GROUP1:DISPLAY ON  
:LOGIC:GROUP1:DISPLAY? -> :LOGIC:  
GROUP1:DISPLAY 1

**:LOGic:GROup<x>:MAPPing**

**Function** Sets the bit mapping of the logic group or queries the current setting.

**Syntax** :LOGic:GROup<x>:MAPPing {<String>}  
:LOGic:GROup<x>:MAPPing?  
<x> = 1 to 5  
<String> = Up to 64 characters by combining "A0" to "A7," "B0" to "B7," "C0" to "C7," and "D0" to "D7."  
(For the SB5310, <string> is a combination of "A0-A7" of up to 16 characters)

**Example** :LOGIC:GROUP1:MAPPING "A7A6A5A4B3B2B1B0  
C7C6C5C4D3D2D1D0"  
:LOGIC:GROUP1:MAPPING? -> :LOGIC:  
GROUP1:MAPPING "A7A6A5A4B3B2B1B0C7C6C5C  
4D3D2D1D0"

**:LOGic:GROup<x>:ORDER**

**Function** Sets the displayed order of the logic group or queries the current setting.

**Syntax** :LOGic:GROup<x>:ORDER {<NRf>}  
:LOGic:GROup<x>:ORDER?  
<x> = 1 to 5  
<NRf> = 1 to 5

**Example** :LOGIC:GROUP1:ORDER 1  
:LOGIC:GROUP1:ORDER? -> :LOGIC:GROUP1:  
ORDER 1

**:LOGic:GROup<x>:STATE**

**Function** Turns ON/OFF the state display of the logic group or queries the current setting.

**Syntax** :LOGic:GROup<x>:STATE {<Boolean>}  
:LOGic:GROup<x>:STATE?  
<x> = 1 to 5

**Example** :LOGIC:GROUP1:STATE ON  
:LOGIC:GROUP1:STATE? -> :LOGIC:GROUP1:  
STATE 1

**:LOGic:LABel?**

**Function** Queries all settings related to the label of the logic signal.

**Syntax** :LOGic:LABel?  
**Example** :LOGIC:LABEL? -> :LOGIC:LABEL:BNAME:  
A0 "A0";A1 "A1";A2 "A2";A3 "A3";A4  
"A4";A5 "A5";A6 "A6";A7 "A7";B0 "B0";  
B1 "B1";B2 "B2";B3 "B3";B4 "B4";  
B5 "B5";B6 "B6";B7 "B7";C0 "C0";  
C1 "C1";C2 "C2";C3 "C3";C4 "C4";  
C5 "C5";C6 "C6";C7 "C7";D0 "D0";  
D1 "D1";D2 "D2";D3 "D3";D4 "D4";D5  
"D5";D6 "D6";D7 "D7";  
:LOGIC:LABEL:LNAME:GROUP1 "Group1";  
GROUP2 "Group2";GROUP3 "Group3";  
GROUP4 "Group4";GROUP5 "Group5";  
:LOGIC:LABEL:MODE 1

**:LOGic:LABel:BNAME?**

**Function** Queries all settings related to the bit name of the logic signal.

**Syntax** :LOGic:LABel:BNAME?  
**Example** :LOGIC:LABEL:BNAME? -> :LOGIC:LABEL:  
BNAME:A0 "A0";A1 "A1";A2 "A2";A3 "A3";  
A4 "A4";A5 "A5";A6 "A6";A7 "A7";  
B0 "B0";B1 "B1";B2 "B2";B3 "B3";  
B4 "B4";B5 "B5";B6 "B6";B7 "B7";  
C0 "C0";C1 "C1";C2 "C2";C3 "C3";  
C4 "C4";C5 "C5";C6 "C6";C7 "C7";  
D0 "D0";D1 "D1";D2 "D2";D3 "D3";  
D4 "D4";D5 "D5";D6 "D6";D7 "D7"

## 5.18 LOGic Group

**:LOGic:LABel:BNAME:{A<x>|B<x>|C<x>|D<x>}**

**Function** Sets the bit name of the logic signal or queries the current setting.

**Syntax** :LOGic:LABel:BNAME:{A<x>|B<x>|C<x>|D<x>} {<String>}  
:LOGic:LABel:BNAME:{A<x>|B<x>|C<x>|D<x>}?  
<x> = 0 to 7  
<String> = Up to 8 characters

**Example** :LOGIC:LABEL:BNAME:A0 "NO\_1"  
:LOGIC:LABEL:BNAME:A0? -> :LOGIC:LABEL:  
BNAME:A0 "NO\_1"

**Description** For the SB5310, only {A<x>} are valid.

**:LOGic:LABel:LNAME?**

**Function** Queries all settings related to the group name of the logic signal.

**Syntax** :LOGic:LABel:LNAME?

**Example** :LOGIC:LABEL:LNAME? -> :LOGIC:LABEL:  
LNAME:GROUP1 "Group1";GROUP2 "Group2";  
GROUP3 "Group3";GROUP4 "Group4";  
GROUP5 "Group5"

**:LOGic:LABel:LNAME:GROup<x>**

**Function** Sets the group name of the logic signal or queries the current setting.

**Syntax** :LOGic:LABel:LNAME:GROup<x> {<String>}  
:LOGic:LABel:LNAME:GROup<x>?  
<x> = 1 to 5  
<String> = Up to 8 characters

**Example** :LOGIC:LABEL:LNAME:GROUP1 "NO\_1"  
:LOGIC:LABEL:LNAME:GROUP1? -> :LOGIC:  
LABEL:LNAME:GROUP1 "NO\_1"

**:LOGic:LABel:MODE**

**Function** Turns ON/OFF the logic signal label or queries the current setting.

**Syntax** :LOGic:LABel:MODE {<Boolean>}  
:LOGic:LABel:MODE?

**Example** :LOGIC:LABEL:MODE ON  
:LOGIC:LABEL:MODE? -> :LOGIC:LABEL:  
MODE 1

**:LOGic:MODE**

**Function** Turns ON/OFF the logic signal or queries the current setting.

**Syntax** :LOGic:MODE {<Boolean>}  
:LOGic:MODE?

**Example** :LOGIC:MODE ON  
:LOGIC:MODE? -> :LOGIC:MODE 1

**:LOGic:POSition**

**Function** Sets the vertical position of the logic signal or queries the current setting.

**Syntax** :LOGic:POSition {<NRF>}  
:LOGic:POSition?  
<NRF> = -25 to 31

**Example** :LOGIC:POSITION 0  
:LOGIC:POSITION? -> :LOGIC:POSITION 0

**:LOGic:SCLock?**

**Function** Queries all settings related to the state clock of the logic signal.

**Syntax** :LOGic:SCLock?

**Example** :LOGIC:SCLOCK? -> :LOGIC:SCLOCK:  
POLARITY RISE;SOURCE A0

**:LOGic:SCLock:POLarity**

**Function** Sets the state clock polarity of the logic signal or queries the current setting.

**Syntax** :LOGic:SCLock:POLarity {BOTH|FALL|RISE}  
:LOGic:SCLock:POLarity?

**Example** :LOGIC:SCLOCK:POLARITY BOTH  
:LOGIC:SCLOCK:POLARITY? -> :LOGIC:  
SCLOCK:POLARITY BOTH

**:LOGic:SCLock:SOURce**

**Function** Sets the state clock source of the logic signal or queries the current setting.

**Syntax** :LOGic:SCLock:SOURce {A<x>|B<x>|C<x>|D<x>}  
:LOGic:SCLock:SOURce?  
<x> = 0 to 7

**Example** :LOGIC:SCLOCK:SOURCE A0  
:LOGIC:SCLOCK:SOURCE? -> :LOGIC:SCLOCK:  
SOURCE A0

**Description** For the SB510, only {A<x>} are valid.

**:LOGic:SIZE**

**Function** Sets the display size of the logic signal or queries the current setting.

**Syntax** :LOGic:SIZE {LARGE|MIDium|SMALL|  
XLARge|XSMAll}  
:LOGic:SIZE?

**Example** :LOGIC:SIZE LARGE  
:LOGIC:SIZE? -> :LOGIC:SIZE LARGE

**:LOGic:THReshold?**

**Function** Queries all settings related to the threshold level of the logic signal.

**Syntax** :LOGic:THReshold?

**Example** :LOGIC:THRESHOLD? -> :LOGIC:THRESHOLD:  
 PODA:TYPE CMOS5;USERLEVEL 0.000E+00;  
 :LOGIC:THRESHOLD:PODB:TYPE CMOS5;  
 USERLEVEL 0.000E+00;  
 :LOGIC:THRESHOLD:PODC:TYPE CMOS5;  
 USERLEVEL 0.000E+00;  
 :LOGIC:THRESHOLD:PODD:TYPE CMOS5;  
 USERLEVEL 0.000E+00

**:LOGic:THReshold:{PODA|PODB|PODC|PODD}?**

**Function** Queries all settings related to the threshold level of the specified pod (port).

**Syntax** :LOGic:THReshold:{PODA|PODB|PODC|PODD}?

**Example** :LOGIC:THRESHOLD:PODA? -> :LOGIC:  
 THRESHOLD:PODA:TYPE CMOS5;  
 USERLEVEL 0.000E+00

**Description** For the SB5310, only {PODA} is valid.

**:LOGic:THReshold:{PODA|PODB|PODC|PODD}:TYPE**

**Function** Sets the type of threshold level of the specified pod (port) or queries the current setting.

**Syntax** :LOGic:THReshold:{PODA|PODB|PODC|PODD}:  
 TYPE {CMOS1|CMOS2|CMOS3|CMOS5|ECL|USER}  
 :LOGic:THReshold:{PODA|PODB|PODC|PODD}:  
 TYPE?

**Example** :LOGIC:THRESHOLD:PODA:TYPE CMOS1  
 :LOGIC:THRESHOLD:PODA:TYPE? -> :LOGIC:  
 THRESHOLD:PODA:TYPE CMOS1

**Description** For the SB5310, only {PODA} is valid.

**:LOGic:THReshold:{PODA|PODB|PODC|PODD}:USERlevel**

**Function** Sets the threshold level of the specified pod (port) or queries the current setting.

**Syntax** :LOGic:THReshold:{PODA|PODB|PODC|PODD}  
 :USERlevel {<Voltage>}  
 :LOGic:THReshold:{PODA|PODB|PODC|PODD}  
 :USERlevel?  
 <Voltage> = -10 to 10 V (in 0.1 V steps)

**Example** :LOGIC:THRESHOLD:PODA:USERLEVEL 1V  
 :LOGIC:THRESHOLD:PODA:USERLEVEL?  
 -> :LOGIC:THRESHOLD:PODA:  
 USERLEVEL 1.0E+00

**Description** For the SB5310, only {PODA} is valid.

## 5.19 MATH Group

### **:MATH<x>?**

**Function** Queries all settings related to the computation.

**Syntax** :MATH<x>?  
<x> = 1 to 8

**Example** :MATH1? -> :MATH1:SELECT MATH;DA:  
BFORMAT SBINARY;RESCALING:  
AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:DISPLAY 1;  
ECOUNT:HYSTERESIS 100.0E-03;  
POLARITY RISE;:MATH1:FILTER:DELAY:  
TIME 0.00000000000E+00;:MATH1:FILTER:  
IIR:FORDER 2;HIPASS:COFF 10.000000E+06;:  
MATH1:FILTER:IIR:LOWPASS:  
COFF 10.000000E+06;:MATH1:FILTER:MAVG:  
WEIGHT 2;:MATH1:FILTER:RESCALING:  
AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:FILTER:  
TYPE THROUGH;:MATH1:I2T:UNIT:  
DEFINE "EU";:MATH1:INTEGRAL:PSCALING:  
AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:INTEGRAL:  
RESCALING:AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:INVERT 0;  
IPOINT:POSITION -5.000E+00;:MATH1:  
LABEL:DEFINE "Math1";MODE 0;:MATH1:  
MINUS:PSCALING1:AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:MINUS:  
PSCALING2:AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:MINUS:  
RESCALING:AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:MULTIPLE:  
PSCALING1:AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:MULTIPLE:  
PSCALING2:AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:MULTIPLE:  
RESCALING:AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:  
OPERATION DA,GROUP1;PLUS:PSCALING1:  
AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:PLUS:  
PSCALING2:AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:PLUS:  
RESCALING:AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00;:MATH1:  
POSITION 0.000E+00;SBIT:  
BRATE 500000.....

### **:MATH<x>:DA?**

**Function** Queries all settings related to the D/A conversion.

**Syntax** :MATH<x>:DA?  
<x> = 1 to 4

**Example** :MATH1:DA?  
-> :MATH1:DA:BFORMAT SBINARY;RESCALING:  
AVALUE 1.0000000E+00;  
BVALUE 0.0000000E+00

### **:MATH<x>:DA:ARANGing**

**Function** Executes the auto range of the D/A conversion.

**Syntax** :MATH<x>:DA:ARANGing  
<x> = 1 to 4

**Example** :MATH1:DA:ARANGING

### **MATH<x>:DA:BFormat**

**Function** Sets the binary format of DA conversion or queries the current setting.

**Syntax** :MATH<x>:DA:  
BFormat {SBINary|TCOMplement}  
:MATH<x>:DA:BFormat?  
<x> = 1 to 4

**Example** :MATH1:DA:BFORMAT SBINARY  
:MATH1:DA:BFORMAT? -> :MATH1:DA:  
BFORMAT SBINARY

### **:MATH<x>:DA:HISTory:ABORT**

**Function** Aborts the history computation of the D/A conversion.

**Syntax** :MATH<x>:DA:HISTory:ABORT  
<x> = 1 to 4

**Example** :MATH1:DA:HISTORY:ABORT

### **:MATH<x>:DA:HISTory:EXECute**

**Function** Executes the auto range of the D/A conversion.

**Syntax** :MATH<x>:DA:HISTory:EXECute  
<x> = 1 to 4

**Example** :MATH1:DA:HISTORY:EXECUTE

### **:MATH<x>:DA:RESCaling?**

**Function** Queries all settings related to the rescaling of the D/A conversion.

**Syntax** :MATH<x>:DA:RESCaling?  
<x> = 1 to 4

**Example** :MATH1:DA:RESCALING? -> :MATH1:DA:  
RESCALING:AVALUE 1.000E+00;BVALUE  
1.000E+00

**:MATH<x>:DA:RESCaling:AVALue**

Function Sets rescaling coefficient A of the D/A conversion or queries the current setting.

Syntax :MATH<x>:DA:RESCaling:AVALue {<Nrf>}  
:MATH<x>:DA:RESCaling:AVALue?  
<x> = 1 to 4  
<Nrf> = -1.0000E+31 to 1.0000E+31

Example :MATH1:DA:RESCALING:AVALUE 1  
:MATH1:DA:RESCALING:AVALUE? -> :MATH1:  
DA:RESCALING:AVALUE 1.000E+00

**:MATH<x>:DA:RESCaling:BVALue**

Function Sets rescaling offset B of the D/A conversion or queries the current setting.

Syntax :MATH<x>:DA:RESCaling:BVALue {<Nrf>}  
:MATH<x>:DA:RESCaling:BVALue?  
<x> = 1 to 4  
<Nrf> = -1.0000E+31 to 1.0000E+31

Example :MATH1:DA:RESCALING:BVALUE 1  
:MATH1:DA:RESCALING:BVALUE? -> :MATH1:  
DA:RESCALING:BVALUE 1.000E+00

**:MATH<x>:DISPlay**

Function Turns ON/OFF the computed waveform or queries the current setting.

Syntax :MATH<x>:DISPlay {<Boolean>}  
:MATH<x>:DISPlay?  
<x> = 1 to 8

Example :MATH1:DISPLAY ON  
:MATH1:DISPLAY? -> :MATH1:DISPLAY 1

**:MATH<x>:ECOUNT?**

Function Queries all settings related to the edge count computation.

Syntax :MATH<x>:ECOUNT?  
<x> = 1 to 8

Example :MATH1:ECOUNT? -> :MATH1:ECOUNT:  
HYSTERESIS 1.000E+00;POLARITY RISE

**:MATH<x>:ECOUNT:HYSTeresis**

Function Sets the hysteresis of the edge detection level of the edge count computation or queries the current setting.

Syntax :MATH<x>:ECOUNT:HYSTeresis {<Nrf>}  
:MATH<x>:ECOUNT:HYSTeresis?  
<x> = 1 to 8  
<Nrf> = 0 to 4 (div)

Example :MATH1:ECOUNT:HYSTERESIS 1  
:MATH1:ECOUNT:HYSTERESIS? -> :MATH1:  
ECOUNT:HYSTERESIS 1.000E+00

**:MATH<x>:ECOUNT:POLarity**

Function Sets the edge detection polarity of the edge count computation or queries the current setting.

Syntax :MATH<x>:ECOUNT:POLarity {FALL|RISE}  
:MATH<x>:ECOUNT:POLarity?  
<x> = 1 to 8

Example :MATH1:ECOUNT:POLARITY RISE  
:MATH1:ECOUNT:POLARITY? -> :MATH1:  
ECOUNT:POLARITY RISE

**:MATH<x>:FILTer?**

Function Queries all settings related to the filter.

Syntax :MATH<x>:FILTer?  
<x> = 1 to 8

Example :MATH1:FILTER? -> :MATH1:FILTER:DELAY:  
TIME 0.000E+00;:MATH1:FILTER:IIR:  
FORDER 2;HIPASS:COFF 10.00E+06;:MATH1:  
FILTER:IIR:LOWPASS:COFF 10.00E+06;:  
MATH1:FILTER:MAVG:WEIGHT 2;:MATH1:  
FILTER:RESCALING:AVALUE 1.000E+00;  
BVALUE 0.000E+00;:MATH1:FILTER:  
TYPE THROUGH

**:MATH<x>:FILTer:DELAy?**

Function Queries all settings related to the delay computation.

Syntax :MATH<x>:FILTer:DELAy?  
<x> = 1 to 8

Example :MATH1:FILTER:DELAY? -> :MATH1:FILTER:  
DELAY:TIME 0.000E+00

**:MATH<x>:FILTer:DELAy:TIME**

Function Sets the delay value of the delay computation or queries the current setting.

Syntax :MATH<x>:FILTer:DELAy:TIME {<Time>}  
:MATH<x>:FILTer:DELAy:TIME?  
<x> = 1 to 8

<Time> = See the SB5000 User's Manual.  
Example :MATH1:FILTER:DELAY:TIME 1S  
:MATH1:FILTER:DELAY:TIME? -> :MATH1:  
FILTER:DELAY:TIME 1.000E+00

**:MATH<x>:FILTer:IIR?**

Function Queries all settings related to the IIR filter computation.

Syntax :MATH<x>:FILTer:IIR?  
<x> = 1 to 8

Example :MATH1:FILTER:IIR? -> :MATH1:FILTER:  
IIR:FORDER 2;HIPASS:COFF 10.00E+06;:  
MATH1:FILTER:IIR:LOWPASS:COFF 10.00E+00



## 5.19 MATH Group

### **:MATH<x>:FILTer:IIR:FORDER**

#### **(Filter Order)**

**Function** Sets the filter order of the IIR filter computation or queries the current setting.

**Syntax** :MATH<x>:FILTer:IIR:FORDER {<NRf>}  
:MATH<x>:FILTer:IIR:FORDER?  
<x> = 1 to 8  
<NRf> = 1 or 2

**Example** :MATH1:FILTer:IIR:FORDER 2  
:MATH1:FILTer:IIR:FORDER? -> :MATH1:  
FILTer:IIR:FORDER 2

### **:MATH<x>:FILTer:IIR:HIPass?**

**Function** Queries all settings related to the IIR high pass filter computation.

**Syntax** :MATH<x>:FILTer:IIR:HIPass?  
<x> = 1 to 8

**Example** :MATH1:FILTer:IIR:HIPASS? -> :MATH1:  
FILTer:IIR:HIPASS:COFF 10.00E+06

### **:MATH<x>:FILTer:IIR:HIPass:COFF**

**Function** Sets the cutoff frequency of the IIR high pass filter computation or queries the current setting.

**Syntax** :MATH<x>:FILTer:IIR:HIPass:  
COFF {<Frequency>}  
:MATH<x>:FILTer:IIR:HIPass:COFF?  
<x> = 1 to 8  
<Frequency> = 0.01 to 1 G (Hz)

**Example** :MATH1:FILTer:IIR:HIPASS:COFF 10MHZ  
:MATH1:FILTer:IIR:HIPASS:COFF?  
-> :MATH1:FILTer:IIR:HIPASS:  
COFF 10.00E+06

### **:MATH<x>:FILTer:IIR:LOWPass?**

**Function** Queries all settings related to the IIR low pass filter computation.

**Syntax** :MATH<x>:FILTer:IIR:LOWPass?  
<x> = 1 to 8

**Example** :MATH1:FILTer:IIR:LOWPASS? -> :MATH1:  
FILTer:IIR:LOWPASS:COFF 10.00E+06

### **:MATH<x>:FILTer:IIR:LOWPass:COFF**

**Function** Sets the cutoff frequency of the IIR low pass filter computation or queries the current setting.

**Syntax** :MATH<x>:FILTer:IIR:LOWPass:C  
OFF {<Frequency>}  
:MATH<x>:FILTer:IIR:LOWPass:COFF?  
<x> = 1 to 8  
<Frequency> = 0.01 to 1 G (Hz)

**Example** :MATH1:FILTer:IIR:LOWPASS:COFF 10HZ  
:MATH1:FILTer:IIR:LOWPASS:COFF?  
-> :MATH1:FILTer:IIR:LOWPASS:  
COFF 10.00E+00

### **:MATH<x>:FILTer:MAVG?**

**Function** Queries all settings related to the moving average computation.

**Syntax** :MATH<x>:FILTer:MAVG?  
<x> = 1 to 8

**Example** :MATH1:FILTer:MAVG? -> :MATH1:FILTer:  
MAVG:WEIGHT 2

### **:MATH<x>:FILTer:MAVG:WEIGHT**

**Function** Sets the weight of the moving average computation or queries the current setting.

**Syntax** :MATH<x>:FILTer:MAVG:WEIGHT {<NRf>}  
:MATH<x>:FILTer:MAVG:WEIGHT?  
<x> = 1 to 8  
<NRf> = 2 to 128 (2n steps)

**Example** :MATH1:FILTer:MAVG:WEIGHT 2  
:MATH1:FILTer:MAVG:WEIGHT? -> :MATH1:  
FILTer:MAVG:WEIGHT 2

### **:MATH<x>:FILTer:RESCaling?**

**Function** Queries all settings related to the rescaling of the filter.

**Syntax** :MATH<x>:FILTer:RESCaling?  
<x> = 1 to 8

**Example** :MATH1:FILTer:RESCALING? -> :MATH1:  
FILTer:RESCALING:AVALUE 1.000E+00;  
BVALUE 0.000E+00

### **:MATH<x>:FILTer:RESCaling:AVALue**

**Function** Sets rescaling coefficient A of the filter or queries the current setting.

**Syntax** :MATH<x>:FILTer:RESCaling:  
AVALue {<NRf>}  
:MATH<x>:FILTer:RESCaling:AVALue?  
<x> = 1 to 8  
<NRf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:FILTer:RESCALING:AVALUE 1  
:MATH1:FILTer:RESCALING:AVALUE?  
-> :MATH1:FILTer:RESCALING:  
AVALUE 1.000E+00

### **:MATH<x>:FILTer:RESCaling:BVALue**

**Function** Sets rescaling offset B of the filter or queries the current setting.

**Syntax** :MATH<x>:FILTer:RESCaling:  
BVALue {<NRf>}  
:MATH<x>:FILTer:RESCaling:BVALue?  
<x> = 1 to 8  
<NRf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:FILTer:RESCALING:BVALUE 0  
:MATH1:FILTer:RESCALING:BVALUE?  
-> :MATH1:FILTer:RESCALING:  
BVALUE 0.000E+00

**:MATH<x>:FILTer:TYPE**

Function Sets the filter type or queries the current setting.  
 Syntax :MATH<x>:FILTer:TYPE {DElay|IHPass|ILPass|MAVG|THrough}  
 :MATH<x>:FILTer:TYPE?  
 <x> = 1 to 8  
 Example :MATH1:FILTER:TYPE DELAY  
 :MATH1:FILTER:TYPE? -> :MATH1:FILTER:TYPE DELAY

**:MATH<x>:INTEgral?**

Function Queries all settings related to the integral computation.  
 Syntax :MATH<x>:INTEgral?  
 <x> = 1 to 8  
 Example :MATH1:INTEGRAL? -> :MATH1:INTEGRAL:PSCALING:AVALUE 1.000E+00;  
 BVALUE 0.000E+00; :MATH1:INTEGRAL:RESCALING:AVALUE 1.000E+00;  
 BVALUE 0.000E+00

**:MATH<x>:INTEgral:PSCaling?**

Function Queries all settings related to the pre-scaling of the integral computation.  
 Syntax :MATH<x>:INTEgral:PSCaling?  
 <x> = 1 to 8  
 Example :MATH1:INTEGRAL:PSCALING? -> :MATH1:INTEGRAL:PSCALING:AVALUE 1.000E+00;  
 BVALUE 0.000E+00

**:MATH<x>:INTEgral:PSCaling:AVALue**

Function Sets pre-scaling coefficient A of the integral computation or queries the current setting.  
 Syntax :MATH<x>:INTEgral:PSCaling:AVALue {<NRf>}  
 :MATH<x>:INTEgral:PSCaling:AVALue?  
 <x> = 1 to 8  
 <NRf> = -1.0000E+31 to 1.0000E+31  
 Example :MATH1:INTEGRAL:PSCALING:AVALUE 1  
 :MATH1:INTEGRAL:PSCALING:AVALUE?  
 -> :MATH1:INTEGRAL:PSCALING:AVALUE 1.000E+00

**:MATH<x>:INTEgral:PSCaling:BVALue**

Function Sets pre-scaling offset B of the integral computation or queries the current setting.  
 Syntax :MATH<x>:INTEgral:PSCaling:BVALue {<NRf>}  
 :MATH<x>:INTEgral:PSCaling:BVALue?  
 <x> = 1 to 8  
 <NRf> = -1.0000E+31 to 1.0000E+31  
 Example :MATH1:INTEGRAL:PSCALING:BVALUE 0  
 :MATH1:INTEGRAL:PSCALING:BVALUE?  
 -> :MATH1:INTEGRAL:PSCALING:BVALUE 0.000E+00

**:MATH<x>:INTEgral:RESCaling?**

Function Queries all settings related to the rescaling of the integral computation.  
 Syntax :MATH<x>:INTEgral:RESCaling?  
 <x> = 1 to 8  
 Example :MATH1:INTEGRAL:RESCALING? -> :MATH1:INTEGRAL:RESCALING:AVALUE 1.000E+00;  
 BVALUE 0.000E+00

**:MATH<x>:INTEgral:RESCaling:AVALue**

Function Sets rescaling coefficient A of the integral computation or queries the current setting.  
 Syntax :MATH<x>:INTEgral:RESCaling:AVALue {<NRf>}  
 :MATH<x>:INTEgral:RESCaling:AVALue?  
 <x> = 1 to 8  
 <NRf> = -1.0000E+31 to 1.0000E+31  
 Example :MATH1:INTEGRAL:RESCALING:AVALUE 1  
 :MATH1:INTEGRAL:RESCALING:AVALUE?  
 -> :MATH1:INTEGRAL:RESCALING:AVALUE 1.000E+00

**:MATH<x>:INTEgral:RESCaling:BVALue**

Function Sets rescaling offset B of the integral computation or queries the current setting.  
 Syntax :MATH<x>:INTEgral:RESCaling:BVALue {<NRf>}  
 :MATH<x>:INTEgral:RESCaling:BVALue?  
 <x> = 1 to 8  
 <NRf> = -1.0000E+31 to 1.0000E+31  
 Example :MATH1:INTEGRAL:RESCALING:BVALUE 0  
 :MATH1:INTEGRAL:RESCALING:BVALUE?  
 -> :MATH1:INTEGRAL:RESCALING:BVALUE 0.000E+00

**:MATH<x>:INVert**

Function Turns ON/OFF the inverted display of the computed waveform or queries the current setting.  
 Syntax :MATH<x>:INVert {<Boolean>}  
 :MATH<x>:INVert?  
 <x> = 1 to 8  
 Example :MATH1:INVERT ON  
 :MATH1:INVERT? -> :MATH1:INVERT 1

**:MATH<x>:IPOINT?****(Initial Point)**

Function Queries all settings related to the computation reference point.  
 Syntax :MATH<x>:IPOINT?  
 <x> = 1 to 8  
 Example :MATH1:IPOINT? -> :MATH1:IPOINT:POSITION 0.000E+00

## 5.19 MATH Group

### **:MATH<x>:IPOINT:JUMP**

**Function** Moves the computation reference point to the specified position.

**Syntax** :MATH<x>:IPOINT:JUMP {<NRf>|TRIGGER|Z1|Z2}  
<x> = 1 to 8  
<NRf> = -5 or 0 (div)

**Example** :MATH1:IPOINT:JUMP TRIGGER

### **:MATH<x>:IPOINT:POSITION**

**Function** Sets the computation reference point or queries the current setting.

**Syntax** :MATH<x>:IPOINT:POSITION {<NRf>}  
:MATH<x>:IPOINT:POSITION?  
<x> = 1 to 8  
<NRf> = -5 to 5 (div)

**Example** :MATH1:IPOINT:POSITION 0  
:MATH1:IPOINT:POSITION? -> :MATH1:  
IPOINT:POSITION 0.000E+00

**Description** This command is valid when :MATH<x>:OPERATION INTEGRAL.

### **:MATH<x>:LABEL?**

**Function** Queries all settings related to the label of the computed waveform.

**Syntax** :MATH<x>:LABEL?  
<x> = 1 to 8

**Example** :MATH1:LABEL? -> :MATH1:LABEL:  
DEFINE "MATH1";MODE 0

### **:MATH<x>:LABEL[:DEFINE]**

**Function** Sets the label of the computed waveform or queries the current setting.

**Syntax** :MATH<x>:LABEL[:DEFINE] {<String>}  
:MATH<x>:LABEL[:DEFINE]?  
<x> = 1 to 8  
<String> = Up to 8 characters

**Example** :MATH1:LABEL:DEFINE "MATH1"  
:MATH1:LABEL:DEFINE? -> :MATH1:LABEL:  
DEFINE "MATH1"

### **:MATH<x>:LABEL:MODE**

**Function** Turns ON/OFF the label display of the computed waveform or queries the current setting.

**Syntax** :MATH<x>:LABEL:MODE {<Boolean>}  
:MATH<x>:LABEL:MODE?  
<x> = 1 to 8

### **:MATH<x>:MINUS?**

**Function** Queries all settings related to the subtraction.

**Syntax** :MATH<x>:MINUS?  
<x> = 1 to 8

**Example** :MATH1:MINUS? -> :MATH1:MINUS:  
PSCALING1:AVALUE 1.000E+00;  
BVALUE 0.000E+00;:MATH1:MINUS:  
PSCALING2:AVALUE 1.000E+00;  
BVALUE 0.000E+00;:MATH1:MINUS:  
RESCALING:AVALUE 1.000E+00;  
BVALUE 0.000E+00+00

### **:MATH<x>:MINUS:PSCALING<x>?**

**Function** Queries all settings related to the pre-scaling of the subtraction.

**Syntax** :MATH<x>:MINUS:PSCALING<x>?  
<x> of MATH<x> = 1 to 8  
<x> of PSCALING<x> = 1 or 2

**Example** :MATH1:MINUS:PSCALING1? -> :MATH1:  
MINUS:PSCALING1:AVALUE 1.000E+00;  
BVALUE 0.000E+00

### **:MATH<x>:MINUS:PSCALING<x>:AVALUE**

**Function** Sets pre-scaling coefficient A of the subtraction or queries the current setting.

**Syntax** :MATH<x>:MINUS:PSCALING<x>:  
AVALUE {<NRf>}  
:MATH<x>:MINUS:PSCALING<x>:AVALUE?  
<x> of MATH<x> = 1 to 8  
<x> of PSCALING<x> = 1 or 2  
<NRf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:MINUS:PSCALING1:AVALUE 1  
:MATH1:MINUS:PSCALING1:AVALUE?  
-> :MATH1:MINUS:PSCALING1:  
AVALUE 1.000E+00

### **:MATH<x>:MINUS:PSCALING<x>:BVALUE**

**Function** Sets pre-scaling offset B of the subtraction or queries the current setting.

**Syntax** :MATH<x>:MINUS:PSCALING<x>:  
BVALUE {<NRf>}  
:MATH<x>:MINUS:PSCALING<x>:BVALUE?  
<x> of MATH<x> = 1 to 8  
<x> of PSCALING<x> = 1 or 2  
<NRf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:MINUS:PSCALING1:BVALUE 0  
:MATH1:MINUS:PSCALING1:BVALUE?  
-> :MATH1:MINUS:PSCALING1:  
BVALUE 0.000E+00

**:MATH<x>:MINus:RESCaling?**

**Function** Queries all settings related to the rescaling of the subtraction.

**Syntax** :MATH<x>:MINus:RESCaling?  
<x> = 1 to 8

**Example** :MATH1:MINUS:RESCALING? -> :MATH1:  
MINUS:RESCALING:AVALUE 1.000E+00;  
BVALUE 0.000E+00

**:MATH<x>:MINus:RESCaling:AVALue**

**Function** Sets rescaling coefficient A of the subtraction or queries the current setting.

**Syntax** :MATH<x>:MINus:RESCaling:AVALue {<Nrf>}  
:MATH<x>:MINus:RESCaling:AVALue?  
<x> = 1 to 8

<Nrf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:MINUS:RESCALING:AVALUE 1  
:MATH1:MINUS:RESCALING:AVALUE?  
-> :MATH1:MINUS:RESCALING:  
AVALUE 1.000E+00

**:MATH<x>:MINus:RESCaling:BVALue**

**Function** Sets rescaling offset B of the subtraction or queries the current setting.

**Syntax** :MATH<x>:MINus:RESCaling:BVALue {<Nrf>}  
:MATH<x>:MINus:RESCaling:BVALue?  
<x> = 1 to 8

<Nrf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:MINUS:RESCALING:BVALUE 0  
:MATH1:MINUS:RESCALING:BVALUE?  
-> :MATH1:MINUS:RESCALING:  
BVALUE 0.000E+00

**:MATH<x>:MULTiple?**

**Function** Queries all settings related to the multiplication.

**Syntax** :MATH<x>:MULTiple?  
<x> = 1 to 8

**Example** :MATH1:MULTIPLE? -> :MATH1:MULTIPLE:  
PSCALING1:AVALUE 1.000E+00;  
BVALUE 0.000E+00;;MATH1:MULTIPLE:  
PSCALING2:AVALUE 1.000E+00;  
BVALUE 0.000E+00;;MATH1:MULTIPLE:  
RESCALING:AVALUE 1.000E+00;  
BVALUE 0.000E+00

**:MATH<x>:MULTiple:PSCaling<x>?**

**Function** Queries all settings related to the pre-scaling of the multiplication.

**Syntax** :MATH<x>:MULTiple:PSCaling<x>?  
<x> of MATH<x> = 1 to 8  
<x> of PSCaling<x> = 1 or 2

**Example** :MATH1:MULTIPLE:PSCALING1? -> :MATH1:  
MULTIPLE:PSCALING1:AVALUE 1.000E+00;  
BVALUE 0.000E+00

**:MATH<x>:MULTiple:PSCaling<x>:AVALue**

**Function** Sets pre-scaling coefficient A of the multiplication or queries the current setting.

**Syntax** :MATH<x>:MULTiple:PSCaling<x>:  
AVALue {<Nrf>}  
:MATH<x>:MULTiple:PSCaling<x>:AVALue?  
<x> of MATH<x> = 1 to 8  
<x> of PSCaling<x> = 1 or 2  
<Nrf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:MULTIPLE:PSCALING1:AVALUE 1  
:MATH1:MULTIPLE:PSCALING1:AVALUE?  
-> :MATH1:MULTIPLE:PSCALING1:  
AVALUE 1.000E+00

**:MATH<x>:MULTiple:PSCaling<x>:BVALue**

**Function** Sets pre-scaling offset B of the multiplication or queries the current setting.

**Syntax** :MATH<x>:MULTiple:PSCaling<x>:  
BVALue {<Nrf>}  
:MATH<x>:MULTiple:PSCaling<x>:BVALue?  
<x> of MATH<x> = 1 to 8  
<x> of PSCaling<x> = 1 or 2  
<Nrf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:MULTIPLE:PSCALING1:BVALUE 0  
:MATH1:MULTIPLE:PSCALING1:BVALUE?  
-> :MATH1:MULTIPLE:PSCALING1:  
BVALUE 0.000E+00

**:MATH<x>:MULTiple:RESCaling?**

**Function** Queries all settings related to the rescaling of the multiplication.

**Syntax** :MATH<x>:MULTiple:RESCaling?  
<x> = 1 to 8

**Example** :MATH1:MULTIPLE:RESCALING? -> :MATH1:  
MULTIPLE:RESCALING:AVALUE 1.000E+00;  
BVALUE 0.000E+00

**:MATH<x>:MULTiple:RESCaling:AVALue**

**Function** Sets rescaling coefficient A of the multiplication or queries the current setting.

**Syntax** :MATH<x>:MULTiple:RESCaling:  
AVALue {<Nrf>}  
:MATH<x>:MULTiple:RESCaling:AVALue?  
<x> = 1 to 8  
<Nrf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:MULTIPLE:RESCALING:AVALUE 1  
:MATH1:MULTIPLE:RESCALING:AVALUE?  
-> :MATH1:MULTIPLE:RESCALING:  
AVALUE 1.000E+00

## 5.19 MATH Group

### **:MATH<x>:MULTiple:RESCaling:BVALue**

**Function** Sets rescaling offset B of the multiplication or queries the current setting.

**Syntax** :MATH<x>:MULTiple:RESCaling:  
BVALue {<Nrf>}  
:MATH<x>:MULTiple:RESCaling:BVALue?  
<x> = 1 to 8  
<Nrf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:MULTIPLE:RESCALING:BVALUE 0  
:MATH1:MULTIPLE:RESCALING:BVALUE?  
-> :MATH1:MULTIPLE:RESCALING:  
BVALUE 0.000E+00

### **:MATH<x>:OPERation**

**Function** Sets the operator or queries the current setting.

**Syntax** :MATH<x>:OPERation { (DA|ECOUNT|FILTER|  
INTEGRAL|MINUS|MULTiple|PLUS|RCOUNT|  
USERdefine), (<Nrf>|GROup<x>), <Nrf>}  
:MATH<x>:OPERation?  
MATH<x> = 1 to 8 (<x> = 1 to 4 if {DA|USERdefine}  
is selected)  
GROup<x> = 1 to 5 ({GROup<x>} is valid only when  
the operator is DA)  
<Nrf> = 1 to 4

**Example** :MATH1:OPERATION FILTER,1  
:MATH1:OPERATION? -> :MATH1:  
OPERATION FILTER,1

**Description** For unary operators (ECOUNT|FILTER|INTEGRAL), select the target waveform using the first <Nrf>.

For binary operators (MINUS|MULTiple|PLUS|RCOUNT), select the target waveform of the first term using the first <Nrf> and the target waveform of the second term using the second <Nrf>.

Select GROup<x> in the case of the DA operator. <Nrf> is not required for the USERdefine operator.

### **:MATH<x>:PLUS?**

**Function** Queries all settings related to the addition.

**Syntax** :MATH<x>:PLUS?  
<x> = 1 to 8

**Example** :MATH1:PLUS? -> :MATH1:PLUS:  
PSCALING1:AVALUE 1.000E+00;  
BVALUE 0.000E+00; :MATH1:PLUS:PSCALING2:  
AVALUE 1.000E+00; BVALUE 0.000E+00; :  
MATH1:PLUS:RESCALING:AVALUE 1.000E+00;  
BVALUE 0.000E+00

### **:MATH<x>:PLUS:PSCaling<x>?**

**Function** Queries all settings related to the pre-scaling of the addition.

**Syntax** :MATH<x>:PLUS:PSCaling<x>?  
<x> of MATH<x> = 1 to 8  
<x> of PSCaling<x> = 1 or 2

**Example** :MATH1:PLUS:PSCALING1? -> :MATH1:PLUS:  
PSCALING1:AVALUE 1.000E+00;  
BVALUE 0.000E+00

### **:MATH<x>:PLUS:PSCaling<x>:AVALue**

**Function** Sets pre-scaling coefficient A of the addition or queries the current setting.

**Syntax** :MATH<x>:PLUS:PSCaling<x>:  
AVALue {<Nrf>}  
:MATH<x>:PLUS:PSCaling<x>:AVALue?  
<x> of MATH<x> = 1 to 8  
<x> of PSCaling<x> = 1 or 2  
<Nrf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:PLUS:PSCALING1:AVALUE 1  
:MATH1:PLUS:PSCALING1:AVALUE?  
-> :MATH1:PLUS:PSCALING1:  
AVALUE 1.000E+00

### **:MATH<x>:PLUS:PSCaling<x>:BVALue**

**Function** Sets pre-scaling offset B of the addition or queries the current setting.

**Syntax** :MATH<x>:PLUS:PSCaling<x>:  
BVALue {<Nrf>}  
:MATH<x>:PLUS:PSCaling<x>:BVALue?  
<x> of MATH<x> = 1 to 8  
<x> of PSCaling<x> = 1 or 2  
<Nrf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:PLUS:PSCALING1:BVALUE 0  
:MATH1:PLUS:PSCALING1:BVALUE?  
-> :MATH1:PLUS:PSCALING1:  
BVALUE 0.000E+00

### **:MATH<x>:PLUS:RESCaling?**

**Function** Queries all settings related to the rescaling of the addition.

**Syntax** :MATH<x>:PLUS:RESCaling?  
<x> = 1 to 8

**Example** :MATH1:PLUS:RESCALING? -> :MATH1:PLUS:  
RESCALING:AVALUE 1.000E+00;  
BVALUE 0.000E+00

### **:MATH<x>:PLUS:RESCaling:AVALue**

**Function** Sets rescaling coefficient A of the addition or queries the current setting.

**Syntax** :MATH<x>:PLUS:RESCaling:AVALue {<Nrf>}  
:MATH<x>:PLUS:RESCaling:AVALue?  
<x> = 1 to 8  
<Nrf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:PLUS:RESCALING:AVALUE 1  
:MATH1:PLUS:RESCALING:AVALUE?  
-> :MATH1:PLUS:RESCALING:  
AVALUE 1.000E+00

**:MATH<x>:PLUS:RESCaling:BVALue**

Function Sets rescaling offset B of the addition or queries the current setting.

Syntax :MATH<x>:PLUS:RESCaling:BVALue {<NRf>}  
:MATH<x>:PLUS:RESCaling:BVALue?  
<x> = 1 to 8  
<NRf> = -1.0000E+31 to 1.0000E+31

Example :MATH1:PLUS:RESCALING:BVALUE 0  
:MATH1:PLUS:RESCALING:BVALUE?  
-> :MATH1:PLUS:RESCALING:  
BVALUE 0.000E+00

**:MATH<x>:POSition**

Function Sets the vertical position of the computed waveform or queries the current setting.

Syntax :MATH<x>:POSition {<NRf>}  
:MATH<x>:POSition?  
<x> = 1 to 8  
<NRf> = -4 to 4 (div)

Example :MATH1:POSITION 0  
:MATH1:POSITION? -> :MATH1:  
POSITION 0.000E+00

**:MATH<x>:SBIT?**

Function Queries all settings related to the stuff bit computation.

Syntax :MATH<x>:SBIT?  
<x> = 1 to 4

Example :MATH1:SBIT?  
-> :MATH1:SBIT:BRATE 1000000;  
HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;RECESSIVE HIGH

**:MATH<x>:SBIT:BRATe**

Function Sets the bit rate (data transfer rate) of the stuff bit computation or queries the current setting.

Syntax :MATH<x>:SBIT:BRATe {<NRf>|USER, <NRf>}  
:MATH<x>:SBIT:BRATe?  
<x> = 1 to 4  
<NRf> = 83300, 125000, 250000, 500000, 1000000  
<NRf> of USER = See the User's Manual (IM701361-01E).

Example :MATH1:SBIT:BRATE 83300  
:MATH1:SBIT:BRATE?  
-> :MATH1:SBIT:BRATE 83300

**:MATH<x>:SBIT:HISTory:ABORT**

Function Cancels history computation for stuff bit computation.

Syntax :MATH<x>:SBIT:HISTory:ABORT  
<x>=1-4

Example :MATH1:SBIT:HISTORY:ABORT

**:MATH<x>:SBIT:HISTory:EXECute**

Function Executes history computation for stuff bit computation.

Syntax :MATH<x>:SBIT:HISTory:EXECute  
<x>=1-4

Example :MATH1:SBIT:HISTORY:EXECUTE

**:MATH<x>:SBIT:HYSTeresis**

Function Sets the hysteresis of the stuff bit computation or queries the current setting.

Syntax :MATH<x>:SBIT:HYSTeresis {<NRf>}  
:MATH<x>:SBIT:HYSTeresis?  
<x> = 1 to 4  
<NRf> = 0 to 4(div)

Example :MATH1:SBIT:HYSTERESIS 1  
:MATH1:SBIT:HYSTERESIS?  
-> :MATH1:SBIT:HYSTERESIS 1.000000E+00

**:MATH<x>:SBIT:LEVel**

Function Sets the threshold level of the stuff bit computation or queries the current setting.

Syntax :MATH<x>:SBIT:LEVel {<NRf>|<Voltage>|  
<Current>}  
:MATH<x>:SBIT:LEVel?  
<x> = 1 to 4

<NRf>, <Voltage>, and <Current> = See the User's Manual (IM701361-01E).

Example :MATH1:SBIT:LEVEL 1  
:MATH1:SBIT:LEVEL?  
-> :MATH1:SBIT:LEVEL 1.0000000E+00

**:MATH<x>:SBIT:RECCessive**

Function Sets the recessive level (bus level) of the stuff bit computation or queries the current setting.

Syntax :MATH<x>:SBIT:RECCessive {HIGH|LOW}  
:MATH<x>:SBIT:RECCessive?  
<x> = 1 to 4

Example :MATH1:SBIT:RECESSIVE HIGH  
:MATH1:SBIT:RECESSIVE?  
-> :MATH1:SBIT:RECESSIVE HIGH

## 5.19 MATH Group

### **:MATH<x>:SBIT:SPOint**

Function Sets the sample point of the stuff bit computation or queries the current setting.

Syntax :MATH<x>:SBIT:SPOint {<Nrf>}  
:MATH<x>:SBIT:SPOint?  
<x> = 1 to 4  
<Nrf> = 18.8 to 90.6(%)

Example :MATH1:SBIT:SPOINT 18.8  
:MATH1:SBIT:SPOINT?  
-> :MATH1:SBIT:SPOINT 18.8E+00

### **:MATH<x>:SCALE?**

Function Queries all settings related to scaling.

Syntax :MATH<x>:SCALE?  
<x> = 1 to 8

Example :MATH1:SCALE? -> :MATH1:SCALE:  
CENTER 1.000E+00;MODE AUTO;  
SENSITIVITY 1.000E+00

### **:MATH<x>:SCALE:CENTer**

Function Sets the offset of the computed waveform or queries the current setting.

Syntax :MATH<x>:SCALE:CENTer {<Nrf>|<Voltage>|  
<Current>}  
:MATH<x>:SCALE:CENTer?  
<x> = 1 to 8

<Nrf>, <Voltage>, and <Current> = See the SB5000 User's Manual.

Example :MATH1:SCALE:CENTER 1  
:MATH1:SCALE:CENTER? -> :MATH1:SCALE:  
CENTER 1.000E+00

### **:MATH<x>:SCALE:MODE**

Function Sets the scaling mode or queries the current setting.

Syntax :MATH<x>:SCALE:MODE {AUTO|MANual}  
:MATH<x>:SCALE:MODE?  
<x> = 1 to 8

Example :MATH1:SCALE:MODE AUTO  
:MATH1:SCALE:MODE? -> :MATH1:SCALE:  
MODE AUTO

### **:MATH<x>:SCALE:SENSitivity**

Function Sets the vertical sensitivity of the computed waveform or queries the current setting.

Syntax :MATH<x>:SCALE:SENSitivity {<Nrf>|  
<Voltage>|<Current>}  
:MATH<x>:SCALE:SENSitivity?  
<x> = 1 to 8

<Nrf>, <Voltage>, and <Current> = See the SB5000 User's Manual.

Example :MATH1:SCALE:SENSITIVITY 1  
:MATH1:SCALE:SENSITIVITY? -> :MATH1:  
SCALE:SENSITIVITY 1.000E+00

### **:MATH<x>:SELEct**

Function Sets the display option or queries the current setting.

Syntax :MATH<x>:SELEct {INPut|MATH|REFErence}  
:MATH<x>:SELEct?  
<x> = 1 to 8

Example :MATH1:SELECT INPUT  
:MATH1:SELECT? -> :MATH1:SELECT INPUT

### **:MATH<x>:SVALue (Scale VALUE)**

Function Turns ON/OFF the scale value display or queries the current setting.

Syntax :MATH<x>:SVALue {<Boolean>}  
:MATH<x>:SVALue?  
<x> = 1 to 8

Example :MATH1:SVALUE ON  
:MATH1:SVALUE? -> MATH1:SVALUE 1

### **:MATH<x>:THREshold<x>**

Function Sets the edge detection level of the count computation or queries the current setting.

Syntax :MATH<x>:THREshold<x> {<Nrf>|  
<Voltage>|<Current>}  
:MATH<x>:THREshold<x>?  
<x> of MATH<x> = 1 to 8

<x> of THREshold<x> = 1 or 2  
<Nrf>, <Voltage>, and <Current> = See the SB5000 User's Manual.

Example :MATH1:THRESHOLD1 1  
:MATH1:THRESHOLD1? -> :MATH1:  
THRESHOLD1 1.000E+00

Description THREshold2 is valid when the operation is {RCOUNT}.

### **:MATH<x>:UNIT?**

Function Queries all settings related to the computation unit.

Syntax :MATH<x>:UNIT?  
<x> = 1 to 8

Example :MATH1:UNIT? -> :MATH1:UNIT:  
DEFINE "EU";MODE AUTO

### **:MATH<x>:UNIT[:DEFine]**

Function Sets the computation unit or queries the current setting.

Syntax :MATH<x>:UNIT[:DEFine] {<String>}  
:MATH<x>:UNIT[:DEFine]?  
<x> = 1 to 8

<String> = Up to 4 characters

Example :MATH1:UNIT:DEFINE "EU"  
:MATH1:UNIT:DEFINE? -> :MATH1:UNIT:  
DEFINE "EU"

**:MATH<x>:UNIT:MODE**

**Function** Sets the automatic/manual addition of the computation unit or queries the current setting.

**Syntax** :MATH<x>:UNIT:MODE {AUTO|USERdefine}  
:MATH<x>:UNIT:MODE?  
<x> = 1 to 8

**Example** :MATH1:UNIT:MODE AUTO  
:MATH1:UNIT:MODE? -> :MATH1:UNIT:  
MODE AUTO

**:MATH<x>:USERdefine?**

**Function** Queries all settings related to user-defined math or queries the current setting.

**Syntax** :MATH<x>:USERdefine?  
<x> = 1 to 4

**Example** :MATH1:USERDEFINE? -> :MATH1:  
USERDEFINE:CONSTANT1 1.000E+00;  
CONSTANT2 1.000E+00;  
CONSTANT3 1.000E+00;  
CONSTANT4 1.000E+00;DEFINE "C1-C2"

**:MATH<x>:USERdefine:ARANGing**

**Function** Executes auto ranging for user-defined math.

**Syntax** :MATH<x>:USERdefine:ARANGing  
<x> = 1 to 4

**Example** :MATH1:USERDEFINE:ARANGING

**:MATH<x>:USERdefine:CONStant<x>**

**Function** Sets a user-defined math constant or queries the current setting.

**Syntax** :MATH<x>:USERdefine:CONStant<x> {<Nrf>}  
:MATH<x>:USERdefine:CONStant<x>?  
MATH<x>: <x> = 1 to 4  
CONStant<x>: <x> = 1 to 4  
<Nrf> = -1.0000E+31 to 1.0000E+31

**Example** :MATH1:USERDEFINE:CONSTANT1 1  
:MATH1:USERDEFINE:CONSTANT1? -> :MATH1:  
USERDEFINE:CONSTANT1 1.000E+00

**:MATH<x>:USERdefine:DEFine**

**Function** Sets a user-defined math equation or queries the current setting.

**Syntax** :MATH<x>:USERdefine:DEFine {<string>}  
:MATH<x>:USERdefine:DEFine?  
<x> = 1 to 4  
<string> = 128 characters or less

**Example** :MATH1:USERDEFINE:DEFINE "C1-C2"  
:MATH1:USERDEFINE:DEFINE? -> :MATH1:  
USERDEFINE:DEFINE "C1-C2"

**Description** Characters and symbols other than those on the keyboard displayed on the main unit screen cannot be used.  
See the main unit user's manual for details about equations.

**:MATH<x>:USERdefine:HISTory:ABORT**

**Function** Cancels history computation for user-defined math.

**Syntax** :MATH<x>:USERdefine:HISTory:ABORT  
<x> = 1 to 4

**Example** :MATH1:USERDEFINE:HISTORY:ABORT

**:MATH<x>:USERdefine:HISTory:EXECute**

**Function** Executes history computation for user-defined math.

**Syntax** :MATH<x>:USERdefine:HISTory:EXECute  
<x> = 1 to 4

**Example** :MATH1:USERDEFINE:HISTORY:EXECUTE



## 5.20 MEASure Group

### :MEASure?

**Function** Queries all settings related to the automated measurement of waveform parameters.

**Syntax** :MEASure?

**Example** :MEASURE? -> :MEASURE:BIT1:AREA1:COUNT:STATE 0;:MEASURE:BIT1:AREA1:DELAY:MEASURE:COUNT 1;POLARITY RISE;:MEASURE:BIT1:AREA1:DELAY:REFERENCE:COUNT 1;POLARITY RISE;TRACE A0;:MEASURE:BIT1:AREA1:DELAY:SOURCE TRIGGER;STATE 0;:MEASURE:BIT1:AREA1:DT:STATE 0;:MEASURE:BIT1:AREA1:DUTYCYCLE:STATE 0;:MEASURE:BIT1:AREA1:FREQUENCY:STATE 0;:MEASURE:BIT1:AREA1:NWIDTH:STATE 0;:MEASURE:BIT1:AREA1:PERFREQUENCY:STATE 0;:MEASURE:BIT1:AREA1:PERIOD:STATE 0;:MEASURE:BIT1:AREA1:PWIDTH:STATE 0;:MEASURE:BIT1:AREA2:COUNT:STATE 0;:MEASURE:BIT1:AREA2:DELAY:MEASURE:COUNT 1;POLARITY RISE;:MEASURE:BIT1:AREA2:DELAY:REFERENCE:COUNT 1;POLARITY RISE;TRACE A0;:MEASURE:BIT1:AREA2:DELAY:SOURCE TRIGGER;STATE 0;:MEASURE:BIT1:AREA2:DT:STATE 0;:MEASURE:BIT1:AREA2:DUTYCYCLE:STATE 0;:MEASURE:BIT1:AREA2:FREQUENCY:STATE 0;:MEASURE:BIT1:AREA2:NWIDTH:STATE 0;:MEASURE:BIT1:AREA2:PERFREQUENCY:STATE 0;:MEASURE:BIT1:AREA2:PERIOD:STATE 0;:MEASURE:BIT1:AREA2:PWIDTH:STATE 0;:MEASURE:BIT2:AREA1:COUNT:STATE 0;:MEASURE:BIT2:AREA1:DELAY:MEASURE:COUNT 1;POLARITY RISE;:MEASURE:BIT2:AREA1:DELAY:REFERENCE:COUNT 1;POLARITY RISE;TRACE A0;:MEASURE:BIT2:AREA1:DELAY:SOURCE TRIGGER;STATE 0;:MEASURE:BIT2:AREA1:DT:STATE 0;:MEASURE:BIT2:AREA1:DUTYCYCLE:STATE 0;:MEASURE:BIT2:AREA1:FREQUENCY:STATE 0;:MEASURE:BIT2:AREA1:NWIDTH:STATE 0 . . . . .

### :MEASure:BIT<x>?

**Function** Queries all settings related to each logic bit.

**Syntax** :MEASure:BIT<x>?  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)

**Example** :MEASURE:BIT1?  
-> :MEASURE:BIT1:AREA1:COUNT:STATE 0;:MEASURE:BIT1:AREA1:DELAY:MEASURE:COUNT 1;POLARITY RISE;:MEASURE:BIT1:AREA1:DELAY:REFERENCE:COUNT 1;POLARITY RISE;TRACE A0;:MEASURE:BIT1:AREA1:DELAY:SOURCE TRACE;STATE 0;:MEASURE:BIT1:AREA1:DT:STATE 0;:MEASURE:BIT1:AREA1:DUTYCYCLE:STATE 0;:MEASURE:BIT1:AREA1:FREQUENCY:STATE 0;:MEASURE:BIT1:AREA1:NWIDTH:STATE 0;:MEASURE:BIT1:AREA1:PERFREQUENCY:STATE 0;:MEASURE:BIT1:AREA1:PERIOD:STATE 0;:MEASURE:BIT1:AREA1:PWIDTH:STATE 0;:MEASURE:BIT1:AREA2:COUNT:STATE 0;:MEASURE:BIT1:AREA2:DELAY:MEASURE:COUNT 1;POLARITY RISE;:MEASURE:BIT1:AREA2:DELAY:REFERENCE:COUNT 1;POLARITY RISE;TRACE A0;:MEASURE:BIT1:AREA2:DELAY:SOURCE TRACE;STATE 0;:MEASURE:BIT1:AREA2:DUTYCYCLE:STATE 0;:MEASURE:BIT1:AREA2:FREQUENCY:STATE 0;:MEASURE:BIT1:AREA2:NWIDTH:STATE 0;:MEASURE:BIT1:AREA2:PERFREQUENCY:STATE 0;:MEASURE:BIT1:AREA2:PERIOD:STATE 0;:MEASURE:BIT1:AREA2:PWIDTH:STATE 0

**:MEASure:BIT<x>:AREA<x>?**

**Function** Queries all settings related to each area.

**Syntax** : MEASure:BIT<x>:AREA<x>?  
 <x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
 <x> of AREA<x> = 1 or 2

**Example** :MEASURE:BIT1:AREA1?  
 -> :MEASURE:BIT1:AREA1:COUNT:STATE 0; :  
 MEASURE:BIT1:AREA1:DELAY:MEASURE:  
 COUNT 1;POLARITY RISE;:MEASURE:BIT1:  
 AREA1:DELAY:REFERENCE:COUNT 1;  
 POLARITY RISE;TRACE A0;:MEASURE:BIT1:  
 AREA1:DELAY:SOURCE TRACE;STATE 0; :  
 MEASURE:BIT1:AREA1:DT:STATE 0; :  
 MEASURE:BIT1:AREA1:DUTYCYCLE:STATE 0; :  
 MEASURE:BIT1:AREA1:FREQUENCY:STATE 0; :  
 MEASURE:BIT1:AREA1:NWIDTH:STATE 0; :  
 MEASURE:BIT1:AREA1:PERFREQUENCY:  
 STATE 0;:MEASURE:BIT1:AREA1:PERIOD:  
 STATE 0;:MEASURE:BIT1:AREA1:PWIDTh:  
 STATE 0

**:MEASure:BIT<x>:AREA<x>:ALL**

**Function** Turns ON/OFF all logic waveform parameters.

**Syntax** :MEASure:BIT<x>:AREA<x>:ALL {<Boolean>}  
 <x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
 <x> of AREA<x> = 1 or 2

**Example** :MEASURE:BIT1:AREA1:ALL ON

**:MEASure:BIT<x>:AREA<x>:<parameter>?**

**Function** Queries all settings related to logic waveform parameters.

**Syntax** :MEASure:BIT<x>:AREA<x>:<parameter>?  
 <x> of BIT<x> = 1 to 32 (with the SB5310, only <x> = 1 to 8 is valid.)  
 <x> of AREA<x> = 1 or 2  
 <parameter>={COUNT|DELAy|DT|DUTYcycle|  
 FREQuency|NWIth|PERFrequency|PERiod|  
 PWIDth}

**Example** (The following is an example of the count with bit 1 area 1.)  
 :MEASURE:BIT1:AREA1:COUNT?  
 -> :MEASURE:BIT1:AREA1:COUNT:STATE 0

**:MEASure:BIT<x>:AREA<x>:<parameter>:****COUNT?**

**Function** Queries the count for continuous statistical processing of logic waveform parameters.

**Syntax** :MEASure:BIT<x>:AREA<x>:<parameter>:  
 COUNT?  
 <x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
 <x> of AREA<x> = 1 or 2  
 <parameter>={COUNT|DELAy|DT|DUTYcycle|  
 FREQuency|NWIth|PERFrequency|PERiod|  
 PWIDth}

**Example** (The following is an example of the count with bit 1 area 1.)  
 :MEASURE:BIT1:AREA1:COUNT:COUNT?  
 -> :MEASURE:BIT1:AREA1:COUNT:COUNT 0

**:MEASure:BIT<x>:AREA<x>:<parameter>:****{MAXimum|MEAN|MINimum|SDEVIation}?**

**Function** Queries each statistical value of logic waveform parameters.

**Syntax** :MEASure:BIT<x>:AREA<x>:<parameter>:  
 MAXimum?  
 <x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
 <x> of AREA<x> = 1 or 2  
 <parameter>={COUNT|DELAy|DT|DUTYcycle|  
 FREQuency|NWIth|PERFrequency|PERiod|  
 PWIDth}

**Example** (The following is an example of the count with bit 1 area 1.)  
 :MEASURE:BIT1:AREA1:COUNT:MAXIMUM?  
 -> :MEASURE:BIT1:AREA1:COUNT:MAXIMUM 0

**:MEASure:BIT<x>:AREA<x>:<parameter>:****STATE**

**Function** Turns ON/OFF the logic waveform parameters or queries the current setting.

**Syntax** :MEASure:BIT<x>:AREA<x>:<parameter>:  
 STATE {<Boolean>}  
 :MEASure:BIT<x>:AREA<x>:<parameter>:  
 STATE?  
 <x> of BIT<x> = 1 to 32(with the SB5310 only <x> = 1 to 8 is valid.)  
 <x> of AREA<x> = 1 or 2  
 <parameter>={COUNT|DELAy|DT|DUTYcycle|  
 FREQuency|NWIth|PERFrequency|PERiod|  
 PWIDth}

**Example** (The following is an example of the count with bit 1 area 1.)  
 :MEASURE:BIT1:AREA1:COUNT:STATE ON  
 :MEASURE:BIT1:AREA1:COUNT:STATE?  
 -> :MEASURE:BIT1:AREA1:COUNT:STATE 1

## 5.20 MEASure Group

### **:MEASure:BIT<x>:AREA<x>:<parameter>:VALue?**

**Function** Queries automatically measured values of logic waveform parameters.

**Syntax** :MEASure:BIT<x>:AREA<x>:<parameter>:VALue? {<NRf>}  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2  
<parameter>={COUNT|DELAy|DT|DUTYcycle|FREQUency|NWIDTH|PERFrequency|PERiod|PWIDth}  
<NRf> = 1 to 100000

**Example** (The following is an example of the count with bit 1 area 1.)  
:MEASure:BIT1:AREA1:COUNT:VALue?  
-> :MEASure:BIT1:AREA1:COUNT:VALue 0

**Description** • If measurement cannot be performed, NAN (Not A Number) is returned.

- <NRf> indicates the n'th automated measured value in the past. For cycle statistics, specify the <NRf>'th cycle from the left of the screen. To specify the oldest automated measured value, specify 1. If <NRf> is omitted, the most recent automated measured value is specified. If the value corresponding to the relevant count is not present, NAN (Not A Number) is returned.

### **:MEASure:BIT<x>:AREA<x>:DELAy:MEASure?**

**Function** Queries all settings related to the measurement conditions for the source waveform of delay measurement between channels.

**Syntax** :MEASure:BIT<x>:AREA<x>:DELAy:MEASure?  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2

**Example** :MEASure:BIT1:AREA1:DELAy:MEASure?  
-> :MEASure:BIT1:AREA1:DELAy:MEASure:COUNT 1;POLARITY RISE

### **:MEASure:BIT<x>:AREA<x>:DELAy:MEASure:COUNT**

**Function** Sets the edge detection count for the source waveform of delay measurement between channels or queries the current setting.

**Syntax** :MEASure:BIT<x>:AREA<x>:DELAy:MEASure:COUNT {<NRf>}  
:MEASure:BIT<x>:AREA<x>:DELAy:MEASure:COUNT?  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2  
<NRf> = 1 to 10

**Example** :MEASure:BIT1:AREA1:DELAy:MEASure:COUNT 1  
:MEASure:BIT1:AREA1:DELAy:MEASure:COUNT?  
-> :MEASure:BIT1:AREA1:DELAy:MEASure:COUNT 1

### **:MEASure:BIT<x>:AREA<x>:DELAy:MEASure:POLarity**

**Function** Sets the polarity of the source waveform of delay measurement between channels or queries the current setting.

**Syntax** :MEASure:BIT<x>:AREA<x>:DELAy:MEASure:POLarity {FALL|RISE}  
:MEASure:BIT<x>:AREA<x>:DELAy:MEASure:POLarity?  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2

**Example** :MEASure:BIT1:AREA1:DELAy:MEASure:POLARITY FALL  
:MEASure:BIT1:AREA1:DELAy:MEASure:POLARITY?  
-> :MEASure:BIT1:AREA1:DELAy:MEASure:POLARITY FALL

### **:MEASure:BIT<x>:AREA<x>:DELAy:REFERENCE?**

**Function** Queries all settings related to the reference waveform of delay measurement between channels.

**Syntax** :MEASure:BIT<x>:AREA<x>:DELAy:REFERENCE?  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2

**Example** :MEASure:BIT1:AREA1:DELAy:REFERENCE?  
-> :MEASure:BIT1:AREA1:DELAy:REFERENCE:COUNT 1;POLARITY RISE;TRACE A0

**:MEASure:BIT<x>:AREA<x>:DELay:****REFerence:COUNT**

**Function** Sets the edge detection count for the reference waveform of delay measurement between channels or queries the current setting.

**Syntax** :MEASure:BIT<x>:AREA<x>:DELay:  
REFerence:COUNT {<NRf>}  
:MEASure:BIT<x>:AREA<x>:DELay:  
REFerence:COUNT?  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2  
<NRf> = 1 to 10

**Example** :MEASURE:BIT1:AREA1:DELAY:REFERENCE:  
COUNT 1  
:MEASURE:BIT1:AREA1:DELAY:REFERENCE:  
COUNT?  
-> :MEASURE:BIT1:AREA1:DELAY:  
REFERENCE:COUNT 1

**:MEASure:BIT<x>:AREA<x>:DELay:****REFerence:POLarity**

**Function** Sets the polarity of the reference waveform of delay measurement between channels or queries the current setting.

**Syntax** :MEASure:BIT<x>:AREA<x>:DELay:  
REFerence:POLarity {FALL|RISE}  
:MEASure:BIT<x>:AREA<x>:DELay:  
REFerence:POLarity?  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2

**Example** :MEASURE:BIT1:AREA1:DELAY:REFERENCE:  
POLARITY FALL  
:MEASURE:BIT1:AREA1:DELAY:REFERENCE:  
POLARITY?  
-> :MEASURE:BIT1:AREA1:DELAY:REFERENCE:  
POLARITY FALL

**:MEASure:BIT<x>:AREA<x>:DELay:****REFerence:TRACe**

**Function** Sets the trace for the reference waveform of delay measurement between channels or queries the current setting.

**Syntax** :MEASure:BIT<x>:AREA<x>:DELay:  
REFerence:TRACe {<NRf>|A<y>|B<y>|C<y>|  
D<y>}  
:MEASure:BIT<x>:AREA<x>:DELay:  
REFerence:TRACe?  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2  
<NRf> = 1 to 8  
<y> = 0 to 7

**Example** :MEASURE:BIT1:AREA1:DELAY:REFERENCE:  
TRACE 1  
:MEASURE:BIT1:AREA1:DELAY:REFERENCE:  
TRACE?  
-> :MEASURE:BIT1:AREA1:DELAY:  
REFERENCE:TRACE 1

**Description** For the SB5310, only {<NRf>|A<y>} are valid.

**:MEASure:BIT<x>:AREA<x>:DELay:SOURCE**

**Function** Sets the reference of delay measurement between channels or queries the current setting.

**Syntax** :MEASure:BIT<x>:AREA<x>:DELay:  
SOURCE {TRACe|TRIGger}  
:MEASure:BIT<x>:AREA<x>:DELay:SOURCE?  
<x> of BIT<x> = 1 to 32 (with the SB5310 only <x> = 1 to 8 is valid.)  
<x> of AREA<x> = 1 or 2

**Example** :MEASURE:BIT1:AREA1:DELAY:SOURCE TRACE  
:MEASURE:BIT1:AREA1:DELAY:SOURCE?  
-> :MEASURE:BIT1:AREA1:DELAY:  
SOURCE TRACE

**:MEASure:CALCulation?**

**Function** Queries all settings related to calculation items.

**Syntax** :MEASure:CALCulation?  
**Example** :MEASURE:CALCULATION? -> :MEASURE:  
CALCULATION:DEFINE1 "MAX(C1)";  
DEFINE2 "MIN(C2)";DEFINE3 "HIGH(C3)";  
DEFINE4 "LOW(C4)";STATE1 0;STATE2 0;  
STATE3 0;STATE4 0

## 5.20 MEASure Group

### **:MEASure:CALCulation:ALL**

Function Turns ON/OFF all calculation items.  
Syntax :MEASure:CALCulation:ALL {<Boolean>}  
Example :MEASURE:CALCULATION:ALL ON

### **:MEASure:CALCulation:COUNT<x>?**

Function Queries the statistical processing count of the calculation item.  
Syntax :MEASure:CALCulation:COUNT<x>?  
<x> = 1 to 4  
Example :MEASURE:CALCULATION:COUNT1?  
-> :MEASURE:CALCULATION:COUNT1 1

### **:MEASure:CALCulation:DEFine<x>**

Function Sets the equation of the calculation item or queries the current setting.  
Syntax :MEASure:CALCulation:DEFine<x>  
{<String>}  
:MEASure:CALCulation:DEFine<x>?  
<x> = 1 to 4  
<String> = Up to 128 characters  
Example :MEASURE:CALCULATION:DEFINE1 "MAX(C1)"  
:MEASURE:CALCULATION:DEFINE1?  
-> :MEASURE:CALCULATION:  
DEFINE1 "MAX(C1)"

### **:MEASure:CALCulation:{MAXimum<x>| MEAN<x>|MINimum<x>|SDEviation<x>}?**

Function Queries the statistical value of the calculation item.  
Syntax :MEASure:CALCulation:{MAXimum<x>|  
MEAN<x>|MINimum<x>|SDEviation<x>}?  
<x> of MAXimum<x> = 1 to 4  
<x> of MEAN<x> = 1 to 4  
<x> of MINimum<x> = 1 to 4  
<x> of SDEviation<x> = 1 to 4  
Example (The following is an example for the maximum value.)  
:MEASURE:CALCULATION:MAXIMUM1?  
-> :MEASURE:CALCULATION:  
MAXIMUM1 1.000E+00

### **:MEASure:CALCulation:STATe<x>**

Function Turns ON/OFF the calculation item or queries the current setting.  
Syntax :MEASure:CALCulation:STATe<x>  
{<Boolean>}  
:MEASure:CALCulation:STATe<x>?  
<x> = 1 to 4  
Example :MEASURE:CALCULATION:STATE1 ON  
:MEASURE:CALCULATION:STATE1?  
-> :MEASURE:CALCULATION:STATE1 1

### **:MEASure:CALCulation:VALue<x>?**

Function Queries the automated measured value of the calculation item.  
Syntax :MEASure:CALCulation:VALue<x>? {<NRf>}  
<x> = 1 to 4  
<NRf> = 1 to 100000  
Example :MEASURE:CALCULATION:VALUE1?  
-> :MEASURE:CALCULATION:VALUE1 1.000E+00  
Description • If the measurement is not possible, "NAN (Not A Number)" is returned.  
• <NRf> indicates the nth automated measured value in the past.  
In the case of cycle statistical processing, specify the <NRf>th cycle from the left of the screen.  
To specify the oldest automated measured value, specify 1.  
If <NRf> is omitted, the latest automated measured value is specified.  
If the value corresponding to the relevant count is not present, "NAN" (Not A Number)" is returned.

### **:MEASure:CONTinuous?**

Function Queries all settings related to the continuous statistical processing.  
Syntax :MEASure:CONTinuous?  
Example :MEASURE:CONTINUOUS? -> :MEASURE:  
CONTINUOUS:COUNT 0

### **:MEASure:CONTinuous:COUNT**

Function Sets the continuous statistical processing count or queries the current setting.  
Syntax :MEASure:CONTinuous:COUNT {<NRf>}  
:MEASure:CONTinuous:COUNT?  
<NRf> = 0 to 100000  
Example :MEASURE:CONTINUOUS:COUNT 10  
:MEASURE:CONTINUOUS:COUNT? -> :MEASURE:  
CONTINUOUS:COUNT 10  
Description When <NRf> = 0, the maximum count that is possible under the current settings is automatically set.

### **:MEASure:CONTinuous:REStart**

Function Restarts the continuous statistical processing.  
Syntax :MEASure:CONTinuous:REStart  
Example :MEASURE:CONTINUOUS:RESTART  
Description Clears the previous statistical data.

### **:MEASure:CYCLe?**

Function Queries all settings related to the cycle statistical processing.  
Syntax :MEASure:CYCLe?  
Example :MEASURE:CYCLE? -> :MEASURE:CYCLE:  
TRACE 1

**:MEASure:CYCLE:ABORT**

Function Aborts the execution of the cycle statistical processing.

Syntax :MEASure:CYCLE:ABORT

Example :MEASURE:CYCLE:ABORT

**:MEASure:CYCLE:EXECute**

Function Executes the cycle statistical processing. This is an overlap command.

Syntax :MEASure:CYCLE:EXECute

Example :MEASURE:CYCLE:EXECUTE

Description Continues the operation without clearing the previous statistical data.

**:MEASure:CYCLE:TRACe**

Function Sets the cycle source trace of the continuous statistical processing count or queries the current setting.

Syntax :MEASure:CYCLE:TRACe {<NRf>|A<x>|B<x>|C<x>|D<x>}  
:MEASure:CYCLE:TRACe?  
<NRf> = 1 to 8  
<x> = 1 to 7

Example :MEASURE:CYCLE:TRACE 1  
:MEASURE:CYCLE:TRACE? -> :MEASURE:  
CYCLE:TRACE 1

Description For the SB5310, only {<NRf>|A<x>} are valid.

**:MEASure:DISPlay**

Function Turns ON/OFF the display of the automated measurement of waveform parameters or queries the current setting.

Syntax :MEASure:DISPlay {<Boolean>}  
:MEASure:DISPlay?

Example :MEASURE:DISPLAY ON  
:MEASURE:DISPLAY? -> :MEASURE:DISPLAY 1

**:MEASure:FLEXray?**

Function Queries all settings related to the FLEXRAY waveform parameters.

Syntax :MEASure:FLEXray?

Example :MEASURE:FLEXRAY? -> :MEASURE:FLEXRAY:  
BUS:BRATE 5000000;BSS:STATE 0;:MEASURE:  
FLEXRAY:BUS:BSSFES:STATE 0;:MEASURE:  
FLEXRAY:BUS:BSSFESID 1;BSSID 1;FBSS:  
STATE 0;:MEASURE:FLEXRAY:BUS:FBSSID 1;  
FTRACE 1;SPOINT 5.00E+00;TRACE1:  
HYSTERESIS 1.000000E+00;  
LEVEL 1.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE2:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE3:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE4:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE5:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE6:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE7:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE8:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
RECEIVER:RXD:BPBM:LEVEL 2.000E+00,  
1.000E+00;TRACE 1.....

**:MEASure:FLEXray:BUS?**

Function Queries all settings related to the FLEXRAY bus waveforms.

Syntax :MEASure:FLEXray:BUS?

Example :MEASURE:FLEXRAY:BUS? -> :MEASURE:  
FLEXRAY:BUS:BRATE 5000000;BSS:STATE 0;:  
MEASURE:FLEXRAY:BUS:BSSFES:STATE 0;:  
MEASURE:FLEXRAY:BUS:BSSFESID 1;BSSID 1;  
FBSS:STATE 0;:MEASURE:FLEXRAY:BUS:  
FBSSID 1;FTRACE 1;SPOINT 5.00E+00;  
TRACE1:HYSTERESIS 1.00000E+00;  
LEVEL 1.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE2:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE3:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE4:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE5:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE6:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE7:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00;:MEASURE:FLEXRAY:  
BUS:TRACE8:HYSTERESIS 600.000E-03;  
LEVEL 0.0000000E+00

## 5.20 MEASure Group

### **:MEASure:FLEXray:BUS:BRATe**

**Function** Sets the FLEXRAY bus waveform bit rate (data transfer rate) or queries the current setting.

**Syntax** :MEASure:FLEXray:BUS:BRATe {<NRf>}  
:MEASure:FLEXray:BUS:BRATe?  
<NRf> = 2500000, 5000000, 10000000

**Example** :MEASURE:FLEXRAY:BUS:BRATE 5000000  
:MEASURE:FLEXRAY:BUS:BRATE?  
-> :MEASURE:FLEXRAY:BUS:BRATE 5000000

### **:MEASure:FLEXray:BUS:<Parameter>?**

**Function** Queries all settings related to the FLEXRAY bus waveform parameters.

**Syntax** :MEASure:FLEXray:BUS:<Parameter>?  
<Parameter> = {BSS|BSSFES|FBSS}

**Example** (The following is an example with BSS.)  
:MEASURE:FLEXRAY:BUS:BSS?  
->:MEASURE:FLEXRAY:BUS:BSS:STATE 0

### **:MEASure:FLEXray:BUS:<Parameter>:**

#### **COUNT?**

**Function** Queries the count for continuous statistical processing of FLEXRAY bus waveform parameters.

**Syntax** :MEASure:FLEXray:BUS:<Parameter>:COUNT?  
<Parameter> = {BSS|BSSFES|FBSS}

**Example** (The following is an example with BSS.)  
:MEASURE:FLEXRAY:BUS:BSS:COUNT?  
->:MEASURE:FLEXRAY:BUS:BSS:COUNT 0

### **:MEASure:FLEXray:BUS:<Parameter>:**

#### **{MAXimum|MEAN|MINimum|SDEVIation}?**

**Function** Queries each statistical value of the FLEXRAY bus waveform parameters.

**Syntax** :MEASure:FLEXray:BUS:<Parameter>:  
{MAXimum|MEAN|MINimum|SDEVIation}?  
<Parameter> = {BSS|BSSFES|FBSS}

**Example** (The following is an example with BSS.)  
:MEASURE:FLEXRAY:BUS:BSS:MAXIMUM?  
->:MEASURE:FLEXRAY:BUS:BSS:  
MAXIMUM 1.000E+00

### **:MEASure:FLEXray:BUS:<Parameter>:STATe**

**Function** Turns ON/OFF FLEXRAY bus waveform parameters or queries the current setting.

**Syntax** :MEASure:FLEXray:BUS:<Parameter>:  
STATe {<Boolean>}  
:MEASure:FLEXray:BUS:<Parameter>:STATe?  
<Parameter> = {BSS|BSSFES|FBSS}

**Example** (The following is an example with BSS.)  
:MEASURE:FLEXRAY:BUS:BSS:STATE ON  
:MEASURE:FLEXRAY:BUS:BSS:STATE?  
->:MEASURE:FLEXRAY:BUS:BSS:STATE 1

### **:MEASure:FLEXray:BUS:<Parameter>:**

#### **VALue?**

**Function** Queries the automated measurement values of the FLEXRAY bus waveform parameters.

**Syntax** :MEASure:FLEXray:BUS:<Parameter>:VALue?  
{<NRf>}  
<Parameter> = {BSS|BSSFES|FBSS}  
<NRf> = 1 to 100000

**Example** (The following is an example with BSS.)  
:MEASURE:FLEXRAY:BUS:BSS:VALue?  
->:MEASURE:FLEXRAY:BUS:BSS:  
VALue 1.000E+00

**Description**• If measurement cannot be performed, NAN (Not A Number) is returned.

- <NRf> indicates the n'th automated measured value in the past. For cycle statistics, specify the <NRf>'th cycle from the left of the screen. To specify the oldest automated measured value, specify 1. If <NRf> is omitted, the most recent automated measured value is specified. If the value corresponding to the relevant count is not present, NAN (Not A Number) is returned.

### **:MEASure:FLEXray:BUS:BSSFESID**

**Function** Sets the BSSFES ID of the FLEXRAY bus waveform or queries the current setting.

**Syntax** :MEASure:FLEXray:BUS:  
BSSFESID {<NRf>|ALL}  
:MEASure:FLEXray:BUS:BSSFESID?  
<NRf> = 1 to 2047

**Example** :MEASURE:FLEXRAY:BUS:BSSFESID 1  
:MEASURE:FLEXRAY:BUS:BSSFESID?  
-> :MEASURE:FLEXRAY:BUS:BSSFESID 1

### **:MEASure:FLEXray:BUS:BSSID**

**Function** Sets the BSS ID of the FLEXRAY bus waveform or queries the current setting.

**Syntax** :MEASure:FLEXray:BUS:BSSID {<NRf>|ALL}  
:MEASure:FLEXray:BUS:BSSID?  
<NRf> = 1 to 2047

**Example** :MEASURE:FLEXRAY:BUS:BSSID 1  
:MEASURE:FLEXRAY:BUS:BSSID?  
-> :MEASURE:FLEXRAY:BUS:BSSID 1

### **:MEASure:FLEXray:BUS:FBSSID**

**Function** Sets the FBSS ID of the FLEXRAY bus waveform or queries the current setting.

**Syntax** :MEASure:FLEXray:BUS:FBSSID {<NRf>|ALL}  
:MEASure:FLEXray:BUS:FBSSID?  
<NRf> = 1 to 2047

**Example** :MEASURE:FLEXRAY:BUS:FBSSID 1  
:MEASURE:FLEXRAY:BUS:FBSSID?  
-> :MEASURE:FLEXRAY:BUS:FBSSID 1

**:MEASure:FLEXray:BUS:FTRace**

**Function** Sets the trace of the FLEXRAY bus waveform or queries the current setting.

**Syntax** :MEASure:FLEXray:BUS:FTRace {<NRf>}  
:MEASure:FLEXray:BUS:FTRace?  
<NRf> = 1 to 8

**Example** :MEASURE:FLEXRAY:BUS:FTRACE 1  
:MEASURE:FLEXRAY:BUS:FTRACE?  
-> :MEASURE:FLEXRAY:BUS:FTRACE 1

**:MEASure:FLEXray:BUS:SPOint**

**Function** Sets the sample point of the FLEXRAY bus waveform or queries the current setting.

**Syntax** :MEASure:FLEXray:BUS:SPOint {<NRf>}  
:MEASure:FLEXray:BUS:SPOint?  
<NRf> = 1 to 8

**Example** :MEASURE:FLEXRAY:BUS:SPOINT 5  
:MEASURE:FLEXRAY:BUS:SPOINT?  
-> :MEASURE:FLEXRAY:BUS:SPOINT 5.00E+00

**:MEASure:FLEXray:BUS:TRACe<x>?**

**Function** Queries all threshold levels and hysteresis settings of each trace of the FLEXRAY bus waveform.

**Syntax** :MEASure:FLEXray:BUS:TRACe<x>?  
<x> = 1 to 8

**Example** :MEASURE:FLEXRAY:BUS:TRACE1? ->  
:MEASURE:FLEXRAY:BUS:TRACE1:  
HYSTERESIS 1.000000E+00;LEVEL  
1.00000000E+00

**:MEASure:FLEXray:BUS:TRACe<x>:****HYSTeresis**

**Function** Sets the hysteresis of the threshold of each trace of the FLEXRAY bus waveform

**Syntax** :MEASure:FLEXray:BUS:TRACe<x>:  
HYSTeresis {<NRf>}  
:MEASure:FLEXray:BUS:TRACe<x>:  
HYSTeresis?  
<x> = 1 to 8  
<NRf> = 0 to 4(div)

**Example** :MEASURE:FLEXRAY:BUS:TRACE1:  
HYSTERESIS 1  
:MEASURE:FLEXRAY:BUS:TRACE1:HYSTERESIS?  
-> :MEASURE:FLEXRAY:BUS:TRACE1:  
HYSTERESIS 1.000000E+00

**:MEASure:FLEXray:BUS:TRACe<x>:LEVel**

**Function** Sets the Threshold level of each trace of the FLEXRAY bus waveform

**Syntax** :MEASure:FLEXray:BUS:TRACe<x>:  
LEVel {<NRf>|<Voltage>|<Current>}  
:MEASure:FLEXray:BUS:TRACe<x>:LEVel?  
<x> = 1 to 8  
<NRf>, <Voltage>, <Current> = See the SB5000  
User's Manual

**Example** :MEASURE:FLEXRAY:BUS:TRACE1:LEVEL 1  
:MEASURE:FLEXRAY:BUS:TRACE1:LEVEL?  
-> :MEASURE:FLEXRAY:BUS:TRACE1:LEVEL  
1.00000000E+00

**:MEASure:FLEXray:RECEiver?**

**Function** Queries all settings related to the FLEXRAY receiver waveform.

**Syntax** :MEASure:FLEXray:RECEiver?

**Example** :MEASURE:FLEXRAY:RECEIVER? -> :MEASURE:  
FLEXRAY:RECEIVER:RXD:BPBM:  
LEVEL 2.000E+00,1.000E+00;TRACE 1;:  
MEASURE:FLEXRAY:RECEIVER:RXD:DATA:  
LEVEL 2.000E+00,1.000E+00;TRACE 1;:  
MEASURE:FLEXRAY:RECEIVER:RXD:DBDRX01:  
STATE 0;:MEASURE:FLEXRAY:RECEIVER:  
RXD:DBDRX10:STATE 0;:MEASURE:FLEXRAY:  
RECEIVER:RXD:DRXASYM:STATE 0;:MEASURE:  
FLEXRAY:RECEIVER:RXEN:BPBM:  
LEVEL 2.000E+00,1.000E+00;TRACE 1;:  
MEASURE:FLEXRAY:RECEIVER:RXEN:DBDRXAI:  
STATE 0;:MEASURE:FLEXRAY:RECEIVER:  
RXEN:DBDRXIA:STATE 0;:MEASURE:FLEXRAY:  
RECEIVER:RXEN:ENABLE:LEVEL 2.000E+00,  
1.000E+00;TRACE 1

**:MEASure:FLEXray:RECEiver:RXD?**

**Function** Queries all settings related to the FLEXRAY receiver waveform data.

**Syntax** :MEASure:FLEXray:RECEiver:RXD?

**Example** :MEASURE:FLEXRAY:RECEIVER:RXD?  
-> :MEASURE:FLEXRAY:RECEIVER:RXD:BPBM:  
LEVEL 2.000E+00,1.000E+00;TRACE 1;:  
MEASURE:FLEXRAY:RECEIVER:RXD:DATA:  
LEVEL 2.000E+00,1.000E+00;TRACE 1;:  
MEASURE:FLEXRAY:RECEIVER:RXD:DBDRX01:  
STATE 0;:MEASURE:FLEXRAY:RECEIVER:  
RXD:DBDRX10:STATE 0;:MEASURE:FLEXRAY:  
RECEIVER:RXD:DRXASYM:STATE 0



## 5.20 MEASure Group

### **:MEASure:FLEXray:RECeiver:RXD:**

#### **<Parameter>?**

**Function** Queries all settings related to the of the FLEXRAY receiver waveform data parameters.

**Syntax** :MEASure:FLEXray:RECeiver:RXD:  
<Parameter>?  
<Parameter> = {DBDRX01|DBDRX10|DRXASYM}

**Example** (The following is an example with DBDRX01.)  
:MEASURE:FLEXRAY:RECEIVER:RXD:DBDRX01?  
->:MEASURE:FLEXRAY:RECEIVER:RXD:  
DBDRX01:STATE 0

### **:MEASure:FLEXray:RECeiver:RXD:**

#### **<Parameter>:COUNT?**

**Function** Queries the count for continuous statistical processing of the FLEXRAY receiver waveform data parameters.

**Syntax** :MEASure:FLEXray:RECeiver:RXD:  
<Parameter>:COUNT?  
<Parameter> = {DBDRX01|DBDRX10|DRXASYM}

**Example** (The following is an example with DBDRX01.)  
:MEASURE:FLEXRAY:RECEIVER:RXD:DBDRX01:  
COUNT? ->:MEASURE:FLEXRAY:RECEIVER:RXD:  
DBDRX01:COUNT 0

### **:MEASure:FLEXray:RECeiver:RXD:**

#### **<Parameter>:{MAXimum|MEAN|MINimum|SDEVIation}?**

**Function** Queries each statistical value of the FLEXRAY receiver waveform data parameters.

**Syntax** :MEASure:FLEXray:RECeiver:RXD:  
<Parameter>:{MAXimum|MEAN|MINimum|  
SDEVIation}?  
<Parameter> = {DBDRX01|DBDRX10|DRXASYM}

**Example** (The following is an example with DBDRX01.)  
:MEASURE:FLEXRAY:RECEIVER:RXD:DBDRX01:  
MAXIMUM? ->:MEASURE:FLEXRAY:RECEIVER:  
RXD:DBDRX01:MAXIMUM 1.000E+00

### **:MEASure:FLEXray:RECeiver:**

#### **RXD:<Parameter>:STATE**

**Function** Turns ON/OFF FLEXRAY receiver waveform data parameters.

**Syntax** :MEASure:FLEXray:RECeiver:RXD:  
<Parameter>:STATE {<Boolean>}  
:MEASure:FLEXray:RECeiver:RXD:  
<Parameter>:STATE?  
<Parameter> = {DBDRX01|DBDRX10|DRXASYM}

**Example** (The following is an example with DBDRX01.)  
:MEASURE:FLEXRAY:RECEIVER:RXD:DBDRX01:  
STATE ON  
:MEASURE:FLEXRAY:RECEIVER:RXD:DBDRX01:  
STATE? ->:MEASURE:FLEXRAY:RECEIVER:RXD:  
DBDRX01:STATE 1

### **:MEASure:FLEXray:RECeiver:RXD:**

#### **<Parameter>:VALue?**

**Function** Queries automated measurement values of the FLEXRAY receiver waveform data parameters.

**Syntax** :MEASure:FLEXray:RECeiver:RXD:  
<Parameter>:VALue? {<NRf>}  
<Parameter> = {DBDRX01|DBDRX10|DRXASYM}  
<NRf> = 1 to 10000

**Example** (The following is an example with DBDRX01.)  
:MEASURE:FLEXRAY:RECEIVER:RXD:DBDRX01:  
VALUE? ->:MEASURE:FLEXRAY:RECEIVER:RXD:  
DBDRX01:VALUE 1.000E+00

**Description**

- If measurement cannot be performed, NAN (Not A Number) is returned.
- <NRf> indicates the n'th automated measured value in the past. For cycle statistics, specify the <NRf>'th cycle from the left of the screen. To specify the oldest automated measured value, specify 1. If <NRf> is omitted, the most recent automated measured value is specified. If the value corresponding to the relevant count is not present, NAN (Not A Number) is returned.

### **:MEASure:FLEXray:RECeiver:RXD:BPBM?**

**Function** Queries all settings in BPBM of the FLEXRAY receiver waveform data.

**Syntax** :MEASure:FLEXray:RECeiver:RXD:BPBM?  
**Example** :MEASURE:FLEXRAY:RECEIVER:RXD:BPBM:  
-> :MEASURE:FLEXRAY:RECEIVER:RXD:BPBM:  
LEVEL 2.000E+00,1.000E+00;TRACE 1

### **:MEASure:FLEXray:RECeiver:RXD:BPBM: LeVel**

**Function** Queries the BPBM level of the FLEXRAY receiver waveform data.

**Syntax** :MEASure:FLEXray:RECeiver:RXD:BPBM:  
LeVel {<NRf>,<NRf>|<Voltage>,<Voltage>|  
<Current>|<Current>}  
:MEASure:FLEXray:RECeiver:RXD:BPBM:  
LeVel?

<NRf>,<Voltage>,<Current> = See the SB5000 User's Manual

**Example** :MEASURE:FLEXRAY:RECEIVER:RXD:BPBM:  
LEVEL 1,2  
:MEASURE:FLEXRAY:RECEIVER:RXD:BPBM:  
LEVEL? -> :MEASURE:FLEXRAY:RECEIVER:  
RXD:BPBM:LEVEL 2.000E+00,1.000E+00

**:MEASure:FLEXray:RECeiver:RXD:BPBM:****TRACe**

**Function** Queries the BPBM trace of the FLEXRAY receiver waveform data.

**Syntax** :MEASure:FLEXray:RECeiver:RXD:BPBM:  
TRACe {<Nrf>}  
:MEASure:FLEXray:RECeiver:RXD:BPBM:  
TRACe?  
<Nrf> = 1 to 8

**Example** :MEASURE:FLEXRAY:RECEIVER:RXD:BPBM:  
TRACE 1  
:MEASURE:FLEXRAY:RECEIVER:RXD:BPBM:  
TRACE? -> :MEASURE:FLEXRAY:RECEIVER:  
RXD:BPBM:TRACE 1

**:MEASure:FLEXray:RECeiver:RXD:DATA?**

**Function** Queries all settings in the FLEXRAY receiver waveform data.

**Syntax** :MEASure:FLEXray:RECeiver:RXD:DATA?

**Example** :MEASURE:FLEXRAY:RECEIVER:RXD:DATA?  
-> :MEASURE:FLEXRAY:RECEIVER:RXD:DATA:  
LEVEL 2.000E+00,1.000E+00;TRACE 1

**:MEASure:FLEXray:RECeiver:RXD:DATA:****LEVel**

**Function** Queries the level of the FLEXRAY receiver waveform data.

**Syntax** :MEASure:FLEXray:RECeiver:RXD:DATA:  
LEVel {<Nrf>,<Nrf>|<Voltage>,<Voltage>|  
<Current>|<Current>}  
:MEASure:FLEXray:RECeiver:RXD:DATA:  
LEVel?  
<Nrf>,<Voltage>,<Current> = See the SB5000  
User's Manual

**Example** :MEASURE:FLEXRAY:RECEIVER:RXD:DATA:  
LEVEL 1,2  
:MEASURE:FLEXRAY:RECEIVER:RXD:DATA:  
LEVEL? -> :MEASURE:FLEXRAY:RECEIVER:  
RXD:DATA:LEVEL 2.000E+00,1.000E+00

**:MEASure:FLEXray:RECeiver:RXD:DATA:****TRACe**

**Function** Queries the trace of the FLEXRAY receiver waveform data.

**Syntax** :MEASure:FLEXray:RECeiver:RXD:DATA:  
TRACe {<Nrf>}  
:MEASure:FLEXray:RECeiver:RXD:DATA:  
TRACe?  
<Nrf> = 1 to 8

**Example** :MEASURE:FLEXRAY:RECEIVER:RXD:DATA:  
TRACE 1  
:MEASURE:FLEXRAY:RECEIVER:RXD:DATA:  
TRACE? -> :MEASURE:FLEXRAY:RECEIVER:  
RXD:DATA:TRACE 1

**:MEASure:FLEXray:RECeiver:RXEN?**

**Function** Queries all settings related to the FLEXRAY receiver waveform enable data.

**Syntax** :MEASure:FLEXray:RECeiver:RXEN?

**Example** :MEASURE:FLEXRAY:RECEIVER:RXEN? ->  
:MEASURE:FLEXRAY:RECEIVER:RXEN:BPBM:  
LEVEL 2.000E+00,1.000E+00;TRACE 1;  
:MEASURE:FLEXRAY:RECEIVER:RXEN:DBDRXAI:  
STATE 0;:MEASURE:FLEXRAY:RECEIVER:  
RXEN:DBDRXIA:STATE 0;:MEASURE:FLEXRAY:  
RECEIVER:RXEN:ENABLE:LEVEL 2.000E+00,  
1.000E+00;TRACE 1

**:MEASure:FLEXray:RECeiver:RXEN:****<Parameter>?**

**Function** Queries all settings related to the FLEXRAY receiver waveform enable data parameters.

**Syntax** :MEASure:FLEXray:RECeiver:RXEN:  
<Parameter>?

**Example** (The following is an example with DBDRXAI.)  
:MEASURE:FLEXRAY:RECEIVER:RXEN:DBDRXAI?  
->:MEASURE:FLEXRAY:RECEIVER:RXEN:  
DBDRXAI:STATE 0

**:MEASure:FLEXray:RECeiver:RXEN:****<Parameter>:COUNT?**

**Function** Queries the count for continuous statistical processing of the FLEXRAY receiver waveform enable data parameters.

**Syntax** :MEASure:FLEXray:RECeiver:RXEN:  
<Parameter>:COUNT?  
<Parameter> = {DBDRXAI|DBDRXIA}

**Example** (The following is an example with DBDRXAI.)  
:MEASURE:FLEXRAY:RECEIVER:RXEN:DBDRXAI:  
COUNT? ->:MEASURE:FLEXRAY:RECEIVER:  
RXEN:DBDRXAI:COUNT 0

**:MEASure:FLEXray:RECeiver:RXEN:****<Parameter>:{MAXimum|MEAN|MINimum|SDEViation}?**

**Function** Queries each statistical value of the FLEXRAY receiver waveform enable data parameters.

**Syntax** :MEASure:FLEXray:RECeiver:RXEN:  
<Parameter>:{MAXimum|MEAN|MINimum|  
SDEVIation}?  
<Parameter> = {DBDRXAI|DBDRXIA}

**Example** (The following is an example with DBDRXAI.)  
:MEASURE:FLEXRAY:RECEIVER:RXEN:DBDRXAI:  
MAXIMUM? ->:MEASURE:FLEXRAY:RECEIVER:  
RXEN:DBDRXAI:MAXIMUM 1.000E+00

## 5.20 MEASure Group

### **:MEASure:FLEXray:RECeiver:RXEN:**

#### **<Parameter>:STATE**

**Function** Turns ON/OFF FLEXRAY receiver waveform enable data parameters.

**Syntax** :MEASure:FLEXray:RECeiver:RXEN:  
<Parameter>:STATE {<Boolean>}  
:MEASure:FLEXray:RECeiver:RXEN:  
<Parameter>:STATE?  
<Parameter> = {DBDRXAI|DBDRXIA}

**Example** (The following is an example with DBDRXAI.)  
:MEASURE:FLEXRAY:RECEIVER:RXEN:DBDRXAI:  
STATE ON  
:MEASURE:FLEXRAY:RECEIVER:RXEN:DBDRXAI:  
STATE? ->:MEASURE:FLEXRAY:RECEIVER:  
RXEN:DBDRXAI:STATE 1

### **:MEASure:FLEXray:RECeiver:RXEN:**

#### **<Parameter>:VALue?**

**Function** Queries automated measurement values of the FLEXRAY receiver waveform enable data parameters.

**Syntax** :MEASure:FLEXray:RECeiver:RXEN:  
<Parameter>:VALue? {<NRf>}  
<Parameter> = {DBDRXAI|DBDRXIA}  
<NRf> = 1 to 100000

**Example** (The following is an example with DBDRXAI.)  
:MEASURE:FLEXRAY:RECEIVER:RXEN:DBDRXAI:  
VALUE? ->:MEASURE:FLEXRAY:RECEIVER:  
RXEN:DBDRXAI:VALUE 1.000E+00

**Description**

- If measurement cannot be performed, NAN (Not A Number) is returned.
- <NRf> indicates the n'th automated measured value in the past. For cycle statistics, specify the <NRf>'th cycle from the left of the screen. To specify the oldest automated measured value, specify 1. If <NRf> is omitted, the most recent automated measured value is specified. If the value corresponding to the relevant count is not present, NAN (Not A Number) is returned.

### **:MEASure:FLEXray:RECeiver:RXEN:BPBM?**

**Function** Queries all settings in BPBM of the FLEXRAY receiver waveform enable data.

**Syntax** :MEASure:FLEXray:RECeiver:RXEN:BPBM?  
**Example** :MEASURE:FLEXRAY:RECEIVER:RXEN:BPBM?  
->:MEASURE:FLEXRAY:RECEIVER:RXEN:BPBM:  
LEVEL 2.000E+00,1.000E+00;TRACE 1

### **:MEASure:FLEXray:RECeiver:RXEN:BPBM:**

#### **LEVel**

**Function** Sets the BPBM level of the FLEXRAY receiver waveform enable data or queries the current setting.

**Syntax** :MEASure:FLEXray:RECeiver:RXEN:BPBM:  
LEVel {<NRf>,<NRf>|<Voltage>,<Voltage>|  
<Current>|<Current>}  
:MEASure:FLEXray:RECeiver:RXEN:BPBM:  
LEVel?  
<NRf>,<Voltage>,<Current> = See the SB5000  
User's Manual

**Example** :MEASURE:FLEXRAY:RECEIVER:RXEN:BPBM:  
LEVEL 1,2  
:MEASURE:FLEXRAY:RECEIVER:RXEN:BPBM:  
LEVEL? ->:MEASURE:FLEXRAY:RECEIVER:  
RXEN:BPBM:LEVEL 2.000E+00,1.000E+00

### **:MEASure:FLEXray:RECeiver:RXEN:BPBM:**

#### **TRACe**

**Function** Sets the BPBM trace of the FLEXRAY receiver waveform enable data or queries the current setting.

**Syntax** :MEASure:FLEXray:RECeiver:RXEN:BPBM:  
TRACe {<NRf>}  
:MEASure:FLEXray:RECeiver:RXEN:BPBM:  
TRACe?  
<NRf> = 1 to 8

**Example** :MEASURE:FLEXRAY:RECEIVER:RXEN:BPBM:  
TRACE 1  
:MEASURE:FLEXRAY:RECEIVER:RXEN:BPBM:  
TRACE? ->:MEASURE:FLEXRAY:RECEIVER:  
RXEN:BPBM:TRACE 1

### **:MEASure:FLEXray:RECeiver:RXEN:ENABle?**

**Function** Queries all settings in the FLEXRAY receiver waveform enable data.

**Syntax** :MEASure:FLEXray:RECeiver:RXEN:ENABle?  
**Example** :MEASURE:FLEXRAY:RECEIVER:RXEN:ENABle?  
->:MEASURE:FLEXRAY:RECEIVER:RXEN:  
ENABLE:LEVEL 2.000E+00,1.000E+00;  
TRACE 2

**:MEASure:FLEXray:RECeiver:RXEN:ENABLE:LEVEL**

**Function** Queries the level of the FLEXRAY receiver waveform enable data.

**Syntax** :MEASure:FLEXray:RECeiver:RXEN:ENABLE:LEVEL {<NRf>,<NRf>|<Voltage>,<Voltage>|<Current>|<Current>}  
:MEASure:FLEXray:RECeiver:RXEN:ENABLE:LEVEL? <NRf>,<Voltage>,<Current> = See the SB5000 User's Manual

**Example** :MEASURE:FLEXRAY:RECEIVER:RXEN:ENABLE:LEVEL 1,2  
:MEASURE:FLEXRAY:RECEIVER:RXEN:ENABLE:LEVEL? -> :MEASURE:FLEXRAY:RECEIVER:RXEN:ENABLE:LEVEL 2.000E+00,1.000E+00

**:MEASure:FLEXray:RECeiver:RXEN:ENABLE:TRACe**

**Function** Queries the trace of the FLEXRAY receiver waveform enable data.

**Syntax** :MEASure:FLEXray:RECeiver:RXEN:ENABLE:TRACe {<NRf>}  
:MEASure:FLEXray:RECeiver:RXEN:ENABLE:TRACe?  
<NRf> = 1 to 8

**Example** :MEASURE:FLEXRAY:RECEIVER:RXEN:ENABLE:TRACE 1  
:MEASURE:FLEXRAY:RECEIVER:RXEN:ENABLE:TRACE? -> :MEASURE:FLEXRAY:RECEIVER:RXEN:ENABLE:TRACE 1

**:MEASure:FLEXray:STATistics**

**Function** Turns ON/OFF statistics mode of the FLEXRAY waveform parameters or queries the current setting.

**Syntax** :MEASure:FLEXray:STATistics {<Boolean>}  
:MEASure:FLEXray:STATistics?

**Example** :MEASURE:FLEXRAY:STATISTICS ON  
:MEASURE:FLEXRAY:STATISTICS?  
-> :MEASURE:FLEXRAY:STATISTICS 1

**:MEASure:FLEXray:TRANSmitter?**

**Function** Queries all settings related to the FLEXRAY transmitter waveform.

**Syntax** :MEASure:FLEXray:TRANSmitter?

**Example** :MEASURE:FLEXRAY:TRANSMITTER? ->  
:MEASURE:FLEXRAY:TRANSMITTER:TXD:BPBM:DPROXIMAL 90,10;LEVEL 2.000E+00,1.000E+00;TRACE 1;:MEASURE:FLEXRAY:TRANSMITTER:TXD:DATA:LEVEL 2.000E+00,1.000E+00;TRACE 1;:MEASURE:FLEXRAY:TRANSMITTER:TXD:DBDTX01:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXD:DBDTX10:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXD:DBUSTX01:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXD:DBUSTX10:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXD:DTXASYM:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXD:UBDTX:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXEN:BPBM:LEVEL 2.000E+00,1.000E+00;TRACE 1;:MEASURE:FLEXRAY:TRANSMITTER:TXEN:DBDTXAI:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXEN:DBDTXIA:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXEN:DBUSTXAI:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXEN:DBUSTXIA:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXEN:ENABLE:LEVEL 2.000E+00,1.000E+00;TRACE 1

**:MEASure:FLEXray:TRANSmitter:TXD?**

**Function** Queries all settings related to the FLEXRAY transmitter waveform data.

**Syntax** :MEASure:FLEXray:TRANSmitter:TXD?

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXD? ->  
:MEASURE:FLEXRAY:TRANSMITTER:TXD:BPBM:DPROXIMAL 90,10;LEVEL 2.000E+00,1.000E+00;TRACE 1;:MEASURE:FLEXRAY:TRANSMITTER:TXD:DATA:LEVEL 2.000E+00,1.000E+00;TRACE 1;:MEASURE:FLEXRAY:TRANSMITTER:TXD:DBDTX01:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXD:DBDTX10:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXD:DBUSTX01:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXD:DBUSTX10:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXD:DTXASYM:STATE 0;:MEASURE:FLEXRAY:TRANSMITTER:TXD:UBDTX:STATE 0

## 5.20 MEASure Group

### **:MEASure:FLEXray:TRANsmitter:TXD:**

#### **<Parameter>?**

**Function** Queries all settings related to the FLEXRAY transmitter waveform data parameters.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXD:  
<Parameter>?  
<Parameter> = {DBDTX01|DBDTX10|DBUSTX01|DBUSTX10|DTXASYM|UBDTX}

**Example** (The following is an example with DBDTX01.)  
:MEASURE:FLEXRAY:TRANSMITTER:  
TXD:DBDTX01? ->:MEASURE:FLEXRAY:  
TRANSMITTER:TXD:DBDTX01:STATE 0

### **:MEASure:FLEXray:TRANsmitter:TXD:**

#### **<Parameter>:COUNT?**

**Function** Queries the count for continuous statistical processing of the FLEXRAY transmitter waveform data parameters.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXD:  
<Parameter>:COUNT?  
<Parameter> = {DBDTX01|DBDTX10|DBUSTX01|DBUSTX10|DTXASYM|UBDTX}

**Example** (The following is an example with DBDTX01.)  
:MEASURE:FLEXRAY:TRANSMITTER:TXD:  
DBDTX01:COUNT? ->:MEASURE:FLEXRAY:  
TRANSMITTER:TXD:DBDTX01:COUNT 0

### **:MEASure:FLEXray:TRANsmitter:TXD:**

#### **<Parameter>:{MAXimum|MEAN|MINimum|SDEVIation}?**

**Function** Queries each statistical value of the FLEXRAY transmitter waveform data parameters.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXD:  
<Parameter>:{MAXimum|MEAN|MINimum|SDEVIation}?  
<Parameter> = {DBDTX01|DBDTX10|DBUSTX01|DBUSTX10|DTXASYM|UBDTX}

**Example** (The following is an example with DBDTX01.)  
:MEASURE:FLEXRAY:TRANSMITTER:TXD:  
DBDTX01:MAXIMUM? ->:MEASURE:FLEXRAY:  
TRANSMITTER:TXD:DBDTX01:  
MAXIMUM 1.000E+00

### **:MEASure:FLEXray:TRANsmitter:TXD:**

#### **<Parameter>:STATE**

**Function** Turns ON/OFF FLEXRAY transmitter waveform data parameters.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXD:  
<Parameter>:STATE {<Boolean>}  
:MEASure:FLEXray:TRANsmitter:TXD:  
<Parameter>:STATE?  
<Parameter> = {DBDTX01|DBDTX10|DBUSTX01|DBUSTX10|DTXASYM|UBDTX}

**Example** (The following is an example with DBDTX01.)  
:MEASURE:FLEXRAY:TRANSMITTER:TXD:  
DBDTX01:STATE ON  
:MEASURE:FLEXRAY:TRANSMITTER:TXD:  
DBDTX01:STATE? ->:MEASURE:FLEXRAY:  
TRANSMITTER:TXD:DBDTX01:STATE 1

### **:MEASure:FLEXray:TRANsmitter:TXD:**

#### **<Parameter>:VALue?**

**Function** Queries automated measurement values of the FLEXRAY transmitter waveform data parameters.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXD:  
<Parameter>:VALue? {<NRf>}  
<Parameter> = {DBDTX01|DBDTX10|DBUSTX01|DBUSTX10|DTXASYM|UBDTX}  
<NRf> = 1 to 100000

**Example** (The following is an example with DBDTX01.)  
:MEASURE:FLEXRAY:TRANSMITTER:TXD:  
DBDTX01:VALUE? ->:MEASURE:FLEXRAY:  
TRANSMITTER:TXD:DBDTX01:VALUE 1.000E+00

**Description**

- If measurement cannot be performed, NAN (Not A Number) is returned.
- <NRf> indicates the n'th automated measured value in the past. For cycle statistics, specify the <NRf>'th cycle from the left of the screen. To specify the oldest automated measured value, specify 1. If <NRf> is omitted, the most recent automated measured value is specified. If the value corresponding to the relevant count is not present, NAN (Not A Number) is returned.

### **:MEASure:FLEXray:TRANsmitter:TXD:BPBM?**

**Function** Queries all settings in BPBM of the FLEXRAY transmitter waveform data.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXD:BPBM?  
**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXD:BPBM?  
-> :MEASURE:FLEXRAY:TRANSMITTER:TXD:  
BPBM:DPROXIMAL 90,10;LEVEL 2.000E+00,  
1.000E+00;TRACE 1

**:MEASure:FLEXray:TRANsmitter:TXD:BPBM:DPROximal**

**Function** Sets the BPBM distal/proximal value of the FLEXRAY transmitter waveform data or queries the current setting.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXD:BPBM:DPROximal {<NRf>,<NRf>}  
:MEASure:FLEXray:TRANsmitter:TXD:BPBM:DPROximal?

<NRf> = 0 to 100(%)

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXD:BPBM:DPROXIMAL 10,90  
:MEASURE:FLEXRAY:TRANSMITTER:TXD:BPBM:DPROXIMAL? -> :MEASURE:FLEXRAY:TRANSMITTER:TXD:BPBM:DPROXIMAL 90,10

**:MEASure:FLEXray:TRANsmitter:TXD:BPBM:LEVEL**

**Function** Sets the BPBM level of the FLEXRAY transmitter waveform data or queries the current setting.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXD:BPBM:LEVEL {<NRf>,<NRf>|<Voltage>,<Voltage>|<Current>|<Current>}  
:MEASure:FLEXray:TRANsmitter:TXD:BPBM:LEVEL?

<NRf>,<Voltage>,<Current> = See the SB5000 User's Manual

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXD:BPBM:LEVEL 1,2  
:MEASURE:FLEXRAY:TRANSMITTER:TXD:BPBM:LEVEL? -> :MEASURE:FLEXRAY:TRANSMITTER:TXD:BPBM:LEVEL 2.000E+00,1.000E+00

**:MEASure:FLEXray:TRANsmitter:TXD:BPBM:TRACe**

**Function** Sets the BPBM trace of the FLEXRAY transmitter waveform data or queries the current setting.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXD:BPBM:TRACe {<NRf>}  
:MEASure:FLEXray:TRANsmitter:TXD:BPBM:TRACe?

<NRf> = 1 to 8

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXD:BPBM:TRACE 1  
:MEASURE:FLEXRAY:TRANSMITTER:TXD:BPBM:TRACE? -> :MEASURE:FLEXRAY:TRANSMITTER:TXD:BPBM:TRACE 1

**:MEASure:FLEXray:TRANsmitter:TXD:DATA?**

**Function** Queries all settings in the FLEXRAY transmitter waveform data.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXD:DATA?  
**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXD:DATA? -> :MEASURE:FLEXRAY:TRANSMITTER:TXD:DATA:LEVEL 2.000E+00,1.000E+00;TRACE 1

**:MEASure:FLEXray:TRANsmitter:TXD:DATA:LEVEL**

**Function** Sets the level of the FLEXRAY transmitter waveform data.  
**Syntax** :MEASure:FLEXray:TRANsmitter:TXD:DATA:

LEVEL {<NRf>,<NRf>|<Voltage>,<Voltage>|<Current>|<Current>}

:MEASure:FLEXray:TRANsmitter:TXD:DATA:LEVEL?

<NRf>,<Voltage>,<Current> = See the SB5000 User's Manual

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXD:DATA:LEVEL 1,2  
:MEASURE:FLEXRAY:TRANSMITTER:TXD:DATA:LEVEL? -> :MEASURE:FLEXRAY:TRANSMITTER:TXD:DATA:LEVEL 2.000E+00,1.000E+00

**:MEASure:FLEXray:TRANsmitter:TXD:DATA:TRACe**

**Function** Sets the trace of the FLEXRAY transmitter waveform data or queries the current setting.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXD:DATA:TRACe {<NRf>}  
:MEASure:FLEXray:TRANsmitter:TXD:DATA:TRACe?

<NRf> = 1 to 8

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXD:DATA:TRACE 1  
:MEASURE:FLEXRAY:TRANSMITTER:TXD:DATA:TRACE? -> :MEASURE:FLEXRAY:TRANSMITTER:TXD:DATA:TRACE 1

## 5.20 MEASure Group

### **:MEASure:FLEXray:TRANsmitter:TXEN?**

**Function** Queries all settings related to the FLEXRAY transmitter enable data.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXEN?

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXEN? ->  
:MEASURE:FLEXRAY:TRANSMITTER:TXEN:BPBM:  
LEVEL 2.000E+00,1.000E+00;TRACE 1;:  
MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
DBDTXAI:STATE 0;:MEASURE:FLEXRAY:  
TRANSMITTER:TXEN:DBDTXIA:STATE 0;:  
MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
DBUSTXAI:STATE 0;:MEASURE:FLEXRAY:  
TRANSMITTER:TXEN:DBUSTXIA:STATE 0;:  
MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
ENABLE:LEVEL 2.000E+00,1.000E+00;  
TRACE 1

### **:MEASure:FLEXray:TRANsmitter:TXEN:**

#### **<Parameter>?**

**Function** Queries all settings related to the FLEXRAY transmitter waveform enable data parameters.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXEN:

<Parameter>?  
<Parameter> = {DBDTXAI|DBDTXIA|DBUSTXAI|  
DBUSTXIA}

**Example** (The following is an example with DBDTXAI.)  
:MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
DBDTXAI? ->:MEASURE:FLEXRAY:  
TRANSMITTER:TXEN:DBDTXAI:STATE 0

### **:MEASure:FLEXray:TRANsmitter:TXEN:**

#### **<Parameter>:COUNT?**

**Function** Queries the count for continuous statistical processing of FLEXRAY transmitter waveform enable data parameters.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXEN:

<Parameter>:COUNT?  
<Parameter> = {DBDTXAI|DBDTXIA|DBUSTXAI|  
DBUSTXIA}

**Example** (The following is an example with DBDTXAI.)  
:MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
DBDTXAI:COUNT? ->:MEASURE:FLEXRAY:  
TRANSMITTER:TXEN:DBDTXAI:COUNT 0

### **:MEASure:FLEXray:TRANsmitter:TXEN:**

#### **<Parameter>:{MAXimum|MEAN|MINimum|SDEVIation}?**

**Function** Queries each statistical value of the FLEXRAY transmitter waveform enable data parameters.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXEN:

<Parameter>:{MAXimum|MEAN|MINimum|  
SDEVIation}?

<Parameter> = {DBDTXAI|DBDTXIA|DBUSTXAI|  
DBUSTXIA}

**Example** (The following is an example with DBDTXAI.)  
:MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
DBDTXAI:MAXIMUM? ->:MEASURE:FLEXRAY:  
TRANSMITTER:TXEN:DBDTXAI:  
MAXIMUM 1.000E+00

### **:MEASure:FLEXray:TRANsmitter:TXEN:**

#### **<Parameter>:STATE**

**Function** Turns ON/OFF FLEXRAY transmitter waveform enable data parameters.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXEN:

<Parameter>:STATE {<Boolean>}

:MEASure:FLEXray:TRANsmitter:

TXEN:<Parameter>:STATE?

<Parameter> = {DBDTXAI|DBDTXIA|DBUSTXAI|  
DBUSTXIA}

**Example** (The following is an example with DBDTXAI.)  
:MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
DBDTXAI:STATE ON  
:MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
DBDTXAI:STATE? ->:MEASURE:FLEXRAY:  
TRANSMITTER:TXEN:DBDTXAI:STATE 1

**:MEASure:FLEXray:TRANsmitter:TXEN:****<Parameter>:VALue?**

**Function** Queries automated measurement values of the FLEXRAY transmitter waveform enable data parameters.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXEN:  
<Parameter>:VALue? {<NRf>}  
<Parameter> = {DBDTXAI|DBDTXIA|DBUSTXAI|  
DBUSTXIA}  
<NRf> = 1 to 100000

**Example** (The following is an example with DBDTXAI.)  
:MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
DBDTXAI:VALUE? ->:MEASURE:FLEXRAY:  
TRANSMITTER:TXEN:DBDTXAI:VALUE  
1.000E+00

**Description**

- If measurement cannot be performed, NAN (Not A Number) is returned.
- <NRf> indicates the n'th automated measured value in the past. For cycle statistics, specify the <NRf>'th cycle from the left of the screen. To specify the oldest automated measured value, specify 1. If <NRf> is omitted, the most recent automated measured value is specified. If the value corresponding to the relevant count is not present, NAN (Not A Number) is returned.

**:MEASure:FLEXray:TRANsmitter:TXEN:****BPBM?**

**Function** Queries all settings in BPBM of the FLEXRAY transmitter waveform enable data.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXEN:BPBM?

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXEN:BPBM?  
->:MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
BPBM:LEVEL 2.000E+00,1.000E+00;TRACE 1

**:MEASure:FLEXray:TRANsmitter:TXEN:****BPBM:LEVel**

**Function** Sets the BPBM level of the FLEXRAY transmitter waveform enable data or queries the current setting.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXEN:BPBM:  
LEVel {<NRf>,<NRf>|<Voltage>,<Voltage>|  
<Current>|<Current>}  
:MEASure:FLEXray:TRANsmitter:TXEN:BPBM:  
LEVel?  
<NRf>,<Voltage>,<Current> = See the SB5000  
User's Manual

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXEN:BPBM:  
LEVEL 1,2  
:MEASURE:FLEXRAY:TRANSMITTER:TXEN:BPBM:  
LEVEL? ->:MEASURE:FLEXRAY:TRANSMITTER:  
TXEN:BPBM:LEVEL 2.000E+00,1.000E+00

**:MEASure:FLEXray:TRANsmitter:TXEN:****BPBM:TRACe**

**Function** Sets the BPBM trace of the FLEXRAY transmitter waveform enable data or queries the current setting.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXEN:BPBM:  
TRACe {<NRf>}  
:MEASure:FLEXray:TRANsmitter:TXEN:BPBM:  
TRACe?  
<NRf> = 1 to 8

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXEN:BPBM:  
TRACE 1  
:MEASURE:FLEXRAY:TRANSMITTER:TXEN:BPBM:  
TRACE? ->:MEASURE:FLEXRAY:TRANSMITTER:  
TXEN:BPBM:TRACE 1

**:MEASure:FLEXray:TRANsmitter:TXEN:****ENABle?**

**Function** Queries all settings in the FLEXRAY transmitter waveform enable data.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXEN:  
ENABle?

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
ENABle? ->:MEASURE:FLEXRAY:  
TRANSMITTER:TXEN:ENABle:  
LEVEL 2.000E+00,1.000E+00;TRACE 1

**:MEASure:FLEXray:TRANsmitter:TXEN:****ENABle:LEVel**

**Function** Sets the level of the FLEXRAY transmitter waveform enable data.

**Syntax** :MEASure:FLEXray:TRANsmitter:TXEN:  
ENABle:LEVel {<NRf>,<NRf>|<Voltage>,  
<Voltage>|<Current>|<Current>}  
:MEASure:FLEXray:TRANsmitter:TXEN:  
ENABle:LEVel?  
<NRf>,<Voltage>,<Current> = See the SB5000  
User's Manual

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
ENABle:LEVEL 1,2  
:MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
ENABle:LEVEL? ->:MEASURE:FLEXRAY:  
TRANSMITTER:TXEN:ENABle:  
LEVEL 2.000E+00,1.000E+00



## 5.20 MEASure Group

### **:MEASure:FLEXray:TRANSMITTER:TXEN:**

#### **ENABLE:TRACe**

**Function** Sets the trace of the FLEXRAY transmitter waveform enable data.

**Syntax** :MEASure:FLEXray:TRANSMITTER:TXEN:  
ENABLE:TRACe {<NRf>}  
:MEASure:FLEXray:TRANSMITTER:TXEN:  
ENABLE:TRACe?  
<NRf> = 1 to 8

**Example** :MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
ENABLE:TRACE 1  
:MEASURE:FLEXRAY:TRANSMITTER:TXEN:  
ENABLE:TRACE? -> :MEASURE:FLEXRAY:  
TRANSMITTER:TXEN:ENABLE:TRACE 1

### **:MEASure:FLEXray:TYPE**

**Function** Queries the type of the FLEXRAY waveform parameters.

**Syntax** :MEASure:FLEXray:TYPE {BUS|RECeiver|  
TRANSMITTER}  
:MEASure:FLEXray:TYPE?

**Example** :MEASURE:FLEXRAY:TYPE BUS  
:MEASURE:FLEXRAY:TYPE?  
-> :MEASURE:FLEXRAY:TYPE BUS

### **:MEASure:HISTory:ABORT**

**Function** Aborts the execution of the statistical processing of the history data.

**Syntax** :MEASure:HISTory:ABORT  
**Example** :MEASURE:HISTORY:ABORT

### **:MEASure:HISTory:EXECute**

**Function** Executes the statistical processing of the history data. This is an overlap command.

**Syntax** :MEASure:HISTory:EXECute  
**Example** :MEASURE:HISTORY:EXECUTE

### **:MEASure:MODE**

**Function** Sets the mode of the automated measurement of waveform parameters or queries the current setting.

**Syntax** :MEASure:MODE {BASic|CONTinuous|CYCLE|  
HISTory}  
:MEASure:MODE?

**Example** :MEASURE:MODE BASIC  
:MEASURE:MODE? -> :MEASURE:MODE BASIC

### **:MEASure:THReshold?**

**Function** Queries all settings related to the threshold levels of the automated measurement of waveform parameters.

**Syntax** :MEASure:THReshold?

**Example** :MEASURE:THRESHOLD? -> :MEASURE:  
THRESHOLD:TRACE1:AUTO PTOPEAK;  
LHYSTERESIS:HYSSTERESIS 1.000E+00;  
LEVEL 0.000E+00;:MEASURE:THRESHOLD:  
TRACE1:MODE AUTO;ULOWER:  
RANGE 2.000E+00,1.000E+00;:MEASURE:  
THRESHOLD:TRACE2:AUTO PTOPEAK;  
LHYSTERESIS:HYSSTERESIS 1.000E+00;  
LEVEL 0.000E+00;:MEASURE:THRESHOLD:  
TRACE2:MODE AUTO;ULOWER:  
RANGE 2.000E+00,1.000E+00;:MEASURE:  
THRESHOLD:TRACE3:AUTO PTOPEAK;  
LHYSTERESIS:HYSSTERESIS 1.000E+00;  
LEVEL 0.000E+00;:MEASURE:THRESHOLD:  
TRACE3:MODE AUTO;ULOWER:  
RANGE 2.000E+00,1.000E+00;:MEASURE:  
THRESHOLD:TRACE4:AUTO PTOPEAK;  
LHYSTERESIS:HYSSTERESIS 1.000E+00;  
LEVEL 0.000E+00;:MEASURE:THRESHOLD:  
TRACE4:MODE AUTO;ULOWER:  
RANGE 2.000E+00,1.000E+00;:MEASURE:  
THRESHOLD:TRACE5:AUTO PTOPEAK;  
LHYSTERESIS:HYSSTERESIS 1.000E+00;  
LEVEL 0.000E+00;:MEASURE:THRESHOLD:  
TRACE5:MODE AUTO;ULOWER:  
RANGE 2.000E+00,1.000E+00;:MEASURE:  
THRESHOLD:TRACE6:AUTO PTOPEAK;  
LHYSTERESIS:HYSSTERESIS 1.000E+00;  
LEVEL 0.000E+00;:MEASURE:THRESHOLD:  
TRACE6:MODE AUTO;ULOWER:RANGE . . . . .

**Description** This command is valid when the <Parameter> of :MEASure:TRACe<x>:AREA<x>:<Parameter> is not RISE or FALL.

**:MEASure:THReshold:TRACe<x>?**

Function Queries the threshold levels of the trace.

Syntax :MEASure:THReshold:TRACe<x>?  
<x> = 1 to 8

Example :MEASURE:THRESHOLD:TRACE1? -> :MEASURE:  
THRESHOLD:TRACE1:AUTO PTOPEAK;  
LHYSTERESIS:HYSTERESIS 1.000E+00;  
LEVEL 0.000E+00; :MEASURE:THRESHOLD:  
TRACE1:MODE AUTO;ULOWER:  
RANGE 1.000E+00,2.000E+00

Description This command is valid when the <Parameter> of  
:MEASure:TRACe<x>:AREA<x>:<Parameter> is not  
RISE or FALL.

**:MEASure:THReshold:TRACe<x>:AUTO**

Function Sets the detection mode when the auto setting of  
the threshold level is enabled or queries the current  
setting.

Syntax :MEASure:THReshold:TRACe<x>:AUTO {HLOW|  
PTOPeak}  
:MEASure:THReshold:TRACe<x>:AUTO?  
<x> = 1 to 8

Example :MEASURE:THRESHOLD:TRACE1:AUTO PTOPEAK  
:MEASURE:THRESHOLD:TRACE1:AUTO?  
-> :MEASURE:THRESHOLD:TRACE1:  
AUTO PTOPEAK

Description This command is valid when the <Parameter> of  
:MEASure:TRACe<x>:AREA<x>:<Parameter> is not  
RISE or FALL.

**:MEASure:THReshold:TRACe<x>:****LHYSteresis?**

Function Queries all settings related to the level and hysteresis  
of the threshold level.

Syntax :MEASure:THReshold:TRACe<x>:  
LHYSteresis?  
<x> = 1 to 8

Example :MEASURE:THRESHOLD:TRACE1:LHYSTERESIS?  
-> :MEASURE:THRESHOLD:TRACE1:  
LHYSTERESIS:HYSTERESIS 1.000E+00;  
LEVEL 0.000E+00

Description This command is valid when the <Parameter> of  
:MEASure:TRACe<x>:AREA<x>:<Parameter> is not  
RISE or FALL.

**:MEASure:THReshold:TRACe<x>:****LHYSteresis:HYSTEResis**

Function Sets the hysteresis of the threshold level or queries  
the current setting.

Syntax :MEASure:THReshold:TRACe<x>:  
LHYSteresis:HYSTEResis {<Nrf>}  
:MEASure:THReshold:TRACe<x>:  
LHYSteresis:HYSTEResis?  
<x> = 1 to 8  
<Nrf> = 0 to 4 (div)

Example :MEASURE:THRESHOLD:TRACE1:LHYSTERESIS:  
HYSTERESIS 1  
:MEASURE:THRESHOLD:TRACE1:LHYSTERESIS:  
HYSTERESIS? -> :MEASURE:THRESHOLD:  
TRACE1:LHYSTERESIS:HYSTERESIS 1.000E+00

Description This command is valid when the <Parameter> of  
:MEASure:TRACe<x>:AREA<x>:<Parameter> is not  
RISE or FALL.

**:MEASure:THReshold:TRACe<x>:****LHYSteresis:LEVel**

Function Sets the level of the threshold level or queries the  
current setting.

Syntax :MEASure:THReshold:TRACe<x>:  
LHYSteresis:LEVel {<Nrf>|<Voltage>|  
<Current>}  
:MEASure:THReshold:TRACe<x>:  
LHYSteresis:LEVel?  
<x> = 1 to 8  
<Nrf>, <Voltage>, and <Current> = See the SB5000  
User's Manual.

Example :MEASURE:THRESHOLD:TRACE1:LHYSTERESIS:  
LEVEL 1  
:MEASURE:THRESHOLD:TRACE1:LHYSTERESIS:  
LEVEL? -> :MEASURE:THRESHOLD:TRACE1:  
LHYSTERESIS:LEVEL 1.000E+00

Description This command is valid when the <Parameter> of  
:MEASure:TRACe<x>:AREA<x>:<Parameter> is not  
RISE or FALL.

**:MEASure:THReshold:TRACe<x>:MODE**

Function Sets the setup mode of the threshold level or queries  
the current setting.

Syntax :MEASure:THReshold:TRACe<x>:MODE {AUTO|  
LHYSteresis|ULOWer}  
:MEASure:THReshold:TRACe<x>:MODE?  
<x> = 1 to 8

Example :MEASURE:THRESHOLD:TRACE1:  
MODE LHYSTERESIS  
:MEASURE:THRESHOLD:TRACE1:MODE?  
-> :MEASURE:THRESHOLD:TRACE1:  
MODE LHYSTERESIS

Description This command is valid when the <Parameter> of  
:MEASure:TRACe<x>:AREA<x>:<Parameter> is not  
RISE or FALL.

## 5.20 MEASure Group

### **:MEASure:THReshold:TRACe<x>:ULOWer?**

**Function** Queries all settings related to the upper and lower limits of the threshold level.

**Syntax** :MEASure:THReshold:TRACe<x>:ULOWer?  
<x> = 1 to 8

**Example** :MEASURE:THRESHOLD:TRACE1:ULOWER?  
-> :MEASURE:THRESHOLD:TRACE1:ULOWER:  
RANGE 2.000E+00,1.000E+00

**Description** This command is valid when the <Parameter> of :MEASure:TRACe<x>:AREA<x>:<Parameter> is not RISE or FALL.

### **:MEASure:THReshold:TRACe<x>:ULOWer:**

#### **RANGE**

**Function** Sets the upper and lower limits of the threshold level or queries the current setting.

**Syntax** :MEASure:THReshold:TRACe<x>:ULOWer:  
RANGE { (<NRf>, <NRf> ) |  
( <Voltage>, <Voltage> ) |  
( <Current>, <Current> ) }  
:MEASure:THReshold:TRACe<x>:ULOWer:  
RANGE?  
<x> = 1 to 8  
<NRf>, <Voltage>, and <Current> = See the SB5000 User's Manual.

**Example** :MEASURE:THRESHOLD:TRACE1:ULOWER:  
RANGE 1,2  
:MEASURE:THRESHOLD:TRACE1:ULOWER:RANGE?  
-> :MEASURE:THRESHOLD:TRACE1:ULOWER:  
RANGE 2.000E+00,1.000E+00

**Description** This command is valid when the <Parameter> of :MEASure:TRACe<x>:AREA<x>:<Parameter> is not RISE or FALL.

### **:MEASure:TRACe<x>?**

**Function** Queries all settings related to the trace.

**Syntax** :MEASure:TRACe<x>?  
<x> = 1 to 8

**Example** :MEASURE:TRACE1? ->: MEASURE:TRACE1:  
AREA1:BURST:STATE 0;:MEASURE:TRACE1:  
AREA1:CMEAN:STATE 0;:MEASURE:TRACE1:  
AREA1:CMODE 0;COUNT:STATE 0;:MEASURE:  
TRACE1:AREA1:CRMS:STATE 0;:MEASURE:  
TRACE1:AREA1:CSDEVIATION:STATE 0;:  
MEASURE:TRACE1:AREA1:DELAY:MEASURE:  
COUNT 1;POLARITY RISE;:MEASURE:TRACE1:  
AREA1:DELAY:REFERENCE:COUNT 1;  
POLARITY RISE;TRACE 1;:MEASURE:TRACE1:  
AREA1:DELAY:SOURCE TRIGGER;STATE 0;:  
MEASURE:TRACE1:AREA1:DPROXIMAL:  
MODE PERCENT;PERCENT 10,90;  
UNIT -3.0000000E+00,3.0000000E+00;:  
MEASURE:TRACE1:AREA1:DT:STATE 0;:  
MEASURE:TRACE1:AREA1:DUTYCYCLE:  
STATE 0;:MEASURE:TRACE1:AREA1:FALL:  
STATE 0;:MEASURE:TRACE1:AREA1:  
FREQUENCY:STATE 0;:MEASURE:TRACE1:  
AREA1:HIGH:STATE 0;:MEASURE:TRACE1:  
AREA1:HILOW:STATE 0;:MEASURE:TRACE1:  
AREA1:LOW:STATE 0;:MEASURE:TRACE1:  
AREA1:MAXIMUM:STATE 0;:MEASURE:TRACE1:  
AREA1:MEAN:STATE 0;:MEASURE:TRACE1:  
AREA1:METHOD AUTO;MINIMUM:STATE 0;:  
MEASURE:TRACE1:AREA1:NOVERSHOOT:  
STATE 0;:MEASURE:TRACE1:AREA1:NWIDTH:  
STATE 0;:MEASURE:TRACE1:AREA1:  
PERFREQUENCY:STATE 0;:MEASURE:TRACE1:  
AREA1:PERIOD:STATE 0;:MEASURE:TRACE1:  
AREA1:POVERSHOOT:STATE 0;:MEASURE:  
TRACE1:AREA1:PTOPEAK:STATE 0;:  
MEASURE:TRACE1:AREA1:PWIDTH:STATE 0;:  
MEASURE:TRACE1:AREA1:RISE:STATE 0;:  
MEASURE:TRACE1:AREA1:RMS:STATE 0 . . . . .

**:MEASure:TRACe<x>:AREA<x>?**

Function Queries all settings related to the area.

Syntax :MEASure:TRACe<x>:AREA<x>?  
 <x> of TRACe<x> = 1 to 8  
 <x> of AREA<x> = 1 or 2

Example :MEASURE:TRACE1:AREA1? -> :MEASURE:  
 TRACE1:AREA1:BURST:STATE 0;:MEASURE:  
 TRACE1:AREA1:CMEAN:STATE 0;:MEASURE:  
 TRACE1:AREA1:CMODE 0;COUNT:STATE 0;:  
 MEASURE:TRACE1:AREA1:CRMS:STATE 0;:  
 MEASURE:TRACE1:AREA1:CSDEVIATION:  
 STATE 0;:MEASURE:TRACE1:AREA1:DELAY:  
 MEASURE:COUNT 1;POLARITY RISE;:MEASURE:  
 TRACE1:AREA1:DELAY:REFERENCE:COUNT 1;  
 POLARITY RISE;TRACE 1;:MEASURE:TRACE1:  
 AREA1:DELAY:SOURCE TRIGGER;STATE 0;:  
 MEASURE:TRACE1:AREA1:DPROXIMAL:  
 MODE PERCENT;PERCENT 10,90;  
 UNIT -3.0000000E+00,3.0000000E+00;:  
 MEASURE:TRACE1:AREA1:DT:STATE 0;:  
 MEASURE:TRACE1:AREA1:DUTYCYCLE:  
 STATE 0;:MEASURE:TRACE1:AREA1:FALL:  
 STATE 0;:MEASURE:TRACE1:AREA1:  
 FREQUENCY:STATE 0;:MEASURE:TRACE1:  
 AREA1:HIGH:STATE 0;:MEASURE:TRACE1:  
 AREA1:HILOW:STATE 0;:MEASURE:TRACE1:  
 AREA1:LOW:STATE 0;:MEASURE:TRACE1:  
 AREA1:MAXIMUM:STATE 0;:MEASURE:TRACE1:  
 AREA1:MEAN:STATE 0;:MEASURE:TRACE1:  
 AREA1:METHOd AUTO;MINIMUM:STATE 0;:  
 MEASURE:TRACE1:AREA1:NOVERSHOOT:  
 STATE 0;:MEASURE:TRACE1:AREA1:NWIDTH:  
 STATE 0;:MEASURE:TRACE1:AREA1:  
 PERFREQUENCY:STATE 0;:MEASURE:TRACE1:  
 AREA1:PERIOD:STATE 0;:MEASURE:TRACE1:  
 AREA1:POVERSHOOT:STATE 0 . . . . .

**:MEASure:TRACe<x>:AREA<x>:ALL**

Function Turns ON/OFF all waveform parameters.

Syntax :MEASure:TRACe<x>:AREA<x>:ALL  
 {<Boolean>}  
 <x> of TRACe<x> = 1 to 8  
 <x> of AREA<x> = 1 or 2

Example :MEASURE:TRACE1:AREA1:ALL ON

**:MEASure:TRACe<x>:AREA<x>:****<Parameter>?**

Function Queries all settings related to the waveform parameter.

Syntax :MEASure:TRACe<x>:AREA<x>:<Parameter>?  
 <x> of TRACe<x> = 1 to 8  
 <x> of AREA<x> = 1 or 2

<Parameter> = {BURSt|CMEan|COUNT|CRMS|  
 CSDeviatiOn|DELay|DT|DUTYcycle|FALL|  
 FREQuency|HIGH|HILOW|LOW|MAXimum|MEAN|  
 MINimum|NOVershoot|NWIDTH|PERFrequency|  
 PERiod|POVershoot|PTOPeak|PWIDth|RISE|  
 RMS|SDEViatiOn|TYCInteg|TYINteg|V1|V2}

Example (The following is an example for the maximum value of trace 1 and area 1.)

```
:MEASURE:TRACE1:AREA1:MAXIMUM?  

-> :MEASURE:TRACE1:AREA1:MAXIMUM:  

STATE 0
```

**:MEASure:TRACe<x>:AREA<x>:****<Parameter>:COUNT?**

Function Queries the continuous statistical processing count of the waveform parameter.

Syntax :MEASure:TRACe<x>:AREA<x>:<Parameter>:  
 COUNT?  
 <x> of TRACe<x> = 1 to 8  
 <x> of AREA<x> = 1 or 2

<Parameter> = {BURSt|CMEan|COUNT|CRMS|  
 CSDeviatiOn|DELay|DT|DUTYcycle|FALL|  
 FREQuency|HIGH|HILOW|LOW|MAXimum|MEAN|  
 MINimum|NOVershoot|NWIDTH|PERFrequency|  
 PERiod|POVershoot|PTOPeak|PWIDth|RISE|  
 RMS|SDEViatiOn|TYCInteg|TYINteg|V1|V2}

Example (The following is an example for the maximum value of trace 1 and area 1.)

```
:MEASURE:TRACE1:AREA1:MAXIMUM:COUNT?  

-> :MEASURE:TRACE1:AREA1:MAXIMUM:  

COUNT 0
```

## 5.20 MEASure Group

**:MEASure:TRACe<x>:AREA<x>:<Parameter>:  
{MAXimum|MEAN|MINimum|SDEVIation}?**

**Function** Queries the statistical value of the waveform parameter.

**Syntax** :MEASure:TRACe<x>:AREA<x>:<Parameter>:  
{MAXimum|MEAN|MINimum|SDEVIation}?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2  
<Parameter> = {BURSt|CMEan|COUNT|CRMS|  
CSDeVIation|DELay|DT|DUTYcycle|FALL|  
FREQuency|HIGH|HILow|LOW|MAXimum|MEAN|  
MINimum|NOVershoot|NWIDth|PERFrequency|  
PERiod|POVershoot|PTOPeak|PWIDth|RISE|  
RMS|SDEVIation|TYCInteg|TYINteg|V1|V2}

**Example** (The following is an example for the maximum value.)  
:MEASURE:TRACE1:AREA1:MAXIMUM:  
MAXIMUM? -> :MEASURE:TRACE1:AREA1:  
MAXIMUM:MAXIMUM 1.000E+00

**:MEASure:TRACe<x>:AREA<x>:  
<Parameter>:STATE**

**Function** Turns ON/OFF the waveform parameter or queries the current setting.

**Syntax** :MEASure:TRACe<x>:AREA<x>:<Parameter>:  
STATE {<Boolean>}  
:MEASure:TRACe<x>:AREA<x>:<Parameter>:  
STATE?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2

<Parameter> = {BURSt|CMEan|COUNT|CRMS|  
CSDeVIation|DELay|DT|DUTYcycle|FALL|  
FREQuency|HIGH|HILow|LOW|MAXimum|MEAN|  
MINimum|NOVershoot|NWIDth|PERFrequency|  
PERiod|POVershoot|PTOPeak|PWIDth|RISE|  
RMS|SDEVIation|TYCInteg|TYINteg|V1|V2}

**Example** (The following is an example for the maximum value of trace 1 and area 1.)  
:MEASURE:TRACE1:AREA1:MAXIMUM:STATE ON  
:MEASURE:TRACE1:AREA1:MAXIMUM:STATE?  
-> :MEASURE:TRACE1:AREA1:MAXIMUM:  
STATE 1

**:MEASure:TRACe<x>:AREA<x>:  
<Parameter>:VALue?**

**Function** Queries the automated measured value of the waveform parameter.

**Syntax** :MEASure:TRACe<x>:AREA<x>:<Parameter>:  
VALue? {<NRf>}  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2  
<Parameter> = {BURSt|CMEan|COUNT|CRMS|  
CSDeVIation|DELay|DT|DUTYcycle|FALL|  
FREQuency|HIGH|HILow|LOW|MAXimum|MEAN|  
MINimum|NOVershoot|NWIDth|PERFrequency|  
PERiod|POVershoot|PTOPeak|PWIDth|RISE|  
RMS|SDEVIation|TYCInteg|TYINteg|V1|V2}  
<NRf> = 1 to 100000

**Example** (The following is an example for the maximum value of trace 1 and area 1.)  
:MEASURE:TRACE1:AREA1:MAXIMUM:VALUE?  
-> :MEASURE:TRACE1:AREA1:MAXIMUM:  
VALUE 1.000E+00

**Description** • If the measurement is not possible, "NAN (Not A Number)" is returned.  
• <NRf> indicates the nth automated measured value in the past.  
In the case of cycle statistical processing, specify the <NRf> cycle from the left of the screen.  
To specify the oldest automated measured value, specify 1.  
If <NRf> is omitted, the latest automated measured value is specified.  
If the value corresponding to the relevant count is not present, "NAN" (Not A Number)" is returned.

**:MEASure:TRACe<x>:AREA<x>:DELay:  
MEASure?**

**Function** Queries all settings related to the measurement conditions of the source waveform of the delay measurement between channels.

**Syntax** :MEASure:TRACe<x>:AREA<x>:DELay:  
MEASure?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2

**Example** :MEASURE:TRACE1:AREA1:DELAY:MEASURE?  
-> :MEASURE:TRACE1:AREA1:DELAY:MEASURE:  
COUNT 1;POLARITY RISE

**:MEASure:TRACe<x>:AREA<x>:DELay:****MEASure:COUNT**

**Function** Sets the edge detection count of the source waveform of the delay measurement between channels or queries the current setting.

**Syntax** :MEASure:TRACe<x>:AREA<x>:DELay:  
MEASure:COUNT {<NRf>}  
:MEASure:TRACe<x>:AREA<x>:DELay:  
MEASure:COUNT?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2  
<NRf> = 1 to 10

**Example** :MEASURE:TRACE1:AREA1:DELAY:MEASURE:  
COUNT 1  
:MEASURE:TRACE1:AREA1:DELAY:MEASURE:  
COUNT? -> :MEASURE:TRACE1:AREA1:DELAY:  
MEASURE:COUNT 1

**:MEASure:TRACe<x>:AREA<x>:DELay:****MEASure:POLarity**

**Function** Sets the polarity of the source waveform of the delay measurement between channels or queries the current setting.

**Syntax** :MEASure:TRACe<x>:AREA<x>:DELay:  
MEASure:POLarity {FALL|RISE}  
:MEASure:TRACe<x>:AREA<x>:DELay:  
MEASure:POLarity?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2

**Example** :MEASURE:TRACE1:AREA1:DELAY:MEASURE:  
POLARITY RISE  
:MEASURE:TRACE1:AREA1:DELAY:MEASURE:  
POLARITY? -> :MEASURE:TRACE1:AREA1:  
DELAY:MEASURE:POLARITY RISE

**:MEASure:TRACe<x>:AREA<x>:DELay:****REFerence?**

**Function** Queries all settings related to the reference waveform of the delay measurement between channels.

**Syntax** :MEASure:TRACe<x>:AREA<x>:DELay:  
REFerence?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2

**Example** :MEASURE:TRACE1:AREA1:DELAY:REFERENCE?  
-> :MEASURE:TRACE1:AREA1:DELAY:  
REFERENCE:COUNT 1;POLARITY FALL;TRACE 1

**:MEASure:TRACe<x>:AREA<x>:DELay:****REFerence:COUNT**

**Function** Sets the edge detection count of the reference waveform of the delay measurement between channels or queries the current setting.

**Syntax** :MEASure:TRACe<x>:AREA<x>:DELay:  
REFerence:COUNT {<NRf>}  
:MEASure:TRACe<x>:AREA<x>:DELay:  
REFerence:COUNT?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2  
<NRf> = 1 to 10

**Example** :MEASURE:TRACE1:AREA1:DELAY:REFERENCE:  
COUNT 1  
:MEASURE:TRACE1:AREA1:DELAY:REFERENCE:  
COUNT? -> :MEASURE:TRACE1:AREA1:DELAY:  
REFERENCE:COUNT 1

**:MEASure:TRACe<x>:AREA<x>:DELay:****REFerence:POLarity**

**Function** Sets the polarity of the reference waveform of the delay measurement between channels or queries the current setting.

**Syntax** :MEASure:TRACe<x>:AREA<x>:DELay:  
REFerence:POLarity {FALL|RISE}  
:MEASure:TRACe<x>:AREA<x>:DELay:  
REFerence:POLarity?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2

**Example** :MEASURE:TRACE1:AREA1:DELAY:REFERENCE:  
POLARITY FALL  
:MEASURE:TRACE1:AREA1:DELAY:REFERENCE:  
POLARITY? -> :MEASURE:TRACE1:AREA1:  
DELAY:REFERENCE:POLARITY FALL

## 5.20 MEASure Group

### **:MEASure:TRACe<x>:AREA<x>:DELAy:**

#### **REFerence:TRACe**

**Function** Sets the trace of the reference waveform of the delay measurement between channels or queries the current setting.

**Syntax** :MEASure:TRACe<x>:AREA<x>:DELAy:  
REFerence:TRACe {<NRf>|A<y>|B<y>|C<y>|  
D<y>}  
:MEASure:TRACe<x>:AREA<x>:DELAy:  
REFerence:TRACe?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2  
<NRf> = 1 to 8  
<y> = 0 to 7

**Example** :MEASURE:TRACE1:AREA1:DELAY:REFERENCE:  
TRACE 1  
:MEASURE:TRACE1:AREA1:DELAY:REFERENCE:  
TRACE? -> :MEASURE:TRACE1:AREA1:DELAY:  
REFERENCE:TRACE 1

**Description** For the SB5310, only {<NRf>|A<y>} are valid.

### **:MEASure:TRACe<x>:AREA<x>:DELAy:**

#### **SOURCE**

**Function** Sets the reference of the delay measurement between channels or queries the current setting.

**Syntax** :MEASure:TRACe<x>:AREA<x>:DELAy:SOURCE  
{TRACe|TRIGger}  
:MEASure:TRACe<x>:AREA<x>:DELAy:SOURCE?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2

**Example** :MEASURE:TRACE1:AREA1:DELAY:  
SOURCE TRACE  
:MEASURE:TRACE1:AREA1:DELAY:SOURCE?  
-> :MEASURE:TRACE1:AREA1:DELAY:  
SOURCE TRACE

### **:MEASure:TRACe<x>:AREA<x>:DPRoximal?**

**Function** Queries all settings related to the distal and proximal values.

**Syntax** :MEASure:TRACe<x>:AREA<x>:DPRoximal?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2

**Example** :MEASURE:TRACE1:AREA1:DPROXIMAL?  
-> ;MEASURE:TRACE1:AREA1:DPROXIMAL:  
MODE PERCENT;PERCENT 10,20;UNIT  
1.000E+00,1.000E+00

**Description** This command is valid when the <Parameter> of :MEASure:TRACe<x>:AREA<x>:<Parameter> is RISE or FALL.

### **:MEASure:TRACe<x>:AREA<x>:DPRoximal:**

#### **MODE**

**Function** Sets the unit of the distal and proximal values or queries the current setting.

**Syntax** :MEASure:TRACe<x>:AREA<x>:DPRoximal:  
MODE {PERCent|UNIT}  
:MEASure:TRACe<x>:AREA<x>:DPRoximal:  
MODE?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2

**Example** :MEASURE:TRACE1:AREA1:DPROXIMAL:  
MODE PERCENT  
:MEASURE:TRACE1:AREA1:DPROXIMAL:MODE?  
-> :MEASURE:TRACE1:AREA1:DPROXIMAL:  
MODE PERCENT

**Description** This command is valid when the <Parameter> of :MEASure:TRACe<x>:AREA<x>:<Parameter> is RISE or FALL.

### **:MEASure:TRACe<x>:AREA<x>:DPRoximal:**

#### **PERCent**

**Function** Sets the distal and proximal values as a percentage or queries the current setting.

**Syntax** :MEASure:TRACe<x>:AREA<x>:DPRoximal:  
PERCent {<NRf>,<NRf>}  
:MEASure:TRACe<x>:AREA<x>:DPRoximal:  
PERCent?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2  
<NRf> = 0 to 100 (%)

**Example** :MEASURE:TRACE1:AREA1:DPROXIMAL:  
PERCENT 10,90  
:MEASURE:TRACE1:AREA1:DPROXIMAL:  
PERCENT? -> :MEASURE:TRACE1:AREA1:  
DPROXIMAL:PERCENT 10,90

**Description** This command is valid when the <Parameter> of :MEASure:TRACe<x>:AREA<x>:<Parameter> is RISE or FALL.

**:MEASure:TRACe<x>:AREA<x>:DPRoximal:****UNIT**

**Function** Sets the distal and proximal values in the specified unit or queries the current setting.

**Syntax** :MEASure:TRACe<x>:AREA<x>:DPRoximal:  
UNIT { (<NRf>, <NRf>) |  
(<Voltage>, <Voltage>) |  
(<Current>, <Current>) }  
:MEASure:TRACe<x>:AREA<x>:DPRoximal:  
UNIT?  
<x> of TRACe<x> = 1 to 8  
<x> of AREA<x> = 1 or 2  
<NRf>, <Voltage>, and <Current> = See the SB5000  
User's Manual.

**Example** :MEASURE:TRACE1:AREA1:DPROXIMAL:  
UNIT 1, -1  
:MEASURE:TRACE1:AREA1:DPROXIMAL:UNIT?  
-> :MEASURE:TRACE1:AREA1:DPROXIMAL:  
UNIT -1.000E+00, 1.000E+00

**Description** This command is valid when the <Parameter> of :MEASure:TRACe<x>:AREA<x>:<Parameter> is RISE or FALL.

**:MEASure:TRACe<x>:AREA<x>:METHod**

**Function** Sets the method for detecting the High/Low level for automated measurement of waveform parameters or queries the current setting.

**Syntax** :MEASure:TRACe<x>:AREA<x>:METHod {AUTO|  
HISTogram|MAXMin}  
:MEASure:TRACe<x>:AREA<x>:METHod?  
TRACe<x>: <x> = 1 to 8  
AREA<x>: <x> = 1, 2

**Example** :MEASURE:TRACE1:AREA1:METHOD AUTO  
:MEASURE:TRACE1:AREA1:METHOD?  
-> :MEASURE:TRACE1:AREA1:METHOD AUTO

**:MEASure:TRANge<x> (Time Range)**

**Function** Sets the measurement range or queries the current setting.

**Syntax** :MEASure:TRANge<x> {<NRf>, <NRf>}  
:MEASure:TRANge<x>?  
<x> = 1 or 2  
<NRf> = -5 to 5 (div)

**Example** :MEASURE:TRANGE1 -5, 0  
:MEASURE:TRANGE1? -> :MEASURE:  
TRANGE1 0.000E+00, -5.000E+00

**:MEASure:WAIT?**

**Function** Waits for the completion of the automated measurement with a timeout option.

**Syntax** MEASure:WAIT? {<NRf>}  
<NRf> = 1 to 360000 (timeout value, in units of 10 ms)

**Example** MEASURE:WAIT 100? -> :MEASURE:WAIT 1

**Description** If the execution of the automated measurement completes within the timeout value, 0 is returned; if it is not complete or automated measurement is not being executed, 1 is returned. Even if the timeout value is set long, 0 is returned when the execution of the automated measurement is complete.

**:MEASure:WINDow<x>**

**Function** Sets the measurement source window of the area or queries the current setting.

**Syntax** :MEASure:WINDow<x> {MAIN|Z1|Z2}  
:MEASure:WINDow<x>?  
<x> = 1 or 2

**Example** :MEASURE:WINDOW1 MAIN  
:MEASURE:WINDOW1? -> :MEASURE:  
WINDOW1 MAIN



## 5.21 REFERENCE Group

### :REFERENCE<x>?

Function Queries all settings related to the reference.

Syntax :REFERENCE<x>?

<x> = 1 to 4

Example :REFERENCE1? -> :REFERENCE1:  
SELECT REFERENCE;DISPLAY 1;INVERT 0;  
LABEL:DEFINE "REF1";MODE 1;:REFERENCE1:  
POSITION 1.000E+00;SVALUE 1

### :REFERENCE<x>:DISPLAY

Function Turns ON/OFF the display of the reference or queries the current setting.

Syntax :REFERENCE<x>:DISPLAY {<Boolean>}

:REFERENCE<x>:DISPLAY?

<x> = 1 to 4

Example :REFERENCE1:DISPLAY ON  
:REFERENCE1:DISPLAY? -> :REFERENCE1:  
DISPLAY 1

### :REFERENCE<x>:INVERT

Function Sets the inverted display of the reference or queries the current setting.

Syntax :REFERENCE<x>:INVERT {<Boolean>}

:REFERENCE<x>:INVERT?

<x> = 1 to 4

Example :REFERENCE1:INVERT ON  
:REFERENCE1:INVERT? -> :REFERENCE1:  
INVERT 1

### :REFERENCE<x>:LABEL?

Function Queries all settings related to the waveform label of the reference.

Syntax :REFERENCE<x>:LABEL?

<x> = 1 to 4

Example :REFERENCE1:LABEL? -> :REFERENCE1:  
LABEL:DEFINE "REF1";MODE 1

### :REFERENCE<x>:LABEL[:DEFINE]

Function Sets the waveform label of the reference or queries the current setting.

Syntax :REFERENCE<x>:LABEL[:DEFINE] {<String>}

:REFERENCE<x>:LABEL[:DEFINE]?

<x> = 1 to 4

<String> = Up to 8 characters

Example :REFERENCE1:LABEL:DEFINE "REF1"  
:REFERENCE1:LABEL:DEFINE?  
-> :REFERENCE1:LABEL:DEFINE "REF1"

### :REFERENCE<x>:LABEL:MODE

Function Turns ON/OFF the waveform label display of the reference or queries the current setting.

Syntax :REFERENCE<x>:LABEL:MODE {<Boolean>}

:REFERENCE<x>:LABEL:MODE?

<x> = 1 to 4

Example :REFERENCE1:LABEL:MODE ON  
:REFERENCE1:LABEL:MODE? -> :REFERENCE1:  
LABEL:MODE 1

### :REFERENCE<x>:LOAD

Function Loads the waveform to the reference.

Syntax :REFERENCE<x>:LOAD {<NRF>}

<x> = 1 to 4

<NRF> = 1 to 12 (1 to 8 are traces and 9 to 12 are internal memories)

Example :REFERENCE1:LOAD 1

### :REFERENCE<x>:POSITION

Function Sets the vertical position of the reference or queries the current setting.

Syntax :REFERENCE<x>:POSITION {<NRF>}

:REFERENCE<x>:POSITION?

<x> = 1 to 4

<NRF> = -4 to 4 (div)

Example :REFERENCE1:POSITION 1  
:REFERENCE1:POSITION? -> :REFERENCE1:  
POSITION 1.000E+00

### :REFERENCE<x>:SELECT

Function Sets the waveform (computation or reference) to the computation channel or queries the current setting.

Syntax :REFERENCE<x>:SELECT {MATH|REFERENCE}

:REFERENCE<x>:SELECT?

<x> = 1 to 4

Example :REFERENCE1:SELECT MATH  
:REFERENCE1:SELECT? -> :REFERENCE1:  
SELECT MATH

### :REFERENCE<x>:SVALUE (Scale VALUE)

Function Turns ON/OFF the scale display of the reference or queries the current setting.

Syntax :REFERENCE<x>:SVALUE {<Boolean>}

:REFERENCE<x>:SVALUE?

<x> = 1 to 4

Example :REFERENCE1:SVALUE ON  
:REFERENCE1:SVALUE? -> :REFERENCE1:  
SVALUE 1



## 5.22 SEARCh Group

### **:SEARCh<x>:CANBus[:SETup]:ACK**

**Function** Sets the ACK condition of the CAN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:  
ACK {ACK|ACKBoth|DONTcare|NONack}  
:SEARCh<x>:CANBus[:SETup]:ACK?  
<x> = 1 or 2

**Example** :SEARCH1:CANBUS:SETUP:ACK ACK  
:SEARCH1:CANBUS:SETUP:ACK?  
-> :SEARCH1:CANBUS:SETUP:ACK ACK

### **:SEARCh<x>:CANBus[:SETup]:BRATe**

**Function** Sets the bit rate (data transfer rate) of the CAN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:  
BRATe {<NRF>|USER,<NRF>}  
:SEARCh<x>:CANBus[:SETup]:BRATe?  
<x> = 1 or 2  
<NRF> =33300, 83300, 125000, 250000, 500000,  
1000000  
<NRF> of USER = See the User's Manual (IM701361-01E).

**Example** :SEARCH1:CANBUS:SETUP:BRATE 83300  
:SEARCH1:CANBUS:SETUP:BRATE?  
-> :SEARCH1:CANBUS:SETUP:BRATE 83300

### **:SEARCh<x>:CANBus[:SETup]:DATA?**

**Function** Queries all settings related to the CAN bus signal search data.

**Syntax** :SEARCh<x>:CANBus[:SETup]:DATA?  
<x> = 1 or 2

**Example** :SEARCH1:CANBUS:SETUP:DATA?  
-> :SEARCH1:CANBUS:SETUP:DATA:  
BORDER BIG;CONDITION TRUE;  
DATA1 0.0000000E+00;  
DATA2 255.00000E+00;DLC 8;MSBLSB 7,0;  
PATTERN "100101100101100001110100010100  
1000010011010101111010111110111100";  
SIGN UNSIGN

### **:SEARCh<x>:CANBus[:SETup]:DATA:BORDER**

**Function** Sets the byte order of the CAN bus signal search data or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:DATA:  
BORDER {BIG|LITTLE}  
:SEARCh<x>:CANBus[:SETup]:DATA:BORDER?  
<x> = 1 or 2

**Example** :SEARCH1:CANBUS:SETUP:DATA:BORDER BIG  
:SEARCH1:CANBUS:SETUP:DATA:BORDER?  
-> :SEARCH1:CANBUS:SETUP:DATA:  
BORDER BIG

### **:SEARCh<x>:CANBus[:SETup]:DATA:CONDition**

**Function** Sets the data condition of the CAN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:DATA:  
CONDition {BETWen|DONTcare|FALSE|  
GTHan|LTHan|ORANge|TRUE}  
:SEARCh<x>:CANBus[:SETup]:DATA:  
CONDition?  
<x> = 1 or 2

**Example** :SEARCH1:CANBUS:SETUP:DATA:  
CONDITION BETWEEN  
:SEARCH1:CANBUS:SETUP:DATA:CONDITION?  
-> :SEARCH1:CANBUS:SETUP:DATA:  
CONDITION BETWEEN

### **:SEARCh<x>:CANBus[:SETup]:DATA:DATA<x>**

**Function** Sets the comparison data of the CAN bus signal search data or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:DATA:  
DATA<x> {<NRF>}  
:SEARCh<x>:CANBus[:SETup]:DATA:DATA<x>?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<NRF> = See the User's Manual (IM701361-01E).

**Example** :SEARCH1:CANBUS:SETUP:DATA:DATA1 1  
:SEARCH1:CANBUS:SETUP:DATA:DATA1?  
-> :SEARCH1:CANBUS:SETUP:DATA:  
DATA1 1.0000000E+00

**Description**

- Use :SEARCh<x>:CANBus[:SETup]:DATA:DATA1 when :SEARCh<x>:CANBus[:SETup]:DATA:CONDition GTHan is specified.
- Use :SEARCh<x>:CANBus[:SETup]:DATA:DATA2 when :SEARCh<x>:CANBus[:SETup]:DATA:CONDition LTHan is specified.
- Use :SEARCh<x>:CANBus[:SETup]:DATA:DATA1 to set the smaller value and :SEARCh<x>:CANBus[:SETup]:DATA:DATA2 to set the larger value when :SEARCh<x>:CANBus[:SETup]:DATA:CONDition BETWen|ORANge is specified.

### **:SEARCh<x>:CANBus[:SETup]:DATA:DLC**

**Function** Sets the number of valid bytes (DLC) of the CAN bus signal search data or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:DATA:  
DLC {<NRF>}  
:SEARCh<x>:CANBus[:SETup]:DATA:DLC?  
<x> = 1 or 2  
<NRF> = 0 to 8

**Example** :SEARCH1:CANBUS:SETUP:DATA:DLC 0  
:SEARCH1:CANBUS:SETUP:DATA:DLC?  
-> :SEARCH1:CANBUS:SETUP:DATA:DLC 0

**: SEARCh<x>: CANBus [: SETUp] : DATA: HEXA**

**Function** Sets the CAN bus signal search data in hexadecimal notation.

**Syntax** :SEARCh<x>:CANBus [:SETUp]:DATA:  
HEXA {<String>}  
<x> = 1 or 2  
<String> = Up to 16 characters by combining '0' to 'F' and 'X' (in one-byte unit)

**Example** :SEARCH1:CANBUS:SETUP:DATA:HEXA "A9"

**: SEARCh<x>: CANBus [: SETUp] : DATA: MSBLsb**

**Function** Sets the MSB and LSB bits of the CAN bus signal search data or queries the current setting.

**Syntax** :SEARCh<x>:CANBus [:SETUp]:DATA:  
MSBLsb {<Nrf>, <Nrf>}  
:SEARCh<x>:CANBus [:SETUp]:DATA:MSBLsb?  
<x> = 1 or 2  
<Nrf> = See the User's Manual (IM701361-01E).

**Example** :SEARCH1:CANBUS:SETUP:DATA:MSBLSB 1,0  
:SEARCH1:CANBUS:SETUP:DATA:MSBLSB?  
-> :SEARCH1:CANBUS:SETUP:DATA:  
MSBLSB 1,0

**: SEARCh<x>: CANBus [: SETUp] : DATA: PATtern**

**Function** Sets the CAN bus signal search data in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:CANBus [:SETUp]:DATA:  
PATtern {<String>}  
:SEARCh<x>:CANBus [:SETUp]:DATA:PATtern?  
<x> = 1 or 2  
<String> = Up to 64 characters by combining '0', '1', and 'X' (in one-byte unit)

**Example** :SEARCH1:CANBUS:SETUP:DATA:  
PATTERN "11011111"  
:SEARCH1:CANBUS:SETUP:DATA:PATTERN?  
-> :SEARCH1:CANBUS:SETUP:DATA:  
PATTERN "11011111"

**: SEARCh<x>: CANBus [: SETUp] : DATA: SIGN**

**Function** Sets the sign of the CAN bus signal search data or queries the current setting.

**Syntax** :SEARCh<x>:CANBus [:SETUp]:DATA:  
SIGN {SIGN|UNSign}  
:SEARCh<x>:CANBus [:SETUp]:DATA:SIGN?  
<x> = 1 or 2

**Example** :SEARCH1:CANBUS:SETUP:DATA:SIGN SIGN  
:SEARCH1:CANBUS:SETUP:DATA:SIGN?  
-> :SEARCH1:CANBUS:SETUP:DATA:SIGN SIGN

**: SEARCh<x>: CANBus [: SETUp] : IDEXT?**

**Function** Queries all settings related to the ID of the extended format of the CAN bus signal search.

**Syntax** :SEARCh<x>:CANBus [:SETUp]:IDEXT?  
<x> = 1 or 2

**Example** :SEARCH1:CANBUS:SETUP:IDEXT?  
-> :SEARCH1:CANBUS:SETUP:IDEXT:  
PATTERN "110010110111000011101110111111"

**: SEARCh<x>: CANBus [: SETUp] : IDEXT: HEXA**

**Function** Sets the ID of the extended format of the CAN bus signal search in hexadecimal notation.

**Syntax** :SEARCh<x>:CANBus [:SETUp]:IDEXT:  
HEXA {<String>}  
<x> = 1 or 2  
<String> = 8 characters by combining '0' to 'F' and 'X'

**Example** :SEARCH1:CANBUS:SETUP:IDEXT:  
HEXA "1AEF5906"

**: SEARCh<x>: CANBus [: SETUp] : IDEXT: PATtern**

**Function** Sets the ID of the extended format of the CAN bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:CANBus [:SETUp]:IDEXT:  
PATtern {<String>}  
:SEARCh<x>:CANBus [:SETUp]:IDEXT:  
PATtern?  
<x> = 1 or 2  
<String> = 29 characters by combining '0', '1', and 'X'

**Example** :SEARCH1:CANBUS:SETUP:IDEXT:  
PATTERN "110010110111000011101110111111"  
:SEARCH1:CANBUS:SETUP:IDEXT:PATTERN?  
-> :SEARCH1:CANBUS:SETUP:IDEXT:  
PATTERN "110010110111000011101110111111"

**: SEARCh<x>: CANBus [: SETUp] : IDSTd?**

**Function** Queries all settings related to the ID of the standard format of the CAN bus signal search.

**Syntax** :SEARCh<x>:CANBus [:SETUp]:IDSTd?  
<x> = 1 or 2

**Example** :SEARCH1:CANBUS:SETUP:IDSTD?  
-> :SEARCH1:CANBUS:SETUP:IDSTD:  
PATTERN "00011111101"

**: SEARCh<x>: CANBus [: SETUp] : IDSTd: HEXA**

**Function** Sets the ID of the standard format of the CAN bus signal search in hexadecimal notation.

**Syntax** :SEARCh<x>:CANBus [:SETUp]:IDSTd:  
HEXA {<String>}  
<x> = 1 or 2  
<String> = 3 characters by combining '0' to 'F' and 'X'

**Example** :SEARCH1:CANBUS:SETUP:IDSTD:HEXA "5DF"

## 5.22 SEARCh Group

### **:SEARCh<x>:CANBus[:SETup]:IDSTd:**

#### **PATtern**

**Function** Sets the ID of the standard format of the CAN bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:IDSTd:  
PATtern {<String>}  
:SEARCh<x>:CANBus[:SETup]:IDSTd:  
PATtern?  
<x> = 1 or 2  
<String> = 11 characters by combining '0','1,' and 'X'

**Example** :SEARCH1:CANBUS:SETUP:IDSTD:  
PATTERN "10111011111"  
:SEARCH1:CANBUS:SETUP:IDSTD:PATTERN?  
-> :SEARCH1:CANBUS:SETUP:IDSTD:  
PATTERN "10111011111"

### **:SEARCh<x>:CANBus[:SETup]:MODE**

**Function** Sets the CAN bus signal search mode or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:  
MODE {EFrame|IDExt|IDStd|MSIGNAL|SOF}  
:SEARCh<x>:CANBus[:SETup]:MODE?  
<x> = 1 or 2

**Example** :SEARCH1:CANBUS:SETUP:MODE EFRAME  
:SEARCH1:CANBUS:SETUP:MODE?  
-> :SEARCH1:CANBUS:SETUP:MODE EFRAME

### **:SEARCh<x>:CANBus[:SETup]:MSIGNAL?**

**Function** Queries all settings related to the message signal of the CAN bus signal search

**Syntax** :SEARCh<x>:CANBus[:SETup]:MSIGNAL?  
<x> = 1, 2

**Example** :SEARCH1:CANBUS:SETUP:MSIGNAL? ->  
:SEARCH1:CANBUS:SETUP:MSIGNAL:MESSAGE:  
MODE 1;:SEARCH1:CANBUS:SETUP:MSIGNAL:  
SELECT MESSAGE;SIGNAL:  
CONDITION BETWEEN;  
DATA1 1.0000000E+00;  
DATA2 1.0000000E+00;MODE 1

### **:SEARCh<x>:CANBus[:SETup]:MSIGNAL:**

#### **MESSAge?**

**Function** Queries all settings related to the message of the CAN bus signal search

**Syntax** :SEARCh<x>:CANBus[:SETup]:MSIGNAL:  
MESSAge?  
<x> = 1, 2

**Example** :SEARCH1:CANBUS:SETUP:MSIGNAL:MESSAGE?  
-> :SEARCH1:CANBUS:SETUP:MSIGNAL:  
MESSAGE:MODE 1

### **:SEARCh<x>:CANBus[:SETup]:MSIGNAL:**

#### **MESSAge:ITEM**

**Function** Sets the CAN bus signal search message item.

**Syntax** :SEARCh<x>:CANBus[:SETup]:MSIGNAL:  
MESSAge:ITEM {<String>}  
<x> = 1, 2  
<String> = Up to 32 characters

**Example** :SEARCH1:CANBUS:SETUP:MSIGNAL:MESSAGE:  
ITEM "TEST"

### **:SEARCh<x>:CANBus[:SETup]:MSIGNAL:**

#### **MESSAge:MODE**

**Function** Turns ON/OFF the CAN bus signal search message or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:MSIGNAL:  
MESSAge:MODE {<Boolean>}  
:SEARCh<x>:CANBus[:SETup]:MSIGNAL:  
MESSAge:MODE?  
<x> = 1, 2

**Example** :SEARCH1:CANBUS:SETUP:MSIGNAL:MESSAGE:  
MODE ON  
:SEARCH1:CANBUS:SETUP:MSIGNAL:MESSAGE:  
MODE? -> :SEARCH1:CANBUS:SETUP:MSIGNAL:  
MESSAGE:MODE 1

### **:SEARCh<x>:CANBus[:SETup]:MSIGNAL:**

#### **SELEct**

**Function** Sets the message signal conditions for the CAN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:MSIGNAL:  
SELEct {MESSAge|SIGNAL}  
:SEARCh<x>:CANBus[:SETup]:MSIGNAL:  
SELEct?  
<x> = 1, 2

**Example** :SEARCH1:CANBUS:SETUP:MSIGNAL:  
SELECT MESSAGE  
:SEARCH1:CANBUS:SETUP:MSIGNAL:SELECT?  
-> :SEARCH1:CANBUS:SETUP:MSIGNAL:  
SELECT MESSAGE

### **:SEARCh<x>:CANBus[:SETup]:MSIGNAL:**

#### **SIGNAL?**

**Function** Queries all settings related to the signal of the CAN bus signal search.

**Syntax** :SEARCh<x>:CANBus[:SETup]:MSIGNAL:  
SIGNAL?  
<x> = 1, 2

**Example** :SEARCH1:CANBUS:SETUP:MSIGNAL:  
SIGNAL? -> :SEARCH1:CANBUS:SETUP:  
MSIGNAL:SIGNAL:CONDITION BETWEEN;  
DATA1 1.0000000E+00;  
DATA2 1.0000000E+00;MODE 1

**:SEARCh<x>:CANBus[:SETup]:MSIGnal:  
SIGnal:CONDition**

**Function** Sets the signal data conditions for the CAN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:MSIGnal:  
SIGnal:CONDition {BETWeen|DONTcare|  
FALSe|GTHan|LTHan|ORANge|TRUE}  
:SEARCh<x>:CANBus[:SETup]:MSIGnal:  
SIGnal:CONDition?  
<x> = 1, 2

**Example** :SEARCH1:CANBUS:SETUP:MSIGNAL:SIGNAL:  
CONDITION BETWEEN  
:SEARCH1:CANBUS:SETUP:MSIGNAL:SIGNAL:  
CONDITION? -> :SEARCH1:CANBUS:SETUP:  
MSIGNAL:SIGNAL:CONDITION BETWEEN

**:SEARCh<x>:CANBus[:SETup]:MSIGnal:  
SIGnal:DATA<x>**

**Function** Sets the signal data comparison data for the CAN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:MSIGnal:  
SIGnal:DATA<x> {<Nrf>}  
:SEARCh<x>:CANBus[:SETup]:MSIGnal:  
SIGnal:DATA<x>?  
<x> of SEARCh<x> = 1, 2  
<x> of DATA<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :SEARCH1:CANBUS:SETUP:MSIGNAL:SIGNAL:  
DATA1 1  
:SEARCH1:CANBUS:SETUP:MSIGNAL:SIGNAL:  
DATA1? -> :SEARCH1:CANBUS:SETUP:  
MSIGNAL:SIGNAL:DATA1 1.0000000E+00

**:SEARCh<x>:CANBus[:SETup]:MSIGnal:  
SIGnal:ITEM**

**Function** Sets the CAN bus signal search signal item.

**Syntax** :SEARCh<x>:CANBus[:SETup]:MSIGnal:  
SIGnal:ITEM {<String>,<String>}  
<x> = 1, 2  
<String> = Up to 32 characters

**Example** :SEARCH1:CANBUS:SETUP:MSIGNAL:SIGNAL:  
ITEM "ENGINE", "TEST"

**Description** The first string sets the signal, and the next string sets the message.

**:SEARCh<x>:CANBus[:SETup]:MSIGnal:  
SIGnal:MODE**

**Function** Turns ON/OFF the CAN bus signal search signal or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:MSIGnal:  
SIGnal:MODE {<Boolean>}  
:SEARCh<x>:CANBus[:SETup]:MSIGnal:  
SIGnal:MODE?  
<x> = 1, 2

**Example** :SEARCH1:CANBUS:SETUP:MSIGNAL:SIGNAL:  
MODE ON  
:SEARCH1:CANBUS:SETUP:MSIGNAL:SIGNAL:  
MODE? -> :SEARCH1:CANBUS:SETUP:MSIGNAL:  
SIGNAL:MODE 1

**:SEARCh<x>:CANBus[:SETup]:RECCessive**

**Function** Sets the recessive level (bus level) of the CAN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:  
RECCessive {HIGH|LOW}  
:SEARCh<x>:CANBus[:SETup]:RECCessive?  
<x> = 1 or 2

**Example** :SEARCH1:CANBUS:SETUP:RECESSIVE HIGH  
:SEARCH1:CANBUS:SETUP:RECESSIVE?  
-> :SEARCH1:CANBUS:SETUP:RECESSIVE HIGH

**:SEARCh<x>:CANBus[:SETup]:RTR**

**Function** Sets the RTR of the CAN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETup]:  
RTR {DATA|DONTcare|REMOte}  
:SEARCh<x>:CANBus[:SETup]:RTR?  
<x> = 1 or 2

**Example** :SEARCH1:CANBUS:SETUP:RTR DATA  
:SEARCH1:CANBUS:SETUP:RTR?  
-> :SEARCH1:CANBUS:SETUP:RTR DATA

## 5.22 SEARCh Group

### **:SEARCh<x>:CANBus[:SETUp]:SPOint**

**Function** Sets the sample point of the CAN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETUp]:SPOint {<Nrf>}  
:SEARCh<x>:CANBus[:SETUp]:SPOint?  
<x> = 1 or 2  
<Nrf>=18.8 to 90.6(%)

**Example** :SEARCH1:CANBUS:SETUP:SPOINT 18.8  
:SEARCH1:CANBUS:SETUP:SPOINT?  
-> :SEARCH1:CANBUS:SETUP:  
SPOINT 18.8E+00

### **:SEARCh<x>:CANBus[:SETUp]:TRACe**

**Function** Sets the trace of the CAN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:CANBus[:SETUp]:TRACe {<Nrf>}  
:SEARCh<x>:CANBus[:SETUp]:TRACe?  
<x> = 1 or 2  
<Nrf> = 1 to 8

**Example** :SEARCH1:CANBUS:SETUP:TRACE 1  
:SEARCH1:CANBUS:SETUP:TRACE?  
-> :SEARCH1:CANBUS:SETUP:TRACE 1

### **:SEARCh<x>:CLOCK?**

**Function** Queries all settings related to the clock channel.

**Syntax** :SEARCh<x>:CLOCK?  
<x> = 1 or 2

**Example** :SEARCH1:CLOCK? -> :SEARCH1:CLOCK:  
SOURCE 1;POLARITY RISE

### **:SEARCh<x>:CLOCK:POLarity**

**Function** Sets the polarity of the clock channel or queries the current setting.

**Syntax** :SEARCh<x>:CLOCK:POLarity {FALL|RISE}  
:SEARCh<x>:CLOCK:POLarity?  
<x> = 1 or 2

**Example** :SEARCH1:CLOCK:POLARITY RISE  
:SEARCH1:CLOCK:POLARITY? -> :SEARCH1:  
CLOCK:POLARITY RISE

**Description** • This command is invalid when :SEARCh<x>:  
CLOCK:SOURce NONE.  
• This command is valid when :SEARCh<x>:TYPE  
STATE.  
• This command is valid when :SEARCh<x>:TYPE  
WIDTH and :SEARCh<x>:WIDTH:TYPE PSTate.

### **:SEARCh<x>:CLOCK:SOURce**

**Function** Sets the clock trace of the search or queries the current setting.

**Syntax** :SEARCh<x>:CLOCK:SOURce {<Nrf>|NONE}  
:SEARCh<x>:CLOCK:SOURce?  
<x> = 1 or 2  
<Nrf> = 1 to 8

**Example** :SEARCH1:CLOCK:SOURCE NONE  
:SEARCH1:CLOCK:SOURCE? -> :SEARCH1:  
CLOCK:SOURCE NONE

**Description** • This command is valid when :SEARCh<x>:TYPE  
STATE.  
• This command is valid when :SEARCh<x>:TYPE  
WIDTH and :SEARCh<x>:WIDTH:TYPE PSTate.

### **:SEARCh<x>:DECimation**

**Function** Sets the decimation detection of the skip mode or queries the current setting.

**Syntax** :SEARCh<x>:DECimation {<Nrf>}  
:SEARCh<x>:DECimation?  
<x> = 1 or 2  
<Nrf> = 1 to 9999

**Example** :SEARCH1:DECIMATION 1  
:SEARCH1:DECIMATION? -> :SEARCH1:  
DECIMATION 1

### **:SEARCh<x>:EXECute**

**Function** Executes the search. This is an overlap command.

**Syntax** :SEARCh<x>:EXECute  
<x> = 1 or 2

**Example** :SEARCH1:EXECUTE

### **:SEARCh<x>:FLEXray?**

**Function** Queries all settings related to the FLEXRAY bus signal search.

**Syntax** :SEARCh<x>:FLEXray?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY? -> :SEARCH1:FLEXRAY:  
BRATE 5000000;ERROR:BSS 1;CRC 1;CRCBUS  
A;FES 1;TRACE 1;:SEARCH1:FLEXRAY:  
IDDATA:CCOUNT:CONDITION BETWEEN;  
COUNT1 10;COUNT2 63;:SEARCH1:FLEXRAY:  
IDDATA:DATA:BORDER BIG;  
CONDITION BETWEEN;DATA1 1.0000000E+00;  
DATA2 1.0000000E+00;DPOSITION 1;DSIZE 1;  
MSBLSB 1,0;PATTERN "10101001";  
SIGN SIGN;:SEARCH1:FLEXRAY:IDDATA:FID:  
CONDITION BETWEEN;ID1 100;ID2 2047;:  
SEARCH1:FLEXRAY:IDDATA:INDICATOR:  
CONDITION DONTCARE;NFRAME DONTCARE;  
PPREAMBLE DONTCARE;STFRAME DONTCARE;  
SYFRAME DONTCARE;:SEARCH1:FLEXRAY:  
MODE FSTART;TRACE 1

**:SEARCh<x>:FLEXray:BRATe**

**Function** Sets the FLEXRAY bus signal search bit rate (data transfer rate) or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:BRATe {<Nrf>}  
:SEARCh<x>:FLEXray:BRATe?  
<x> = 1, 2  
<Nrf> = 2500000, 5000000, 10000000

**Example** :SEARCH1:FLEXRAY:BRATE 5000000  
:SEARCH1:FLEXRAY:BRATE?  
-> :SEARCH1:FLEXRAY:BRATE 5000000

**:SEARCh<x>:FLEXray:ERROr?**

**Function** Queries all settings related to the FLEXRAY bus signal search error.

**Syntax** :SEARCh<x>:FLEXray:ERROr?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:ERROR? -> :SEARCH1:  
FLEXRAY:ERROR:BSS 1;CRC 1;CRCBUS A;  
FES 1;TRACE 1

**:SEARCh<x>:FLEXray:ERROr:BSS**

**Function** Sets the FLEXRAY bus signal search BSS error or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:ERROr:  
BSS {<Boolean>}  
:SEARCh<x>:FLEXray:ERROr:BSS?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:ERROR:BSS ON  
:SEARCH1:FLEXRAY:ERROR:BSS?  
-> :SEARCH1:FLEXRAY:ERROR:BSS 1

**:SEARCh<x>:FLEXray:ERROr:CRc**

**Function** Sets the FLEXRAY bus signal search CRC error or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:ERROr:  
CRc {<Boolean>}  
:SEARCh<x>:FLEXray:ERROr:CRc?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:ERROR:CRc ON  
:SEARCH1:FLEXRAY:ERROR:CRc?  
-> :SEARCH1:FLEXRAY:ERROR:CRc 1

**:SEARCh<x>:FLEXray:ERROr:CRcBus**

**Function** Sets the target channel of the FLEXRAY bus signal search CRC error or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:ERROr:CRcBus {A|B}  
:SEARCh<x>:FLEXray:ERROr:CRcBus?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:ERROR:CRcBUS A  
:SEARCH1:FLEXRAY:ERROR:CRcBUS?  
-> :SEARCH1:FLEXRAY:ERROR:CRcBUS A

**:SEARCh<x>:FLEXray:ERROr:FES**

**Function** Sets the FLEXRAY bus signal search FES error or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:ERROr:  
FES {<Boolean>}  
:SEARCh<x>:FLEXray:ERROr:FES?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:ERROR:FES ON  
:SEARCH1:FLEXRAY:ERROR:FES?  
-> :SEARCH1:FLEXRAY:ERROR:FES 1

**:SEARCh<x>:FLEXray:ERROr:TRAcE**

**Function** Sets the FLEXRAY bus signal search error trace or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:ERROr:TRAcE {<Nrf>}  
:SEARCh<x>:FLEXray:ERROr:TRAcE?  
<x> = 1, 2  
<Nrf> = 1 to 8

**Example** :SEARCH1:FLEXRAY:ERROR:TRACE 1  
:SEARCH1:FLEXRAY:ERROR:TRACE?  
-> :SEARCH1:FLEXRAY:ERROR:TRACE 1

**:SEARCh<x>:FLEXray:IDData?**

**Function** Queries all settings related to the IDData of the FLEXRAY bus signal search.

**Syntax** :SEARCh<x>:FLEXray:IDData?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA?  
-> :SEARCH1:FLEXRAY:IDDATA:CCOUNT;  
CONDITION BETWEEN;COUNT1 10;  
COUNT2 63;:SEARCH1:FLEXRAY:IDDATA:  
DATA:BORDER BIG;CONDITION BETWEEN;  
DATA1 1.0000000E+00;DATA2 1.0000000E+00;  
DPOSITION 1;DSIZE 1;MSBLSB 1,0;  
PATTERN "10101001";SIGN SIGN;:SEARCH1:  
FLEXRAY:IDDATA:FID:CONDITION BETWEEN;  
ID1 100;ID2 2047;:SEARCH1:FLEXRAY:  
IDDATA:INDICATOR:CONDITION DONTCARE;  
NFRAME DONTCARE;PPREAMBLE DONTCARE;  
STFRAME DONTCARE;SYFRAME DONTCARE

**:SEARCh<x>:FLEXray:IDData:CCOUNT?**

**Function** Queries all settings related to the Cycle Count of the FLEXRAY bus signal search.

**Syntax** :SEARCh<x>:FLEXray:IDData:CCOUNT?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:CCOUNT?  
-> :SEARCH1:FLEXRAY:IDDATA:CCOUNT;  
CONDITION BETWEEN;COUNT1 10;COUNT2 63



## 5.22 SEARCH Group

### **:SEARCH<x>:FLEXray:IDData:CCOUNT:**

#### **CONDition**

**Function** Sets the Cycle Count data conditions for the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCH<x>:FLEXray:IDData:CCOUNT:  
CONDition {BETWEEen|DONTcare|FALSE|  
GTHan|LTHan|ORANge|TRUE}  
:SEARCH<x>:FLEXray:IDData:CCOUNT:  
CONDition?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:CCOUNT:  
CONDITION BETWEEN  
:SEARCH1:FLEXRAY:IDDATA:CCOUNT:  
CONDITION? -> :SEARCH1:FLEXRAY:IDDATA:  
CCOUNT:CONDITION BETWEEN

### **:SEARCH<x>:FLEXray:IDData:CCOUNT:**

#### **COUNT<x>**

**Function** Sets the FLEXRAY bus signal search Cycle Count or queries the current setting.

**Syntax** :SEARCH<x>:FLEXray:IDData:CCOUNT:  
COUNT<x> {<Nrf>}  
:SEARCH<x>:FLEXray:IDData:CCOUNT:  
COUNT<x>?  
<x> of SEARCh<x> = 1, 2  
<x> of COUNT<x> = 1, 2  
<Nrf> = 0 to 63

**Example** :SEARCH1:FLEXRAY:IDDATA:CCOUNT:  
COUNT1 10  
:SEARCH1:FLEXRAY:IDDATA:CCOUNT:  
COUNT1? -> :SEARCH1:FLEXRAY:IDDATA:  
CCOUNT:COUNT1 10

**Description**

- For :SEARCH<x>:FLEXray:IDData:CCOUNT:CONDition GTHan, set using: SEARCh<x>:FLEXray:IDData:CCOUNT:COUNT1.
- For :SEARCH<x>:FLEXray:IDData:CCOUNT:CONDition LTHan, set using: SEARCh<x>:FLEXray:IDData:CCOUNT:COUNT2.
- For :SEARCH<x>:FLEXray:IDData:CCOUNT:CONDition BETWEEen|ORANge, set small values with: SEARCh<x>:FLEXray:IDData:CCOUNT:COUNT1, and large values with: SEARCh<x>:FLEXray:IDData:CCOUNT:COUNT2.

### **:SEARCH<x>:FLEXray:IDData:DATA?**

**Function** Queries all settings related to the Data Field of the FLEXRAY bus signal search.

**Syntax** :SEARCH<x>:FLEXray:IDData:DATA?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:DATA?  
-> :SEARCH1:FLEXRAY:IDDATA:DATA:  
BORDER BIG;CONDITION BETWEEN;  
DATA1 1.0000000E+00;  
DATA2 1.0000000E+00;DPOSITION 1;  
DSIZE 1;MSBLSB 1,0;  
PATTERN "10101001";SIGN SIGN

### **:SEARCH<x>:FLEXray:IDData:DATA:BORDER**

**Function** Sets the byte order of the Data Field of the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCH<x>:FLEXray:IDData:DATA:  
BORDER {BIG|LITTLE}  
:SEARCH<x>:FLEXray:IDData:DATA:BORDER?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:DATA:BORDER BIG  
:SEARCH1:FLEXRAY:IDDATA:DATA:BORDER? ->  
:SEARCH1:FLEXRAY:IDDATA:DATA:BORDER BIG

### **:SEARCH<x>:FLEXray:IDData:DATA:**

#### **CONDition**

**Function** Sets the data conditions of the Data Field of the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCH<x>:FLEXray:IDData:DATA:  
CONDition {BETWEEen|DONTcare|FALSE|  
GTHan|LTHan|ORANge|TRUE}  
:SEARCH<x>:FLEXray:IDData:DATA:  
CONDition?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:DATA:  
CONDITION BETWEEN  
:SEARCH1:FLEXRAY:IDDATA:DATA:CONDITION?  
-> :SEARCH1:FLEXRAY:IDDATA:DATA:  
CONDITION BETWEEN

**:SEARCh<x>:FLEXray:IDData:DATA:DATA<x>**

**Function** Sets the comparison data of the Data Field of the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:IDData:DATA:DATA<x> {<Nrf>}  
:SEARCh<x>:FLEXray:IDData:DATA:DATA<x>?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<Nrf> = See the SB5000 User's Manual

**Example** :SEARCH1:FLEXRAY:IDDATA:DATA:DATA1 1  
:SEARCH1:FLEXRAY:IDDATA:DATA:DATA1?  
-> :SEARCH1:FLEXRAY:IDDATA:DATA:DATA1 1.0000000E+00

**Description**

- For :SEARCh<x>:FLEXray:IDData:DATA:CONDition GTHan, set using: SEARCh<x>:FLEXray:IDData:DATA:DATA1.
- For :SEARCh<x>:FLEXray:IDData:DATA:CONDition LTHan, set using: SEARCh<x>:FLEXray:IDData:DATA:DATA2.
- For :SEARCh<x>:FLEXray:IDData:DATA:CONDition BETWeen|ORANge, set small values with: SEARCh<x>:FLEXray:IDData:DATA:DATA1, and large values with: SEARCh<x>:FLEXray:IDData:DATA:DATA2.

**:SEARCh<x>:FLEXray:IDData:DATA:****DPOSITION**

**Function** Sets the position for pattern comparison of the data of the Data Field of the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:IDData:DATA:DPOSITION {<Nrf>}  
:SEARCh<x>:FLEXray:IDData:DATA:DPOSITION?  
<x> = 1, 2  
<Nrf> = 0 to 253

**Example** :SEARCH1:FLEXRAY:IDDATA:DATA:DPOSITION 1  
:SEARCH1:FLEXRAY:IDDATA:DATA:DPOSITION?  
-> :SEARCH1:FLEXRAY:IDDATA:DATA:DPOSITION 1

**:SEARCh<x>:FLEXray:IDData:DATA:DSIZE**

**Function** Sets the number of bytes of data in the Data Field of the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:IDData:DATA:DSIZE {<Nrf>}  
:SEARCh<x>:FLEXray:IDData:DATA:DSIZE?  
<x> = 1, 2  
<Nrf> = 1 to 8

**Example** :SEARCH1:FLEXRAY:IDDATA:DATA:DSIZE 1  
:SEARCH1:FLEXRAY:IDDATA:DATA:DSIZE? ->  
:SEARCH1:FLEXRAY:IDDATA:DATA:DSIZE 1

**:SEARCh<x>:FLEXray:IDData:DATA:HEXA**

**Function** Sets the data in the Data Field of the FLEXRAY bus signal search in hexadecimal.

**Syntax** :SEARCh<x>:FLEXray:IDData:DATA:HEXA {<String>}  
<x> = 1, 2  
<String> = 16 characters by combining '0' to 'F' and 'X,' units of 1 byte

**Example** :SEARCH1:FLEXRAY:IDDATA:DATA:HEXA "A9"

**:SEARCh<x>:FLEXray:IDData:DATA:MSBLSb**

**Function** Sets the MSB/LSB bit of data in the Data Field of the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:IDData:DATA:MSBLSb {<Nrf>,<Nrf>}  
:SEARCh<x>:FLEXray:IDData:DATA:MSBLSb?  
<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :SEARCH1:FLEXRAY:IDDATA:DATA:MSBLSB 1,0  
:SEARCH1:FLEXRAY:IDDATA:DATA:MSBLSB? ->  
:SEARCH1:FLEXRAY:IDDATA:DATA:MSBLSB 1,0

**:SEARCh<x>:FLEXray:IDData:DATA:PATTern**

**Function** Sets the data of the Data Field of the FLEXRAY bus signal search in binary or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:IDData:DATA:PATTern {<String>}  
:SEARCh<x>:FLEXray:IDData:DATA:PATTern?  
<x> = 1, 2  
<String> = 64 characters by combining '0','1',' and 'X,' units of 1 byte

**Example** :SEARCH1:FLEXRAY:IDDATA:DATA:PATTERN "11011111"  
:SEARCH1:FLEXRAY:IDDATA:DATA:PATTERN?  
-> :SEARCH1:FLEXRAY:IDDATA:DATA:PATTERN "11011111"

**:SEARCh<x>:FLEXray:IDData:DATA:SIGN**

**Function** Sets the data sign of the Data Field of the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:IDData:DATA:SIGN {SIGN|UNSign}  
:SEARCh<x>:FLEXray:IDData:DATA:SIGN?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:DATA:SIGN SIGN  
:SEARCH1:FLEXRAY:IDDATA:DATA:SIGN? ->  
:SEARCH1:FLEXRAY:IDDATA:DATA:SIGN SIGN

## 5.22 SEARCH Group

### **:SEARCH<x>:FLEXray:IDData:FID?**

**Function** Queries all settings related to the Frame ID of the FLEXRAY bus signal search.

**Syntax** :SEARCH<x>:FLEXray:IDData:FID?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:FID? ->  
:SEARCH1:FLEXRAY:IDDATA:FID:  
CONDITION BETWEEN;ID1 100;ID2 2047

### **:SEARCH<x>:FLEXray:IDData:FID:**

#### **CONDition**

**Function** Sets the Frame ID data conditions for the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCH<x>:FLEXray:IDData:FID:  
CONDition {BETween|DONTcare|FALSE|  
GTHan|LTHan|ORANGE|TRUE}  
:SEARCH<x>:FLEXray:IDData:FID:  
CONDition?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:FID:  
CONDITION BETWEEN  
:SEARCH1:FLEXRAY:IDDATA:FID:CONDITION?  
-> :SEARCH1:FLEXRAY:IDDATA:FID:  
CONDITION BETWEEN

### **:SEARCH<x>:FLEXray:IDData:FID:ID<x>**

**Function** Sets the Frame ID value for the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCH<x>:FLEXray:IDData:FID:  
ID<x> {<NRF>}  
:SEARCH<x>:FLEXray:IDData:FID:ID<x>?  
<x> of SEARCH<x> = 1, 2  
<x> of ID<x> = 1, 2  
<NRF> = 1 to 2047

**Example** :SEARCH1:FLEXRAY:IDDATA:FID:ID1 100  
:SEARCH1:FLEXRAY:IDDATA:FID:ID1? ->  
:SEARCH1:FLEXRAY:IDDATA:FID:ID1 100

**Description**

- For :SEARCH<x>:FLEXray:IDData:FID:CONDition GTHan, set using: SEARCH<x>:FLEXray:IDData:FID:ID1.
- For :SEARCH<x>:FLEXray:IDData:FID:CONDition LTHan, set using: SEARCH<x>:FLEXray:IDData:FID:ID2.
- For :SEARCH<x>:FLEXray:IDData:FID:CONDition BETWEEN|ORANGE, set small values with: SEARCH<x>:FLEXray:IDData:FID:ID1, and large values with: SEARCH<x>:FLEXray:IDData:FID:ID2.

### **:SEARCH<x>:FLEXray:IDData:INDicator?**

**Function** Queries all settings related to the Indicator of the FLEXRAY bus signal search.

**Syntax** :SEARCH<x>:FLEXray:IDData:INDicator?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:INDICATOR?  
-> SEARCH1:FLEXRAY:IDDATA:INDICATOR:  
CONDITION DONTCARE;NFRAME DONTCARE;  
PPREAMBLE DONTCARE;STFRAME DONTCARE;  
SYFRAME DONTCARE

### **:SEARCH<x>:FLEXray:IDData:INDicator:**

#### **CONDition**

**Function** Sets the data conditions of the Indicator of the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCH<x>:FLEXray:IDData:INDicator:  
CONDition {DONTcare|FALSE|TRUE}  
:SEARCH<x>:FLEXray:IDData:INDicator:  
CONDition?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:INDICATOR:  
CONDITION DONTCARE  
:SEARCH1:FLEXRAY:IDDATA:INDICATOR:  
CONDITION? -> :SEARCH1:FLEXRAY:IDDATA:  
INDICATOR:CONDITION DONTCARE

### **:SEARCH<x>:FLEXray:IDData:INDicator:**

#### **NFrame**

**Function** Sets the Null frame of the Indicator of the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCH<x>:FLEXray:IDData:INDicator:  
NFrame {DONTcare|OFF|ON}  
:SEARCH<x>:FLEXray:IDData:INDicator:  
NFrame?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:INDICATOR:  
NFRAME DONTCARE  
:SEARCH1:FLEXRAY:IDDATA:INDICATOR:  
NFRAME? -> :SEARCH1:FLEXRAY:IDDATA:  
INDICATOR:NFRAME DONTCARE

**:SEARCh<x>:FLEXray:IDData:INDicator:****PPReamble**

**Function** Sets the Payload preamble of the Indicator of the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:IDData:INDicator:  
PPReamble {DONTcare|OFF|ON}  
:SEARCh<x>:FLEXray:IDData:INDicator:  
PPReamble?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:INDICATOR:  
PPREAMBLE DONTCARE  
:SEARCH1:FLEXRAY:IDDATA:INDICATOR:  
PPREAMBLE? -> :SEARCH1:FLEXRAY:IDDATA:  
INDICATOR:PPREAMBLE DONTCARE

**:SEARCh<x>:FLEXray:IDData:INDicator:****STFRame**

**Function** Sets the Start frame of the Indicator of the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:IDData:INDicator:  
STFRame {DONTcare|OFF|ON}  
:SEARCh<x>:FLEXray:IDData:INDicator:  
STFRame?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:INDICATOR:  
STFRAME DONTCARE  
:SEARCH1:FLEXRAY:IDDATA:INDICATOR:  
STFRAME? -> :SEARCH1:FLEXRAY:IDDATA:  
INDICATOR:STFRAME DONTCARE

**:SEARCh<x>:FLEXray:IDData:INDicator:****SYFRame**

**Function** Sets the Sync frame of the Indicator of the FLEXRAY bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:IDData:INDicator:  
SYFRame {DONTcare|OFF|ON}  
:SEARCh<x>:FLEXray:IDData:INDicator:  
SYFRame?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:IDDATA:INDICATOR:  
SYFRAME DONTCARE  
:SEARCH1:FLEXRAY:IDDATA:INDICATOR:  
SYFRAME? -> :SEARCH1:FLEXRAY:IDDATA:  
INDICATOR:SYFRAME DONTCARE

**:SEARCh<x>:FLEXray:MODE**

**Function** Sets the FLEXRAY bus signal search mode or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:  
MODE {ERROR|FStart|IDData}  
:SEARCh<x>:FLEXray:MODE?  
<x> = 1, 2

**Example** :SEARCH1:FLEXRAY:MODE ERROR  
:SEARCH1:FLEXRAY:MODE?  
-> :SEARCH1:FLEXRAY:MODE ERROR

**:SEARCh<x>:FLEXray:TRACe**

**Function** Sets the FLEXRAY bus signal search trace or queries the current setting.

**Syntax** :SEARCh<x>:FLEXray:TRACe {<NRf>}  
:SEARCh<x>:FLEXray:TRACe?  
<x> = 1, 2  
<NRf> = 1 to 8

**Example** :SEARCH1:FLEXRAY:TRACE 1  
:SEARCH1:FLEXRAY:TRACE?  
-> :SEARCH1:FLEXRAY:TRACE 1

**:SEARCh<x>:HOLDoff**

**Function** Sets the hold off detection or queries the current setting.

**Syntax** :SEARCh<x>:HOLDoff {<Time>}  
:SEARCh<x>:HOLDoff?  
<x> = 1 or 2  
<Time> = 0 s to 1 s (100 ps steps)

**Example** :SEARCH1:HOLDOFF 0S  
:SEARCH1:HOLDOFF? -> :SEARCH1:  
HOLDOFF 0.000E+00

## 5.22 SEARCh Group

### SEARCh<x>: I2CBus?

**Function** Queries all settings related to the I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:I2CBus?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS?  
-> :SEARCH1:I2CBUS:CLOCK:SOURCE 1;:  
SEARCH1:I2CBUS:SETUP:ADATA:  
BIT10ADDRESS:PATTERN " 10111011111";:  
SEARCH1:I2CBUS:SETUP:ADATA:BIT7ADDRESS:  
PATTERN " 11011110";:SEARCH1:I2CBUS:  
SETUP:ADATA:BIT7APSUB:ADDRESS:  
PATTERN " 11001101";:SEARCH1:I2CBUS:  
SETUP:ADATA:BIT7APSUB:SADDRESS:  
PATTERN " 11101111";:SEARCH1:I2CBUS:  
SETUP:ADATA:TYPE BIT7APSUB;:SEARCH1:  
I2CBUS:SETUP:DATA:BYTE 1;  
CONDITION TRUE;DPOSITION 0;MODE 0;  
PATTERN1 " 10101011";  
PATTERN2 " 10101011";  
PATTERN3 " 10101011";  
PATTERN4 " 10101011";  
PMODE DONTCARE;:SEARCH1:I2CBUS:SETUP:  
GCALL:BIT7MADDRESS:PATTERN " 1010101";:  
SEARCH1:I2CBUS:SETUP:GCALL:  
SBYTE BIT7MADDRESS;:SEARCH1:I2CBUS:  
SETUP:MODE SBHSMODE;.....

### : SEARCh<x>: I2CBus: CLOck?

**Function** Queries all settings related to the clock of the I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:I2CBus:CLOck?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:CLOCK?  
-> :SEARCH1:I2CBUS:CLOCK:SOURCE 1

### : SEARCh<x>: I2CBus: CLOck: SOURce

**Function** Sets the clock trace of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus:CLOck:SOURce {<Nrf>}  
:SEARCh<x>:I2CBus:CLOck:SOURce?  
<x> = 1 or 2  
<Nrf> = 1 to 8

**Example** :SEARCH1:I2CBUS:CLOCK:SOURCE 1  
:SEARCH1:I2CBUS:CLOCK:SOURCE?  
-> :SEARCH1:I2CBUS:CLOCK:SOURCE 1

### : SEARCh<x>: I2CBus: SETUp?

**Function** Queries all settings related to the I<sup>2</sup>C bus signal search setup.

**Syntax** :SEARCh<x>:I2CBus:SETUp?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP?  
-> :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT10ADDRESS:PATTERN " 10111011111";:  
SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7ADDRESS:PATTERN " 11011110";:  
SEARCH1:I2CBUS:SETUP:ADATA:BIT7APSUB:  
ADDRESS:PATTERN " 11001101";:SEARCH1:  
I2CBUS:SETUP:ADATA:BIT7APSUB:  
SADDRESS:PATTERN " 11101111";:SEARCH1:  
I2CBUS:SETUP:ADATA:TYPE BIT7APSUB;:  
SEARCH1:I2CBUS:SETUP:DATA:BYTE 1;  
CONDITION TRUE;DPOSITION 0;MODE 0;  
PATTERN1 " 10101011";  
PATTERN2 " 10101011";  
PATTERN3 " 10101011";  
PATTERN4 " 10101011";PMODE DONTCARE;:  
SEARCH1:I2CBUS:SETUP:GCALL:  
BIT7MADDRESS:PATTERN " 1010101";:  
SEARCH1:I2CBUS:SETUP:GCALL:  
SBYTE BIT7MADDRESS;:SEARCH1:I2CBUS:  
SETUP:MODE SBHSMODE;NAIGNORE:HSMODE 0;  
RACCESS 0;SBYTE 0;:SEARCH1:I2CBUS:  
SETUP:SBHSMODE:TYPE SBYTE

### : SEARCh<x>: I2CBus [: SETUp] : ADATa?

**Function** Queries all settings related to the address of the I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:I2CBus[:SETUp]:ADATa?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:ADATA?  
-> :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT10ADDRESS:PATTERN " 10111011111";:  
SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7ADDRESS:PATTERN " 11011110";:  
SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7APSUB:ADDRESS:PATTERN " 11001101";:  
SEARCH1:I2CBUS:SETUP:ADATA:BIT7APSUB:  
SADDRESS:PATTERN " 11101111";:  
SEARCH1:I2CBUS:SETUP:ADATA:  
TYPE BIT7APSUB

**:SEARCh<x>:I2CBus[:SETUp]:ADATa:****BIT10address?**

Function Queries all settings related to the 10-bit address of the I<sup>2</sup>C bus signal search.

Syntax :SEARCh<x>:I2CBus[:SETUp]:ADATa:  
BIT10address?  
<x> = 1 or 2

Example :SEARCH1:I2CBUS:SETUP:  
ADATA:BIT10ADDRESS?  
-> :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT10ADDRESS:PATTERN " 00011111101"

**:SEARCh<x>:I2CBus[:SETUp]:ADATa:****BIT10address:HEXA**

Function Sets the 10-bit address of the I<sup>2</sup>C bus signal search in hexadecimal notation.

Syntax :SEARCh<x>:I2CBus[:SETUp]:ADATa:  
BIT10address:HEXA {<String>}  
<x> = 1 or 2  
<String> = 3 characters by combining '0' to 'F' and 'X'  
(bit 8 is the R/W bit)

Example :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT10ADDRESS:HEXA " 5DF"

**:SEARCh<x>:I2CBus[:SETUp]:ADATa:****BIT10address:PATtern**

Function Sets the 10-bit address of the I<sup>2</sup>C bus signal search in binary notation or queries the current setting.

Syntax :SEARCh<x>:I2CBus[:SETUp]:ADATa:  
BIT10address:PATtern {<String>}  
:SEARCh<x>:I2CBus[:SETUp]:ADATa:  
BIT10address:PATtern?  
<x> = 1 or 2  
<String> = 11 characters by combining '0', '1', and 'X'  
(bit 8 is the R/W bit)

Example :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT10ADDRESS:PATTERN " 10111011111"  
:SEARCH1:I2CBUS:SETUP:ADATA:  
BIT10ADDRESS:PATTERN?  
-> :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT10ADDRESS:PATTERN " 10111011111"

**:SEARCh<x>:I2CBus[:SETUp]:ADATa:****BIT7Address?**

Function Queries all settings related to the 7-bit address of the I<sup>2</sup>C bus signal search.

Syntax :SEARCh<x>:I2CBus[:SETUp]:ADATa:  
BIT7Address?  
<x> = 1 or 2

Example :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7ADDRESS?  
-> :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7ADDRESS:PATTERN " 11011110"

**:SEARCh<x>:I2CBus[:SETUp]:ADATa:****BIT7Address:HEXA**

Function Sets the 7-bit address of the I<sup>2</sup>C bus signal search in hexadecimal notation.

Syntax :SEARCh<x>:I2CBus[:SETUp]:ADATa:  
BIT7Address:HEXA {<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X'  
(bit 0 is the R/W bit)

Example :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7ADDRESS:HEXA " DE"

## 5.22 SEARCh Group

### **:SEARCh<x>:I2CBus[:SETup]:ADATa:**

#### **BIT7Address:PATtern**

**Function** Sets the 7-bit address of the I<sup>2</sup>C bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:ADATa:  
BIT7Address:PATtern {<String>}  
:SEARCh<x>:I2CBus[:SETup]:ADATa:  
BIT7Address:PATtern?  
<x> = 1 or 2  
<String> = 8 characters by combining '0', '1', and 'X'  
(bit 0 is the R/W bit)

**Example** :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7ADDRESS:PATTERN " 11011110"  
:SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7ADDRESS:PATTERN?  
-> :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7ADDRESS:PATTERN " 11011110"

### **:SEARCh<x>:I2CBus[:SETup]:ADATa:**

#### **BIT7APsub?**

**Function** Queries all settings related to the 7-bit + Sub address of the I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:ADATa:  
BIT7APsub?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:ADATA:BIT7APSUB?  
-> :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7APSUB:ADDRESS:PATTERN " 11001101";  
:SEARCH1:I2CBUS:SETUP:ADATA:BIT7APSUB:  
SADDRESS:PATTERN " 11101111"

### **:SEARCh<x>:I2CBus[:SETup]:ADATa:**

#### **BIT7APsub:ADDRESS?**

**Function** Queries all settings related to the 7-bit address of the 7-bit + Sub address of the I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:ADATa:  
BIT7APsub:ADDRESS?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:ADATA:BIT7APSUB:  
ADDRESS?  
-> :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7APSUB:ADDRESS:PATTERN " 11001101"

### **:SEARCh<x>:I2CBus[:SETup]:ADATa:**

#### **BIT7APsub:ADDRESS:HEXA**

**Function** Sets the 7-bit address of the 7-bit + Sub address of the I<sup>2</sup>C bus signal search in hexadecimal notation.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:ADATa:  
BIT7APsub:ADDRESS:HEXA {<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X'  
(bit 0 is the R/W bit)

**Example** :SEARCH1:I2CBUS:SETUP:ADATA:BIT7APSUB:  
ADDRESS:HEXA " CD"

### **:SEARCh<x>:I2CBus[:SETup]:ADATa:**

#### **BIT7APsub:ADDRESS:PATtern**

**Function** Sets the 7-bit address of the 7-bit + Sub address of the I<sup>2</sup>C bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:ADATa:  
BIT7APsub:ADDRESS:PATtern {<String>}  
:SEARCh<x>:I2CBus[:SETup]:ADATa:  
BIT7APsub:ADDRESS:PATtern?  
<x> = 1 or 2  
<String> = 8 characters by combining '0', '1', and 'X'  
(bit 0 is the R/W bit)

**Example** :SEARCH1:I2CBUS:SETUP:ADATA:BIT7APSUB:  
ADDRESS:PATTERN " 11001101"  
:SEARCH1:I2CBUS:SETUP:ADATA:BIT7APSUB:  
ADDRESS:PATTERN?  
-> :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7APSUB:ADDRESS:PATTERN " 11001101"

### **:SEARCh<x>:I2CBus[:SETup]:ADATa:**

#### **BIT7APsub:SADDRESS?**

**Function** Queries all settings related to the Sub address of the 7-bit + Sub address of the I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:ADATa:  
BIT7APsub:SADDRESS?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:ADATA:BIT7APSUB:  
SADDRESS?  
-> :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7APSUB:SADDRESS:PATTERN " 11101111"

### **:SEARCh<x>:I2CBus[:SETup]:ADATa:**

#### **BIT7APsub:SADDRESS:HEXA**

**Function** Sets the Sub address of the 7-bit + Sub address of the I<sup>2</sup>C bus signal search in hexadecimal notation.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:ADATa:  
BIT7APsub:SADDRESS:HEXA {<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X'

**Example** :SEARCH1:I2CBUS:SETUP:ADATA:BIT7APSUB:  
SADDRESS:HEXA " EF"

**:SEARCh<x>:I2CBus[:SETUp]:ADATa:****BIT7APsub:SADdress:PATtern**

**Function** Sets the Sub address of the 7-bit + Sub address of the I<sup>2</sup>C bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETUp]:ADATa:  
BIT7APsub:SADdress:PATtern {<String>}  
:SEARCh<x>:I2CBus[:SETUp]:ADATa:  
BIT7APsub:SADdress:PATtern?  
<x> = 1 or 2  
<String> = 8 characters by combining '0','1,' and 'X'

**Example** :SEARCH1:I2CBUS:SETUP:ADATA:BIT7APSUB:  
SADDRESS:PATTERN " 11101111"  
:SEARCH1:I2CBUS:SETUP:ADATA:BIT7APSUB:  
SADDRESS:PATTERN?  
-> :SEARCH1:I2CBUS:SETUP:ADATA:  
BIT7APSUB:SADDRESS:PATTERN " 11101111"

**:SEARCh<x>:I2CBus[:SETUp]:ADATa:TYPE**

**Function** Sets the address type of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETUp]:ADATa:  
TYPE {BIT10address|BIT7ADdress|  
BIT7APsub}  
:SEARCh<x>:I2CBus[:SETUp]:ADATa:TYPE?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:ADATA:  
TYPE BIT10ADDRESS  
:SEARCH1:I2CBUS:SETUP:ADATA:TYPE?  
-> :SEARCH1:I2CBUS:SETUP:ADATA:  
TYPE BIT10ADDRESS

**:SEARCh<x>:I2CBus[:SETUp]:DATA?**

**Function** Queries all settings related to the data of the I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:I2CBus[:SETUp]:DATA?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:DATA?  
-> :SEARCH1:I2CBUS:SETUP:DATA:BYTE 1;  
CONDITION TRUE;DPOSITION 0;MODE 0;  
PATTERN1 " 10101011";  
PATTERN2 " 10101011";  
PATTERN3 " 10101011";  
PATTERN4 " 10101011";PMODE DONTCARE

**:SEARCh<x>:I2CBus[:SETUp]:DATA:BYTE**

**Function** Sets the number of data bytes of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETUp]:DATA:  
BYTE {<NRF>}  
:SEARCh<x>:I2CBus[:SETUp]:DATA:BYTE?  
<x> = 1 or 2  
<NRF> = 1 to 4

**Example** :SEARCH1:I2CBUS:SETUP:DATA:BYTE 1  
:SEARCH1:I2CBUS:SETUP:DATA:BYTE?  
-> :SEARCH1:I2CBUS:SETUP:DATA:BYTE 1

**:SEARCh<x>:I2CBus[:SETUp]:DATA:****CONDition**

**Function** Sets the determination method (match or not match) of the data of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETUp]:DATA:  
CONDition {FALSE|TRUE}  
:SEARCh<x>:I2CBus[:SETUp]:DATA:  
CONDition?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:DATA:  
CONDITION TRUE  
:SEARCH1:I2CBUS:SETUP:DATA:  
CONDITION?  
-> :SEARCH1:I2CBUS:SETUP:DATA:  
CONDITION TRUE

**:SEARCh<x>:I2CBus[:SETUp]:DATA:****DPOSITION**

**Function** Sets the position for comparing the data pattern of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETUp]:DATA:  
DPOSITION {<NRF>}  
:SEARCh<x>:I2CBus[:SETUp]:DATA:  
DPOSITION?  
<x> = 1 or 2  
<NRF> = 0 to 9999

**Example** :SEARCH1:I2CBUS:SETUP:DATA:DPOSITION 1  
:SEARCH1:I2CBUS:SETUP:DATA:  
DPOSITION?  
-> :SEARCH1:I2CBUS:SETUP:DATA:  
DPOSITION 1

**:SEARCh<x>:I2CBus[:SETUp]:DATA:****HEXA<x>**

**Function** Sets the data of the I<sup>2</sup>C bus signal search in hexadecimal notation.

**Syntax** :SEARCh<x>:I2CBus[:SETUp]:DATA:  
HEXA<x> {<String>}  
<x> of SEARCh<x> = 1 or 2  
<x> of HEXA<x> = 1 to 4  
<String> = 2 characters by combining '0' to 'F' and 'X'

**Example** :SEARCH1:I2CBUS:SETUP:DATA:HEXA1 " AB"

**:SEARCh<x>:I2CBus[:SETUp]:DATA:MODE**

**Function** Enables/Disables the data conditions of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETUp]:DATA:  
MODE {<Boolean>}  
:SEARCh<x>:I2CBus[:SETUp]:DATA:MODE?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:DATA:MODE ON  
:SEARCH1:I2CBUS:SETUP:DATA:MODE?  
-> :SEARCH1:I2CBUS:SETUP:DATA:MODE 1



## 5.22 SEARCh Group

### **:SEARCh<x>:I2CBus[:SETup]:DATA:**

#### **PATtern<x>**

**Function** Sets the data of the I<sup>2</sup>C bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:DATA:  
PATtern<x> {<String>}  
:SEARCh<x>:I2CBus[:SETup]:DATA:  
PATtern<x>?  
<x> of SEARCh<x> = 1 or 2  
<x> of <PATtern x> = 1 to 4  
<String> = 8 characters by combining '0,' '1,' and 'X'

**Example** :SEARCH1:I2CBUS:SETUP:DATA:  
PATTERN1 " 10101011"  
:SEARCH1:I2CBUS:SETUP:DATA:PATTERN1?  
-> :SEARCH1:I2CBUS:SETUP:DATA:  
PATTERN1 " 10101011"

### **:SEARCh<x>:I2CBus[:SETup]:DATA:PMODE**

**Function** Sets the pattern comparison start position mode of the data of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:DATA:  
PMODE {DONTcare|SElect}  
:SEARCh<x>:I2CBus[:SETup]:DATA:PMODE?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:DATA:  
PMODE DONTCARE  
:SEARCH1:I2CBUS:SETUP:DATA:PMODE?  
-> :SEARCH1:I2CBUS:SETUP:DATA:  
PMODE DONTCARE

### **:SEARCh<x>:I2CBus[:SETup]:DATA:TRACe**

**Function** Sets the trace of the data of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:DATA:TRACe  
{<NRf>}  
:SEARCh<x>:I2CBus[:SETup]:DATA:TRACe?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:DATA::TRACe 1  
:SEARCH1:I2CBUS:SETUP:DATA:TRACe?  
-> :SEARCH1:I2CBUS:SETUP:DATA::TRACe 1

### **:SEARCh<x>:I2CBus[:SETup]:GCAL1?**

**Function** Queries all settings related to the general call of the I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:GCAL1?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:GCALL?  
-> :SEARCH1:I2CBUS:SETUP:GCALL:  
BIT7MADDRESS:PATTERN " 1010101";;  
SEARCH1:I2CBUS:SETUP:GCALL:  
SBYTE BIT7MADDRESS

### **:SEARCh<x>:I2CBus[:SETup]:GCAL1:**

#### **BIT7maddress?**

**Function** Queries all settings related to the 7-bit master address of the general call of the I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:GCAL1:  
BIT7maddress?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:GCALL:  
BIT7MADDRESS?  
-> :SEARCH1:I2CBUS:SETUP:GCALL:  
BIT7MADDRESS:PATTERN " 1010101"

### **:SEARCh<x>:I2CBus[:SETup]:GCAL1:**

#### **BIT7maddress:HEXA**

**Function** Sets the 7-bit master address of the general call of the I<sup>2</sup>C bus signal search in hexadecimal notation.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:GCAL1:  
BIT7maddress:HEXA {<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X'  
(bit 0 is fixed 1)

**Example** :SEARCH1:I2CBUS:SETUP:GCALL:  
BIT7MADDRESS:HEXA " BA"

### **:SEARCh<x>:I2CBus[:SETup]:GCAL1:**

#### **BIT7maddress:PATtern**

**Function** Sets the 7-bit master address of the general call of the I<sup>2</sup>C bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:GCAL1:  
BIT7maddress:PATtern {<String>}  
:SEARCh<x>:I2CBus[:SETup]:GCAL1:  
BIT7maddress:PATtern?  
<x> = 1 or 2  
<String> = 7 characters by combining '0,' '1,' and 'X'

**Example** :SEARCH1:I2CBUS:SETUP:GCALL:  
BIT7MADDRESS:PATTERN " 1010101"  
:SEARCH1:I2CBUS:SETUP:GCALL:  
BIT7MADDRESS:PATTERN?  
-> :SEARCH1:I2CBUS:SETUP:GCALL:  
BIT7MADDRESS:PATTERN " 1010101"

### **:SEARCh<x>:I2CBus[:SETup]:GCAL1:**

#### **SBYTE (Second Byte)**

**Function** Sets the second byte type of the general call of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:I2CBus[:SETup]:GCAL1:  
SBYTE {BIT7maddress|DONTcare|H04|H06}  
:SEARCh<x>:I2CBus[:SETup]:GCAL1:SBYTE?  
<x> = 1 or 2

**Example** :SEARCH1:I2CBUS:SETUP:GCALL:  
SBYTE BIT7MADDRESS  
:SEARCH1:I2CBUS:SETUP:GCALL:SBYTE?  
-> :SEARCH1:I2CBUS:SETUP:GCALL:  
SBYTE BIT7MADDRESS

**: SEARCh<x>: I2Cbus [: SETUp] : MODE**

**Function** Sets the search mode of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>: I2Cbus [: SETUp] :  
MODE {ADATa | ESTart | GCALl | NAIGNore |  
SBHSMode}  
:SEARCh<x>: I2Cbus [: SETUp] :MODE?  
<x> = 1 or 2

**Example** :SEARCH1: I2CBUS: SETUP: MODE ADATA  
:SEARCH1: I2CBUS: SETUP: MODE?  
-> :SEARCH1: I2CBUS: SETUP: MODE ADATA

**: SEARCh<x>: I2Cbus [: SETUp] : NAIGNore?**

**Function** Queries all settings related to the NON ACK ignore mode of the I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>: I2Cbus [: SETUp] :NAIGNore?  
<x> = 1 or 2

**Example** :SEARCH1: I2CBUS: SETUP: NAIGNORE?  
-> :SEARCH1: I2CBUS: SETUP: NAIGNORE:  
HSMODE 1; RACCESS 1; SBYTE 1

**: SEARCh<x>: I2Cbus [: SETUp] : NAIGNore:****HSMode**

**Function** Sets whether to ignore NON ACK in high speed mode of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>: I2Cbus [: SETUp] :NAIGNore:  
HSMode {<Boolean>}  
:SEARCh<x>: I2Cbus [: SETUp] :NAIGNore:  
HSMode?  
<x> = 1 or 2

**Example** :SEARCH1: I2CBUS: SETUP: NAIGNORE:  
HSMODE ON  
:SEARCH1: I2CBUS: SETUP: NAIGNORE: HSMODE?  
-> :SEARCH1: I2CBUS: SETUP: NAIGNORE:  
HSMODE 1

**: SEARCh<x>: I2Cbus [: SETUp] : NAIGNore:****RACCEss**

**Function** Sets whether to ignore NON ACK in read access mode of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>: I2Cbus [: SETUp] :NAIGNore:  
RACCEss {<Boolean>}  
:SEARCh<x>: I2Cbus [: SETUp] :NAIGNore:  
RACCEss?  
<x> = 1 or 2

**Example** :SEARCH1: I2CBUS: SETUP: NAIGNORE:  
RACCESS ON  
:SEARCH1: I2CBUS: SETUP: NAIGNORE:  
RACCESS?  
-> :SEARCH1: I2CBUS: SETUP: NAIGNORE:  
RACCESS 1

**: SEARCh<x>: I2Cbus [: SETUp] : NAIGNore:****SBYTE (Start Byte)**

**Function** Sets whether to ignore NON ACK in the start byte of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>: I2Cbus [: SETUp] :NAIGNore:  
SBYTE {<Boolean>}  
:SEARCh<x>: I2Cbus [: SETUp] :NAIGNore:  
SBYTE?  
<x> = 1 or 2

**Example** :SEARCH1: I2CBUS: SETUP: NAIGNORE: SBYTE ON  
:SEARCH1: I2CBUS: SETUP: NAIGNORE:  
SBYTE?  
-> :SEARCH1: I2CBUS: SETUP: NAIGNORE:  
SBYTE 1

**: SEARCh<x>: I2Cbus [: SETUp] : SBHSMode?**

**Function** Queries all settings related to the start byte and high speed mode of the I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>: I2Cbus [: SETUp] :SBHSMode?  
<x> = 1 or 2

**Example** :SEARCH1: I2CBUS: SETUP: SBHSMODE?  
-> :SEARCH1: I2CBUS: SETUP: SBHSMODE:  
TYPE HSMODE

**: SEARCh<x>: I2Cbus [: SETUp] : SBHSMode:****TYPE**

**Function** Sets the type of the start byte or high speed mode of the I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>: I2Cbus [: SETUp] :SBHSMode:  
TYPE {HSMode | SBYTE}  
:SEARCh<x>: I2Cbus [: SETUp] :SBHSMode:  
TYPE?  
<x> = 1 or 2

**Example** :SEARCH1: I2CBUS: SETUP: SBHSMODE:  
TYPE HSMODE  
:SEARCH1: I2CBUS: SETUP: SBHSMODE: TYPE?  
-> :SEARCH1: I2CBUS: SETUP: SBHSMODE:  
TYPE HSMODE



**:SEARCh<x>:LINBus[:SETup]:DATA:****CONDition**

**Function** Sets the LIN bus signal search data or queries the current setting.

**Syntax** :SEARCh<x>:LINBus[:SETup]:DATA:  
CONDition {BETween|DONTcare|FALSE|  
GTHan|LTHan|ORANge|TRUE}  
:SEARCh<x>:LINBus[:SETup]:DATA:  
CONDition?  
<x>=1 or 2

**Example** :SEARCH1:LINBUS:SETUP:DATA:  
CONDITION DONTCARE  
:SEARCH1:LINBUS:SETUP:DATA:CONDITION?  
-> :SEARCH1:LINBUS:SETUP:DATA:  
CONDITION DONTCARE

**:SEARCh<x>:LINBus[:SETup]:DATA:DATA<x>**

**Function** Sets the comparison data of the LIN bus signal search data or queries the current setting.

**Syntax** :SEARCh<x>:LINBus[:SETup]:DATA:  
DATA<x> {<Nrf>}  
:SEARCh<x>:LINBus[:SETup]:DATA:DATA<x>?  
<x> of SEARCh<x> = 1, 2  
<x> of DATA<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :SEARCH1:LINBUS:SETUP:DATA:DATA1 1  
:SEARCH1:LINBUS:SETUP:DATA:DATA1?  
-> :SEARCH1:LINBUS:SETUP:DATA:  
DATA1 1.0000000E+00

**Description**

- For :SEARCh<x>:LINBus[:SETup]:DATA:CONDition GTHan, set using: SEARCh<x>:LINBus[:SETup]:DATA:DATA1.
- For :SEARCh<x>:LINBus[:SETup]:DATA:CONDition LTHan, set using: SEARCh<x>:LINBus[:SETup]:DATA:DATA2.
- For :SEARCh<x>:LINBus[:SETup]:DATA:CONDition BETween|ORANge, set small values with: SEARCh<x>:LINBus[:SETup]:DATA:DATA1, and large values with: SEARCh<x>:LINBus[:SETup]:DATA:DATA2.

**:SEARCh<x>:LINBus[:SETup]:DATA:HEXA**

**Function** Sets the LIN bus signal search data in hexadecimal.

**Syntax** :SEARCh<x>:LINBus[:SETup]:DATA:  
HEXA {<string>}  
<x>=1 or 2  
<string>=Combination of up to 16 hex characters ('0' – 'F' and 'X') (changed with the BNUM setting)

**Example** :SEARCH1:LINBUS:SETUP:DATA:HEXA "3B"

**:SEARCh<x>:LINBus[:SETup]:DATA:MSBLSb**

**Function** Sets the MSB/LSB bit of the LIN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:LINBus[:SETup]:DATA:  
MSBLSb {<Nrf>, <Nrf>}  
:SEARCh<x>:LINBus[:SETup]:DATA:MSBLSb?  
<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :SEARCH1:LINBUS:SETUP:DATA:MSBLSB 1,0  
:SEARCH1:LINBUS:SETUP:DATA:MSBLSB? ->  
:SEARCH1:LINBUS:SETUP:DATA:MSBLSB 1,0

**:SEARCh<x>:LINBus[:SETup]:DATA:PATtern**

**Function** Sets the LIN bus signal search data in binary or queries the current setting.

**Syntax** :SEARCh<x>:LINBus[:SETup]:DATA:  
PATtern {<string>}  
:SEARCh<x>:LINBus[:SETup]:DATA:PATtern?  
<x>=1 or 2  
<string>=Combination of up to 64 characters ('0','1,' and 'X') (changed with the BNUM setting)

**Example** :SEARCH1:LINBUS:SETUP:DATA:  
PATTERN "11011111"  
:SEARCH1:LINBUS:SETUP:DATA:PATTERN?  
-> :SEARCH1:LINBUS:SETUP:DATA:  
PATTERN "11011111"

**:SEARCh<x>:LINBus[:SETup]:DATA:SIGN**

**Function** Sets the sign order of the LIN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:LINBus[:SETup]:DATA:  
SIGN {SIGN|UNSign}  
:SEARCh<x>:LINBus[:SETup]:DATA:SIGN?  
<x> = 1, 2

**Example** :SEARCH1:LINBUS:SETUP:DATA:SIGN SIGN  
:SEARCH1:LINBUS:SETUP:DATA:SIGN? ->  
:SEARCH1:LINBUS:SETUP:DATA:SIGN SIGN

**:SEARCh<x>:LINBus[:SETup]:ERROR?**

**Function** Queries all settings related to the LIN bus signal search error.

**Syntax** :SEARCh<x>:LINBus[:SETup]:ERROR?  
<x> = 1, 2

**Example** :SEARCH1:LINBUS:SETUP:ERROR? ->  
:SEARCH1:LINBUS:SETUP:ERROR:CHECKSUM  
1;FRAMING 1;PARITY 1;SYNCH 1;TOUT 1

## 5.22 SEARCh Group

### **:SEARCh<x>:LINBus[:SETup]:ERROr:**

#### **CHECKsum**

**Function** Sets the LIN bus signal search Checksum error or queries the current setting.

**Syntax** :SEARCh<x>:LINBus[:SETup]:ERROr:  
CHECKsum {<Boolean>}  
:SEARCh<x>:LINBus[:SETup]:ERROr:  
CHECKsum?  
<x> = 1, 2

**Example** :SEARCH1:LINBUS:SETUP:ERROR:CHECKSUM ON  
:SEARCH1:LINBUS:SETUP:ERROR:CHECKSUM?  
-> :SEARCH1:LINBUS:SETUP:ERROR:  
CHECKSUM 1

### **:SEARCh<x>:LINBus[:SETup]:ERROr:**

#### **FRAMing**

**Function** Sets the LIN bus signal search Framing error or queries the current setting.

**Syntax** :SEARCh<x>:LINBus[:SETup]:ERROr:  
FRAMing {<Boolean>}  
:SEARCh<x>:LINBus[:SETup]:ERROr:  
FRAMing?  
<x> = 1, 2

**Example** :SEARCH1:LINBUS:SETUP:ERROR:FRAMING ON  
:SEARCH1:LINBUS:SETUP:ERROR:FRAMING?  
-> :SEARCH1:LINBUS:SETUP:ERROR:FRAMING 1

### **:SEARCh<x>:LINBus[:SETup]:ERROr:PARity**

**Function** Sets the LIN bus signal search Parity error or queries the current setting.

**Syntax** :SEARCh<x>:LINBus[:SETup]:ERROr:  
PARity {<Boolean>}  
:SEARCh<x>:LINBus[:SETup]:ERROr:PARity?  
<x> = 1, 2

**Example** :SEARCH1:LINBUS:SETUP:ERROR:PARITY ON  
:SEARCH1:LINBUS:SETUP:ERROR:PARITY?  
-> :SEARCH1:LINBUS:SETUP:ERROR:PARITY 1

### **:SEARCh<x>:LINBus[:SETup]:ERROr:SYNCh**

**Function** Sets the LIN bus signal search Synch error or queries the current setting.

**Syntax** :SEARCh<x>:LINBus[:SETup]:ERROr:  
SYNCh {<Boolean>}  
:SEARCh<x>:LINBus[:SETup]:ERROr:SYNCh?  
<x> = 1, 2

**Example** :SEARCH1:LINBUS:SETUP:ERROR:SYNCH ON  
:SEARCH1:LINBUS:SETUP:ERROR:SYNCH?  
-> :SEARCH1:LINBUS:SETUP:ERROR:SYNCH 1

### **:SEARCh<x>:LINBus[:SETup]:ERROr:TOUT**

**Function** Sets the LIN bus signal search Timeout error or queries the current setting.

**Syntax** :SEARCh<x>:LINBus[:SETup]:ERROr:  
TOUT {<Boolean>}  
:SEARCh<x>:LINBus[:SETup]:ERROr:TOUT?  
<x> = 1, 2

**Example** :SEARCH1:LINBUS:SETUP:ERROR:TOUT ON  
:SEARCH1:LINBUS:SETUP:ERROR:TOUT?  
-> :SEARCH1:LINBUS:SETUP:ERROR:TOUT 1

### **:SEARCh<x>:LINBus[:SETup]:ID?**

**Function** Queries all settings related to ID of the LIN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:LINBus[:SETup]:ID?  
<x>=1 or 2

**Example** :SEARCH1:LINBUS:SETUP:ID?  
-> :SEARCH1:LINBUS:SETUP:ID:  
PATTERN "101111"

### **:SEARCh<x>:LINBus[:SETup]:ID:HEXA**

**Function** Sets the LIN bus signal search ID in hexadecimal.

**Syntax** :SEARCh<x>:LINBus[:SETup]:ID:  
HEXA {<string>}  
<x>=1 or 2  
<string>=Combination of up to 2 characters ('0'-'F' and 'X')

**Example** :SEARCH1:LINBUS:SETUP:ID:HEXA "2A"

### **:SEARCh<x>:LINBus[:SETup]:ID:PATtern**

**Function** Sets the LIN bus signal search ID in binary or queries the current setting.

**Syntax** :SEARCh<x>:LINBus[:SETup]:ID:  
PATtern {<string>}  
:SEARCh<x>:LINBus[:SETup]:ID:PATtern?  
<x>=1 or 2  
<string>=Combination of up to 6 characters ('0','1,' and 'X')

**Example** :SEARCH1:LINBUS:SETUP:ID:  
PATTERN "101111"  
:SEARCH1:LINBUS:SETUP:ID:PATTERN?  
-> :SEARCH1:LINBUS:SETUP:ID:  
PATTERN "101111"

### **:SEARCh<x>:LINBus[:SETup]:MODE**

**Function** Sets the LIN bus signal search mode or queries the current setting.

**Syntax** SEARCh<x>:LINBus[:SETup]:  
MODE {ERROr|IDData|SYNCh}  
:SEARCh<x>:LINBus[:SETup]:MODE?  
<x>=1 or 2

**Example** :SEARCH1:LINBUS:SETUP:MODE IDDATA  
:SEARCH1:LINBUS:SETUP:MODE?  
-> :SEARCH1:LINBUS:SETUP:MODE IDDATA

**:SEARCH<x>:LINBus[:SETup]:REVISION**

**Function** Sets the LIN bus signal search revision (1.3 or 2.0) or queries the current setting.

**Syntax** :SEARCH<x>:LINBus[:SETup]:  
REVISION {LIN1\_3|LIN2\_0}  
:SEARCH<x>:LINBus[:SETup]:REVISION?  
<x> = 1, 2

**Example** :SEARCH1:LINBUS:SETUP:REVISION LIN1\_3  
:SEARCH1:LINBUS:SETUP:REVISION? ->  
:SEARCH1:LINBUS:SETUP:REVISION LIN1\_3

**:SEARCH<x>:LINBus[:SETup]:SPOINT**

**Function** Sets the LIN bus signal search sampling point or queries the current setting.

**Syntax** :SEARCH<x>:LINBus[:SETup]:  
SPOINT {<Nrf>}  
:SEARCH<x>:LINBus[:SETup]:SPOINT?  
<x> = 1, 2  
<Nrf> = 18.8 to 90.6(%)

**Example** :SEARCH1:LINBUS:SETUP:SPOINT 18.8  
:SEARCH1:LINBUS:SETUP:SPOINT? ->  
:SEARCH1:LINBUS:SETUP:SPOINT 18.8E+00

**:SEARCH<x>:LINBus[:SETup]:TRACE**

**Function** Sets the LIN bus signal search trace or queries the current setting.

**Syntax** :SEARCH<x>:LINBus[:SETup]:TRACE {<Nrf>}  
:SEARCH<x>:LINBus[:SETup]:TRACE?  
<x>=1 or 2  
<Nrf>=1-8

**Example** :SEARCH1:LINBUS:SETUP:TRACE 1  
:SEARCH1:LINBUS:SETUP:TRACE?  
-> :SEARCH1:LINBUS:SETUP:TRACE 1

**:SEARCH<x>:LOGic**

**Function** Sets the search logic or queries the current setting.

**Syntax** :SEARCH<x>:LOGic {AND|OR}  
:SEARCH<x>:LOGic?  
<x> = 1 or 2

**Example** :SEARCH1:LOGIC OR  
:SEARCH1:LOGIC? -> :SEARCH1:LOGIC OR

**Description** • This command is valid when :SEARCH<x>:  
TYPE EQUalify|SPATtern|STATE.  
• This command is valid when :SEARCH<x>:  
TYPE WIDTH and :SEARCH<x>:WIDTH:  
TYPE PQualify|PSTATE.

**:SEARCH<x>:MARK**

**Function** Turns ON/OFF the search mark or queries the current setting.

**Syntax** :SEARCH<x>:MARK {<Boolean>}  
:SEARCH<x>:MARK?  
<x> = 1 or 2

**Example** :SEARCH1:MARK ON  
:SEARCH1:MARK? -> :SEARCH1:MARK 1

**:SEARCH<x>:POLarity**

**Function** Sets the search polarity or queries the current setting.

**Syntax** :SEARCH<x>:POLarity {ENTER|EXIT|FALL|  
FALSE|NEGative|POSitive|RISE|  
TRUE}  
:SEARCH<x>:POLarity?  
<x> = 1 or 2

**Example** :SEARCH1:POLARITY ENTER  
:SEARCH1:POLARITY? ->  
:SEARCH1:POLARITY ENTER

**Description** • {FALL|RISE} is valid when :SEARCH<x>:TYPE  
EDGE|EQUalify.  
• {ENTER|EXIT} is valid when :SEARCH<x>:TYPE  
STATE.  
• {NEGative|POSitive} is valid when :SEARCH<x>:  
TYPE WIDTH and :SEARCH<x>:WIDTH:TYPE  
PQualify|PULSe.  
• {FALSE|TRUE} is valid when :SEARCH<x>:TYPE  
WIDTH and :SEARCH<x>:WIDTH:TYPE PSTate.

**:SEARCH<x>:SELEct**

**Function** Sets the detection waveform number of the search function and queries the position that corresponds to the detection waveform number.

**Syntax** :SEARCH<x>:SELEct {<Nrf>|MAXimum}  
:SEARCH<x>:SELEct?  
<x> = 1 or 2  
<Nrf> = 0 to 4999

**Example** :SEARCH1:SELECT 1  
:SEARCH1:SELECT? -> :SEARCH1:  
SELECT 1.500E+00

**Description** If there is no searched position, "NAN" is returned for the query.

**:SEARCH<x>:SELEct? MAXimum**

**Function** Queries the detection count of the search function.

**Syntax** :SEARCH<x>:SELEct? {MAXimum}  
<x> = 1 or 2

**Example** :SEARCH1:SELEct? MAXIMUM -> :SEARCH1:  
SELECT 100

**Description** If there is no searched position, "NAN" is returned for the query.

## 5.22 SEARCh Group

### **:SEARCh<x>:SLOGic?**

**Function** Queries all settings related to the logic search.

**Syntax** :SEARCh<x>:SLOGic?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC? -> :SEARCH1:SLOGIC:  
CLOCK:POLARITY RISE;SOURCE A0;:SEARCH1:  
SLOGIC:I2CBUS:CLOCK:SOURCE A0;:SEARCH1:  
SLOGIC:I2CBUSSETUP:ADATA:BIT10ADDRESS:  
PATTERN "XXXXXXXXXX";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:BIT7ADDRESS:  
PATTERN "XXXXXXXX";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:BIT7APSUB:ADDRESS:  
PATTERN "XXXXXXXX";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:BIT7APSUB:SADDRESS:  
PATTERN "XXXXXXXX";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:TYPE BIT7ADDRESS;:  
SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:  
BYTE 1;CONDITION TRUE;DPOSITION 0;  
MODE 0;PATTERN1 "XXXXXXXX";  
PATTERN2 "XXXXXXXX";PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";PMODE DONTCARE;  
TRACE A1;:SEARCH1:SLOGIC:I2CBUS:SETUP:  
GCALL:BIT7MADDRESS:PATTERN "XXXXXXXX1";:  
SEARCH1:SLOGIC:I2CBUS:SETUP:GCALL:  
SBYTE DONTCARE;:SEARCH1:SLOGIC:I2CBUS:  
SETUP:MODE ESTART;NAIGNORE:HSMODE 0;  
RACCESS 0;SBYTE 0;:SEARCH1:SLOGIC:  
I2CBUS:SETUP:SBHSMODE:TYPE SBYTE;:  
SEARCH1:SLOGIC:LINBUS:SETUP:  
BLENGTH 11;BRATE 19200;DATA:  
BORDER BIG;BNUM 8;CONDITION TRUE;  
DATA1 0.0000000E+00;  
DATA2 127.00000E+00;MSBLSB 7,0.....

### **:SEARCh<x>:SLOGic:CLOCK?**

**Function** Queries all settings related to the logic search clock.

**Syntax** :SEARCh<x>:SLOGic:CLOCK?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:CLOCK?  
-> :SEARCH1:SLOGIC:CLOCK:POLARITY FALL;  
SOURCE A0

### **:SEARCh<x>:SLOGic:CLOCK:POLarity**

**Function** Sets the polarity of the clock of the logic search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:CLOCK:POLarity  
{FALL|RISE}  
:SEARCh<x>:SLOGic:CLOCK:POLarity?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:CLOCK:POLARITY FALL  
:SEARCH1:SLOGIC:CLOCK:POLARITY?  
-> :SEARCH1:SLOGIC:CLOCK:POLARITY FALL

### **:SEARCh<x>:SLOGic:CLOCK:SOURce**

**Function** Sets the clock for the logic search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:CLOCK:SOURce {A<y>|  
B<y>|C<y>|D<y>|DONTcare}  
:SEARCh<x>:SLOGic:CLOCK:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :SEARCH1:SLOGIC:CLOCK:SOURCE A0  
:SEARCH1:SLOGIC:CLOCK:SOURCE?  
-> :SEARCH1:SLOGIC:CLOCK:SOURCE A0

**Description** For the SB5310, only {A<y>|DONTcare} are valid.

**:SEARCh<x>:SLOGic:I2CBus?**

**Function** Queries all settings related to the logic I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:SLOGic:I2CBus?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS? -> :SEARCH1:  
SLOGIC:I2CBUS:CLOCK:SOURCE A0;:SEARCH1:  
SLOGIC:I2CBUSSETUP:ADATA:BIT10ADDRESS:  
PATTERN " 10111011111";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:BIT7ADDRESS:  
PATTERN " 11011110";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:BIT7APSUB:ADDRESS:  
PATTERN " 11001101";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:BIT7APSUB:SADDRESS:  
PATTERN " 11101111";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:TYPE BIT10ADDRESS;:  
SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:  
BYTE 1;CONDITION FALSE;DPOSITION 1;  
MODE 1;PATTERN1 " 10101011";  
PATTERN2 " XXXXXXXX";  
PATTERN3 " XXXXXXXX";  
PATTERN4 " XXXXXXXX";PMODE DONTCARE;  
TRACE A0;:SEARCH1:SLOGIC:I2CBUS:SETUP:  
GCALL:BIT7MADDRESS:PATTERN " 1010101";:  
SEARCH1:SLOGIC:I2CBUS:SETUP:GCALL:  
SBYTE BIT7MADDRESS;:SEARCH1:SLOGIC:  
I2CBUS:SETUP:MODE ADATA;NAIGNORE:  
HSMODE 1;RACCESS 1;SBYTE 1;:SEARCH1:  
SLOGIC:I2CBUS:SETUP:SBHSMODE:  
TYPE HSMODE

**:SEARCh<x>:SLOGic:I2CBus:CLOCK?**

**Function** Queries all settings related to the clock channel of the logic I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:SLOGic:I2CBus:CLOCK?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:  
CLOCK? -> :SEARCH1:SLOGIC:I2CBUS:CLOCK:  
SOURCE A0

**:SEARCh<x>:SLOGic:I2CBus:CLOCK:****SOURce**

**Function** Sets the clock channel of the logic I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:I2CBus:CLOCK:SOURce  
{A<y>}  
:SEARCh<x>:SLOGic:I2CBus:CLOCK:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :SEARCH1:SLOGIC:I2CBUS:CLOCK:SOURCE A0  
:SEARCH1:SLOGIC:I2CBUS:CLOCK:  
SOURCE? -> :SEARCH1:SLOGIC:I2CBUS:  
CLOCK:SOURCE A0

**:SEARCh<x>:SLOGic:I2CBus[:SETUp]?**

**Function** Queries all settings related to the setup of the logic I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETUp] ?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:  
SETUP? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:  
ADATA:BIT10ADDRESS:  
PATTERN " 10111011111";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:BIT7ADDRESS:  
PATTERN " 11011110";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:BIT7APSUB:ADDRESS:  
PATTERN " 11001101";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:BIT7APSUB:SADDRESS:  
PATTERN " 11101111";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:TYPE BIT10ADDRESS;:  
SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:  
BYTE 1;CONDITION FALSE;DPOSITION 1;  
MODE 1;PATTERN1 " 10101011";  
PATTERN2 " XXXXXXXX";  
PATTERN3 " XXXXXXXX";  
PATTERN4 " XXXXXXXX";PMODE DONTCARE;  
TRACE A0;:SEARCH1:SLOGIC:I2CBUS:SETUP:  
GCALL:BIT7MADDRESS:PATTERN " 1010101";:  
SEARCH1:SLOGIC:I2CBUS:SETUP:GCALL:  
SBYTE BIT7MADDRESS;:SEARCH1:SLOGIC:  
I2CBUS:SETUP:MODE ADATA;NAIGNORE:  
HSMODE 1;RACCESS 1;SBYTE 1;:SEARCH1:  
SLOGIC:I2CBUS:SETUP:SBHSMODE:  
TYPE HSMODE

**:SEARCh<x>:SLOGic:I2CBus[:SETUp]:****ADATa?**

**Function** Queries all settings related to the address of the logic I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETUp]:ADATa?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:  
ADATa? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:  
ADATA:BIT10ADDRESS:  
PATTERN " 10111011111";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:BIT7ADDRESS:  
PATTERN " 11011110";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:BIT7APSUB:ADDRESS:  
PATTERN " 11001101";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:BIT7APSUB:SADDRESS:  
PATTERN " 11101111";:SEARCH1:SLOGIC:  
I2CBUS:SETUP:ADATA:TYPE BIT10ADDRESS



## 5.22 SEARCh Group

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **ADATa:BIT10address?**

**Function** Queries all settings related to the 10-bit address of the logic I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT10address?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT10ADDRESS? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT10ADDRESS:PATTERN " 10111011111"

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **ADATa:BIT10address:HEXA**

**Function** Sets the 10-bit address of the logic I<sup>2</sup>C bus signal search in hexadecimal notation.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT10address:HEXA {<String>}  
<x> = 1 or 2  
<String> = 3 characters by combining '0' to 'F' and 'X' (bit 8 is the R/W bit)

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT10ADDRESS:HEXA " 5DF"

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **ADATa:BIT10address:PATtern**

**Function** Sets the 10-bit address of the logic I<sup>2</sup>C bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT10address:PATtern {<String>}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT10address:PATtern?  
<x> = 1 or 2  
<String> = 11 characters by combining '0' to '1' and 'X' (bit 8 is the R/W bit)

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT10ADDRESS:PATTERN " 10111011111"  
:SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT10ADDRESS:PATTERN? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT10ADDRESS:PATTERN " 10111011111"

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **ADATa:BIT7Address?**

**Function** Queries all settings related to the 7-bit address of the logic I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7Address?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7ADDRESS? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7ADDRESS:PATTERN " 11011110"

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **ADATa:BIT7Address:HEXA**

**Function** Sets the 7-bit address of the logic I<sup>2</sup>C bus signal search in hexadecimal notation.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7Address:HEXA {<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X' (bit 0 is the R/W bit)

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7ADDRESS:HEXA " DE"

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **ADATa:BIT7Address:PATtern**

**Function** Sets the 7-bit address of the logic I<sup>2</sup>C bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7Address:PATtern {<String>}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7Address:PATtern?  
<x> = 1 or 2  
<String> = 8 characters by combining '0' to '1' and 'X' (bit 0 is the R/W bit)

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7ADDRESS:PATTERN " 11011110"  
:SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7ADDRESS:PATTERN? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7ADDRESS:PATTERN " 11011110"

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **ADATa:BIT7APsub?**

**Function** Queries all settings related to the 7-bit address + Sub address of the logic I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:ADDRESS:PATTERN " 11001101"; :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:SADDRESS:PATTERN " 11101111"

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****ADATa:BIT7APsub:ADReSS?**

Function Queries all settings related to the 7-bit address of the 7-bit address + Sub address of the logic I<sup>2</sup>C bus signal search.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:ADReSS?  
<x> = 1 or 2

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:ADDRESS? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:ADDRESS:PATTERN "11001101"

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****ADATa:BIT7APsub:ADReSS:HEXA**

Function Queries all settings related to the 7-bit address of the 7-bit address + Sub address of the logic I<sup>2</sup>C bus signal search.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:ADReSS:HEXA {<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X' (bit 0 is the R/W bit)

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:ADDRESS:HEXA "CD"

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****ADATa:BIT7APsub:ADReSS:PATTeRn**

Function Sets the 7-bit address of the 7-bit address + Sub address of the logic I<sup>2</sup>C bus signal search in binary notation or queries the current setting.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:ADReSS:PATTeRn {<String>}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:ADReSS:PATTeRn?  
<x> = 1 or 2  
<String> = 8 characters by combining '0' to '1' and 'X' (bit 0 is the R/W bit)

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:ADDRESS:PATTERN "11001101"  
:SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:ADDRESS:PATTERN? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:ADDRESS:PATTERN "11001101"

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****ADATa:BIT7APsub:SADReSS?**

Function Queries all settings related to the Sub address of the 7-bit address + Sub address of the logic I<sup>2</sup>C bus signal search.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:SADReSS?  
<x> = 1 or 2

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:SADDRESS? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:SADDRESS:PATTERN "11101111"

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****ADATa:BIT7APsub:SADReSS:HEXA**

Function Queries all settings related to the Sub address of the 7-bit address + Sub address of the logic I<sup>2</sup>C bus signal search.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:SADReSS:HEXA {<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X'

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:SADDRESS:HEXA "EF"

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****ADATa:BIT7APsub:SADReSS:PATTeRn**

Function Sets the Sub address of the 7-bit address + Sub address of the logic I<sup>2</sup>C bus signal search in binary notation or queries the current setting.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:SADReSS:PATTeRn {<String>}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:BIT7APsub:SADReSS:PATTeRn?  
<x> = 1 or 2  
<String> = 8 characters by combining '0' to '1' and 'X'

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:SADDRESS:PATTERN "11101111"  
:SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:SADDRESS:PATTERN? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:BIT7APSUB:SADDRESS:PATTERN "11101111"

## 5.22 SEARCh Group

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **ADATa:TYPE**

**Function** Sets the address type of the logic I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:TYPE {BIT10address|BIT7Address|BIT7APsub}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:ADATa:TYPE?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:TYPE BIT10ADDRESS  
:SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:TYPE? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:ADATA:TYPE BIT10ADDRESS

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **DATA?**

**Function** Queries all settings related to the data of the logic I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:BYTE 1;CONDITION FALSE;  
DPOSITION 1;MODE 1;PATTERN1 "10101011";  
PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";PMODE DONTCARE;  
TRACE A0

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **DATA:BYTE**

**Function** Sets the number of setup data bytes of the logic I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:BYTE {<NRf>}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:BYTE?  
<x> = 1 or 2  
<NRf> = 1 to 4

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:BYTE 1  
:SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:BYTE? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:BYTE 1

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **DATA:CONDition**

**Function** Sets the determination method (match or not match) of the data of the logic I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:CONDition {FALSE|TRUE}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:CONDition?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:CONDITION FALSE  
:SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:CONDITION? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:CONDITION FALSE

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **DATA:DPOSITION**

**Function** Sets the position for comparing the data pattern of the logic I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:DPOSITION {<NRf>}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:DPOSITION?  
<x> = 1 or 2  
<NRf> = 0 to 9999

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:DPOSITION 1  
:SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:DPOSITION? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:DPOSITION 1

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **DATA:HEXA<x>**

**Function** Sets the data of the logic I<sup>2</sup>C bus signal search in hexadecimal notation.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:HEXA<x> {<String>}  
<x> of SEARCh<x> = 1 or 2  
<x> of HEXA<x> = 1 to 4  
<String> = 2 characters by combining '0' to 'F' and 'X'

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:HEXA1 "AB"

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****DATA:MODE**

Function Enables/disables the data conditions of the logic I<sup>2</sup>C bus signal search or queries the current setting.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:  
MODE {<Boolean>}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:  
MODE?  
<x> = 1 or 2

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:  
MODE ON  
:SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:  
MODE? -> :SEARCH1:SLOGIC:I2CBUS:  
SETUP:DATA:MODE 1

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****DATA:PATtern<x>**

Function Sets the data of the logic I<sup>2</sup>C bus signal search in binary notation or queries the current setting.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:  
PATtern<x> {<String>}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:  
PATtern<x>?  
<x> of SEARCh<x> = 1 or 2  
<x> of PATtern<x> = 1 to 4  
<String> = 8 characters by combining '0' to '1' and 'X'

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:  
PATTERN1 "10101011"  
:SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:  
PATTERN1? -> :SEARCH1:SLOGIC:I2CBUS:  
SETUP:DATA:PATTERN1 "10101011"

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****DATA:PMODE**

Function Sets the pattern comparison start position mode of the logic I<sup>2</sup>C bus signal search or queries the current setting.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:  
PMODE {DONTcare|SElect}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:  
PMODE?  
<x> = 1 or 2

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:  
PMODE DONTCARE  
:SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:  
PMODE? -> :SEARCH1:SLOGIC:I2CBUS:  
SETUP:DATA:PMODE DONTCARE

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****DATA:TRACe**

Function Sets the data trace of the logic I<sup>2</sup>C bus signal search or queries the current setting.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:  
TRACe {A<y>}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:DATA:  
TRACe?  
<x> = 1 or 2  
<y> = 0 to 7

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:  
TRACE A0  
:SEARCH1:SLOGIC:I2CBUS:SETUP:DATA:  
TRACE? -> :SEARCH1:SLOGIC:I2CBUS:  
SETUP:DATA:TRACE A0

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****GCALl?**

Function Queries all settings related to the general call of the logic I<sup>2</sup>C bus signal search.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:GCALl?  
<x> = 1 or 2

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:  
GCALL? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:  
GCALL:BIT7MADDRESS:PATTERN "10101011";  
SEARCH1:SLOGIC:I2CBUS:SETUP:GCALL:  
SBYTE BIT7MADDRESS

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****GCALl:BIT7maddress?**

Function Queries all settings related to the 7-bit master address of the general code of the logic I<sup>2</sup>C bus signal search.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:GCALl:  
BIT7maddress?  
<x> = 1 or 2

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:GCALL:  
BIT7MADDRESS? -> :SEARCH1:SLOGIC:  
I2CBUS:SETUP:GCALL:BIT7MADDRESS:  
PATTERN "10101011"

**:SEARCh<x>:SLOGic:I2CBus[:SETup]:****GCALl:BIT7maddress:HEXA**

Function Sets the 7-bit master address of the general call of the logic I<sup>2</sup>C bus signal search in hexadecimal notation.

Syntax :SEARCh<x>:SLOGic:I2CBus[:SETup]:GCALl:  
BIT7maddress:HEXA {<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X'  
(bit 0 is fixed 1)

Example :SEARCH1:SLOGIC:I2CBUS:SETUP:GCALL:  
BIT7MADDRESS:HEXA "BA"

## 5.22 SEARCh Group

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **GCALl:BIT7maddress:PATtern**

**Function** Sets the 7-bit master address of the general call of the logic I<sup>2</sup>C bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:GCALl:BIT7maddress:PATtern {<String>}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:GCALl:BIT7maddress:PATtern?  
<x> = 1 or 2  
<String> = 7 characters by combining '0' to '1' and 'X'

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:GCALL:BIT7MADDRESS:PATTERN " 1010101"  
:SEARCH1:SLOGIC:I2CBUS:SETUP:GCALL:BIT7MADDRESS:PATTERN? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:GCALL:BIT7MADDRESS:PATTERN " 1010101"

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **GCALl:SBYTE (Second Byte)**

**Function** Sets the second byte type of the general call of the logic I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:GCALl:SBYTE {BIT7maddress|DONTcare|H04|H06}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:GCALl:SBYTE?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:GCALL:SBYTE BIT7MADDRESS  
:SEARCH1:SLOGIC:I2CBUS:SETUP:GCALL:SBYTE? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:GCALL:SBYTE BIT7MADDRESS

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **MODE**

**Function** Sets the search mode of the logic I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:MODE {ADATa|ESTart|GCALl|NAIGNore|SBHSmode}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:MODE?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:MODE ADATA  
:SEARCH1:SLOGIC:I2CBUS:SETUP:MODE? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:MODE ADATA

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **NAIGNore?**

**Function** Queries all settings related to the NON ACK ignore mode of the logic I<sup>2</sup>C bus signal search.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:NAIGNore?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:NAIGNORE? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:NAIGNORE:HSMODE 1;RACCESS 1;SBYTE 1

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **NAIGNore:HSMode**

**Function** Sets whether to ignore NON ACK in high speed mode of the logic I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:NAIGNore:HSMode {<Boolean>}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:NAIGNore:HSMode?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:NAIGNORE:HSMODE ON  
:SEARCH1:SLOGIC:I2CBUS:SETUP:NAIGNORE:HSMODE? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:NAIGNORE:HSMODE 1

### **:SEARCh<x>:SLOGic:I2CBus[:SETup]:**

#### **NAIGNore:RACCEss**

**Function** Sets whether to ignore NON ACK in read access mode of the logic I<sup>2</sup>C bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:I2CBus[:SETup]:NAIGNore:RACCEss {<Boolean>}  
:SEARCh<x>:SLOGic:I2CBus[:SETup]:NAIGNore:RACCEss?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:I2CBUS:SETUP:NAIGNORE:RACCESS ON  
:SEARCH1:SLOGIC:I2CBUS:SETUP:NAIGNORE:RACCESS? -> :SEARCH1:SLOGIC:I2CBUS:SETUP:NAIGNORE:RACCESS 1





**:SEARCh<x>:SLOGic:LINBus[:SETup]:****DATA:DATA<x>**

**Function** Sets the comparison data of the logic LIN bus signal search data or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:DATA<x> {<Nrf>}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:DATA<x>?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<Nrf> = See the SB5000 User's Manual

**Example** :SEARCH1:SLOGIC:LINBUS:SETUP:DATA:DATA1 1  
:SEARCH1:SLOGIC:LINBUS:SETUP:DATA:DATA1? -> :SEARCH1:SLOGIC:LINBUS:SETUP:DATA:DATA1 1.0000000E+00

**Description**

- For :SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:CONDition GTHan, set using: SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:DATA1.
- For :SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:CONDition LTHan, set using: SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:DATA2.
- For :SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:CONDition BETWeen|ORANge, set small values with: SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:DATA1, and large values with: SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:DATA2.

**:SEARCh<x>:SLOGic:LINBus[:SETup]:****DATA:HEXA**

**Function** Sets the data of the logic LIN bus signal search in hexadecimal notation.

**Syntax** :SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:HEXA {<String>}  
<x> = 1 or 2  
<String> = Up to 16 characters by combining '0' to 'F' and 'X' (varies depending on the BNUM setting)

**Example** :SEARCH1:SLOGIC:LINBUS:SETUP:DATA:HEXA "3B"

**:SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:****MSBLsb**

**Function** Sets the MSB/LSB bit of the logic LIN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:MSBLsb {<Nrf>,<Nrf>}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:MSBLsb?  
<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :SEARCH1:SLOGIC:LINBUS:SETUP:DATA:MSBLSB 1,0  
:SEARCH1:SLOGIC:LINBUS:SETUP:DATA:MSBLSB? -> :SEARCH1:SLOGIC:LINBUS:SETUP:DATA:MSBLSB 1,0

**:SEARCh<x>:SLOGic:LINBus[:SETup]:****DATA:PATtern**

**Function** Sets the data of the logic LIN bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:PATtern {<String>}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:PATtern?  
<x> = 1 or 2  
<String> = Up to 64 characters by combining '0' to '1' and 'X' (varies depending on the BNUM setting)

**Example** :SEARCH1:SLOGIC:LINBUS:SETUP:DATA:PATTERN "11011111"  
:SEARCH1:SLOGIC:LINBUS:SETUP:DATA:PATTERN? -> :SEARCH1:SLOGIC:LINBUS:SETUP:DATA:PATTERN "11011111"

**:SEARCh<x>:SLOGic:LINBus[:SETup]:****DATA:SIGN**

**Function** Sets the data sign of the logic LIN bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:SIGN {SIGN|UNSign}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:DATA:SIGN?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:LINBUS:SETUP:DATA:SIGN SIGN  
:SEARCH1:SLOGIC:LINBUS:SETUP:DATA:SIGN? -> :SEARCH1:SLOGIC:LINBUS:SETUP:DATA:SIGN SIGN



## 5.22 SEARCh Group

### **:SEARCh<x>:SLOGic:LINBus[:SETup]:**

#### **ERROR?**

**Function** Queries all settings related to the logic LIN bus signal search error.  
**Syntax** :SEARCh<x>:SLOGic:LINBus[:SETup]:ERROR?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:LINBUS:SETUP:ERROR? ->  
:SEARCH1:SLOGIC:LINBUS:SETUP:ERROR:  
CHECKSUM 1;FRAMING 1;PARITY 1;SYNCH 1;  
TOUT 1

### **:SEARCh<x>:SLOGic:LINBus[:SETup]:**

#### **ERROR:CHECKsum**

**Function** Sets the logic LIN bus signal search Checksum error or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:LINBus[:SETup]:ERROR:CHECKsum {<Boolean>}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:ERROR:CHECKsum?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:LINBUS:SETUP:ERROR:  
CHECKSUM ON  
:SEARCH1:SLOGIC:LINBUS:SETUP:ERROR:  
CHECKSUM? -> :SEARCH1:SLOGIC:LINBUS:  
SETUP:ERROR:CHECKSUM 1

### **:SEARCh<x>:SLOGic:LINBus[:SETup]:**

#### **ERROR:FRAMing**

**Function** Sets the logic LIN bus signal search Framing error or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:LINBus[:SETup]:ERROR:FRAMing {<Boolean>}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:ERROR:FRAMing?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:LINBUS:SETUP:ERROR:  
FRAMING ON  
:SEARCH1:SLOGIC:LINBUS:SETUP:ERROR:  
FRAMING? -> :SEARCH1:SLOGIC:LINBUS:  
SETUP:ERROR:FRAMING 1

### **:SEARCh<x>:SLOGic:LINBus[:SETup]:**

#### **ERROR:PARity**

**Function** Sets the logic LIN bus signal search Parity error or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:LINBus[:SETup]:ERROR:PARity {<Boolean>}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:ERROR:PARity?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:LINBUS:SETUP:ERROR:  
PARITY ON  
:SEARCH1:SLOGIC:LINBUS:SETUP:ERROR:  
PARITY? -> :SEARCH1:SLOGIC:LINBUS:  
SETUP:ERROR:PARITY 1

### **:SEARCh<x>:SLOGic:LINBus[:SETup]:**

#### **ERROR:SYNCh**

**Function** Sets the logic LIN bus signal search Synch error or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:LINBus[:SETup]:ERROR:SYNCh {<Boolean>}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:ERROR:SYNCh?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:LINBUS:SETUP:ERROR:  
SYNCH ON  
:SEARCH1:SLOGIC:LINBUS:SETUP:ERROR:  
SYNCH? -> :SEARCH1:SLOGIC:LINBUS:SETUP:  
ERROR:SYNCH 1

### **:SEARCh<x>:SLOGic:LINBus[:SETup]:**

#### **ERROR:TOUT**

**Function** Sets the logic LIN bus signal search Timeout error or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:LINBus[:SETup]:ERROR:TOUT {<Boolean>}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:ERROR:TOUT?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:LINBUS:SETUP:ERROR:  
TOUT ON  
:SEARCH1:SLOGIC:LINBUS:SETUP:ERROR:  
TOUT? -> :SEARCH1:SLOGIC:LINBUS:SETUP:  
ERROR:TOUT 1

### **:SEARCh<x>:SLOGic:LINBus[:SETup]:ID?**

**Function** Queries all settings related to the ID of the logic LIN bus signal search.

**Syntax** :SEARCh<x>:SLOGic:LINBus[:SETup]:ID?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:LINBUS:SETUP:  
ID? -> :SEARCH1:SLOGIC:LINBUS:SETUP:  
ID:PATTERN " 101111"

**:SEARCh<x>:SLOGic:LINBus[:SETup]:ID:****HEXA**

Function Sets the ID of the logic LIN bus signal search in hexadecimal notation.

Syntax :SEARCh<x>:SLOGic:LINBus[:SETup]:ID:  
HEXA {<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X'

Example :SEARCH1:SLOGIC:LINBUS:SETUP:ID:  
HEXA "2A"

**:SEARCh<x>:SLOGic:LINBus[:SETup]:ID:****PATtern**

Function Sets the ID of the logic LIN bus signal search in binary notation or queries the current setting.

Syntax :SEARCh<x>:SLOGic:LINBus[:SETup]:ID:  
PATtern {<String>}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:ID:  
PATtern?  
<x> = 1 or 2  
<String> = 6 characters by combining '0' to '1' and 'X'

Example :SEARCH1:SLOGIC:LINBUS:SETUP:ID:  
PATTERN "101111"  
:SEARCH1:SLOGIC:LINBUS:SETUP:ID:  
PATTERN? -> :SEARCH1:SLOGIC:LINBUS:  
SETUP:ID:PATTERN "101111"

**:SEARCh<x>:SLOGic:LINBus[:SETup]:****MODE**

Function Sets the logic LIN bus signal search mode or queries the current setting.

Syntax :SEARCh<x>:SLOGic:LINBus[:SETup]:  
MODE {ERRor|IDData|SYNCh}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:MODE?  
<x> = 1 or 2

Example :SEARCH1:SLOGIC:LINBUS:SETUP:MODE  
IDDATA  
:SEARCH1:SLOGIC:LINBUS:SETUP:  
MODE? -> :SEARCH1:SLOGIC:LINBUS:SETUP:  
MODE IDDATA

**:SEARCh<x>:SLOGic:LINBus[:SETup]:****REVision**

Function Sets the logic LIN bus signal search revision (1.3 or 2.0) or queries the current setting.

Syntax :SEARCh<x>:SLOGic:LINBus[:SETup]:  
REVision {LIN1\_3|LIN2\_0}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:  
REVision?  
<x> = 1, 2

Example :SEARCH1:SLOGIC:LINBUS:SETUP:  
REVISION LIN1\_3  
:SEARCH1:SLOGIC:LINBUS:SETUP:REVISION?  
-> :SEARCH1:SLOGIC:LINBUS:SETUP:  
REVISION LIN1\_3

**:SEARCh<x>:SLOGic:LINBus[:SETup]:****SPOint**

Function Sets the logic LIN bus signal search sampling point or queries the current setting.

Syntax :SEARCh<x>:SLOGic:LINBus[:SETup]:  
SPOint {<NRF>}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:  
SPOint?  
<x> = 1, 2  
<NRF> = 18.8 to 90.6(%)

Example :SEARCH1:SLOGIC:LINBUS:SETUP:  
SPOINT 18.8  
:SEARCH1:SLOGIC:LINBUS:SETUP:SPOINT?  
-> :SEARCH1:SLOGIC:LINBUS:SETUP:  
SPOINT 18.8E+00

**:SEARCh<x>:SLOGic:LINBus[:SETup]:****TRACe**

Function Sets the trace of the logic LIN bus signal search or queries the current setting.

Syntax :SEARCh<x>:SLOGic:LINBus[:SETup]:  
TRACe {<A><y>}  
:SEARCh<x>:SLOGic:LINBus[:SETup]:TRACe?  
<x> = 1 or 2  
<y> = 0 to 7

Example :SEARCH1:SLOGIC:LINBUS:SETUP:TRACE A0  
:SEARCH1:SLOGIC:LINBUS:SETUP:  
TRACE? -> :SEARCH1:SLOGIC:LINBUS:SETUP:  
TRACE A0

**:SEARCh<x>:SLOGic:POLarity**

Function Sets the logic search polarity or queries the current setting.

Syntax :SEARCh<x>:SLOGic:POLarity {ENTer|EXIT|  
FALL|RISE|FALSe|NEGative|POSitive|TRUE}  
:SEARCh<x>:SLOGic:POLarity?  
<x> = 1 or 2

Example :SEARCH1:SLOGIC:POLARITY FALL  
:SEARCH1:SLOGIC:POLARITY? -> :SEARCH1:  
SLOGIC:POLARITY FALL

Description • {FALL|RISE} valid when :SEARCh<x>:TYPE  
LEDGe|LQQualify.  
• {ENTer|EXIT} valid when :SEARCh<x>:TYPE  
LState.  
• {NEGative|POSitive} valid when :SEARCh<x>:  
TYPE LWIDth and :SEARCh<x>:SLOGic:  
WIDTh:TYPE PQQualify|PULSe.  
• FALSe|TRUE} valid when :SEARCh<x>:  
TYPE LWIDth and :SEARCh<x>:SLOGic:WIDTh:  
TYPE PState.

## 5.22 SEARCh Group

### **:SEARCh<x>:SLOGic:SOURce**

**Function** Sets the logic search source or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SOURce {A<y>|B<y>|C<y>|D<y>}  
:SEARCh<x>:SLOGic:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :SEARCH1:SLOGIC:SOURCE A0  
:SEARCH1:SLOGIC:SOURCE? -> :SEARCH1:  
SLOGIC:SOURCE A0

**Description** For the SB5310, only {A<y>} are valid.

### **:SEARCh<x>:SLOGic:SPATtern? (Serial Pattern)**

**Function** Queries all settings related to logic serial pattern search.

**Syntax** :SEARCh<x>:SLOGic:SPATtern?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPATTERN?  
-> :SEARCH1:SLOGIC:SPATTERN:CLOCK:  
MODE 1;POLARITY FALL;SOURCE A0;;  
SEARCH1:SLOGIC:SPATTERN:CS 1;LATCH:  
TRACE A0;POLARITY FALL;;SEARCH1:SLOGIC:  
SPATTERNSETUP:BITRATE 1.0000000E+00;  
DATA:ACTIVE HIGH;TRACE A0;;SEARCH1:  
SLOGIC:SPATTERN:SETUP:  
PATTERN "1100110111101111"

### **:SEARCh<x>:SLOGic:SPATtern:CLOCK?**

**Function** Queries all settings related to the clock for the logic serial pattern search.

**Syntax** :SEARCh<x>:SLOGic:SPATtern:CLOCK?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPATTERN:CLOCK?  
-> :SEARCH1:SLOGIC:SPATTERN:CLOCK:  
MODE 1;POLARITY FALL;SOURCE A0

### **:SEARCh<x>:SLOGic:SPATtern:CLOCK:MODE**

**Function** Enables/disables the clock for the logic serial analysis pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPATtern:CLOCK:  
MODE {<Boolean>}  
:SEARCh<x>:SLOGic:SPATtern:CLOCK:MODE?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPATTERN:CLOCK:MODE ON  
:SEARCH1:SLOGIC:SPATTERN:CLOCK:MODE?  
-> :SEARCH1:SLOGIC:SPATTERN:CLOCK:  
MODE 1

### **:SEARCh<x>:SLOGic:SPATtern:CLOCK: POLarity**

**Function** Sets the polarity of the clock trace of the logic serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPATtern:CLOCK:  
POLarity {FALL|RISE}  
:SEARCh<x>:SLOGic:SPATtern:CLOCK:  
POLarity?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPATTERN:CLOCK:  
POLARITY FALL  
:SEARCH1:SLOGIC:SPATTERN:CLOCK:  
POLARITY?  
-> :SEARCH1:SLOGIC:SPATTERN:CLOCK:  
POLARITY FALL

**Description** This command valid when :SEARCh<x>:SLOGic:  
SPATtern:CLOCK:MODE ON.

### **:SEARCh<x>:SLOGic:SPATtern:CLOCK: SOURCE**

**Function** Sets the clock trace for the logic serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPATtern:CLOCK:  
SOURCE {A<y>}  
:SEARCh<x>:SLOGic:SPATtern:CLOCK:  
SOURCE?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :SEARCH1:SLOGIC:SPATTERN:CLOCK:  
SOURCE A0  
:SEARCH1:SLOGIC:SPATTERN:CLOCK:SOURCE?  
-> :SEARCH1:SLOGIC:SPATTERN:CLOCK:  
SOURCE A0

**Description** • This command valid when :SEARCh<x>:SLOGic:  
SPATtern:CLOCK:MODE ON.

### **:SEARCh<x>:SLOGic:SPATtern:CS**

**Function** Enables/disables the chip select for the logic serial analysis pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPATtern:  
CS {<Boolean>}  
:SEARCh<x>:SLOGic:SPATtern:CS?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPATTERN:CS ON  
:SEARCH1:SLOGIC:SPATTERN:CS?  
-> :SEARCH1:SLOGIC:SPATTERN:CS 1

**Description** This command valid when :SEARCh<x>:SLOGic:  
SPATtern:CLOCK:MODE ON.

**:SEARCh<x>:SLOGic:SPATtern:LATCh?**

**Function** Queries all settings related to the latch for the logic serial pattern search.

**Syntax** :SEARCh<x>:SLOGic:SPATtern:LATCh?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPATTERN:LATCH?  
-> :SEARCH1:SLOGIC:SPATTERN:LATCH:  
TRACE A0;POLARITY FALL

**:SEARCh<x>:SLOGic:SPATtern:LATCh:****POLarity**

**Function** Sets the polarity of the latch trace of the logic serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPATtern:LATCh:  
POLarity {FALL|RISE}  
:SEARCh<x>:SLOGic:SPATtern:LATCh:  
POLarity?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPATTERN:LATCH:  
POLARITY FALL  
:SEARCH1:SLOGIC:SPATTERN:LATCH:  
POLARITY?  
-> :SEARCH1:SLOGIC:SPATTERN:LATCH:  
POLARITY FALL

**Description** • This command valid when :SEARCh<x>:SLOGic:SPATtern:CLOCK:MODE ON.

- Invalid for :SEARCh<x>:SLOGic:SPATtern:LATCh:TRACe DONTcare.

**:SEARCh<x>:SLOGic:SPATtern:LATCh:TRACe**

**Function** Sets the latch trace for the logic serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPATtern:LATCh:  
TRACe {A<y>|DONTcare}  
:SEARCh<x>:SLOGic:SPATtern:LATCh:  
TRACe?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :SEARCH1:SLOGIC:SPATTERN:LATCH:TRACE A0  
:SEARCH1:SLOGIC:SPATTERN:LATCH:TRACE?  
-> :SEARCH1:SLOGIC:SPATTERN:LATCH:  
TRACE A0

**Description** • This command valid when :SEARCh<x>:SLOGic:SPATtern:CLOCK:MODE ON.

**:SEARCh<x>:SLOGic:SPATtern[:SETup]?**

**Function** Queries all settings related to the setup for the logic serial pattern search.

**Syntax** :SEARCh<x>:SLOGic:SPATtern[:SETup]?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPATTERN:SETUP?  
-> :SEARCH1:SLOGIC:SPATTERN:SETUP:  
BITRATE 1.0000000E+00;DATA:ACTIVE HIGH;  
TRACE A0;:SEARCH1:SLOGIC:SPATTERN:  
SETUP:PATTERN "1100110111101111"

**:SEARCh<x>:SLOGic:SPATtern[:SETup]:****BITRate**

**Function** Sets the bit rate for the logic serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPATtern[:SETup]:  
BITRate {<NRf>}  
:SEARCh<x>:SLOGic:SPATtern[:SETup]:  
BITRate?  
<x> = 1 or 2  
<NRf>=1 to 1G(bps)

**Example** :SEARCH1:SLOGIC:SPATTERN:SETUP:  
BITRATE 1  
:SEARCH1:SLOGIC:SPATTERN:SETUP:  
BITRATE?  
-> :SEARCH1:SLOGIC:SPATTERN:SETUP:  
BITRATE 1.000E+00

**Description** This command valid when :SEARCh<x>:SLOGic:SPATtern:CLOCK:MODE is OFF.

**:SEARCh<x>:SLOGic:SPATtern[:SETup]:****CLEar**

**Function** Clears (Don't care) all patterns of the logic serial pattern search.

**Syntax** :SEARCh<x>:SLOGic:SPATtern[:SETup]:  
CLEar  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPATTERN:SETUP: CLEAR

**:SEARCh<x>:SLOGic:SPATtern[:SETup]:****DATA?**

**Function** Queries all settings related to the data for the logic serial pattern search.

**Syntax** :SEARCh<x>:SLOGic:SPATtern[:SETup]:  
DATA?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPATTERN:SETUP:DATA?  
-> :SEARCH1:SLOGIC:SPATTERN:SETUP:DATA:  
ACTIVE HIGH;TRACE A0

## 5.22 SEARCh Group

### **:SEARCh<x>:SLOGic:SPATtern[:SETup]:**

#### **DATA:ACTive**

**Function** Sets the active trace level of the data for the logic serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPATtern[:SETup]:  
DATA:ACTive {HIGH|LOW}  
:SEARCh<x>:SLOGic:SPATtern[:SETup]:  
DATA:ACTive?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPATTERN:SETUP:DATA:  
ACTIVE HIGH  
:SEARCH1:SLOGIC:SPATTERN:SETUP:DATA:  
ACTIVE?  
-> :SEARCH1:SLOGIC:SPATTERN:SETUP:DATA:  
ACTIVE HIGH

### **:SEARCh<x>:SLOGic:SPATtern[:SETup]:**

#### **DATA:TRACe**

**Function** Sets the trace of the data for the logic serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPATtern[:SETup]:  
DATA:TRACe {A<y>}  
:SEARCh<x>:SLOGic:SPATtern[:SETup]:  
DATA:TRACe?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :SEARCH1:SLOGIC:SPATTERN:SETUP:DATA:  
TRACE A0  
:SEARCH1:SLOGIC:SPATTERN:SETUP:DATA:  
TRACE?  
-> :SEARCH1:SLOGIC:SPATTERN:SETUP:DATA:  
TRACE A0

### **:SEARCh<x>:SLOGic:SPATtern[:SETup]:**

#### **HEXA**

**Function** Sets the pattern of the logic serial pattern search in hexadecimal notation.

**Syntax** :SEARCh<x>:SLOGic:SPATtern[:SETup]:  
HEXA {<string>}  
<x> = 1 or 2  
<string> = combination of up to 32 characters (0-F and X)

**Example** :SEARCH1:SLOGIC:SPATTERN:SETUP:  
HEXA "ABCD"

### **:SEARCh<x>:SLOGic:SPATtern[:SETup]:**

#### **PATtern**

**Function** Sets the pattern of the logic serial pattern search in binary notation, or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPATtern[:SETup]:  
PATtern {<string>}  
:SEARCh<x>:SLOGic:SPATtern[:SETup]:  
PATtern?  
<x> = 1 or 2

<string> = combination of up to 128 characters (0, 1, and X)

**Example** :SEARCH1:SLOGIC:SPATTERN:SETUP:  
PATTERN "1100110111101111"  
:SEARCH1:SLOGIC:SPATTERN:SETUP:  
PATTERN?  
-> :SEARCH1:SLOGIC:SPATTERN:SETUP:  
PATTERN "1100110111101111"

### **:SEARCh<x>:SLOGic:SPIBUS?**

**Function** Queries all settings related to the logic SPI bus signal search.

**Syntax** :SEARCh<x>:SLOGic:SPIBUS?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPIBUS? -> :SEARCH1:  
SLOGIC:SPIBUS:CLOCK:POLARITY FALL;  
SOURCE A0;:SEARCH1:SLOGIC:SPIBUS:CS:  
ACTIVE HIGH;TRACE A0;:SEARCH1:SLOGIC:  
SPIBUSSETUP:BITORDER LSBFIRST;DATA1:  
BYTE 1;CONDITION FALSE;DPOSITION 1;  
PATTERN1 " 11101111";  
PATTERN2 " XXXXXXXX";  
PATTERN3 " XXXXXXXX";  
PATTERN4 " XXXXXXXX";TRACE A0;:SEARCH1:  
SLOGIC:SPIBUS:SETUP:DATA2:BYTE 1;  
CONDITION TRUE;DPOSITION 0;  
PATTERN1 " XXXXXXXX";  
PATTERN2 " XXXXXXXX";  
PATTERN3 " XXXXXXXX";  
PATTERN4 " XXXXXXXX";TRACE A2;:  
SEARCH1:SLOGIC:SPIBUS:SETUP:MODE WIRE3

### **:SEARCh<x>:SLOGic:SPIBUS:CLOCK?**

**Function** Queries all settings related to the clock signal channel of the logic SPI bus signal search.

**Syntax** :SEARCh<x>:SLOGic:SPIBUS:CLOCK?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPIBUS:  
CLOCK? -> :SEARCH1:SLOGIC:SPIBUS:  
CLOCK:POLARITY FALL;SOURCE A0

**:SEARCh<x>:SLOGic:SPIBUS:CLOCK:****POLarity**

**Function** Sets the polarity of the clock signal channel of the logic SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPIBUS:CLOCK:  
POLarity {FALL|RISE}  
:SEARCh<x>:SLOGic:SPIBUS:CLOCK:  
POLarity?

**Example** :SEARCH1:SLOGIC:SPIBUS:CLOCK:  
POLARITY FALL  
:SEARCH1:SLOGIC:SPIBUS:CLOCK:  
POLARITY? -> :SEARCH1:SLOGIC:SPIBUS:  
CLOCK:POLARITY FALL

**:SEARCh<x>:SLOGic:SPIBUS:CLOCK:****SOURCE**

**Function** Sets the clock signal channel of the logic SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPIBUS:CLOCK:  
SOURCE {A<y>}  
:SEARCh<x>:SLOGic:SPIBUS:CLOCK:SOURCE?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :SEARCH1:SLOGIC:SPIBUS:CLOCK:SOURCE A0  
:SEARCH1:SLOGIC:SPIBUS:CLOCK:  
SOURCE? -> :SEARCH1:SLOGIC:SPIBUS:  
CLOCK:SOURCE A0

**:SEARCh<x>:SLOGic:SPIBUS:CS?**

**Function** Queries all settings related to the chip select signal channel of the logic SPI bus signal search.

**Syntax** :SEARCh<x>:SLOGic:SPIBUS:CS?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPIBUS:CS? -> :SEARCH1:  
SLOGIC:SPIBUS:CS:ACTIVE HIGH;TRACE A0

**:SEARCh<x>:SLOGic:SPIBUS:CS:ACTIVE**

**Function** Sets the active level of the chip select signal channel of the logic SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPIBUS:CS:  
ACTIVE {HIGH|LOW}  
:SEARCh<x>:SLOGic:SPIBUS:CS:ACTIVE?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPIBUS:CS:ACTIVE HIGH  
:SEARCH1:SLOGIC:SPIBUS:CS:  
ACTIVE? -> :SEARCH1:SLOGIC:SPIBUS:CS:  
ACTIVE HIGH

**:SEARCh<x>:SLOGic:SPIBUS:CS:TRACE**

**Function** Sets the chip select signal channel of the logic SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPIBUS:CS:TRACE  
{A<y>}  
:SEARCh<x>:SLOGic:SPIBUS:CS:TRACE?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :SEARCH1:SLOGIC:SPIBUS:CS:TRACE A0  
:SEARCH1:SLOGIC:SPIBUS:CS:  
TRACE? -> :SEARCH1:SLOGIC:SPIBUS:CS:  
TRACE A0

**:SEARCh<x>:SLOGic:SPIBUS[:SETup]?**

**Function** Queries all settings related to the setup of the logic SPI bus signal search.

**Syntax** :SEARCh<x>:SLOGic:SPIBUS[:SETup]?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPIBUS:SETUP?  
-> :SEARCH1:SLOGIC:SPIBUS:SETUP  
:BITORDER LSBFIRST;DATA1:BYTE 1  
;CONDITION FALSE;DPOSITION 1  
;PATTERN1 "11101111"  
;PATTERN2 "XXXXXXXX"  
;PATTERN3 "XXXXXXXX"  
;PATTERN4 "XXXXXXXX";TRACE A0; :SEARCH1  
:SLOGIC:SPIBUS:SETUP:DATA2:BYTE 1  
;CONDITION TRUE;DPOSITION 0  
;PATTERN1 "XXXXXXXX"  
;PATTERN2 "XXXXXXXX"  
;PATTERN3 "XXXXXXXX"  
;PATTERN4 "XXXXXXXX";TRACE A2;  
:SEARCH1:SLOGIC:SPIBUS:SETUP:MODE WIRE3

**:SEARCh<x>:SLOGic:SPIBUS[:SETup]:****BITOrder**

**Function** Sets the bit order of the logic SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPIBUS[:SETup]:  
BITOrder {LSBFirst|MSBFirst}  
:SEARCh<x>:SLOGic:SPIBUS[:SETup]:  
BITOrder?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPIBUS:SETUP:  
BITORDER LSBFIRST  
:SEARCH1:SLOGIC:SPIBUS:SETUP:  
BITORDER? -> :SEARCH1:SLOGIC:SPIBUS:  
SETUP:BITORDER LSBFIRST

## 5.22 SEARCh Group

### **:SEARCh<x>:SLOGic:SPIBus[:SETup]:**

#### **DATA<x>?**

**Function** Queries all settings related to each data of the logic SPI bus signal search.

**Syntax** :SEARCh<x>:SLOGic:SPIBus[:SETup]:  
DATA<x>?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPIBUS:SETUP:  
DATA1? -> :SEARCH1:SLOGIC:SPIBUS:SETUP:  
DATA1:BYTE 1;CONDITION FALSE;  
DPOSITION 1;PATTERN1 " 11101111";  
PATTERN2 " XXXXXXXX";  
PATTERN3 " XXXXXXXX";  
PATTERN4 " XXXXXXXX";TRACE A0

**Description** DATA2 is valid when:SEARCh<x>:SLOGic:SPIBus[:SETup]:MODE WIRE4 is specified.

### **:SEARCh<x>:SLOGic:SPIBus[:SETup]:**

#### **DATA<x>:BYTE**

**Function** Sets the data size (in bytes) of each data of the logic SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPIBus[:SETup]:  
DATA<x>:BYTE {<NRf>}  
:SEARCh<x>:SLOGic:SPIBus[:SETup]:  
DATA<x>:BYTE?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<NRf> = 1 to 4

**Example** :SEARCH1:SLOGIC:SPIBUS:SETUP:DATA1:  
BYTE 1  
:SEARCH1:SLOGIC:SPIBUS:SETUP:DATA1:  
BYTE? -> :SEARCH1:SLOGIC:SPIBUS:SETUP:  
DATA1:BYTE 1

### **:SEARCh<x>:SLOGic:SPIBus[:SETup]:**

#### **DATA<x>:CONDition**

**Function** Sets the determination method (match/mismatch) of the data of the logic SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPIBus[:SETup]:  
DATA<x>:CONDition {FALSe|TRUE}  
:SEARCh<x>:SLOGic:SPIBus[:SETup]:  
DATA<x>:CONDition?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPIBUS:SETUP:DATA1:  
CONDITION FALSE  
:SEARCH1:SLOGIC:SPIBUS:SETUP:DATA1:  
CONDITION? -> :SEARCH1:SLOGIC:SPIBUS:  
SETUP:DATA1:CONDITION FALSE

### **:SEARCh<x>:SLOGic:SPIBus[:SETup]:**

#### **DATA<x>:DPOSITion**

**Function** Sets the pattern comparison start position of the logic SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPIBus[:SETup]:  
DATA<x>:DPOSITion {<NRf>}  
:SEARCh<x>:SLOGic:SPIBus[:SETup]:  
DATA<x>:DPOSITion?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<NRf> = 0 to 9999

**Example** :SEARCH1:SLOGIC:SPIBUS:SETUP:DATA1:  
DPOSITION 1  
:SEARCH1:SLOGIC:SPIBUS:SETUP:DATA1:  
DPOSITION? -> :SEARCH1:SLOGIC:SPIBUS:  
SETUP:DATA1:DPOSITION 1

### **:SEARCh<x>:SLOGic:SPIBus[:SETup]:**

#### **DATA<x>:HEXA<x>**

**Function** Sets the data of the logic SPI bus signal search in hexadecimal notation.

**Syntax** :SEARCh<x>:SLOGic:SPIBus[:SETup]:  
DATA<x>:HEXA<x> {<String>}  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<x> of HEXA<x> = 1 to 4  
<String> = 2 characters by combining '0' to 'F' and 'X'

**Example** :SEARCH1:SLOGIC:SPIBUS:SETUP:DATA1:  
HEXA1 " EF"

### **:SEARCh<x>:SLOGic:SPIBus[:SETup]:**

#### **DATA<x>:PATTern<x>**

**Function** Sets the data of the logic SPI bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPIBus[:SETup]:  
DATA<x>:PATTern<x> {<String>}  
:SEARCh<x>:SLOGic:SPIBus[:SETup]:  
DATA<x>:PATTern<x>?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<x> of PATTern<x> = 1 to 4  
<String> = 8 characters by combining '0' to '1' and 'X'

**Example** :SEARCH1:SLOGIC:SPIBUS:SETUP:DATA1:  
PATTERN1 " 11101111"  
:SEARCH1:SLOGIC:SPIBUS:SETUP:DATA1:  
PATTERN1? -> :SEARCH1:SLOGIC:SPIBUS:  
SETUP:DATA1:PATTERN1 " 11101111"

**:SEARCh<x>:SLOGic:SPIBus[:SETup]:****DATA<x>:TRACe**

**Function** Sets the source channel of each data of the logic SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPIBus[:SETup]:  
DATA<x>:TRACe {A<y>}  
:SEARCh<x>:SLOGic:SPIBus[:SETup]:  
DATA<x>:TRACe?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<y> = 0 to 7

**Example** :SEARCH1:SLOGIC:SPIBUS:SETUP:DATA1:  
TRACE A0  
:SEARCH1:SLOGIC:SPIBUS:SETUP:DATA1:  
TRACE? -> :SEARCH1:SLOGIC:SPIBUS:  
SETUP:DATA1:TRACE A0

**:SEARCh<x>:SLOGic:SPIBus[:SETup]:****MODE**

**Function** Sets the wiring system of the logic SPI bus signal search (three-wire or four-wire) or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:SPIBus[:SETup]:  
MODE {WIRE3|WIRE4}  
:SEARCh<x>:SLOGic:SPIBus[:SETup]:MODE?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:SPIBUS:SETUP:MODE WIRE3  
:SEARCH1:SLOGIC:SPIBUS:SETUP:  
MODE? -> :SEARCH1:SLOGIC:SPIBUS:SETUP:  
MODE WIRE3

**:SEARCh<x>:SLOGic:STATe?**

**Function** Queries all settings related to the logic state search.

**Syntax** :SEARCh<x>:SLOGic:STATe?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:STATE?  
-> :SEARCH1:SLOGIC:STATE:BIT:A0 LOW;  
A1 LOW;A2 LOW;A3 LOW;A4 HIGH;A5 HIGH;  
A6 HIGH;A7 HIGH;B0 LOW;B1 LOW;B2 LOW;  
B3 LOW;B4 HIGH;B5 HIGH;B6 HIGH;B7 HIGH;  
C0 LOW;C1 LOW;C2 LOW;C3 LOW;C4 HIGH;  
C5 HIGH;C6 HIGH;C7 HIGH;D0 LOW;D1 LOW;  
D2 LOW;D3 LOW;D4 HIGH;D5 HIGH;D6 HIGH;  
D7 HIGH;LOGIC AND;:SEARCH1:SLOGIC:  
STATE:GROUP1:CONDITION DONTCARE;  
DATA1 0.0000000E+00;  
DATA2 255.000000E+00;  
PATTERN "1111000011110000111100001111  
0000";:SEARCH1:SLOGIC:STATE:GROUP2:  
CONDITION DONTCARE;DATA1 0.0000000E+00;  
DATA2 1.0000000E+00;PATTERN "":  
SEARCH1:SLOGIC:STATE:GROUP3:  
CONDITION DONTCARE;DATA1 0.0000000E+00;  
DATA2 1.0000000E+00;PATTERN "":  
SEARCH1:SLOGIC:STATE:GROUP4:  
CONDITION DONTCARE;DATA1 0.0000000E+00;  
DATA2 1.0000000E+00;PATTERN "":  
SEARCH1:SLOGIC:STATE:GROUP5:  
CONDITION DONTCARE;DATA1 0.0000000E+00;  
DATA2 0.0000000E+00;PATTERN "":  
SEARCH1:SLOGIC:STATE:TYPE BIT



## 5.22 SEARCh Group

### **:SEARCh<x>:SLOGic:STAtE:BIT?**

**Function** Queries all settings related to the bits of the logic state search.

**Syntax** :SEARCh<x>:SLOGic:STAtE:BIT?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:STATE:BIT?  
-> :SEARCH1:SLOGIC:STATE:BIT:  
A0 DONTCARE;A1 DONTCARE;A2 DONTCARE;  
A3 DONTCARE;A4 DONTCARE;A5 DONTCARE;  
A6 DONTCARE;A7 DONTCARE;B0 DONTCARE;  
B1 DONTCARE;B2 DONTCARE;B3 DONTCARE;  
B4 DONTCARE;B5 DONTCARE;B6 DONTCARE;  
B7 DONTCARE;C0 DONTCARE;C1 DONTCARE;  
C2 DONTCARE;C3 DONTCARE;C4 DONTCARE;  
C5 DONTCARE;C6 DONTCARE;C7 DONTCARE;  
D0 DONTCARE;D1 DONTCARE;D2 DONTCARE;  
D3 DONTCARE;D4 DONTCARE;D5 DONTCARE;  
D6 DONTCARE;D7 DONTCARE;LOGIC AND

### **:SEARCh<x>:SLOGic:STAtE:BIT:{A<x>|**

### **B<x>|C<x>|D<x>}?**

**Function** Sets the truth conditions for each bit of the logic state search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:STAtE:BIT:{A<x>|  
B<x>|C<x>|D<x>} {DONTcare|HIGH|LOW}  
:SEARCh<x>:SLOGic:STAtE:BIT:{A<x>|  
B<x>|C<x>|D<x>}?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :SEARCH1:SLOGIC:STATE:BIT:A0 DONTCARE  
:SEARCH1:SLOGIC:STATE:BIT:A0?  
-> :SEARCH1:SLOGIC:STATE:BIT:  
A0 DONTCARE

**Description** For the SB5310, only {A<x>} are valid.

### **:SEARCh<x>:SLOGic:STAtE:BIT:CLEAr**

**Function** Clears (Don't care) all truth conditions for each bit of the logic serial pattern search.

**Syntax** :SEARCh<x>:SLOGic:STAtE:BIT:CLEAr  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:STATE:BIT:CLEAr

### **:SEARCh<x>:SLOGic:STAtE:BIT:LOGic**

**Function** Sets the logic of the logic state search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:STAtE:BIT:  
LOGic {AND|OR}  
:SEARCh<x>:SLOGic:STAtE:BIT:LOGic?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:STATE:BIT:LOGIC AND  
:SEARCH1:SLOGIC:STATE:BIT:LOGIC?  
-> :SEARCH1:SLOGIC:STATE:BIT:LOGIC AND

### **:SEARCh<x>:SLOGic:STAtE:GRoup<x>?**

**Function** Queries all settings related to each group of the logic state search.

**Syntax** :SEARCh<x>:SLOGic:STAtE:GRoup<x>?  
<x> of SEARCh<x> = 1 or 2  
<x> of GRoup<x> = 1 to 5

**Example** :SEARCH1:SLOGIC:STATE:GROUP1?  
-> :SEARCH1:SLOGIC:STATE:GROUP1:  
CONDITION DONTCARE;  
DATA1 0.0000000E+00;  
DATA2 255.000000E+00;  
PATTERN "1111000011110000111100001111  
0000"

### **:SEARCh<x>:SLOGic:STAtE:GRoup<x>:CLEAr**

**Function** Clears (Don't care) all truth conditions for each group of the logic serial pattern search.

**Syntax** :SEARCh<x>:SLOGic:STAtE:GRoup<x>:CLEAr  
<x> of SEARCh<x> = 1 or 2  
<x> of GRoup<x> = 1 to 5

**Example** :SEARCH1:SLOGIC:STATE:GROUP1:CLEAr

### **:SEARCh<x>:SLOGic:STAtE:GRoup<x>:**

#### **CONDition**

**Function** Sets the determination condition for each group of the logic state search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:STAtE:GRoup<x>:  
CONDition {BETWEn|DONTcare|FALSe|  
GTHAn|LTHAn|ORANge|TRUE}  
:SEARCh<x>:SLOGic:STAtE:GRoup<x>:  
CONDition?  
<x> of SEARCh<x> = 1 or 2  
<x> of GRoup<x> = 1 to 5

**Example** :SEARCH1:SLOGIC:STATE:GROUP1:  
CONDITION BETWEEN  
:SEARCH1:SLOGIC:STATE:GROUP1:  
CONDITION?  
-> :SEARCH1:SLOGIC:STATE:GROUP1:  
CONDITION BETWEEN

**:SEARCH<x>:SLOGic:STAtE:GRouP<x>:****DATA<x>**

**Function** Sets the comparison data for each group of the logic state search or queries the current setting.

**Syntax** :SEARCH<x>:SLOGic:STAtE:GRouP<x>:  
DATA<x> {<NRf>}  
:SEARCH<x>:SLOGic:STAtE:GRouP<x>:  
DATA<x>?  
<x> of SEARCH<x> = 1 or 2  
<x> of GRouP<x> = 1 to 5  
<x> of DATA<x> = 1 or 2  
<NRf> = See the main unit user's manual.

**Example** :SEARCH1:SLOGIC:STATE:GROUP1:DATA1 1  
:SEARCH1:SLOGIC:STATE:GROUP1:DATA1?  
-> :SEARCH1:SLOGIC:STATE:GROUP1:  
DATA1 1.0000000E+00

**Description**

- For :SEARCH<x>:SLOGic:STAtE:GRouP<x>:CONDition GTHan, set using :SEARCH<x>:SLOGic:STAtE:GRouP<x>:DATA1.
- For :SEARCH<x>:SLOGic:STAtE:GRouP<x>:CONDition LTHan, set using :SEARCH<x>:SLOGic:STAtE:GRouP<x>:DATA2.
- For :SEARCH<x>:SLOGic:STAtE:GRouP<x>:CONDition BETWEEen|ORANge, set small values with :SEARCH<x>:SLOGic:STAtE:GRouP<x>:DATA1, and large values with :SEARCH<x>:SLOGic:STAtE:GRouP<x>:DATA2.

**:SEARCH<x>:SLOGic:STAtE:GRouP<x>:HEXA**

**Function** Sets the truth conditions for each group of the logic serial pattern search in hexadecimal notation.

**Syntax** :SEARCH<x>:SLOGic:STAtE:GRouP<x>:  
HEXA {<string>}  
<x> of SEARCH<x> = 1 or 2  
<x> of GRouP<x> = 1 to 5  
<string> = combination of up to 8 characters (0-F and X)

**Example** :SEARCH1:SLOGIC:STATE:GROUP1:  
HEXA "1A3F24CD"

**Description** If the number of bit mappings specified with :LOGic:GRouP<x>:MAPPING is too large, the lower bits are set to X. If the number is too small, the top bits are set.

**:SEARCH<x>:SLOGic:STAtE:GRouP<x>:****PATtern**

**Function** Sets the truth condition for each group of the logic state search in binary notation or queries the current setting.

**Syntax** :SEARCH<x>:SLOGic:STAtE:GRouP<x>:  
PATtern {<string>}  
:SEARCH<x>:SLOGic:STAtE:GRouP<x>:  
PATtern?  
<x> of SEARCH<x> = 1 or 2  
<x> of GRouP<x> = 1 to 5  
<string> = combination of up to 32 characters (0, 1, and X)

**Example** :SEARCH1:SLOGIC:STATE:GROUP1:  
PATTERN "1111000011110000111100001111  
0000"  
:SEARCH1:SLOGIC:STATE:GROUP1:PATTERN?  
-> :SEARCH1:SLOGIC:STATE:GROUP1:  
PATTERN "1111000011110000111100001111  
0000"

**:SEARCH<x>:SLOGic:STAtE:GRouP<x>:****SYMBOL**

**Function** Sets the symbol item for each group of the logic state search.

**Syntax** :SEARCH<x>:SLOGic:STAtE:GRouP<x>:SYMBOL  
{<String>}  
<x> of SEARCH<x> = 1, 2  
<x> of GRouP<x> = 1 to 5  
<String> = Up to 16 characters

**Example** :SEARCH1:SLOGIC:STATE:GROUP1:SYMBOL  
"TEST"

**:SEARCH<x>:SLOGic:STAtE:TYPE**

**Function** Sets the setting method of the logic state search or queries the current setting.

**Syntax** :SEARCH<x>:SLOGic:STAtE:  
TYPE {BIT|GRouP}  
:SEARCH<x>:SLOGic:STAtE:TYPE?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:STATE:TYPE BIT  
:SEARCH1:SLOGIC:STATE:TYPE?  
-> :SEARCH1:SLOGIC:STATE:TYPE BIT

## 5.22 SEARCh Group

### **:SEARCh<x>:SLOGic:UART?**

**Function** Queries all settings related to the logic UART bus signal search.

**Syntax** :SEARCh<x>:SLOGic:UART?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:UART? -> :SEARCH1:  
SLOGIC:UART:BRATE 19200;DATA:  
BITORDER LSBFIRST;DSIZE 1;  
PATTERN "X0101001";:SEARCH1:SLOGIC:  
UART:ERROR:FRAMING 1;PARITY 1;  
PMODE EVEN;:SEARCH1:SLOGIC:UART:  
FORMAT BIT7PARITY;MODE DATA;  
POLARITY NEGATIVE;SPOINT 18.8E+00;  
TRACE A0

### **:SEARCh<x>:SLOGic:UART:BRATE**

**Function** Sets the logic UART bus signal search bit rate (data transfer rate) or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:UART:  
BRATE {<Nrf>|USER,<Nrf>}  
:SEARCh<x>:SLOGic:UART:BRATE?  
<x> = 1, 2

<Nrf> = 1200, 2400, 4800, 9600, 19200, 38400,  
57600, 115200  
<Nrf> of USER = See the SB5000 User's Manual

**Example** :SEARCH1:SLOGIC:UART:BRATE 19200  
:SEARCH1:SLOGIC:UART:BRATE? ->  
:SEARCH1:SLOGIC:UART:BRATE 19200

### **:SEARCh<x>:SLOGic:UART:DATA?**

**Function** Queries all settings related to data of the logic UART bus signal search.

**Syntax** :SEARCh<x>:SLOGic:UART:DATA?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:UART:DATA? -> :SEARCH1:  
SLOGIC:UART:DATA:BITORDER LSBFIRST;  
DSIZE 1;PATTERN "X0101001"

### **:SEARCh<x>:SLOGic:UART:DATA:BITOrder**

**Function** Sets the data bit order of the logic UART bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:UART:DATA:  
BITOrder {LSBFirst|MSBFirst}  
:SEARCh<x>:SLOGic:UART:DATA:BITOrder?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:UART:DATA:  
BITORDER LSBFIRST  
:SEARCH1:SLOGIC:UART:DATA:BITORDER?  
-> :SEARCH1:SLOGIC:UART:DATA:  
BITORDER LSBFIRST

### **:SEARCh<x>:SLOGic:UART:DATA:DSIZE**

**Function** Sets the number of data bytes of the logic UART bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:UART:DATA:  
DSIZE {<Nrf>}  
:SEARCh<x>:SLOGic:UART:DATA:DSIZE?  
<x> = 1, 2  
<Nrf> = 1 to 4

**Example** :SEARCH1:SLOGIC:UART:DATA:DSIZE 1  
:SEARCH1:SLOGIC:UART:DATA:DSIZE? ->  
:SEARCH1:SLOGIC:UART:DATA:DSIZE 1

### **:SEARCh<x>:SLOGic:UART:DATA:HEXA**

**Function** Sets the logic UART bus signal search data in hexadecimal.

**Syntax** :SEARCh<x>:SLOGic:UART:DATA:  
HEXA {<String>}  
<x> = 1, 2  
<String> = Up to 8 characters by combining '0' to 'F'  
and 'X,' units of 1 byte

**Example** :SEARCH1:SLOGIC:UART:DATA:HEXA "A9"

### **:SEARCh<x>:SLOGic:UART:DATA:PATtern**

**Function** Sets the data of the logic UART bus signal search in binary or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:UART:DATA:  
PATtern {<String>}  
:SEARCh<x>:SLOGic:UART:DATA:PATtern?  
<x> = 1, 2  
<String> = Up to 32 characters by combining '0,' '1,'  
and 'X,' units of 1 byte

**Example** :SEARCH1:SLOGIC:UART:DATA:  
PATTERN "11011111"  
:SEARCH1:SLOGIC:UART:DATA:PATTERN?  
-> :SEARCH1:SLOGIC:UART:DATA:  
PATTERN "11011111"

### **:SEARCh<x>:SLOGic:UART:ERRor?**

**Function** Queries all settings related to the logic UART bus signal search error.

**Syntax** :SEARCh<x>:SLOGic:UART:ERRor?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:UART:ERROR? ->  
:SEARCH1:SLOGIC:UART:ERROR:  
FRAMING 1;PARITY 1;PMODE EVEN

**:SEARCH<x>:SLOGic:UART:ERROR:FRAMing**

**Function** Sets the logic UART bus signal search Framing error or queries the current setting.

**Syntax** :SEARCH<x>:SLOGic:UART:ERROR:  
FRAMing {<Boolean>}  
:SEARCH<x>:SLOGic:UART:ERROR:FRAMing?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:UART:ERROR:FRAMING ON  
:SEARCH1:SLOGIC:UART:ERROR:FRAMING? ->  
:SEARCH1:SLOGIC:UART:ERROR:FRAMING 1

**:SEARCH<x>:SLOGic:UART:ERROR:PARity**

**Function** Sets the logic UART bus signal search Parity error or queries the current setting.

**Syntax** :SEARCH<x>:SLOGic:UART:ERROR:  
PARity {<Boolean>}  
:SEARCH<x>:SLOGic:UART:ERROR:PARity?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:UART:ERROR:PARITY ON  
:SEARCH1:SLOGIC:UART:ERROR:PARITY? ->  
:SEARCH1:SLOGIC:UART:ERROR:PARITY 1

**:SEARCH<x>:SLOGic:UART:ERROR:PMODE**

**Function** Sets the logic UART bus signal search Parity mode or queries the current setting.

**Syntax** :SEARCH<x>:SLOGic:UART:ERROR:  
PMODE {EVEN|ODD}  
:SEARCH<x>:SLOGic:UART:ERROR:PMODE?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:UART:ERROR:PMODE EVEN  
:SEARCH1:SLOGIC:UART:ERROR:PMODE? ->  
:SEARCH1:SLOGIC:UART:ERROR:PMODE EVEN

**:SEARCH<x>:SLOGic:UART:FORMat**

**Function** Sets the logic UART bus signal search format or queries the current setting.

**Syntax** :SEARCH<x>:SLOGic:UART:  
FORMat {BIT7parity|BIT8Noparity|  
BIT8Parity}  
:SEARCH<x>:SLOGic:UART:FORMat?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:UART:FORMAT BIT7PARITY  
:SEARCH1:SLOGIC:UART:FORMAT? ->  
:SEARCH1:SLOGIC:UART:FORMAT BIT7PARITY

**:SEARCH<x>:SLOGic:UART:MODE**

**Function** Sets the logic UART bus signal search mode or queries the current setting.

**Syntax** :SEARCH<x>:SLOGic:UART:  
MODE {DATA|ERROR}  
:SEARCH<x>:SLOGic:UART:MODE?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:UART:MODE DATA  
:SEARCH1:SLOGIC:UART:MODE? -> :SEARCH1:  
SLOGIC:UART:MODE DATA

**:SEARCH<x>:SLOGic:UART:POLarity**

**Function** Sets the logic UART bus signal search polarity or queries the current setting.

**Syntax** :SEARCH<x>:SLOGic:UART:  
POLarity {NEGative|POSitive}  
:SEARCH<x>:SLOGic:UART:POLarity?  
<x> = 1, 2

**Example** :SEARCH1:SLOGIC:UART:POLARITY NEGATIVE  
:SEARCH1:SLOGIC:UART:POLARITY? ->  
:SEARCH1:SLOGIC:UART:POLARITY NEGATIVE

**:SEARCH<x>:SLOGic:UART:TRACe**

**Function** Sets the logic UART bus signal search trace or queries the current setting.

**Syntax** :SEARCH<x>:SLOGic:UART:TRACe {A<y>}  
:SEARCH<x>:SLOGic:UART:TRACe?  
<x> = 1, 2  
<y> = 0 to 7

**Example** :SEARCH1:SLOGIC:UART:TRACE A0  
:SEARCH1:SLOGIC:UART:TRACE? ->  
:SEARCH1:SLOGIC:UART:TRACE A0

**:SEARCH<x>:SLOGic:UART:SPOINT**

**Function** Sets the logic UART bus signal search sampling point or queries the current setting.

**Syntax** :SEARCH<x>:SLOGic:UART:SPOINT {<Nrf>}  
:SEARCH<x>:SLOGic:UART:SPOINT?  
<x> = 1, 2  
<Nrf> = 18.8 to 90.6(%)

**Example** :SEARCH1:SLOGIC:UART:SPOINT 18.8  
:SEARCH1:SLOGIC:UART:SPOINT? ->  
:SEARCH1:SLOGIC:UART:SPOINT 18.8E+00

**:SEARCH<x>:SLOGic:WIDTH?**

**Function** Queries all settings of the logic pulse width search.

**Syntax** :SEARCH<x>:SLOGic:WIDTH?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:WIDTH?  
-> :SEARCH1:SLOGIC:WIDTH:MODE BETWEEN;  
TIME1 1.0000000E+00;  
TIME2 1.0000000E+00;TYPE PQUALIFY

## 5.22 SEARCh Group

### **:SEARCh<x>:SLOGic:WIDTh:MODE**

**Function** Sets the determination mode of the logic pulse width search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:WIDTh:  
MODE {BETWEE|IN|NOTBETWEE|OUT|  
TIMEout}  
:SEARCh<x>:SLOGic:WIDTh:MODE?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:WIDTH:MODE BETWEEN  
:SEARCH1:SLOGIC:WIDTH:MODE?  
-> :SEARCH1:SLOGIC:WIDTH:MODE BETWEEN

### **:SEARCh<x>:SLOGic:WIDTh:TIME<x>**

**Function** Sets the pulse width of the logic pulse width search or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:WIDTh:TIME<x>  
{<time>}  
:SEARCh<x>:SLOGic:WIDTh:TIME<x>?  
<x> of SEARCh<x> = 1 or 2  
<x> of TIME<x> = 1 or 2  
<time> = 1 ns to 10 s (500ps steps)

**Example** :SEARCH1:SLOGIC:WIDTH:TIME1 1S  
:SEARCH1:SLOGIC:WIDTH:TIME1?  
-> :SEARCH1:SLOGIC:WIDTH:  
TIME1 1.000E+00

**Description** TIME2 is valid for :SEARCh<x>:SLOGic:WIDTh:  
MODE BETWEE|NOTBETWEE.

### **:SEARCh<x>:SLOGic:WIDTh:TYPE**

**Function** Sets the logic pulse width search type or queries the current setting.

**Syntax** :SEARCh<x>:SLOGic:WIDTh:  
TYPE {PQUALify|PSTATE|PULSE}  
:SEARCh<x>:SLOGic:WIDTh:TYPE?  
<x> = 1 or 2

**Example** :SEARCH1:SLOGIC:WIDTH:TYPE PQUALIFY  
:SEARCH1:SLOGIC:WIDTH:TYPE?  
-> :SEARCH1:SLOGIC:WIDTH:TYPE PQUALIFY

### **:SEARCh<x>:SMODE**

**Function** Sets the skip mode or queries the current setting.

**Syntax** :SEARCh<x>:SMODE {DECimation|HOLDoff|  
OFF}  
:SEARCh<x>:SMODE?  
<x> = 1 or 2

**Example** :SEARCH1:SMODE HOLDOFF  
:SEARCH1:SMODE? -> :SEARCH1:  
SMODE HOLDOFF

### **:SEARCh<x>:SPATtern? (Serial Pattern)**

**Function** Queries all settings related to the serial pattern search.

**Syntax** :SEARCh<x>:SPATtern?  
<x> = 1,2

**Example** :SEARCH1:SPATTERN? -> :SEARCH1:  
SPATTERN:CLOCK:MODE 1;POLARITY FALL;  
SOURCE 1;:SEARCH1:SPATTERN:CS 1;LATCH:  
TRACE 1;POLARITY FALL;:SEARCH1:  
SPATTERN:SETUP:BITRATE 1.000E+00;  
PATTERN "1100110111101111"

### **:SEARCh<x>:SPATtern:CLOCK?**

**Function** Queries all settings related to clock of the serial pattern search.

**Syntax** :SEARCh<x>:SPATtern:CLOCK?  
<x> = 1,2

**Example** :SEARCH1:SPATTERN:CLOCK? -> :SEARCH1:  
SPATTERN:CLOCK:MODE 1;  
POLARITY FALL;SOURCE 1

### **:SEARCh<x>:SPATtern:CLOCK:MODE**

**Function** Enables/Disables the clock of the serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SPATtern:CLOCK:  
MODE {<Boolean>}  
:SEARCh<x>:SPATtern:CLOCK:MODE?  
<x> = 1,2

**Example** :SEARCH1:SPATTERN:CLOCK:MODE ON  
:SEARCH1:SPATTERN:CLOCK:MODE?  
-> :SEARCH1:SPATTERN:CLOCK:MODE 1

### **:SEARCh<x>:SPATtern:CLOCK:POLarity**

**Function** Sets the polarity of the clock trace of the serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SPATtern:CLOCK:  
POLarity {FALL|RISE}  
:SEARCh<x>:SPATtern:CLOCK:POLarity?  
<x> = 1,2

**Example** :SEARCH1:SPATTERN:CLOCK:POLARITY FALL  
:SEARCH1:SPATTERN:CLOCK:POLARITY?  
-> :SEARCH1:SPATTERN:CLOCK:  
POLARITY FALL

**Description** This command is valid when :SEARCh<x>:SPATtern:  
CLOCK:MODE ON.

**:SEARCh<x>:SPATtern:CLOCK:SOURce**

**Function** Sets the clock trace of the serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SPATtern:CLOCK:  
SOURce {<Nrf>}  
:SEARCh<x>:SPATtern:CLOCK:SOURce?  
<x> = 1,2  
<Nrf> = 1 to 8

**Example** :SEARCH1:SPATTERN:CLOCK:SOURCE 1  
:SEARCH1:SPATTERN:CLOCK:SOURCE?  
-> :SEARCH1:SPATTERN:CLOCK:SOURCE 1

**Description** This command is valid when :SEARCh<x>:SPATtern:CLOCK:MODE ON.

**:SEARCh<x>:SPATtern:CS**

**Function** Enables/Disables the chip select of the serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SPATtern:CS {<Boolean>}  
:SEARCh<x>:SPATtern:CS?  
<x> = 1,2

**Example** :SEARCH1:SPATTERN:CS ON  
:SEARCH1:SPATTERN:CS? -> :SEARCH1:  
SPATTERN:CS 1

**Description** This command is valid when :SEARCh<x>:SPATtern:CLOCK:MODE ON.

**:SEARCh<x>:SPATtern:LATCh?**

**Function** Queries all settings related to latch of the serial pattern search.

**Syntax** :SEARCh<x>:SPATtern:LATCh?  
<x> = 1,2

**Example** :SEARCH1:SPATTERN:LATCH? -> :SEARCH1:  
SPATTERN:LATCH:TRACE 1;  
POLARITY FALL

**:SEARCh<x>:SPATtern:LATCh:POLarity**

**Function** Sets the polarity of the latch trace of the serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SPATtern:LATCh:  
POLarity {FALL|RISE}  
:SEARCh<x>:SPATtern:LATCh:POLarity?  
<x> = 1,2

**Example** :SEARCH1:SPATTERN:LATCH:POLARITY FALL  
:SEARCH1:SPATTERN:LATCH:POLARITY?  
-> :SEARCH1:SPATTERN:LATCH:  
POLARITY FALL

**Description** • This command is valid when :SEARCh<x>:SPATtern:CLOCK:MODE ON.  
• This command is invalid when :SEARCh<x>:SPATtern:LATCh:TRACe NONE.

**:SEARCh<x>:SPATtern:LATCh:TRACe**

**Function** Sets the latch trace of the serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SPATtern:LATCh:TRACe {<Nrf>|  
NONE}  
:SEARCh<x>:SPATtern:LATCh:TRACe?  
<x> = 1,2  
<Nrf> = 1 to 8

**Example** :SEARCH1:SPATTERN:LATCH:TRACE 1  
:SEARCH1:SPATTERN:LATCH:TRACE?  
-> :SEARCH1:SPATTERN:LATCH:TRACE 1

**Description** This command is valid when :SEARCh<x>:SPATtern:CLOCK:MODE ON.

**:SEARCh<x>:SPATtern:SETup?**

**Function** Queries all settings related to setup of the serial pattern search.

**Syntax** :SEARCh<x>:SPATtern:SETup?  
<x> = 1,2

**Example** :SEARCH1:SPATTERN:SETUP? -> :SEARCH1:  
SPATTERN:SETUP:  
BITRATE 1.000E+03;DATA:ACTIVE HIGH;  
TRACE 1;  
:SEARCH1:SPATTERN:SETUP:PATTERN "1100"

**:SEARCh<x>:SPATtern[:SETup]:BITRate**

**Function** Sets the bit rate of the serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SPATtern[:SETup]:  
BITRate {<Nrf>}  
:SEARCh<x>:SPATtern[:SETup]:BITRate?  
<x> = 1, 2  
<Nrf> = 1 to 1G (bps)

**Example** :SEARCH1:SPATTERN:SETUP:BITRATE 1  
:SEARCH1:SPATTERN:SETUP:BITRATE?  
-> :SEARCH1:SPATTERN:SETUP:  
BITRATE 1.000E+00

**Description** This command is valid when :SEARCh<x>:SPATtern:CLOCK:MODE OFF.

**:SEARCh<x>:SPATtern[:SETup]:CLEar**

**Function** Clears the entire pattern of the serial pattern search (to don't care).

**Syntax** :SEARCh<x>:SPATtern[:SETup]:CLEar  
<x> = 1,2

**Example** :SEARCH1:SPATTERN:SETUP:CLEAR

**:SEARCh<x>:SPATtern[:SETup]:DATA?**

**Function** Queries all settings related to data of the serial pattern search.

**Syntax** :SEARCh<x>:SPATtern[:SETup]:DATA?  
<x> = 1,2

**Example** :SEARCH1:SPATTERN:SETUP:DATA?  
-> :SEARCH1:SPATTERN:SETUP:DATA:  
ACTIVE HIGH;TRACE 1

## 5.22 SEARCh Group

### **:SEARCh<x>:SPATtern[:SETup]:DATA:**

#### **ACTive**

**Function** Sets the active level of the data trace of the serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SPATtern[:SETup]:DATA:  
ACTive {HIGH|LOW}  
:SEARCh<x>:SPATtern[:SETup]:DATA:  
ACTive?  
<x> = 1,2

**Example** :SEARCH1:SPATTERN:SETUP:DATA:  
ACTIVE HIGH  
:SEARCH1:SPATTERN:SETUP:DATA:ACTIVE?  
-> :SEARCH1:SPATTERN:SETUP:DATA:  
ACTIVE HIGH

### **:SEARCh<x>:SPATtern[:SETup]:DATA:TRACe**

**Function** Sets the data trace of the serial pattern search or queries the current setting.

**Syntax** :SEARCh<x>:SPATtern[:SETup]:DATA:  
TRACe {<NRf>}  
:SEARCh<x>:SPATtern[:SETup]:DATA:TRACe?  
<x> = 1,2  
<NRf> = 1 to 8

**Example** :SEARCH1:SPATTERN:SETUP:DATA:TRACE 1  
:SEARCH1:SPATTERN:SETUP:DATA:TRACE?  
-> :SEARCH1:SPATTERN:SETUP:DATA:TRACE 1

### **:SEARCh<x>:SPATtern[:SETup]:HEXA**

**Function** Sets the pattern of the serial pattern search in hexadecimal notation.

**Syntax** :SEARCh<x>:SPATtern[:SETup]:HEXA  
{<String>}  
<x> = 1,2  
<String> = Up to 32 characters by combining '0' to 'F' and 'X'

**Example** :SEARCH1:SPATTERN:SETUP:HEXA "ABCD"

### **:SEARCh<x>:SPATtern[:SETup]:PATTern**

**Function** Sets the pattern of the serial pattern search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:SPATtern[:SETup]:  
PATTern {<String>}  
:SEARCh<x>:SPATtern[:SETup]:PATTern?  
<x> = 1,2  
<String> = Up to 128 characters by combining '0', '1', and 'X'

**Example** :SEARCH1:SPATTERN:SETUP:  
PATTERN "1100110111101111"  
:SEARCH1:SPATTERN:SETUP:PATTERN?  
-> :SEARCH1:SPATTERN:SETUP:  
PATTERN "1100110111101111"

### **:SEARCh<x>:SPIBUS?**

**Function** Queries all settings related to the SPI bus signal search.

**Syntax** :SEARCh<x>:SPIBUS?  
<x> = 1 or 2

**Example** :SEARCH1:SPIBUS?  
-> :SEARCH1:SPIBUS:CLOCK:POLARITY FALL;  
SOURCE 1;:SEARCH1:SPIBUS:CS:  
ACTIVE HIGH;TRACE 1;:SEARCH1:SPIBUS:  
SETUP:BITORDER LSBFIRST;DATA1:BYTE 1;  
CONDITION TRUE;DPOSITION 1;  
PATTERN1 "00010010";  
PATTERN2 "00110100";  
PATTERN3 "01010110";  
PATTERN4 "01111000";TRACE 1;:SEARCH1:  
SPIBUS:SETUP:DATA2:BYTE 1;  
CONDITION TRUE;DPOSITION 1;  
PATTERN1 "00010010";  
PATTERN2 "00110100";  
PATTERN3 "01010110";  
PATTERN4 "01111000";TRACE 1;:SEARCH1:  
SPIBUS:SETUP:MODE WIRE3

### **:SEARCh<x>:SPIBUS:CLOCK**

**Function** Queries all settings related to the clock channel of the SPI bus signal search.

**Syntax** :SEARCh<x>:SPIBUS:CLOCK?  
<x> = 1 or 2

**Example** :SEARCH1:SPIBUS:CLOCK?  
-> :SEARCH1:SPIBUS:CLOCK:POLARITY FALL;  
SOURCE 1

### **:SEARCh<x>:SPIBUS:CLOCK:POLarity**

**Function** Sets the polarity of the clock channel of the SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SPIBUS:CLOCK:  
POLarity {FALL|RISE}  
:SEARCh<x>:SPIBUS:CLOCK:POLarity?  
<x> = 1 or 2

**Example** :SEARCH1:SPIBUS:CLOCK:POLARITY FALL  
:SEARCH1:SPIBUS:CLOCK:POLARITY?  
-> :SEARCH1:SPIBUS:CLOCK:POLARITY FALL

### **:SEARCh<x>:SPIBUS:CLOCK:SOURce**

**Function** Sets the clock channel of the SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SPIBUS:CLOCK:SOURce {<NRf>}  
:SEARCh<x>:SPIBUS:CLOCK:SOURce?  
<x> = 1 or 2  
<NRf> = 1 to 8

**Example** :SEARCH1:SPIBUS:CLOCK:SOURCE 1  
:SEARCH1:SPIBUS:CLOCK:SOURCE?  
-> :SEARCH1:SPIBUS:CLOCK:SOURCE 1

**:SEARCh<x>:SPIBUS:CS?**

**Function** Queries all settings related to the chip select channel of the SPI bus signal search.

**Syntax** :SEARCh<x>:SPIBUS:CS?  
<x> = 1 or 2

**Example** :SEARCH1:SPIBUS:CS?  
-> :SEARCH1:SPIBUS:CS:ACTIVE HIGH;  
TRACE 1

**:SEARCh<x>:SPIBUS:CS:ACTive**

**Function** Sets the active level of the chip select channel of the SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SPIBUS:CS:ACTive {HIGH|LOW}  
:SEARCh<x>:SPIBUS:CS:ACTive?  
<x> = 1 or 2

**Example** :SEARCH1:SPIBUS:CS:ACTIVE HIGH  
:SEARCH1:SPIBUS:CS:ACTIVE?  
-> :SEARCH1:SPIBUS:CS:ACTIVE HIGH

**:SEARCh<x>:SPIBUS:CS:TRACe**

**Function** Sets the chip select channel of the SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SPIBUS:CS:TRACe {<NRf>}  
:SEARCh<x>:SPIBUS:CS:TRACe?  
<x> = 1 or 2  
<NRf> = 1 to 8

**Example** :SEARCH1:SPIBUS:CS:TRACE 1  
:SEARCH1:SPIBUS:CS:TRACE?  
-> :SEARCH1:SPIBUS:CS:TRACE 1

**:SEARCh<x>:SPIBUS:SETup?**

**Function** Queries all settings related to the SPI bus signal search setup.

**Syntax** :SEARCh<x>:SPIBUS:SETup?  
<x> = 1 or 2

**Example** :SEARCH1:SPIBUS:SETUP?  
-> :SEARCH1:SPIBUS:SETUP:  
BITORDER LSBFIRST;DATA1:BYTE 1;  
CONDITION TRUE;DPOSITION 1;  
PATTERN1 " 00010010";  
PATTERN2 " 00110100";  
PATTERN3 " 01010110";  
PATTERN4 " 01111000";TRACE 1;:SEARCH1:  
SPIBUS:SETUP:DATA2:BYTE 1;  
CONDITION TRUE;DPOSITION 1;  
PATTERN1 " 00010010";  
PATTERN2 " 00110100";  
PATTERN3 " 01010110";  
PATTERN4 " 01111000";TRACE 1;:SEARCH1:  
SPIBUS:SETUP:MODE WIRE3

**:SEARCh<x>:SPIBUS[:SETup]:BITOrder**

**Function** Sets the bit order of the SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SPIBUS[:SETup]:  
BITOrder {LSBFirst|MSBFirst}  
:SEARCh<x>:SPIBUS[:SETup]:BITOrder?  
<x> = 1 or 2

**Example** :SEARCH1:SPIBUS:SETUP:BITORDER LSBFIRST  
:SEARCH1:SPIBUS:SETUP:BITORDER?  
-> :SEARCH1:SPIBUS:SETUP:  
BITORDER LSBFIRST

**:SEARCh<x>:SPIBUS[:SETup]:DATA<x>?**

**Function** Queries all settings related to the data of the SPI bus signal search.

**Syntax** :SEARCh<x>:SPIBUS[:SETup]:DATA<x>?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

**Example** :SEARCH1:SPIBUS:SETUP:DATA1?  
-> :SEARCH1:SPIBUS:SETUP:DATA1:BYTE 1;  
CONDITION TRUE;DPOSITION 1;  
PATTERN1 " 00010010";  
PATTERN2 " 00110100";  
PATTERN3 " 01010110";  
PATTERN4 " 01111000";TRACE 1

**Description** DATA2 is valid when :SEARCh<x>:  
SPIBUS[:SETup]:MODE WIRE4 is specified.

**:SEARCh<x>:SPIBUS[:SETup]:DATA<x>:BYTE**

**Function** Sets the number of bytes of the data of the SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SPIBUS[:SETup]:DATA<x>:  
BYTE {<NRf>}  
:SEARCh<x>:SPIBUS[:SETup]:DATA<x>:BYTE?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<NRf> = 1 to 4

**Example** :SEARCH1:SPIBUS:SETUP:DATA1:BYTE 1  
:SEARCH1:SPIBUS:SETUP:DATA1:BYTE?  
-> :SEARCH1:SPIBUS:SETUP:DATA1:BYTE 1



## 5.22 SEARCh Group

### **:SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:CONDition**

**Function** Sets the determination method (match or not match) of the data of the SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:  
CONDition {FALSE|TRUE}  
:SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:  
CONDition?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

**Example** :SEARCH1:SPIBUS:SETUP:DATA1:  
CONDITION TRUE  
:SEARCH1:SPIBUS:SETUP:DATA1:  
CONDITION?  
-> :SEARCH1:SPIBUS:SETUP:DATA1:  
CONDITION TRUE

### **:SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:DPOsition**

**Function** Sets the pattern comparison start position of the data of the SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:  
DPOsition {<Nrf>}  
:SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:  
DPOsition?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<Nrf> = 0 to 9999

**Example** :SEARCH1:SPIBUS:SETUP:DATA1:DPOSITION 1  
:SEARCH1:SPIBUS:SETUP:DATA1:  
DPOSITION?  
-> :SEARCH1:SPIBUS:SETUP:DATA1:  
DPOSITION 1

### **:SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:HEXA<x>**

**Function** Sets the data of the SPI bus signal search in hexadecimal notation.

**Syntax** :SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:  
HEXA<x> {<String>}  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<x> of HEXA<x> = 1 to 4  
<String> = 2 characters by combining '0' to 'F' and 'X'

**Example** :SEARCH1:SPIBUS:SETUP:DATA1:HEXA1 " EF"

### **:SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:PATTern<x>**

**Function** Sets the data of the SPI bus signal search in binary notation or queries the current setting.

**Syntax** :SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:  
PATTern<x> {<String>}  
:SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:  
PATTern<x>?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<x> of <PATTern x> = 1 to 4  
<String> = 8 characters by combining '0','1,' and 'X'

**Example** :SEARCH1:SPIBUS:SETUP:DATA1:  
PATTERN1 " 11101111"  
:SEARCH1:SPIBUS:SETUP:DATA1:  
PATTERN1?  
-> :SEARCH1:SPIBUS:SETUP:DATA1:  
PATTERN1 " 11101111"

### **:SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:TRACe**

**Function** Sets the source channel of the data of the SPI bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:  
TRACe {<Nrf>}  
:SEARCh<x>:SPIBUS[:SETUp]:DATA<x>:  
TRACe?  
<x> of SEARCh<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<Nrf> = 1 to 8

**Example** :SEARCH1:SPIBUS:SETUP:DATA1:TRACE 1  
:SEARCH1:SPIBUS:SETUP:DATA1:TRACE?  
-> :SEARCH1:SPIBUS:SETUP:DATA1:TRACE 1

### **:SEARCh<x>:SPIBUS[:SETUp]:MODE**

**Function** Sets the wiring system of the SPI bus signal search (three-wire or four-wire) or queries the current setting.

**Syntax** :SEARCh<x>:SPIBUS[:SETUp]:  
MODE {WIRE3|WIRE4}  
:SEARCh<x>:SPIBUS[:SETUp]:MODE?  
<x> = 1 or 2

**Example** :SEARCH1:SPIBUS:SETUP:MODE WIRE3  
:SEARCH1:SPIBUS:SETUP:MODE?  
-> :SEARCH1:SPIBUS:SETUP:MODE WIRE3

**:SEARCh<x>:SPOint**

**Function** Sets the search start position or queries the current setting.

**Syntax** :SEARCh<x>:SPOint {<NRF>}  
:SEARCh<x>:SPOint?  
<x> = 1 or 2  
<NRF> = -5 to 5 (div)

**Example** :SEARCH1:SPOINT 1  
:SEARCH1:SPOINT? -> :SEARCH1:  
SPOINT 1.000E+00

**:SEARCh<x>:STRace**

**Function** Sets the search source trace or queries the current setting.

**Syntax** :SEARCh<x>:STRace {<NRF>}  
:SEARCh<x>:STRace?  
<x> = 1 or 2  
<NRF> = 1 to 8

**Example** :SEARCH1:STRACE 1  
:SEARCH1:STRACE? -> :SEARCH1:STRACE 1

**Description** • This command is valid when :SEARCh<x>:TYPE EDGE|EQUalify.  
• This command is valid when :SEARCh<x>:TYPE WIDTH and :SEARCh<x>:WIDTH:TYPE PQUalify|PULSe.

**:SEARCh<x>:TRACe<x>?**

**Function** Queries all settings related to the search conditions of the trace.

**Syntax** :SEARCh<x>:TRACe<x>?  
<x> of SEARCh<x> = 1 or 2  
<x> of TRACe<x> = 1 to 8

**Example** :SEARCH1:TRACE1? -> :SEARCH1:TRACE1:  
CONDITION DONTCARE;  
HYSTERESIS 1.000E+00;LEVEL 0.000E+00

**:SEARCh<x>:TRACe<x>:CONDition**

**Function** Sets the condition to be satisfied for the trace or queries the current setting.

**Syntax** :SEARCh<x>:TRACe<x>:  
CONDition {DONTcare|HIGH|LOW}  
:SEARCh<x>:TRACe<x>:CONDition?  
<x> of SEARCh<x> = 1 or 2  
<x> of TRACe<x> = 1 to 8

**Example** :SEARCH1:TRACE1:CONDITION HIGH  
:SEARCH1:TRACE1:CONDITION? -> :SEARCH1:  
TRACE1:CONDITION HIGH

**Description** • This command is valid when :SEARCh<x>:TYPE EQUalify|SPATtern|STATe.  
• This command is valid when :SEARCh<x>:TYPE WIDTH and :SEARCh<x>:WIDTH:TYPE PQUalify|PSTAtE.

**:SEARCh<x>:TRACe<x>:HYSTEResis**

**Function** Sets the hysteresis of the trace or queries the current setting.

**Syntax** :SEARCh<x>:TRACe<x>:HYSTEResis {<NRF>}  
:SEARCh<x>:TRACe<x>:HYSTEResis?  
<x> of SEARCh<x> = 1 or 2  
<x> of TRACe<x> = 1 to 8  
<NRF> = 0 to 4 (div, 0.1 div steps)

**Example** :SEARCH1:TRACE1:HYSTERESIS 1  
:SEARCH1:TRACE1:HYSTERESIS?  
-> :SEARCH1:TRACE1:HYSTERESIS 1.000E+00

**:SEARCh<x>:TRACe<x>:LEVel**

**Function** Sets the threshold level of the trace or queries the current setting.

**Syntax** :SEARCh<x>:TRACe<x>:LEVel {<NRF>|  
<Voltage>|<Current>}  
:SEARCh<x>:TRACe<x>:LEVel?  
<x> of SEARCh<x> = 1 or 2  
<x> of TRACe<x> = 1 to 8  
<NRF>, <Voltage>, and <Current> = See the SB5000  
User's Manual.

**Example** :SEARCH1:TRACE1:LEVEL 0  
:SEARCH1:TRACE1:LEVEL? -> :SEARCH1:  
TRACE1:LEVEL 0.000E+00

**:SEARCh<x>:TYPE**

**Function** Sets the search type or queries the current setting.

**Syntax** :SEARCh<x>:TYPE {CANBus|EDGE|EQUalify|  
FLEXray|I2Cbus|LEDge|LI2Cbus|LINbus|  
LLINbus|LQUalify|LSPAttern|LSPiBus|  
LStAtE|LUARt|LWIDth|SPATtern|SPiBus|  
STATe|UART|WIDTh}  
:SEARCh<x>:TYPE?  
<x> = 1 or 2

**Example** :SEARCH1:TYPE EDGE  
:SEARCH1:TYPE? -> :SEARCH1:TYPE EDGE

**:SEARCh<x>:UART?**

**Function** Queries all settings related to the UART bus signal search.

**Syntax** :SEARCh<x>:UART?  
<x> = 1, 2

**Example** :SEARCH1:UART? -> :SEARCH1:UART:  
BRATE 19200;DATA:BITORDER LSBFIRST;  
DSIZE 1;PATTERN "X0101001";:SEARCH1:  
UART:ERROR:FRAMING 1;PARITY 1;  
PMODE EVEN;;:SEARCH1:UART:  
FORMAT BIT7PARITY;MODE DATA;  
POLARITY NEGATIVE;SPOINT 18.8E+00;  
TRACE 1

## 5.22 SEARCh Group

### **:SEARCh<x>:UART:BRATe**

**Function** Sets the UART bus signal search bit rate (data transfer rate) or queries the current setting.

**Syntax** :SEARCh<x>:UART:  
BRATe {<Nrf>|USER,<Nrf>}  
:SEARCh<x>:UART:BRATe?  
<x> = 1, 2  
<Nrf> = 1200, 2400, 4800, 9600, 19200, 38400,  
57600, 115200  
<Nrf> of USER = See the SB5000 User's Manual

**Example** :SEARCH1:UART:BRATE 19200  
:SEARCH1:UART:BRATE? -> :SEARCH1:UART:  
BRATE 19200

### **:SEARCh<x>:UART:DATA?**

**Function** Queries all settings related to data of the UART bus signal search

**Syntax** :SEARCh<x>:UART:DATA?  
<x> = 1, 2

**Example** :SEARCH1:UART:DATA? -> :SEARCH1:UART:  
DATA:BITORDER LSBFIRST;DSIZE 1;  
PATTERN "X0101001"

### **:SEARCh<x>:UART:DATA:BITOrder**

**Function** Sets the data bit order of the UART bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:UART:DATA:  
BITOrder {LSBFirst|MSBFirst}  
:SEARCh<x>:UART:DATA:BITOrder?  
<x> = 1, 2

**Example** :SEARCH1:UART:DATA:BITORDER LSBFIRST  
:SEARCH1:UART:DATA:BITORDER? ->  
:SEARCH1:UART:DATA:BITORDER LSBFIRST

### **:SEARCh<x>:UART:DATA:DSIZE**

**Function** Sets the number of data bytes of the UART bus signal search or queries the current setting.

**Syntax** :SEARCh<x>:UART:DATA:DSIZE {<Nrf>}  
:SEARCh<x>:UART:DATA:DSIZE?  
<x> = 1, 2  
<Nrf> = 1 to 4

**Example** :SEARCH1:UART:DATA:DSIZE 1  
:SEARCH1:UART:DATA:DSIZE? ->  
:SEARCH1:UART:DATA:DSIZE 1

### **:SEARCh<x>:UART:DATA:HEXA**

**Function** Sets the UART bus signal search data in hexadecimal.

**Syntax** :SEARCh<x>:UART:DATA:HEXA {<String>}  
<x> = 1, 2  
<String> = Up to 8 characters by combining '0' to 'F'  
and 'X,' units of 1 byte

**Example** :SEARCH1:UART:DATA:HEXA "A9"

### **:SEARCh<x>:UART:DATA:PATtern**

**Function** Sets the data of the UART bus signal search in binary or queries the current setting.

**Syntax** :SEARCh<x>:UART:DATA:PATtern {<String>}  
:SEARCh<x>:UART:DATA:PATtern?  
<x> = 1, 2  
<String> = Up to 32 characters by combining '0','1,'  
and 'X,' units of 1 byte

**Example** :SEARCH1:UART:DATA:PATTERN "11011111"  
:SEARCH1:UART:DATA:PATTERN? ->  
:SEARCH1:UART:DATA:PATTERN "11011111"

### **:SEARCh<x>:UART:ERROR?**

**Function** Queries all settings related to the UART bus signal search error.

**Syntax** :SEARCh<x>:UART:ERROR?  
<x> = 1, 2

**Example** :SEARCH1:UART:ERROR? -> :SEARCH1:UART:  
ERROR:FRAMING 1;PARITY 1;PMODE EVEN

### **:SEARCh<x>:UART:ERROR:FRAMing**

**Function** Sets the UART bus signal search Framing error or queries the current setting.

**Syntax** :SEARCh<x>:UART:ERROR:  
FRAMing {<Boolean>}  
:SEARCh<x>:UART:ERROR:FRAMing?  
<x> = 1, 2

**Example** :SEARCH1:UART:ERROR:FRAMING ON  
:SEARCH1:UART:ERROR:FRAMING? ->  
:SEARCH1:UART:ERROR:FRAMING 1

### **:SEARCh<x>:UART:ERROR:PARity**

**Function** Sets the UART bus signal search Parity error or queries the current setting.

**Syntax** :SEARCh<x>:UART:ERROR:  
PARity {<Boolean>}  
:SEARCh<x>:UART:ERROR:PARity?  
<x> = 1, 2

**Example** :SEARCH1:UART:ERROR:PARITY ON  
:SEARCH1:UART:ERROR:PARITY? ->  
:SEARCH1:UART:ERROR:PARITY 1

**:SEARCH<x>:UART:ERROR:PMODE**

**Function** Sets the UART bus signal search Parity mode or queries the current setting.

**Syntax** :SEARCH<x>:UART:ERROR:PMODE {EVEN|ODD}  
:SEARCH<x>:UART:ERROR:PMODE?  
<x> = 1, 2

**Example** :SEARCH1:UART:ERROR:PMODE EVEN  
:SEARCH1:UART:ERROR:PMODE? -> :SEARCH1:UART:ERROR:PMODE EVEN

**:SEARCH<x>:UART:FORMAT**

**Function** Sets the UART bus signal search format or queries the current setting.

**Syntax** :SEARCH<x>:UART:FORMAT {BIT7parity|BIT8Noparity|BIT8Parity}  
:SEARCH<x>:UART:FORMAT?  
<x> = 1, 2

**Example** :SEARCH1:UART:FORMAT BIT7PARITY  
:SEARCH1:UART:FORMAT? -> :SEARCH1:UART:FORMAT BIT7PARITY

**:SEARCH<x>:UART:MODE**

**Function** Sets the UART bus signal search mode or queries the current setting.

**Syntax** :SEARCH<x>:UART:MODE {DATA|ERROR}  
:SEARCH<x>:UART:MODE?  
<x> = 1, 2

**Example** :SEARCH1:UART:MODE DATA  
:SEARCH1:UART:MODE? -> :SEARCH1:UART:MODE DATA

**:SEARCH<x>:UART:POLARITY**

**Function** Sets the UART bus signal search polarity or queries the current setting.

**Syntax** :SEARCH<x>:UART:POLARITY {NEGATIVE|POSITIVE}  
:SEARCH<x>:UART:POLARITY?  
<x> = 1, 2

**Example** :SEARCH1:UART:POLARITY NEGATIVE  
:SEARCH1:UART:POLARITY? -> :SEARCH1:UART:POLARITY NEGATIVE

**:SEARCH<x>:UART:TRACE**

**Function** Sets the UART bus signal search trace or queries the current setting.

**Syntax** :SEARCH<x>:UART:TRACE {<Nrf>}  
:SEARCH<x>:UART:TRACE?  
<x> = 1, 2  
<Nrf> = 1 to 8

**Example** :SEARCH1:UART:TRACE 1  
:SEARCH1:UART:TRACE? -> :SEARCH1:UART:TRACE 1

**:SEARCH<x>:UART:SPOINT**

**Function** Sets the UART bus signal search sample point or queries the current setting.

**Syntax** :SEARCH<x>:UART:SPOINT {<Nrf>}  
:SEARCH<x>:UART:SPOINT?  
<x> = 1, 2  
<Nrf> = 18.8 to 90.6(%)

**Example** :SEARCH1:UART:SPOINT 18.8  
:SEARCH1:UART:SPOINT? -> :SEARCH1:UART:SPOINT 18.8E+00

**:SEARCH<x>:WIDTH?**

**Function** Queries all settings related to the pulse width search.

**Syntax** :SEARCH<x>:WIDTH?  
<x> = 1 or 2

**Example** :SEARCH1:WIDTH? -> :SEARCH1:WIDTH:MODE OUT;TIME1 1.000E-09;TIME2 2.000E-09;TYPE PULSE

**:SEARCH<x>:WIDTH:MODE**

**Function** Sets the pulse width determination mode or queries the current setting.

**Syntax** :SEARCH<x>:WIDTH:MODE {BETWEEN|IN|NOTBetween|OUT|TIMEout}  
:SEARCH<x>:WIDTH:MODE?  
<x> = 1 or 2

**Example** :SEARCH1:WIDTH:MODE TIMEOUT  
:SEARCH1:WIDTH:MODE? -> :SEARCH1:WIDTH:MODE TIMEOUT

**:SEARCH<x>:WIDTH:TIME<x>**

**Function** Sets the pulse width of the pulse width search or queries the current setting.

**Syntax** :SEARCH<x>:WIDTH:TIME<x> {<Time>}  
:SEARCH<x>:WIDTH:TIME<x>?  
<x> of SEARCH<x> = 1 or 2  
<x> of TIME<x> = 1 or 2  
<Time> = 1 ns to 10 s (500 ps steps)

**Example** :SEARCH1:WIDTH:TIME1 1S  
:SEARCH1:WIDTH:TIME1? -> :SEARCH1:WIDTH:TIME1 1.000E+00

**Description** TIME2 is valid when :SEARCH<x>:WIDTH:MODE BETWEEN|NOTBetween.

**:SEARCH<x>:WIDTH:TYPE**

**Function** Sets the pulse width search type or queries the current setting.

**Syntax** :SEARCH<x>:WIDTH:TYPE {PQUALIFY|PSTATE|PULSE}  
:SEARCH<x>:WIDTH:TYPE?  
<x> = 1 or 2

**Example** :SEARCH1:WIDTH:TYPE PQUALIFY  
:SEARCH1:WIDTH:TYPE? -> :SEARCH1:WIDTH:TYPE PQUALIFY

## 5.23 SERIALbus Group

### **:SERIALbus?**

Function Queries all settings related to the serial bus setup.

Syntax :SERIALbus?

Example :SERIALBUS? -> :SERIALBUS:SETUP1:  
CANBUS:BRATE 83300;RECESSIVE HIGH;  
TRACE 1;SPOINT 18.8E+00;:SERIALBUS:  
SETUP1:FLEXRAY:BRATE 5000000;CRCBUS A;  
TRACE 1;SPOINT 5.00E+00;:SERIALBUS:  
SETUP1:I2CBUS:CLOCK 1;DTRACE 1;:  
SERIALBUS:SETUP1:LINBUS:BRATE 19200;  
REVISION LIN1\_3;TRACE 1;  
SPOINT 18.8E+00;:SERIALBUS:SETUP1:  
SPIBUS:BITORDER LSBFIRST;CLOCK:  
POLARITY FALL;TRACE 1;:SERIALBUS:  
SETUP1:SPIBUS:CS:ACTIVE HIGH;TRACE 1;:  
SERIALBUS:SETUP1:SPIBUS:DATA1:  
ACTIVE HIGH;TRACE 1;:SERIALBUS:SETUP1:  
SPIBUS:DATA2:ACTIVE HIGH;TRACE 3;:  
SERIALBUS:SETUP1:SPIBUS:MODE WIRE3;:  
SERIALBUS:SETUP1:TRACE1:  
HYSTERESIS 1.0000000E+00;  
LEVEL 0.0000000E+00;:SERIALBUS:SETUP1:  
TRACE2:HYSTERESIS 300.000000E-03;  
LEVEL 0.0000000E+00;:SERIALBUS:SETUP1:  
TRACE3:HYSTERESIS 300.000000E-03;  
LEVEL 0.0000000E+00;:SERIALBUS:SETUP1:  
TRACE4:HYSTERESIS 300.000000E-03;  
LEVEL 0.0000000E+00;:SERIALBUS:SETUP1:  
TRACE5:HYSTERESIS 300.000000E-03;  
LEVEL 0.0000000E+00;:SERIALBUS:SETUP1:  
TRACE6:HYSTERESIS 300.000000E-03;  
LEVEL 0.0000000E+00;:SERIALBUS:SETUP1:  
TRACE7:HYSTERESIS 300.000000E-03;  
LEVEL 0.0000000E+00;:SERIALBUS:SETUP1:  
TRACE8:HYSTERESIS 300.000000E-03;  
LEVEL 0.0000000E+00;:SERIALBUS:SETUP1:  
TYPE CANBUS;UART:BITORDER LSBFIRST;  
BRATE 19200;FORMAT BIT7PARITY;  
PMODE EVEN;POLARITY NEGATIVE;  
TRACE 1;SPOINT 18.8E+00;:SERIALBUS:  
SETUP2:CANBUS:BRATE 500000;  
RECESSIVE HIGH;TRACE 1;  
SPOINT 62.5E+00.....

### **:SERIALbus:SETup<x>?**

Function Queries all settings related to each setup of the serial bus setup.

Syntax :SERIALbus:SETup<x>?  
<x> = 1, 2

Example :SERIALBUS:SETUP1? -> :SERIALBUS:  
SETUP1:CANBUS:BRATE 83300;  
RECESSIVE HIGH;TRACE 1;SPOINT 18.8E+00;:  
SERIALBUS:SETUP1:FLEXRAY:  
BRATE 5000000;CRCBUS A;TRACE 1;  
SPOINT 5.00E+00;:SERIALBUS:SETUP1:  
I2CBUS:CLOCK 1;DTRACE 1;:SERIALBUS:  
SETUP1:LINBUS:BRATE 19200;  
REVISION LIN1\_3;TRACE 1;  
SPOINT 18.8E+00;:SERIALBUS:SETUP1:  
SPIBUS:BITORDER LSBFIRST;CLOCK:  
POLARITY FALL;TRACE 1;:SERIALBUS:  
SETUP1:SPIBUS:CS:ACTIVE HIGH;TRACE  
1;:SERIALBUS:SETUP1:SPIBUS:DATA1:  
ACTIVE HIGH;TRACE 1;:SERIALBUS:SETUP1:  
SPIBUS:DATA2:ACTIVE HIGH;TRACE 3;:  
SERIALBUS:SETUP1:SPIBUS:MODE WIRE3;:  
SERIALBUS:SETUP1:TRACE1:  
HYSTERESIS 1.0000000E+00;LEVEL 0.0000000E+00;:  
SERIALBUS:SETUP1:TRACE2:HYSTERESIS  
300.000000E-03;LEVEL 0.0000000E+00;:  
SERIALBUS:SETUP1:TRACE3:HYSTERESIS  
300.000000E-03;LEVEL 0.0000000E+00;:  
SERIALBUS:SETUP1:TRACE4:HYSTERESIS  
300.000000E-03;LEVEL 0.0000000E+00;:  
SERIALBUS:SETUP1:TRACE5:HYSTERESIS  
300.000000E-03;LEVEL 0.0000000E+00;:  
SERIALBUS:SETUP1:TRACE6:HYSTERESIS  
300.000000E-03;LEVEL 0.0000000E+00;:  
SERIALBUS:SETUP1:TRACE7:HYSTERESIS  
300.000000E-03;LEVEL 0.0000000E+00.....

### **:SERIALbus:SETup<x>:ASETup:ABORT**

Function Cancels auto setup of the serial bus setup.

Syntax :SERIALbus:SETup<x>:ASETup:ABORT  
<x> = 1, 2

Example :SERIALBUS:SETUP1:ASETUP:ABORT

### **:SERIALbus:SETup<x>:ASETup:EXECute**

Function Executes auto setup of the serial bus setup.

Syntax :SERIALbus:SETup<x>:ASETup:EXECute  
<x> = 1, 2

Example :SERIALBUS:SETUP1:ASETUP:EXECUTE

**:SERIALbus:SETup<x>:ASETup:UNDO**

Function Undoes the executed auto setup of the serial bus setup.

Syntax :SERIALbus:SETup<x>:ASETup:UNDO  
<x> = 1, 2

Example :SERIALBUS:SETUP1:ASETUP:UNDO

**:SERIALbus:SETup<x>:CANBus?**

Function Queries all settings related to the CAN bus setup.

Syntax :SERIALbus:SETup<x>:CANBus?  
<x> = 1, 2

Example :SERIALBUS:SETUP1:CANBUS? ->  
:SERIALBUS:SETUP1:CANBUS:BRATE 83300;  
RECESSIVE HIGH;TRACE 1;SPOINT 18.8E+00

**:SERIALbus:SETup<x>:CANBus:BRATE**

Function Sets the CAN bus setup bit rate (data transfer rate) or queries the current setting.

Syntax :SERIALbus:SETup<x>:CANBus:  
BRATE {<Nrf>|USER,<Nrf>}  
:SERIALbus:SETup<x>:CANBus:BRATE?  
<x> = 1, 2  
<Nrf> = 33300, 83300, 125000, 250000, 500000,  
1000000  
<Nrf> of USER = See the SB5000 User's Manual

Example :SERIALBUS:SETUP1:CANBUS:BRATE 83300  
:SERIALBUS:SETUP1:CANBUS:BRATE? ->  
:SERIALBUS:SETUP1:CANBUS:BRATE 83300

**:SERIALbus:SETup<x>:CANBus:REcessive**

Function Sets the CAN bus setup recessive level (bus level) or queries the current setting.

Syntax :SERIALbus:SETup<x>:CANBus:  
REcessive {HIGH|LOW}  
:SERIALbus:SETup<x>:CANBus:  
REcessive?  
<x> = 1, 2

Example :SERIALBUS:SETUP1:CANBUS:RECESSIVE HIGH  
:SERIALBUS:SETUP1:CANBUS:RECESSIVE? ->  
:SERIALBUS:SETUP1:CANBUS:RECESSIVE HIGH

**:SERIALbus:SETup<x>:CANBus:SPOint**

Function Sets the CAN bus setup sample point or queries the current setting.

Syntax :SERIALbus:SETup<x>:CANBus:  
SPOint {<Nrf>}  
:SERIALbus:SETup<x>:CANBus:SPOint?  
<x> = 1, 2  
<Nrf> = 18.8 to 90.6(%)

Example :SERIALBUS:SETUP1:CANBUS:SPOINT 18.8  
:SERIALBUS:SETUP1:CANBUS:SPOINT? ->  
:SERIALBUS:SETUP1:CANBUS:  
SPOINT 18.8E+00

**:SERIALbus:SETup<x>:CANBus:TRACe**

Function Sets the CAN bus setup trace or queries the current setting.

Syntax :SERIALbus:SETup<x>:CANBus:  
TRACe {<Nrf>}  
:SERIALbus:SETup<x>:CANBus:TRACe?  
<x> = 1, 2  
<Nrf> = 1 to 8

Example :SERIALBUS:SETUP1:CANBUS:TRACE 1  
:SERIALBUS:SETUP1:CANBUS:TRACE? ->  
:SERIALBUS:SETUP1:CANBUS:TRACE 1

**:SERIALbus:SETup<x>:FLEXray?**

Function Queries all settings related to the FLEXRAY bus setup.

Syntax :SERIALbus:SETup<x>:FLEXray?  
<x> = 1, 2

Example :SERIALBUS:SETUP1:FLEXRAY? ->  
:SERIALBUS:SETUP1:FLEXRAY:BRATE  
5000000;CRCBUS A;TRACE 1;  
SPOINT 5.00E+00

**:SERIALbus:SETup<x>:FLEXray:BRATE**

Function Sets the FLEXRAY bus setup bit rate (data transfer rate) or queries the current setting.

Syntax :SERIALbus:SETup<x>:FLEXray:  
BRATE {<Nrf>}  
:SERIALbus:SETup<x>:FLEXray:BRATE?  
<x> = 1, 2  
<Nrf> = 2500000, 5000000, 10000000

Example :SERIALBUS:SETUP1:FLEXRAY:BRATE 5000000  
:SERIALBUS:SETUP1:FLEXRAY:BRATE? ->  
:SERIALBUS:SETUP1:FLEXRAY:BRATE 5000000

**:SERIALbus:SETup<x>:FLEXray:CRCBUS**

Function Sets the FLEXRAY bus setup CRC error or queries the current setting.

Syntax :SERIALbus:SETup<x>:FLEXray:  
CRCBUS {A|B}  
:SERIALbus:SETup<x>:FLEXray:CRCBUS?  
<x> = 1, 2

Example :SERIALBUS:SETUP1:FLEXRAY:CRCBUS A  
:SERIALBUS:SETUP1:FLEXRAY:CRCBUS? ->  
:SERIALBUS:SETUP1:FLEXRAY:CRCBUS A

## 5.23 SERIALbus Group

### **:SERIALbus:SETup<x>:FLEXray:SPOint**

**Function** Sets the FLEXRAY bus setup sample point or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:FLEXray:  
SPOint {<NRf>}  
:SERIALbus:SETup<x>:FLEXray:SPOint?  
<x> = 1, 2  
<NRf> = 1 to 8

**Example** :SERIALBUS:SETUP1:FLEXRAY:SPOINT 5  
:SERIALBUS:SETUP1:FLEXRAY:SPOINT? ->  
:SERIALBUS:SETUP1:FLEXRAY:  
SPOINT 5.00E+00

### **:SERIALbus:SETup<x>:FLEXray:TRACe**

**Function** Sets the FLEXRAY bus setup trace or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:FLEXray:  
TRACe {<NRf>}  
:SERIALbus:SETup<x>:FLEXray:TRACe?  
<x> = 1, 2  
<NRf> = 1 to 8

**Example** :SERIALBUS:SETUP1:FLEXRAY:TRACE 1  
:SERIALBUS:SETUP1:FLEXRAY:TRACE? ->  
:SERIALBUS:SETUP1:FLEXRAY:TRACE 1

### **:SERIALbus:SETup<x>:I2Cbus?**

**Function** Queries all settings related to the I2C bus setup.

**Syntax** :SERIALbus:SETup<x>:I2Cbus?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:I2CBUS? ->  
:SERIALBUS:SETUP1:I2CBUS:CLOCK 1;  
TRACE 1

### **:SERIALbus:SETup<x>:I2Cbus:CLOCK**

**Function** Sets the I2C bus setup clock channel or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:I2Cbus:  
CLOCK {<NRf>|A<y>}  
:SERIALbus:SETup<x>:I2Cbus:CLOCK?  
<x> = 1, 2  
<NRf> = 1 to 8  
<y> = 0 to 7

**Example** :SERIALBUS:SETUP1:I2CBUS:CLOCK 1  
:SERIALBUS:SETUP1:I2CBUS:CLOCK? ->  
:SERIALBUS:SETUP1:I2CBUS:CLOCK 1

### **:SERIALbus:SETup<x>:I2Cbus:DTRace**

**Function** Sets the I2C bus signal analysis data channel or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:I2Cbus:  
DTRace {<NRf>|A<y>}  
:SERIALbus:SETup<x>:I2Cbus:DTRace?  
<x> = 1, 2  
<NRf> = 1 to 8  
<y> = 0 to 7

**Example** :SERIALBUS:SETUP1:I2CBUS:DTRACE 1  
:SERIALBUS:SETUP1:I2CBUS:DTRACE? ->  
:SERIALBUS:SETUP1:I2CBUS:DTRACE 1

### **:SERIALbus:SETup<x>:LINbus?**

**Function** Queries all settings related to the LIN bus setup.

**Syntax** :SERIALbus:SETup<x>:LINbus?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:LINBUS? ->  
:SERIALBUS:SETUP1:LINBUS:BRATE 19200;  
REVISION LIN1\_3;TRACE 1;SPOINT 18.8E+00

### **:SERIALbus:SETup<x>:LINbus:BRATe**

**Function** Sets the LIN bus setup bit rate (data transfer rate) or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:LINbus:  
BRATe {<NRf>|USER,<NRf>}  
:SERIALbus:SETup<x>:LINbus:BRATe?  
<x> = 1, 2

<NRf> = 1200, 2400, 4800, 9600, 19200  
<NRf> of USER = See the SB5000 User's Manual  
**Example** :SERIALBUS:SETUP1:LINBUS:BRATE 19200  
:SERIALBUS:SETUP1:LINBUS:BRATE? ->  
:SERIALBUS:SETUP1:LINBUS:BRATE 19200

### **:SERIALbus:SETup<x>:LINbus:REVision**

**Function** Sets the LIN bus setup revision (1.3 or 2.0) or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:LINbus:  
REVision {LIN1\_3|LIN2\_0}  
:SERIALbus:SETup<x>:LINbus:REVision?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:LINBUS:REVISION  
LIN1\_3  
:SERIALBUS:SETUP1:LINBUS:REVISION? ->  
:SERIALBUS:SETUP1:LINBUS:  
REVISION LIN1\_3

**:SERIALbus:SETup<x>:LINbus:SPOint**

**Function** Sets the LIN bus setup sample point or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:LINbus:  
SPOint {<NRf>}  
:SERIALbus:SETup<x>:LINbus:SPOint?  
<x> = 1, 2  
<NRf> = 18.8 to 90.6(%)

**Example** :SERIALBUS:SETUP1:LINBUS:SPOINT 18.8  
:SERIALBUS:SETUP1:LINBUS:SPOINT? ->  
:SERIALBUS:SETUP1:LINBUS:  
SPOINT 18.8E+00

**:SERIALbus:SETup<x>:LINbus:TRACe**

**Function** Sets the LIN bus setup trace or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:LINbus:  
TRACe {<NRf>|A<y>}  
:SERIALbus:SETup<x>:LINbus:TRACe?  
<x> = 1, 2  
<NRf> = 1 to 8  
<y> = 0 to 7

**Example** :SERIALBUS:SETUP1:LINBUS:TRACE 1  
:SERIALBUS:SETUP1:LINBUS:TRACE? ->  
:SERIALBUS:SETUP1:LINBUS:TRACE 1

**:SERIALbus:SETup<x>:SPIBUS?**

**Function** Queries all settings related to the SPI bus setup.

**Syntax** :SERIALbus:SETup<x>:SPIBUS?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:SPIBUS? ->  
:SERIALBUS:SETUP1:SPIBUS:  
BITORDER LSBFIRST;CLOCK:POLARITY FALL;  
TRACE 1;:SERIALBUS:SETUP1:SPIBUS:CS:  
ACTIVE HIGH;TRACE 1;:SERIALBUS:SETUP1:  
SPIBUS:DATA1:ACTIVE HIGH;TRACE 1;:  
SERIALBUS:SETUP1:SPIBUS:DATA2:  
ACTIVE HIGH;TRACE 3;:SERIALBUS:SETUP1:  
SPIBUS:MODE WIRE3

**:SERIALbus:SETup<x>:SPIBUS:BITOrder**

**Function** Sets the SPI bus setup bit order or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:SPIBUS:  
BITOrder {LSBFirst|MSBFirst}  
:SERIALbus:SETup<x>:SPIBUS:BITOrder?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:SPIBUS:  
BITORDER LSBFIRST  
:SERIALBUS:SETUP1:SPIBUS:BITORDER?  
-> :SERIALBUS:SETUP1:SPIBUS:  
BITORDER LSBFIRST

**:SERIALbus:SETup<x>:SPIBUS:CLOCK?**

**Function** Queries all settings related to the channel of the clock signal of the SPI bus setup.

**Syntax** :SERIALbus:SETup<x>:SPIBUS:CLOCK?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:SPIBUS:CLOCK? ->  
:SERIALBUS:SETUP1:SPIBUS:CLOCK:  
POLARITY FALL;TRACE 1

**:SERIALbus:SETup<x>:SPIBUS:CLOCK:****POLarity**

**Function** Sets the polarity of the channel of the clock signal of the SPI bus setup.

**Syntax** :SERIALbus:SETup<x>:SPIBUS:CLOCK:  
POLarity {FALL|RISE}  
:SERIALbus:SETup<x>:SPIBUS:CLOCK:  
POLarity?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:SPIBUS:CLOCK:  
POLARITY FALL  
:SERIALBUS:SETUP1:SPIBUS:CLOCK:  
POLARITY? -> :SERIALBUS:SETUP1:SPIBUS:  
CLOCK:POLARITY FALL

**:SERIALbus:SETup<x>:SPIBUS:CLOCK:TRACe**

**Function** Sets the channel of the clock signal of the SPI bus setup or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:SPIBUS:CLOCK:  
TRACe {<NRf>|A<y>}  
:SERIALbus:SETup<x>:SPIBUS:CLOCK:TRACe?  
<x> = 1, 2  
<NRf> = 1 to 8  
<y> = 0 to 7

**Example** :SERIALBUS:SETUP1:SPIBUS:CLOCK:TRACE 1  
:SERIALBUS:SETUP1:SPIBUS:CLOCK:TRACE?  
-> :SERIALBUS:SETUP1:SPIBUS:CLOCK:  
TRACE 1

**:SERIALbus:SETup<x>:SPIBUS:CS?**

**Function** Queries all settings related to the channel of the chip select signal of the SPI bus setup.

**Syntax** :SERIALbus:SETup<x>:SPIBUS:CS?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:SPIBUS:CS? ->  
:SERIALBUS:SETUP1:SPIBUS:CS:  
ACTIVE HIGH;TRACE 1



## 5.23 SERIALbus Group

### **:SERIALbus:SETup<x>:SPIBUS:CS:ACTive**

**Function** Sets the active level of the channel of the chip select signal of the SPI bus setup or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:SPIBUS:CS:  
ACTIVE {HIGH|LOW}  
:SERIALbus:SETup<x>:SPIBUS:CS:ACTive?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:SPIBUS:CS:ACTIVE HIGH  
:SERIALBUS:SETUP1:SPIBUS:CS:ACTIVE? ->  
:SERIALBUS:SETUP1:SPIBUS:CS:ACTIVE HIGH

### **:SERIALbus:SETup<x>:SPIBUS:CS:TRACe**

**Function** Sets the channel of the chip select signal of the SPI bus setup or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:SPIBUS:CS:  
TRACe {<Nrf>|A<y>}  
:SERIALbus:SETup<x>:SPIBUS:CS:TRACe?  
<x> = 1, 2  
<Nrf> = 1 to 8  
<y> = 0 to 7

**Example** :SERIALBUS:SETUP1:SPIBUS:CS:TRACE 1  
:SERIALBUS:SETUP1:SPIBUS:CS:TRACE? ->  
:SERIALBUS:SETUP1:SPIBUS:CS:TRACE 1

### **:SERIALbus:SETup<x>:SPIBUS:DATA<x>?**

**Function** Queries all settings related to each data of the SPI bus setup.

**Syntax** :SERIALbus:SETup<x>:SPIBUS:DATA<x>?  
<x> of SETup<x> = 1, 2  
<x> of DATA<x> = 1, 2

**Example** :SERIALBUS:SETUP1:SPIBUS:DATA1? ->  
:SERIALBUS:SETUP1:SPIBUS:DATA1:  
ACTIVE HIGH;TRACE 1

### **:SERIALbus:SETup<x>:SPIBUS:DATA<x>: ACTive**

**Function** Sets the active level of each data of the SPI bus setup or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:SPIBUS:DATA<x>:  
ACTive {HIGH|LOW}  
:SERIALbus:SETup<x>:SPIBUS:DATA<x>:  
ACTive?  
<x> of SETup<x> = 1, 2  
<x> of DATA<x> = 1, 2

**Example** :SERIALBUS:SETUP1:SPIBUS:DATA1:  
ACTIVE HIGH  
:SERIALBUS:SETUP1:SPIBUS:DATA1:ACTIVE?  
-> :SERIALBUS:SETUP1:SPIBUS:DATA1:  
ACTIVE HIGH

### **:SERIALbus:SETup<x>:SPIBUS:DATA<x>: TRACe**

**Function** Sets each data channel of the SPI bus setup or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:SPIBUS:DATA<x>:  
TRACe {<Nrf>|A<y>}  
:SERIALbus:SETup<x>:SPIBUS:DATA<x>:  
TRACe?  
<x> of SETup<x> = 1, 2  
<x> of DATA<x> = 1, 2  
<Nrf> = 1 to 8  
<y> = 0 to 7

**Example** :SERIALBUS:SETUP1:SPIBUS:DATA1:TRACE 1  
:SERIALBUS:SETUP1:SPIBUS:DATA1:TRACE?  
-> :SERIALBUS:SETUP1:SPIBUS:DATA1:  
TRACE 1

### **:SERIALbus:SETup<x>:SPIBUS:MODE**

**Function** Sets the wiring method (3-wire/4-wire) of the SPI bus setup or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:SPIBUS:  
MODE {WIRE3|WIRE4}  
:SERIALbus:SETup<x>:SPIBUS:MODE?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:SPIBUS:MODE WIRE3  
:SERIALBUS:SETUP1:SPIBUS:MODE? ->  
:SERIALBUS:SETUP1:SPIBUS:MODE WIRE3

### **:SERIALbus:SETup<x>:TRACe<x>?**

**Function** Queries all settings related to each trace.

**Syntax** :SERIALbus:SETup<x>:TRACe<x>?  
<x> of SETup<x> = 1, 2  
<x> of TRACe<x> = 1 to 8

**Example** :SERIALBUS:SETUP1:TRACE1? ->  
:SERIALBUS:SETUP1:TRACE1:  
HYSTERESIS 1.0000000E+00;  
LEVEL 0.0000000E+00

### **:SERIALbus:SETup<x>:TRACe<x>: HYSTEResis**

**Function** Sets the hysteresis of the threshold level of each trace or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:TRACe<x>:  
HYSTEResis {<Nrf>}  
:SERIALbus:SETup<x>:TRACe<x>:  
HYSTEResis?  
<x> of SETup<x> = 1, 2  
<x> of TRACe<x> = 1 to 8  
<Nrf> = 0 to 4(div, 0.1 div step)

**Example** :SERIALBUS:SETUP1:TRACE1:HYSTERESIS 1  
:SERIALBUS:SETUP1:TRACE1:HYSTERESIS?  
-> :SERIALBUS:SETUP1:TRACE1:  
HYSTERESIS 1.000E+00

**:SERIALbus:SETup<x>:TRACe<x>:LEVEl**

**Function** Sets the threshold level of each trace or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:TRACe<x>:  
LEVEl {<Nrf>|<Voltage>|<Current>}  
:SERIALbus:SETup<x>:TRACe<x>:LEVEl?  
<x> of SETup<x> = 1, 2  
<x> of TRACe<x> = 1 to 8  
<Nrf>, <Voltage>, <Current> = See the SB5000  
User's Manual

**Example** :SERIALBUS:SETUP1:TRACE1:LEVEL 0  
:SERIALBUS:SETUP1:TRACE1:LEVEL? ->  
:SERIALBUS:SETUP1:TRACE1:  
LEVEL 0.000E+00

**:SERIALbus:SETup<x>:TYPE**

**Function** Sets the serial bus setup type or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:TYPE {CANBus |  
FLEXray | I2Cbus | LINbus | SPIbus | UART}  
:SERIALbus:SETup<x>:TYPE?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:TYPE CANBUS  
:SERIALBUS:SETUP1:TYPE? -> :SERIALBUS:  
SETUP1:TYPE CANBUS

**:SERIALbus:SETup<x>:UART?**

**Function** Queries all settings related to the UART bus setup.

**Syntax** :SERIALbus:SETup<x>:UART?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:UART? -> :SERIALBUS:  
SETUP1:UART:BITORDER LSBFIRST;  
BRATE 19200;FORMAT BIT7PARITY;  
PMODE EVEN;POLARITY NEGATIVE;TRACE 1;  
SPOINT 18.8E+00

**:SERIALbus:SETup<x>:UART:BITorder**

**Function** Sets the UART bus setup bit order or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:UART:  
BITorder {LSBFirst|MSBFirst}  
:SERIALbus:SETup<x>:UART:BITorder?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:UART:BITORDER  
LSBFIRST  
:SERIALBUS:SETUP1:UART:BITORDER? ->  
:SERIALBUS:SETUP1:UART:  
BITORDER LSBFIRST

**:SERIALbus:SETup<x>:UART:BRATe**

**Function** Sets the UART bus setup bit rate (data transfer rate) or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:UART:  
BRATe {<Nrf>|USER,<Nrf>}  
:SERIALbus:SETup<x>:UART:BRATe?  
<x> = 1, 2  
<Nrf> = 1200, 2400, 4800, 9600, 19200, 38400,  
57600, 115200

**Example** :SERIALBUS:SETUP1:UART:BRATE 19200  
:SERIALBUS:SETUP1:UART:BRATE? ->  
:SERIALBUS:SETUP1:UART:BRATE 19200

**:SERIALbus:SETup<x>:UART:FORMAt**

**Function** Sets the UART bus setup data format or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:UART:  
FORMAt {BIT7parity|BIT8Noparity|  
BIT8Parity}  
:SERIALbus:SETup<x>:UART:FORMAt?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:UART:  
FORMAT BIT7PARITY  
:SERIALBUS:SETUP1:UART:FORMAt? ->  
:SERIALBUS:SETUP1:UART:  
FORMAT BIT7PARITY

**:SERIALbus:SETup<x>:UART:PMODE**

**Function** Sets the UART bus setup Parity mode or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:UART:  
PMODE {EVEN|ODD}  
:SERIALbus:SETup<x>:UART:PMODE?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:UART:PMODE EVEN  
:SERIALBUS:SETUP1:UART:PMODE? ->  
:SERIALBUS:SETUP1:UART:PMODE EVEN

**:SERIALbus:SETup<x>:UART:POLarity**

**Function** Sets the UART bus setup polarity or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:UART:  
POLarity {NEGative|POSitive}  
:SERIALbus:SETup<x>:UART:POLarity?  
<x> = 1, 2

**Example** :SERIALBUS:SETUP1:UART:POLARITY  
NEGATIVE  
:SERIALBUS:SETUP1:UART:POLARITY? ->  
:SERIALBUS:SETUP1:UART:  
POLARITY NEGATIVE

## 5.23 SERIALbus Group

---

### **:SERIALbus:SETup<x>:UART:SPOint**

**Function** Sets the UART bus setup sample point or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:UART:SPOint {<NRf>}  
:SERIALbus:SETup<x>:UART:SPOint?  
<x> = 1, 2  
<NRf> = 18.8 to 90.6(%)

**Example** :SERIALBUS:SETUP1:UART:SPOINT 18.8  
:SERIALBUS:SETUP1:UART:SPOINT? ->  
:SERIALBUS:SETUP1:UART:SPOINT 18.8E+00

### **:SERIALbus:SETup<x>:UART:TRACe**

**Function** Sets the UART bus setup trace or queries the current setting.

**Syntax** :SERIALbus:SETup<x>:UART:  
TRACe {<NRf>|A<y>}  
:SERIALbus:SETup<x>:UART:TRACe?  
<x> = 1, 2  
<NRf> = 1 to 8  
<y> = 0 to 7

**Example** :SERIALBUS:SETUP1:UART:TRACE 1  
:SERIALBUS:SETUP1:UART:TRACE? ->  
:SERIALBUS:SETUP1:UART:TRACE 1

### **:SERIALbus:TLink**

**Function** Sets the serial bus setup trigger link or queries the current setting.

**Syntax** :SERIALbus:TLink {OFF|SETUP1|SETUP2}  
:SERIALbus:TLink?

**Example** :SERIALBUS:TLink OFF  
:SERIALBUS:TLink? ->  
:SERIALBUS:TLink OFF

## 5.24 SNAP Group

### :SNAP

Function Executes the snapshot.

Syntax :SNAP

Example :SNAP

## 5.25 SStart Group

### :SStart?

Function Starts the waveform acquisition with the trigger mode set to single. If the waveform acquisition stops within the specified time period, 0 is returned at that point. If not, 1 is returned.

Syntax :SStart? {<NRf>}  
 <NRf> = 1 to 360000 (10 ms resolution: wait period, START and wait)  
 0 (START only. No wait.)  
 -360000 to -1 (10 ms unit: wait time, do not START and wait)

Example :SSTART? 100 -> :SSTART 0

Description

- If the specified time period is positive, data acquisition is started in the SINGLE TRIGGER mode and waits for the operation to stop.
- If the specified time period is 0, data acquisition is started and 0 is returned without waiting for the operation to stop.
- If the specified time period is negative, the instrument simply waits for the operation to stop. Data acquisition is not started.

## 5.26 START Group

### :START

Function Starts the waveform acquisition.

Syntax :START

Example :START

Description Use STOP to stop the waveform acquisition.

## 5.27 STATUS Group

The commands in the STATUS group are used to make settings and inquiries related to the communication status function. There are no front panel keys that correspond to the commands in this group. For a description of the status report, see chapter 6.

### :STATUS?

Function Queries all settings related to the communication status function.

Syntax :STATUS?

Example :STATUS? -> :STATUS:EESE 0;  
FILTER1 NEVER;FILTER2 NEVER;  
FILTER3 NEVER;FILTER4 NEVER;  
FILTER5 NEVER;FILTER6 NEVER;  
FILTER7 NEVER;FILTER8 NEVER;  
FILTER9 NEVER;FILTER10 NEVER;  
FILTER11 NEVER;FILTER12 NEVER;  
FILTER13 NEVER;FILTER14 NEVER;  
FILTER15 NEVER;FILTER16 NEVER;  
QENABLE 1;QMESSAGE 1

### :STATUS:CONDition?

Function Queries the contents of the condition register.

Syntax :STATUS:CONDition?

Example :STATUS:CONDITION -> 16

Description For details on the condition register, see chapter 6, "Status Report."

### :STATUS:EESE

Function Sets the extended event enable register or queries the current setting.

Syntax :STATUS:EESE <Register>  
:STATUS:EESE?

<Register> = 0 to 65535

Example :STATUS:EESE 257  
:STATUS:EESE? -> :STATUS:EESE 257

Description For details on the extended event enable register, see chapter 6, "Status Report."

### :STATUS:EESR?

Function Queries the content of the extended event register and clears the register.

Syntax :STATUS:EESR?

Example :STATUS:EESR? -> 1

Description For details on the extended event register, see chapter 6, "Status Report."

### :STATUS:ERROR?

Function Queries the error code and message information (top of the error queue).

Syntax :STATUS:ERROR?

Example :STATUS:ERROR? ->  
113, "Undefined header"

### :STATUS:FILTer<x>

Function Sets the transition filter or queries the current setting.

Syntax :STATUS:FILTer<x> {RISE|FALL|BOTH|NEVER}

:STATUS:FILTer<x>?

<x> = 1 to 16

Example :STATUS:FILTER2 RISE  
:STATUS:FILTER2? -> :STATUS:FILTER2  
RISE

Description For details on the transition filter, see chapter 6, "Status Report."

### :STATUS:QENable

Function Sets whether to store messages other than errors to the error queue or queries the current setting.

Syntax :STATUS:QENable {<Boolean>}

:STATUS:QENable?

Example :STATUS:QENABLE ON  
:STATUS:QENABLE? -> :STATUS:QENABLE 1

### :STATUS:QMESsage

Function Sets whether or not to attach message information to the response to the "STATUS:ERRor?" query or queries the current setting.

Syntax :STATUS:QMESsage {<Boolean>}

:STATUS:QMESsage?

Example :STATUS:QMESSAGE OFF  
:STATUS:QMESSAGE? -> :STATUS:QMESSAGE 0

### :STATUS:SPOLL? (Serial Poll)

Function Executes serial polling.

Syntax :STATUS:SPOLL?

Example :STATUS:SPOLL? -> STATUS:SPOLL 0

Description This command is dedicated to the Ethernet interface (option).

## 5.28 STOP Group

### : STOP

Function Stops the waveform acquisition.

Syntax :STOP

Example :STOP

Description Use START to start the waveform acquisition.

## 5.29 SYSTEM Group

### : SYSTEM?

Function Queries all settings related to the system.

Syntax :SYSTEM?

Example :SYSTEM? -> :SYSTEM:CLICK 1;CLOCK:  
DTIME "2007/01/06",  
"11:37:32", "09:00";MODE 1;:SYSTEM:  
LANGUAGE JAPANESE;MFSIZE SMALL;  
MLANGUAGE ENGLISH;USBKEYBOARD ENGLISH

### : SYSTEM:CLICK

Function Turns ON/OFF the click sound or queries the current setting.

Syntax :SYSTEM:CLICK {<Boolean>}  
:SYSTEM:CLICK?

Example :SYSTEM:CLICK ON  
:SYSTEM:CLICK? -> :SYSTEM:CLICK 1

### : SYSTEM:CLOCK?

Function Queries all settings related to the date, time, and time difference with respect to GMT.

Syntax :SYSTEM:CLOCK?

Example :SYSTEM:CLOCK? -> :SYSTEM:CLOCK:  
DTIME "2007/01/06", "11:37:32", "09:00";  
MODE 1

### : SYSTEM:CLOCK:DTIME

Function Sets the date, time, and time difference with respect to GMT or queries the current setting.

Syntax :SYSTEM:CLOCK:DTIME {<String>, <String>, <String>}  
:SYSTEM:CLOCK:DTIME?

The left <String> = YYYY/MM/DD. See the SB5000 User's Manual.

The center <String> = HH:MM:SS. See the SB5000 User's Manual.

The right <String> = HH:MM. See the SB5000 User's Manual.

Example :SYSTEM:CLOCK:DTIME "2005/05/06",  
"11:37:32", "09:00"  
:SYSTEM:CLOCK:DTIME? -> :SYSTEM:CLOCK:  
DTIME "2005/05/06",  
"11:37:32", "09:00"

### : SYSTEM:CLOCK:MODE

Function Turns ON/OFF the date, time, and time difference with respect to GMT or queries the current setting.

Syntax :SYSTEM:CLOCK:MODE {<Boolean>}  
:SYSTEM:CLOCK:MODE?

Example :SYSTEM:CLOCK:MODE ON  
:SYSTEM:CLOCK:MODE? -> :SYSTEM:CLOCK:  
MODE 1

### : SYSTEM:FORMAT:IMEMORY[:EXECUTE]

Function Formats the internal memory.

Syntax :SYSTEM:FORMAT:IMEMORY[:EXECUTE]  
Example :SYSTEM:FORMAT:IMEMORY:EXECUTE

### : SYSTEM:FORMAT:IHDD[:EXECUTE]

Function Formats the internal hard disk.

Syntax :SYSTEM:FORMAT:IHDD[:EXECUTE]  
Example :SYSTEM:FORMAT:IHDD:EXECUTE

### : SYSTEM:FORMAT:SDELETE[:EXECUTE] (Sure Delete)

Function Clears and formats the internal memory.

Syntax :SYSTEM:FORMAT:SDELETE[:EXECUTE]  
Example :SYSTEM:FORMAT:SDELETE:EXECUTE

### : SYSTEM:LANGUAGE

Function Sets the message language or queries the current setting.

Syntax :SYSTEM:LANGUAGE {CHINESE|ENGLISH|  
JAPANESE|KOREAN}  
:SYSTEM:LANGUAGE?

Example :SYSTEM:LANGUAGE JAPANESE  
:SYSTEM:LANGUAGE? -> :SYSTEM:  
LANGUAGE JAPANESE

## 5.29 SYSTemGroup

---

### **:SYSTem:MFSize**

Function Sets the menu font size or queries the current setting.

Syntax SYSTem:MFSize {LARGE|SMALL}

Example :SYSTEM:MFSIZE LARGE  
:SYSTEM:MFSIZE? -> :SYSTEM:MFSIZE LARGE

### **:SYSTem:MLANguage**

Function Sets the menu language or queries the current setting.

Syntax :SYSTem:MLANguage {CHINese|ENGLish|  
JAPANese|KOREan}

:SYSTem:MLANguage?  
Example :SYSTEM:MLANGUAGE ENGLISH  
:SYSTEM:MLANGUAGE? -> :SYSTEM:  
MLANGUAGE ENGLISH

### **:SYSTem:OVERview**

Function Displays system information.

Syntax :SYSTem:OVERview

Example :SYSTEM:OVERVIEW

### **:SYSTem:USBKeyboard**

Function Sets the USB keyboard type or queries the current setting.

Syntax :SYSTem:USBKeyboard {ENGLish|JAPANese}  
:SYSTem:USBKeyboard?

Example :SYSTEM:USBKEYBOARD ENGLISH  
:SYSTEM:USBKEYBOARD? -> :SYSTEM:  
USBKEYBOARD ENGLISH

## 5.30 TIMEbase Group

### **:TIMEbase?**

Function Queries all settings related to the time base.

Syntax :TIMEbase?

Example :TIMEBASE? -> :TIMEBASE:TDIV 1.000E-06

### **:TIMEbase:SRATE? (Sample RATE)**

Function Queries the sample rate or queries the current setting.

Syntax :TIMEbase:SRATE?

Example :TIMEBASE:SRATE? -> :TIMEBASE:  
SRATE 125.0E+06

### **:TIMEbase:TDIV**

Function Sets the T/div value or queries the current setting.

Syntax :TIMEbase:TDIV {<Time>}

:TIMEbase:TDIV?

<Time> = 500 ps to 50 s

Example :TIMEBASE:TDIV 1NS  
:TIMEBASE:TDIV? -> :TIMEBASE:  
TDIV 1.000E-06





**:TRIGger:ACTion:MAIL:INTERval**

**Function** Sets the interval at which to send mail when an action is activated or queries the current setting.

**Syntax** :TRIGger:ACTion:MAIL:INTERval  
{OFF|<Nrf>}  
:TRIGger:ACTion:MAIL:INTERval?  
<Nrf> = 1 to 1440 (min)

**Example** :TRIGGER:ACTION:MAIL:INTERVAL 10  
:TRIGGER:ACTION:MAIL:INTERVAL?  
-> :TRIGGER:ACTION:MAIL:INTERVAL 10

**:TRIGger:ACTion:MAIL:MODE**

**Function** Sets whether to send mail when an action is activated or queries the current setting.

**Syntax** :TRIGger:ACTion:MAIL:MODE {<Boolean>}  
:TRIGger:ACTion:MAIL:MODE?

**Example** :TRIGGER:ACTION:MAIL:MODE ON:TRIGGER:  
ACTION:MAIL:MODE? -> :TRIGGER:ACTION:  
MAIL:MODE 1

**:TRIGger:ACTion:MODE**

**Function** Sets the action-on-trigger mode or queries the current setting.

**Syntax** :TRIGger:ACTion:MODE {ACONdition|OFF}  
:TRIGger:ACTion:MODE?

**Example** :TRIGGER:ACTION:MODE ACONDITION  
:TRIGGER:ACTION:MODE? -> :TRIGGER:  
ACTION:MODE ACONDITION

**:TRIGger:ACTion:SAVE**

**Function** Sets whether to save the waveform data to the storage medium (ON/OFF) when an action is activated or queries the current setting.

**Syntax** :TRIGger:ACTion:SAVE {<Boolean>}  
:TRIGger:ACTion:SAVE?

**Example** :TRIGGER:ACTION:SAVE ON  
:TRIGGER:ACTION:SAVE? -> :TRIGGER:  
ACTION:SAVE 1

**:TRIGger:ACTion:START**

**Function** Starts the action-on-trigger.

**Syntax** :TRIGger:ACTion:START

**Example** :TRIGGER:ACTION:START

**:TRIGger:ACTion:STOP**

**Function** Stops the action-on-trigger.

**Syntax** :TRIGger:ACTion:STOP

**Example** :TRIGGER:ACTION:STOP

**:TRIGger:CLOCK?**

**Function** Queries all settings related to the clock channel.

**Syntax** :TRIGger:CLOCK?

**Example** :TRIGGER:CLOCK? -> :TRIGGER:CLOCK:  
SOURCE 1;POLARITY RISE

**:TRIGger:CLOCK:POLarity**

**Function** Sets the polarity of the clock channel or queries the current setting.

**Syntax** :TRIGger:CLOCK:POLarity {FALL|RISE}  
:TRIGger:CLOCK:POLarity?

**Example** :TRIGGER:CLOCK:POLARITY RISE  
:TRIGGER:CLOCK:POLARITY? -> :TRIGGER:  
CLOCK:POLARITY RISE

**Description** • This command is invalid when :TRIGger:CLOCK:  
SOURCE NONE.

- For :TRIGger:SOURce:CHANnel<x>:WINDow ON, the choices in the SB5000 menu are Enter/Exit. {RISE} corresponds to Enter, and {FALL} corresponds to Exit.
- This command is valid when :TRIGger:TYPE PStAte|StAte.

**:TRIGger:CLOCK:SOURce**

**Function** Sets the source waveform of the clock channel or queries the current setting.

**Syntax** :TRIGger:CLOCK:SOURce {<Nrf>|NONE}  
:TRIGger:CLOCK:SOURce?

<Nrf> = 1 to 4

**Example** :TRIGGER:CLOCK:SOURCE NONE  
:TRIGGER:CLOCK:SOURCE? -> :TRIGGER:  
CLOCK:SOURCE NONE

**Description** This command is valid when :TRIGger:TYPE  
PStAte|StAte.

**:TRIGger:DELay?**

**Function** Queries all settings related to the trigger delay.

**Syntax** :TRIGger:DELay?

**Example** :TRIGGER:DELAY? -> :TRIGGER:DELAY:  
EDGEcount:COUNT 1;:  
TRIGGER:DELAY:MODE 1;POLARITY FALL;  
SOURCE 4;TIME 1.000E+00;TYPE EDGEcount

**:TRIGger:DELay:EDGEcount?**

**Function** Queries all settings related to edge count of the trigger delay.

**Syntax** :TRIGger:DELay:EDGEcount?

**Example** :TRIGGER:DELAY:EDGEcount? -> :TRIGGER:  
DELAY:EDGEcount:COUNT 1

**:TRIGger:DELay:EDGEcount:COUNT**

**Function** Sets the edge count value of the trigger delay or queries the current setting.

**Syntax** :TRIGger:DELay:EDGEcount:COUNT {<Nrf>}  
:TRIGger:DELay:EDGEcount:COUNT?

<Nrf> = 1 to 1000000000

**Example** :TRIGGER:DELAY:EDGEcount:COUNT 1  
:TRIGGER:DELAY:EDGEcount:COUNT?  
-> :TRIGGER:DELAY:EDGEcount:COUNT 1





## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

#### **BRATe**

**Function** Sets the bit rate (data transfer rate) of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
BRATe {<Nrf>|USER,<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
BRATe?  
<x> = 1 or 2  
<Nrf> = 33300, 83300, 125000, 250000, 500000,  
1000000  
<Nrf> of USER = See the User's Manual (IM701361-01E).

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
BRATE 83300  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
BRATE? -> :TRIGGER:EINTERVAL:EVENT1:  
CANBUS:BRATE 83300

### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

#### **DATA?**

**Function** Queries all settings related to the CAN bus signal trigger data.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA? ->:TRIGGER:EINTERVAL:EVENT1:  
CANBUS:DATA:BORDER BIG;  
CONDITION DONTCARE;  
DATA1 0.0000000E+00;  
DATA2 255.00000E+00;DLC 8;MSBLSB 7,0;  
PATTERN "1110010101100100011110001001  
00110010101000100001000111111111010"  
;SIGN UNSIGN

### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

#### **DATA:BORDER**

**Function** Sets the byte order of the CAN bus signal trigger data or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:BORDER {BIG|LITTLE}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:BORDER?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:BORDER BIG;  
TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:BORDER? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:DATA:BORDER BIG

### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

#### **DATA:CONDition**

**Function** Sets the data condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:CONDition {BETWEE|DONTcare|  
FALSE|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:CONDition?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:CONDITION BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:CONDITION? -> TRIGGER:  
EINTERVAL:EVENT1:CANBUS:DATA:  
CONDITION BETWEEN

### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

#### **DATA:DATA<x>**

**Function** Sets the comparison data of the CAN bus signal trigger data or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:DATA<x> {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:DATA<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

<Nrf> = See the User's Manual (IM701361-01E).

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:DATA1 1  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:DATA1? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:DATA:  
DATA1 1.0000000E+00

**Description**

- **Use** :TRIGger:EINTerval:EVENT<x>:CANBus:DATA:DATA1 when :TRIGger:EINTerval:EVENT<x>:CANBus:DATA:CONDITION GTHan is specified.
- **Use** :TRIGger:EINTerval:EVENT<x>:CANBus:DATA:DATA2 when :TRIGger:EINTerval:EVENT<x>:CANBus:DATA:CONDITION LTHan is specified.
- **Use** :TRIGger:EINTerval:EVENT<x>:CANBus:DATA:DATA1 to set the smaller value and :TRIGger:EINTerval:EVENT<x>:CANBus:DATA:DATA2 to set the larger value when :TRIGger:EINTerval:EVENT<x>:CANBus:DATA:CONDition BETWEEN|ORANge is specified.

**:TRIGger:EINTerval:EVENT<x>:CANBus:****DATA:DLc**

Function Sets the number of valid bytes (DLC) of the CAN bus signal trigger data or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:DLc {<NRf>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:DLc?  
<x> = 1 or 2  
<NRf> = 0 to 8

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:DLc 0  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:DLc? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:DATA:DLc 0

**:TRIGger:EINTerval:EVENT<x>:CANBus:****DATA:HEXA**

Function Sets the CAN bus signal trigger data in hexadecimal notation.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:HEXA {<String>}  
<x> = 1 or 2  
<String> = Up to 16 characters by combining '0'  
to 'F' and 'X' (in one-byte unit)

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:HEXA "A9"

**:TRIGger:EINTerval:EVENT<x>:CANBus:****DATA:MSBLsb**

Function Sets the MSB and LSB bits of the CAN bus signal trigger data or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:MSBLsb {<NRf>,<NRf>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:MSBLsb?  
<x> = 1 or 2  
<NRf> = See the User's Manual  
(IM701361-01E).

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:MSBLsb 1,0  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:MSBLsb? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:DATA:MSBLsb 1,0

**:TRIGger:EINTerval:EVENT<x>:CANBus:****DATA:PATtern**

Function Sets the CAN bus signal trigger data in binary notation or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:PATtern {<String>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:PATtern?  
<x> = 1 or 2  
<String> = Up to 64 characters by  
combining '0','1,' and 'X' (in one-byte unit)

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:PATTERN "11011111"  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:PATTERN? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:DATA:PATTERN "11011111"

**:TRIGger:EINTerval:EVENT<x>:CANBus:****DATA:SIGN**

Function Sets the sign of the CAN bus signal trigger data or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:SIGN {SIGN|UNSign}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
DATA:SIGN?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:SIGN SIGN  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
DATA:SIGN? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:DATA:SIGN SIGN

**:TRIGger:EINTerval:EVENT<x>:CANBus:****IDEXT?**

Function Queries all settings related to the ID of the extended format of the CAN bus signal trigger.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDEXT?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDEXT? -> :TRIGGER:EINTERVAL:EVENT1:  
CANBUS:IDEXT:PATTERN "1100101101110000  
11101110111111"

**:TRIGger:EINTerval:EVENT<x>:CANBus:****IDEXT:HEXA**

Function Sets the ID of the extended format of the CAN bus signal trigger in hexadecimal notation.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDEXT:HEXA {<String>}  
<x> = 1 or 2  
<String> = 8 characters by combining '0' to 'F' and 'X'

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDEXT:HEXA "1AEF5906"

### 5.31 TRIGger Group

#### **:TRIGger:EINTerval:EVENT<x>:CANBus:IDEXt:PATtern**

**Function** Sets the ID of the extended format of the CAN bus signal trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:IDEXt:PATtern {<String>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:IDEXt:PATtern?  
<x> = 1 or 2  
<String> = 29 characters by combining '0','1,' and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:IDEXT:PATTERN "11001011011100001110111011111"  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:IDEXT:PATTERN? -> :TRIGGER:EINTERVAL:EVENT1:CANBUS:IDEXT:PATTERN "11001011011100001110111011111"

#### **:TRIGger:EINTerval:EVENT<x>:CANBus:IDOR?**

**Function** Queries all settings related to the OR condition of the CAN bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:IDOR?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:IDOR? -> :TRIGGER:EINTERVAL:EVENT1:CANBUS:IDOR:ID1:ACK DONTCARE;DATA: BORDER BIG;CONDITION DONTCARE; DATA1 0.0000000E+00; DATA2 255.000000E+00;DLC 8;MSBLSB 7,0; PATTERN "00000001001000110100010101100111000100101011110011011100111011";SIGN UNSIGN;:TRIGGER:EINTERVAL:EVENT1:CANBUS:IDOR:ID1:FORMAT STD;IDEXT:PATTERN"1101010111100110111101110000?;:TRIGGER:EINTERVAL:EVENT1:CANBUS:IDOR:ID1:IDSTD: PATTERN "00100100011";:TRIGGER:EINTERVAL:EVENT1:CANBUS:IDOR:ID1:MODE 0;RTR DATA;:TRIGGER:EINTERVAL:EVENT1:CANBUS:IDOR:ID2:ACK DONTCARE; DATA: BORDER BIG;CONDITION DONTCARE; DATA1 0.0000000E+00; DATA2 255.000000E+00;DLC 8;MSBLSB 7,0; PATTERN ?11111110110111001011101010011000011001000010000?;SIGN UNSIGN;:TRIGGER:EINTERVAL:EVENT1:CANBUS:IDOR:ID2:FORMAT STD;IDEXT:PATTERN"100100011010001010110011111000";:TRIGGER:EINTERVAL:EVENT1:CANBUS:IDOR:ID2:IDSTD: PATTERN "10001010110";:TRIGGER:EINTERVAL:EVENT1:CANBUS:IDOR:ID2:MODE 0;RTR DATA;:TRIGGER:EINTERVAL:EVENT1:CANBUS:IDOR:ID3:ACK DONTCARE; DATA: BORDER BIG;CONDITION DONTCARE; DATA1 0.0000000E+00; DATA2 255.000000E+00;DLC 8.....

**:TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>?**

Function Queries all settings related to each ID of the OR condition of the CAN bus signal trigger.

Syntax :TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:IDOR:ID1:ACK DONTCARE;  
DATA:BORDER BIG;CONDITION DONTCARE;  
DATA1 0.0000000E+00;  
DATA2 255.00000E+00;DLC 8;MSBSLB 7,0;  
PATTERN "000000010010001101000101011  
00111100010011010101111001101111011  
11";SIGN UNSIGN;:TRIGGER:EINTERVAL:  
EVENT1:CANBUS:IDOR:ID1:FORMAT STD;  
IDEXT:PATTERN "110101011110011011110  
11110000";:TRIGGER:EINTERVAL:EVENT1:  
CANBUS:IDOR:ID1:IDSTD:  
PATTERN"00100100011";:TRIGGER:  
EINTERVAL:EVENT1:CANBUS:IDOR:ID1:  
MODE 0;RTR DATA

**:TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>:ACK**

Function Sets each ACK condition of the OR condition of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>:ACK {ACK|ACKBoth|DONTcare|  
NONack}  
:TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>:ACK?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:ACK ACK  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:ACK? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:IDOR:ID1:ACK ACK

**:TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>:DATA?**

Function Queries all settings related to each data of the OR condition of the CAN bus signal trigger.

Syntax :TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>:DATA?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:DATA? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:IDOR:ID1:DATA:  
BORDER BIG;CONDITION DONTCARE;  
DATA1 0.0000000E+00;  
DATA2 255.00000E+00;DLC 8;MSBSLB 7,0;  
PATTERN "00000001001000110100010101110  
011110001001101010111100110111101111"  
;SIGN UNSIGN

**:TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>:DATA:BORDER**

Function Sets byte order of each data of the OR condition of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>:DATA:BORDER {BIG|LITTLE}  
:TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>:DATA:BORDER?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:DATA:BORDER BIG  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:DATA:BORDER? -> :TRIGGER:  
EINTERVAL:EVENT1:CANBUS:IDOR:ID1:  
DATA:BORDER BIG

**:TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>:DATA:CONDition**

Function Sets each data condition of the OR condition of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>:DATA:CONDition {BETWEEN|  
DONTcare|FALSE|GTHan|LTHan|ORANge|  
TRUE}  
:TRIGger:EINterval:EVENT<x>:CANBus:  
IDOR:ID<x>:DATA:CONDition?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:DATA:CONDITION BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:DATA:CONDITION? -> :TRIGGER:  
EINTERVAL:EVENT1:CANBUS:IDOR:ID1:  
DATA:CONDITION BETWEEN



## 5.31 TRIGger Group

### : TRIGger: EINTerval: EVENT<x>: CANBus:

#### IDOR: ID<x>: DATA: DATA<x>

**Function** Sets comparison data of each data of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** : TRIGger: EINTerval: EVENT<x>: CANBus:  
IDOR: ID<x>: DATA: DATA<x> {<Nrf>}  
: TRIGger: EINTerval: EVENT<x>: CANBus:  
IDOR: ID<x>: DATA: DATA<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4  
<x> of DATA<x> = 1 or 2  
<Nrf> = See the User's Manual (IM701361-01E).

**Example** : TRIGGER: EINTERVAL: EVENT1: CANBUS:  
IDOR: ID1: DATA: DATA1 1  
: TRIGGER: EINTERVAL: EVENT1: CANBUS:  
IDOR: ID1: DATA: DATA1? -> : TRIGGER:  
EINTERVAL: EVENT1: CANBUS: IDOR: ID1:  
DATA: DATA1 1.000000E+00

**Description**

- Use : TRIGger: EINTerval: EVENT<x>: CANBus: IDOR: ID<x>: DATA: DATA1 when : TRIGger: EINTerval: EVENT<x>: CANBus: IDOR: ID<x>: DATA: CONDition GTHan is specified.
- Use : TRIGger: EINTerval: EVENT<x>: CANBus: IDOR: ID<x>: DATA: DATA2 when : TRIGger: EINTerval: EVENT<x>: CANBus: IDOR: ID<x>: DATA: CONDition LTHan is specified.
- Use : TRIGger: EINTerval: EVENT<x>: CANBus: IDOR: ID<x>: DATA: DATA1 to set the smaller value and : TRIGger: EINTerval: EVENT<x>: CANBus: IDOR: ID<x>: DATA: DATA2 to set the larger value when : TRIGger: EINTerval: EVENT<x>: CANBus: IDOR: ID<x>: DATA: CONDition BETWEEN|ORANge is specified.

### : TRIGger: EINTerval: EVENT<x>: CANBus:

#### IDOR: ID<x>: DATA: DLC

**Function** Sets the number of valid bytes (DLC) of each data of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** : TRIGger: EINTerval: EVENT<x>: CANBus:  
IDOR: ID<x>: DATA: DLC {<Nrf>}  
: TRIGger: EINTerval: EVENT<x>: CANBus:  
IDOR: ID<x>: DATA: DLC?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4  
<Nrf> = 0 to 8

**Example** : TRIGGER: EINTERVAL: EVENT1: CANBUS:  
IDOR: ID1: DATA: DLC 0  
: TRIGGER: EINTERVAL: EVENT1: CANBUS:  
IDOR: ID1: DATA: DLC? -> : TRIGGER:  
EINTERVAL: EVENT1: CANBUS: IDOR: ID1:  
DATA: DLC 0

### : TRIGger: EINTerval: EVENT<x>: CANBus:

#### IDOR: ID<x>: DATA: HEXA

**Function** Sets each data of the OR condition of the CAN bus signal trigger in hexadecimal notation.

**Syntax** : TRIGger: EINTerval: EVENT<x>: CANBus:  
IDOR: ID<x>: DATA: HEXA {<String>}  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4  
<String> = Up to 16 characters by combining '0' to 'F' and 'X' (in one-byte unit)

**Example** : TRIGGER: EINTERVAL: EVENT1: CANBUS:  
IDOR: ID1: DATA: HEXA "A9"

### : TRIGger: EINTerval: EVENT<x>: CANBus:

#### IDOR: ID<x>: DATA: MSBLSb

**Function** Sets the MSB and LSB bits of each data of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** : TRIGger: EINTerval: EVENT<x>: CANBus:  
IDOR: ID<x>: DATA: MSBLSb {<Nrf>, <Nrf>}  
: TRIGger: EINTerval: EVENT<x>: CANBus:  
IDOR: ID<x>: DATA: MSBLSb?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4  
<Nrf> = See the User's Manual (IM701361-01E).

**Example** : TRIGGER: EINTERVAL: EVENT1: CANBUS:  
IDOR: ID1: DATA: MSBLSB 1,0  
: TRIGGER: EINTERVAL: EVENT1: CANBUS:  
IDOR: ID1: DATA: MSBLSB? -> : TRIGGER:  
EINTERVAL: EVENT1: CANBUS: IDOR: ID1:  
DATA: MSBLSB 1,0

### : TRIGger: EINTerval: EVENT<x>: CANBus:

#### IDOR: ID<x>: DATA: PATtern

**Function** Sets each data of the OR condition of the CAN bus signal trigger in binary notation or queries the current setting.

**Syntax** : TRIGger: EINTerval: EVENT<x>: CANBus:  
IDOR: ID<x>: DATA: PATtern {<String>}  
: TRIGger: EINTerval: EVENT<x>: CANBus:  
IDOR: ID<x>: DATA: PATtern?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4  
<String> = Up to 64 characters by combining '0', '1,' and 'X' (in one-byte unit)

**Example** : TRIGGER: EINTERVAL: EVENT1: CANBUS:  
IDOR: ID1: DATA: PATtern "11011111"  
: TRIGGER: EINTERVAL: EVENT1: CANBUS:  
IDOR: ID1: DATA: PATtern? -> : TRIGGER:  
EINTERVAL: EVENT1: CANBUS: IDOR: ID1:  
DATA: PATtern "11011111"

**:TRIGger:EINTerval:EVENT<x>:CANBus:****IDOR:ID<x>:DATA:SIGN**

Function Sets sign of each data of the OR condition of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:DATA:SIGN {SIGN|UNSign}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:DATA:SIGN?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:DATA:SIGN SIGN  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:DATA:SIGN? -> :TRIGGER:  
EINTERVAL:EVENT1:CANBUS:IDOR:ID1:  
DATA:SIGN SIGN

**:TRIGger:EINTerval:EVENT<x>:CANBus:****IDOR:ID<x>:FORMAT**

Function Sets each message format (standard or extended) of the OR condition of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:FORMAT {STD|EXT}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:FORMAT?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:FORMAT STD  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:FORMAT? -> :TRIGGER:  
EINTERVAL:EVENT1:CANBUS:IDOR:ID1:  
FORMAT STD

**:TRIGger:EINTerval:EVENT<x>:CANBus:****IDOR:ID<x>:IDEXT?**

Function Queries all settings related to the ID of each extended format of the OR condition of the CAN bus signal trigger.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:IDEXT?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:IDEXT? -> :TRIGGER:  
EINTERVAL:EVENT1:CANBUS:IDOR:ID1:  
IDEXT:PATTERN "1100101101110000111011  
1011111"

**:TRIGger:EINTerval:EVENT<x>:CANBus:****IDOR:ID<x>:IDEXT:HEXA**

Function Sets the ID of each extended format of the OR condition of the CAN bus signal trigger in hexadecimal notation.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:IDEXT:HEXA {<String>}  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4  
<String> = 8 characters by combining '0' to 'F' and 'X'

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:IDEXT:HEXA "1AEF5906"

**:TRIGger:EINTerval:EVENT<x>:CANBus:****IDOR:ID<x>:IDEXT:PATtern**

Function Sets the ID of each extended format of the OR condition of the CAN bus signal trigger in binary notation or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:IDEXT:PATtern {<String>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:IDEXT:PATtern?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4  
<String> = 29 characters by combining '0', '1', and 'X'

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:IDEXT:PATTERN "1100101101110  
0001110111011111"  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:IDEXT:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:CANBUS:IDOR:ID1:  
IDEXT:PATTERN "1100101101110000111011  
1011111"

**:TRIGger:EINTerval:EVENT<x>:CANBus:****IDOR:ID<x>:IDSTd?**

Function Queries all settings related to the ID of each standard format of the OR condition of the CAN bus signal trigger.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:IDSTd?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:IDSTD? -> :TRIGGER:  
EINTERVAL:EVENT1:CANBUS:IDOR:ID1:  
IDSTD:PATTERN "00011111101"

### 5.31 TRIGger Group

#### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

##### **IDOR:ID<x>:IDSTd:HEXA**

**Function** Sets the ID of each standard format of the OR condition of the CAN bus signal trigger in hexadecimal notation.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:IDSTd:HEXA {<String>}  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4  
<String> = 3 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:IDSTD:HEXA "5DF"

#### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

##### **IDOR:ID<x>:IDSTd:PATtern**

**Function** Sets the ID of each standard format of the OR condition of the CAN bus signal trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:IDSTd:PATtern {<String>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:IDSTd:PATtern?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4  
<String> = 11 characters by combining '0,' '1,' and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:IDSTD:PATTERN "10111011111"  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:IDSTD:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:CANBUS:IDOR:ID1:  
IDSTD:PATTERN "10111011111"

#### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

##### **IDOR:ID<x>:MODE**

**Function** Enables or disables each condition of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:MODE {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:MODE?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:MODE ON  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:MODE? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:IDOR:ID1:MODE 1

#### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

##### **IDOR:ID<x>:RTR**

**Function** Sets each RTR of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:RTR {DATA|DONTcare|REMote}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
IDOR:ID<x>:RTR?  
<x> of EVENT<x> = 1 or 2  
<x> of ID<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:RTR DATA  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDOR:ID1:RTR? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:IDOR:ID1:RTR DATA

#### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

##### **IDSTd?**

**Function** Queries all settings related to the ID of the standard format of the CAN bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDSTd?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDSTd? -> :TRIGGER:EINTERVAL:EVENT1:  
CANBUS:IDSTD:PATTERN "00011111101"

#### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

##### **IDSTd:HEXA**

**Function** Sets the ID of the standard format of the CAN bus signal trigger in hexadecimal notation.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDSTd:HEXA {<String>}  
<x> = 1 or 2  
<String> = 8 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDSTd:HEXA "5DF"

**:TRIGger:EINTerval:EVENT<x>:CANBus:****IDSTd:PATtern**

**Function** Sets the ID of the standard format of the CAN bus signal trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
IDSTd:PATtern {<String>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
IDSTd:PATtern?  
<x> = 1 or 2  
<String> = 11 characters by combining '0','1,' and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDSTD:PATTERN "10111011111"  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
IDSTD:PATTERN? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:IDSTD:  
PATTERN "10111011111"

**:TRIGger:EINTerval:EVENT<x>:CANBus:****MODE**

**Function** Sets the CAN bus signal trigger mode or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
MODE {EFrame|IDExt|IDOR|IDSTd|MSIGNAL|  
SOF}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
MODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MODE EFRAME  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MODE? -> :TRIGGER:EINTERVAL:EVENT1:  
CANBUS:MODE EFRAME

**:TRIGger:EINTerval:EVENT<x>:CANBus:****MSIGNAL?**

**Function** Queries all settings related to the message signal of the CAN bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGNAL?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:MSIGNAL:MESSAGE1:MODE 1;  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:MESSAGE2:MODE 0;:TRIGGER:  
EINTERVAL:EVENT1:CANBUS:MSIGNAL:  
MESSAGE3:MODE 0;:TRIGGER:EINTERVAL:  
EVENT1:CANBUS:MSIGNAL:MESSAGE4:MODE 0;  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:SELECT MESSAGE;SIGNAL1:  
CONDITION BETWEEN;  
DATA1 0.000000E+00;  
DATA2 255.00000E+00;MODE 1;:TRIGGER:  
EINTERVAL:EVENT1:CANBUS:MSIGNAL:  
SIGNAL2:CONDITION DONTCARE;  
DATA1 0.000000E+00;  
DATA2 255.00000E+00;MODE 0;:TRIGGER:  
EINTERVAL:EVENT1:CANBUS:MSIGNAL:  
SIGNAL3:CONDITION DONTCARE;  
DATA1 0.000000E+00;  
DATA2 255.00000E+00;MODE 0;:TRIGGER:  
EINTERVAL:EVENT1:CANBUS:MSIGNAL:  
SIGNAL4:CONDITION DONTCARE;  
DATA1 0.000000E+00;  
DATA2 255.00000E+00;MODE 0

**:TRIGger:EINTerval:EVENT<x>:CANBus:****MSIGNAL:MESSAge<x>?**

**Function** Queries all settings related to the message of the CAN bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGNAL:MESSAge<x>?  
<x> of EVENT<x> = 1, 2  
<x> of MESSAge<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:MESSAGE1? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:MSIGNAL:MESSAGE1:MODE 1

## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

#### **MSIGnal:MESSAge<x>:ITEM**

Function Sets the CAN bus signal trigger message item.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:MESSAge<x>:ITEM {<string>}  
<x> of EVENT<x> = 1, 2  
<x> of MESSAge<x> = 1 to 4  
<string> = Up to 32 characters

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:MESSAGE1:ITEM "TEST"

### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

#### **MSIGnal:MESSAge<x>:MODE**

Function Turns ON/OFF the CAN bus signal trigger message or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:MESSAge<x>:MODE {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:MESSAge<x>:MODE?  
<x> of EVENT<x> = 1, 2  
<x> of MESSAge<x> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:MESSAGE1:MODE ON  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:MESSAGE1:MODE? -> :TRIGGER:  
EINTERVAL:EVENT1:CANBUS:MSIGNAL:  
MESSAGE1:MODE 1

### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

#### **MSIGnal:SELEct**

Function Sets the message signal conditions for the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:SELEct {MESSAGE|SIGNAL}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:SELEct?  
<x> = 1, 2

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:SELECT MESSAGE  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:SELECT? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:MSIGNAL:SELECT MESSAGE

### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

#### **MSIGnal:SIGNAL<x>?**

Function Queries all settings related to the signal of the CAN bus signal trigger.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:SIGNAL<x>?  
<x> of EVENT<x> = 1, 2  
<x> of SIGNAL<x> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:SIGNAL1? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:MSIGNAL:SIGNAL1:  
CONDITION BETWEEN;  
DATA1 0.0000000E+00;  
DATA2 255.000000E+00;MODE 1

### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

#### **MSIGnal:SIGNAL<x>:CONDition**

Function Sets the signal data conditions for the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:SIGNAL<x>:CONDition {BETween|  
DONTcare|FALSe|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:SIGNAL<x>:CONDition?  
<x> of EVENT<x> = 1, 2  
<x> of SIGNAL<x> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:SIGNAL1:CONDITION BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:SIGNAL1:CONDITION? -> :TRIGGER:  
EINTERVAL:EVENT1:CANBUS:MSIGNAL:  
SIGNAL1:CONDITION BETWEEN

### **:TRIGger:EINTerval:EVENT<x>:CANBus:**

#### **MSIGnal:SIGNAL<x>:DATA<x>**

Function Sets the signal data comparison data for the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:SIGNAL<x>:DATA<x> {<NRf>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:SIGNAL<x>:DATA<x>?  
<x> of EVENT<x> = 1, 2  
<x> of SIGNAL<x> = 1 to 4  
<x> of DATA<x> = 1, 2  
<NRf> = See the SB5000 User's Manual

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:SIGNAL1:DATA1 1  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:SIGNAL1:DATA1? -> :TRIGGER:  
EINTERVAL:EVENT1:CANBUS:MSIGNAL:  
SIGNAL1:DATA1 1.0000000E+00

**:TRIGger:EINTerval:EVENT<x>:CANBus:****MSIGnal:SIGNAL<x>:ITEM**

Function Sets the CAN bus signal trigger signal item.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:SIGNAL<x>:  
ITEM {<string>, <string>}  
<x> of EVENT<x>= 1, 2  
<x> of SIGNAL<x>= 1 to 4  
<string> = Up to 32 characters

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:SIGNAL1:ITEM "ENGINE", "TEST"

Description The first string sets the signal, and the next string sets the message.

**:TRIGger:EINTerval:EVENT<x>:CANBus:****MSIGnal:SIGNAL<x>:MODE**

Function Turns ON/OFF the CAN bus signal trigger signal or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:SIGNAL<x>:MODE {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
MSIGnal:SIGNAL<x>:MODE?  
<x> of EVENT<x>= 1, 2  
<x> of SIGNAL<x>= 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:SIGNAL1:MODE ON  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
MSIGNAL:SIGNAL1:MODE? -> :TRIGGER:  
EINTERVAL:EVENT1:CANBUS:MSIGNAL:  
SIGNAL1:MODE 1

**:TRIGger:EINTerval:EVENT<x>:CANBus:****RECEssive**

Function Sets the recessive level (bus level) of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
RECEssive {HIGH|LOW}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
RECEssive?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
RECESSIVE HIGH  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
RECESSIVE? -> :TRIGGER:EINTERVAL:  
EVENT1:CANBUS:RECESSIVE HIGH

**:TRIGger:EINTerval:EVENT<x>:CANBus:RTR**

Function Sets the RTR of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
RTR {DATA|DONTcare|REMOte}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
RTR?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
RTR DATA  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
RTR? -> :TRIGGER:EINTERVAL:EVENT1:  
CANBUS:RTR DATA

**:TRIGger:EINTerval:EVENT<x>:CANBus:****SOURCE**

Function Sets the trigger source of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
SOURCE {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
SOURCE?  
<x> = 1 or 2  
<Nrf> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
SOURCE? -> :TRIGGER:EINTERVAL:EVENT1:  
CANBUS:SOURCE 1

**:TRIGger:EINTerval:EVENT<x>:CANBus:****SPOint**

Function Sets the sample point of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:CANBus:  
SPOint {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:CANBus:  
SPOint?  
<x> = 1 or 2  
<Nrf> = 18.8 to 90.6(%)

Example :TRIGGER:EINTERVAL:EVENT1:CANBUS:  
SPOINT 18.8  
:TRIGGER:EINTERVAL:EVENT1:CANBUS:  
SPOINT? -> :TRIGGER:EINTERVAL:EVENT1:  
CANBUS:SPOINT 18.8E+00

**:TRIGger:EINTerval:EVENT<x>:CLOCK?**

Function Queries all settings related to the clock channel of the event.

Syntax :TRIGger:EINTerval:EVENT<x>:CLOCK?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:CLOCK?  
-> :TRIGGER:EINTERVAL:EVENT1:CLOCK:  
SOURCE 1;POLARITY FALL

## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:CLOCK:**

#### **POLarity**

**Function** Sets the polarity of the clock channel of the event or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CLOCK:  
POLarity {FALL|RISE}  
:TRIGger:EINTerval:EVENT<x>:CLOCK:  
POLarity?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:CLOCK:  
POLARITY FALL  
:TRIGGER:EINTERVAL:EVENT1:CLOCK:  
POLARITY? -> :TRIGGER:EINTERVAL:EVENT1:  
CLOCK:POLARITY FALL

**Description**• This command is invalid if :TRIGger:  
EINTerval:EVENT<x>:CLOCK:SOURce NONE.  
• For :TRIGger:SOURce:CHANnel<x>:WINDow ON,  
the choices in the SB5000 menu are Enter/Exit.  
{RISE} corresponds to Enter, and {FALL}  
corresponds to Exit.  
• This command is valid when :TRIGger:EINTerval:  
EVENT<x>:TYPE PSTate|STATE.

### **:TRIGger:EINTerval:EVENT<x>:CLOCK:**

#### **SOURce**

**Function** Sets the source waveform of the clock channel of the event or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:CLOCK:  
SOURce {<Nrf>|NONE}  
:TRIGger:EINTerval:EVENT<x>:CLOCK:  
SOURce?  
<x> = 1 or 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:CLOCK:  
SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:CLOCK:SOURCE?  
-> :TRIGGER:EINTERVAL:EVENT1:CLOCK:  
SOURCE 1

**Description** This command is valid when :TRIGger:EINTerval:  
EVENT<x>:TYPE PSTate|STATE.

### **:TRIGger:EINTerval:EVENT<x>:ESTate?**

**Function** Queries all settings related to the edge/state trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:ESTate?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:ESTATE?  
-> :TRIGGER:EINTERVAL:EVENT1:ESTATE:  
SOURCE 1;POLARITY FALL

### **:TRIGger:EINTerval:EVENT<x>:ESTate:**

#### **POLarity**

**Function** Sets the polarity of the edge/state trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:ESTate:  
POLarity {ENTER|EXIT|FALL|RISE}  
:TRIGger:EINTerval:EVENT<x>:ESTate:  
POLarity?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:ESTATE:  
POLARITY ENTER  
:TRIGGER:EINTERVAL:EVENT1:ESTATE:  
POLARITY? -> :TRIGGER:EINTERVAL:  
EVENT1:ESTATE:POLARITY ENTER

**Description**• This command is valid when :TRIGger:EINTerval:  
EVENT<x>:TYPE EDGE and  
:TRIGger:EINTerval:EVENT<x>:  
ESTate:SOURce LINE.  
• For :TRIGger:EINTerval:EVENT<x>:TYPE  
EDGE|EQUalify and :TRIGger:SOURce:  
CHANnel<x>:WINDow ON, the choices in the  
SB5000 menu are Enter/Exit.  
{RISE} corresponds to Enter, and {FALL}  
corresponds to Exit.  
• {ENTER|EXIT} is valid when :TRIGger:EINTerval:  
EVENT<x>:TYPE STATE.

### **:TRIGger:EINTerval:EVENT<x>:ESTate:** **SOURce**

**Function** Sets the trigger source of the edge/state trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:ESTate:  
SOURce {<Nrf>|EXTErnal|LINE}  
:TRIGger:EINTerval:EVENT<x>:ESTate:  
SOURce?  
<x> = 1 or 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:ESTATE:  
SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:ESTATE:  
SOURCE? -> :TRIGGER:EINTERVAL:EVENT1:  
ESTATE:SOURCE 1

**Description**• This command is valid when :TRIGger:EINTerval:  
EVENT<x>:TYPE EDGE|EQUalify.  
• {<Nrf>|EXTErnal|LINE} is valid when :TRIGger:  
EINTerval:EVENT<x>:TYPE EDGE.  
• {<Nrf>|EXTErnal} is valid when :TRIGger:  
EINTerval:EVENT<x>:TYPE EQUalify.

**:TRIGger:EINTerval:EVENT<x>:FLEXray?**

**Function** Queries all settings related to the FLEXRAY bus signal triggers of each event.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY? ->  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
BRATE 5000000;ERROR:BSS 1;CHANNEL DUAL;  
CRC 1;CRCBUS1 A;CRCBUS2 A;FES 1;  
SOURCE1 1;SOURCE2 1;:TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDDATA:CCOUNT:  
CONDITION BETWEEN;COUNT1 10;COUNT2 63;:  
TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:BORDER BIG;  
CONDITION BETWEEN;DATA1 1.0000000E+00;  
DATA2 1.0000000E+00;DPOSITION 1;DSIZE 1;  
MSBLSB 1, 0;PATTERN "11011111";  
SIGN SIGN;:TRIGGER:EINTERVAL:EVENT1:  
FLEXRAY:IDDATA:FID:CONDITION BETWEEN;  
ID1 100;ID2 2047;:TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDDATA:INDICATOR:  
CONDITION DONTCARE;NFRAME DONTCARE;  
PPREAMBLE DONTCARE;STFRAME DONTCARE;  
SYFRAME DONTCARE;:TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDOR:DPOSITION 253;  
DSIZE 1;IDDATA1:CCOUNT:  
CONDITION BETWEEN;COUNT1 0;COUNT2 0;:  
TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:DATA:BORDER BIG.....

**:TRIGger:EINTerval:EVENT<x>:FLEXray:**

**BRATe**

**Function** Sets the FLEXRAY bus signal trigger bit rate (data transfer rate) or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
BRATe {<NRf>}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
BRATe?  
<x> = 1, 2  
<NRf> = 2500000, 5000000, 10000000

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
BRATE 5000000  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
BRATE? -> :TRIGGER:EINTERVAL:EVENT1:  
FLEXRAY:BRATE 5000000

**:TRIGger:EINTerval:EVENT<x>:FLEXray:ERROR?**

**Function** Queries all settings related to the FLEXRAY bus signal trigger error.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR? -> :TRIGGER:EINTERVAL:EVENT1:  
FLEXRAY:ERROR:BSS 1;CHANNEL DUAL;  
CRC 1;CRCBUS1 A;CRCBUS2 A;FES 1;  
SOURCE1 1;SOURCE2 1

**:TRIGger:EINTerval:EVENT<x>:FLEXray:ERROR:BSS**

**Function** Sets the FLEXRAY bus signal trigger BSS error or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR:BSS {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR:BSS?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR:BSS ON  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR:BSS? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:ERROR:BSS 1

**:TRIGger:EINTerval:EVENT<x>:FLEXray:ERROR:CHANnel**

**Function** Sets the FLEXRAY bus signal trigger error channel or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR:CHANnel {DUAL|SINGLE}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR:CHANnel?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR:CHANNEL DUAL  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR:CHANNEL? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:ERROR:CHANNEL DUAL



### 5.31 TRIGger Group

#### **:TRIGger:EINTerval:EVENT<x>:FLEXray: ERROR:CRC**

**Function** Sets the FLEXRAY bus signal trigger CRC error or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR:CRC {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR:CRC?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR:CRC ON  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR:CRC? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:ERROR:CRC 1

#### **:TRIGger:EINTerval:EVENT<x>:FLEXray: ERROR:CRCBus<x>**

**Function** Sets the target channel of the FLEXRAY bus signal trigger CRC error or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR:CRCBus<x> {A|B}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR:CRCBus<x>?  
<x> of EVENT<x> = 1, 2  
<x> of CRCBus<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR:CRCBUS1 A  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR:CRCBUS1? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:ERROR:CRCBUS1 A

#### **:TRIGger:EINTerval:EVENT<x>:FLEXray: ERROR:FES**

**Function** Sets the FLEXRAY bus signal trigger FES error or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR:FES {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR:FES?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR:FES ON  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR:FES? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:ERROR:FES 1

#### **:TRIGger:EINTerval:EVENT<x>:FLEXray: ERROR:SOURCE<x>**

**Function** Sets the FLEXRAY bus signal trigger error source or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR:SOURCE<x> {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
ERROR:SOURCE<x>?  
<x> of EVENT<x> = 1, 2  
<x> of SOURCE<x> = 1, 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR:SOURCE1 1  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
ERROR:SOURCE1? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:ERROR:SOURCE1 1

#### **:TRIGger:EINTerval:EVENT<x>:FLEXray: IDData?**

**Function** Queries all settings related to the IDData of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA? -> :TRIGGER:EINTERVAL:EVENT1:  
FLEXRAY:IDDATA:CCOUNT:  
CONDITION BETWEEN;COUNT1 10;COUNT2 63;:  
TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:BORDER BIG;  
CONDITION BETWEEN;DATA1 1.0000000E+00;  
DATA2 1.0000000E+00;DPOSITION 1;  
DSIZE 1;MSBLSB 1, 0;  
PATTERN "11011111";SIGN SIGN;:TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:  
FID:CONDITION BETWEEN;ID1 100;  
ID2 2047;:TRIGGER:EINTERVAL:EVENT1:  
FLEXRAY:IDDATA:INDICATOR:  
CONDITION DONTCARE;NFRAME DONTCARE;  
PPREAMBLE DONTCARE;STFRAME DONTCARE;  
SYFRAME DONTCARE

#### **:TRIGger:EINTerval:EVENT<x>:FLEXray: IDData:CCOUNT?**

**Function** Queries all settings related to the Cycle Count of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:CCOUNT?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:CCOUNT? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDDATA:CCOUNT:  
CONDITION BETWEEN;COUNT1 10;COUNT2 63

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDData:CCOunt:CONDition**

**Function** Sets the Cycle Count data conditions of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:CCOunt:CONDition {BETween|  
DONTcare|FALSE|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:CCOunt:CONDition?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:CCOUNT:CONDITION BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:CCOUNT:CONDITION? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:CCOUNT:  
CONDITION BETWEEN

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDData:CCOunt:COUNT<x>**

**Function** Sets the FLEXRAY bus signal trigger Cycle Count or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:CCOunt:COUNT<x> {<NRF>}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:CCOunt:COUNT<x>?  
<x> of EVENT<x> = 1, 2  
<x> of COUNT<x> = 1, 2  
<NRF> = 0 to 63

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:CCOUNT:COUNT1 10  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:CCOUNT:COUNT1? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:CCOUNT:  
COUNT1 10

**Description**

- For :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:CCOunt:CONDition GTHan, set using:  
TRIGger:EINterval:EVENT<x>:FLEXray:IDData:  
CCOunt:COUNT1.
- For :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:CCOunt:CONDition LTHan, set using:  
TRIGger:EINterval:EVENT<x>:FLEXray:IDData:  
CCOunt:COUNT2.
- For :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:CCOunt:CONDition BETWEEN|ORANge,  
set small values with: TRIGger:EINterval:  
EVENT<x>:FLEXray:IDData:CCOunt:COUNT1, and  
large values with: TRIGger:EINterval:EVENT<x>:  
FLEXray:IDData:CCOunt:COUNT2.

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDData:DATA?**

**Function** Queries all settings related to the Data Field of the FLEXRAY bus signal trigger .

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:  
FLEXRAY:IDDATA:DATA? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:  
DATA:BORDER BIG;CONDITION BETWEEN;  
DATA1 1.0000000E+00;  
DATA2 1.0000000E+00;DPOSITION 1;  
DSIZE 1;MSBLSB 1, 0;  
PATTERN "11011111";SIGN SIGN

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDData:DATA:Border**

**Function** Sets the byte order of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:Border {BIG|LITTLE}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:Border?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:Border BIG  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:Border? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:DATA:  
Border BIG

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDData:DATA:CONDition**

**Function** Sets the data conditions of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:CONDition {BETween|  
DONTcare|FALSE|GTHan|LTHan|ORANge|  
TRUE}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:CONDition?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:CONDITION BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:CONDITION? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:DATA:  
CONDITION BETWEEN

### 5.31 TRIGger Group

#### **:TRIGger:EINterval:EVENT<x>:FLEXray:**

##### **IDData:DATA:DATA<x>**

**Function** Sets the comparison data of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:DATA<x> {<NRf>}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:DATA<x>?  
<x> of EVENT<x> = 1, 2  
<x> of DATA<x> = 1, 2  
<NRf> = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:DATA1 1  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:DATA1? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:DATA:  
DATA1 1.0000000E+00

**Description**

- For :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:CONDition GTHan, set using:  
TRIGger:EINterval:EVENT<x>:FLEXray:IDData:  
DATA:DATA1.
- For :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:CONDition LTHan, set using:  
TRIGger:EINterval:EVENT<x>:FLEXray:IDData:  
DATA:DATA2.
- For :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:CONDition BETWEEN|ORANGE, set  
small values with: TRIGger:EINterval:EVENT<x>:  
FLEXray:IDData:DATA:DATA1, and large values  
with: TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:DATA2.

#### **:TRIGger:EINterval:EVENT<x>:FLEXray:**

##### **IDData:DATA:DPOSITION**

**Function** Sets the position for pattern comparison of the data of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:DPOSITION {<NRf>}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:DPOSITION?  
<x> = 1, 2  
<NRf> = 0 to 253

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:DPOSITION 1  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:DPOSITION? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:DATA:  
DPOSITION 1

#### **:TRIGger:EINterval:EVENT<x>:FLEXray:**

##### **IDData:DATA:DSIZE**

**Function** Sets the number of bytes of data in the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:DSIZE {<NRf>}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:DSIZE?  
<x> = 1, 2  
<NRf> = 1 to 8

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:DSIZE 1  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:DSIZE? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:DATA:  
DSIZE 1

#### **:TRIGger:EINterval:EVENT<x>:FLEXray:**

##### **IDData:DATA:HEXA**

**Function** Sets the data in the Data Field of the FLEXRAY bus signal trigger in hexadecimal.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:HEXA {<string>}  
<x> = 1, 2  
<string> = Up to 16 characters by combining '0' to 'F'  
and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:HEXA "A9"

#### **:TRIGger:EINterval:EVENT<x>:FLEXray:**

##### **IDData:DATA:MSBLSb**

**Function** Sets the MSB/LSB bit of data in the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:MSBLSb {<NRf>, <NRf>}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:DATA:MSBLSb?  
<x> = 1, 2  
<NRf> = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:MSBLSB 1, 0  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:MSBLSB? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:DATA:  
MSBLSB 1, 0

**:TRIGger:EINTerval:EVENT<x>:FLEXray:****IDData:DATA:PATtern**

**Function** Sets the data of the Data Field of the FLEXRAY bus signal trigger in binary or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:DATA:PATtern {<string>}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:DATA:PATtern?  
<x> = 1, 2  
<string> = Up to 64 characters by combining '0','1,'  
and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:PATTERN "11011111"  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:DATA:  
PATTERN "11011111"

**:TRIGger:EINTerval:EVENT<x>:FLEXray:****IDData:DATA:SIGN**

**Function** Sets the data sign of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:DATA:SIGN {SIGN|UNSign}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:DATA:SIGN?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:SIGN SIGN  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:DATA:SIGN? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDDATA:DATA:SIGN SIGN

**:TRIGger:EINTerval:EVENT<x>:FLEXray:****IDData:FID?**

**Function** Queries all settings related to the Frame ID of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:FID?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:FID? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDDATA:FID:  
CONDITION BETWEEN;ID1 100;ID2 2047

**:TRIGger:EINTerval:EVENT<x>:FLEXray:****IDData:FID:CONDition**

**Function** Sets the Frame ID data conditions of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:FID:CONDition {BETWEEN|DONTcare|  
FALSE|GTHan|LTHan|ORANGE|TRUE}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:FID:CONDition?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:FID:CONDITION BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:FID:CONDITION? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:FID:  
CONDITION BETWEEN

**:TRIGger:EINTerval:EVENT<x>:FLEXray:****IDData:FID:ID<x>**

**Function** Sets the Frame ID value of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:FID:ID<x> {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:FID:ID<x>?  
<x> of EVENT<x> = 1, 2  
<x> of ID<x> = 1, 2  
<Nrf> = 1 to 2047

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:FID:ID1 100  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:FID:ID1? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDDATA:FID:ID1 100

**Description**

- For :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:FID:CONDition GTHan, set using: TRIGger:  
EINTerval:EVENT<x>:FLEXray:IDData:FID:ID1.
- For :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:FID:CONDition LTHan, set using: TRIGger:  
EINTerval:EVENT<x>:FLEXray:IDData:FID:ID2.
- For :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDData:FID:CONDition BETWEEN|ORANGE, set  
small values with: TRIGger:EINTerval:EVENT<x>:  
FLEXray:IDData:FID:ID1, and large values with:  
TRIGger:EINTerval:EVENT<x>:FLEXray:IDData:  
FID:ID2.

## 5.31 TRIGger Group

### **:TRIGger:EINterval:EVENT<x>:FLEXray: IDData:INDicator?**

**Function** Queries all settings related to the Indicator of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:INDicator?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:  
INDICATOR:CONDITION DONTCARE;  
NFRAME DONTCARE;PPREAMBLE DONTCARE;  
STFRAME DONTCARE;SYFRAME DONTCARE

### **:TRIGger:EINterval:EVENT<x>:FLEXray: IDData:INDicator:CONDition**

**Function** Sets the data conditions of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:INDicator:  
CONDition {DONTcare|FALSE|TRUE}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:INDicator:CONDition?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR:CONDITION DONTCARE  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR:CONDITION? ->  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR:CONDITION DONTCARE

### **:TRIGger:EINterval:EVENT<x>:FLEXray: IDData:INDicator:NFRame**

**Function** Sets the Null frame of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:INDicator:  
NFRame {DONTcare|OFF|ON}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:INDicator:NFRame?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR:NFRAME DONTCARE  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR:NFRAME? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:  
INDICATOR:NFRAME DONTCARE

### **:TRIGger:EINterval:EVENT<x>:FLEXray: IDData:INDicator:PPReamble**

**Function** Sets the Payload preamble of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:INDicator:  
PPReamble {DONTcare|OFF|ON}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:INDicator:PPReamble?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR:PPREAMBLE DONTCARE  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR:PPREAMBLE? ->  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR:PPREAMBLE DONTCARE

### **:TRIGger:EINterval:EVENT<x>:FLEXray: IDData:INDicator:STFRame**

**Function** Sets the Start frame of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:INDicator:  
STFRame {DONTcare|OFF|ON}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:INDicator:STFRame?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR:STFRAME DONTCARE  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR:STFRAME? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:  
INDICATOR:STFRAME DONTCARE

### **:TRIGger:EINterval:EVENT<x>:FLEXray: IDData:INDicator:SYFRame**

**Function** Sets the Sync frame of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:INDicator:  
SYFRame {DONTcare|OFF|ON}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDData:INDicator:SYFRame?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR:SYFRAME DONTCARE  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDDATA:INDICATOR:SYFRAME? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDDATA:  
INDICATOR:SYFRAME DONTCARE

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDOR?**

**Function** Queries all settings related to the OR condition of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR?  
-> :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDOR:DPOSITION 253;DSIZE 1;IDDATA1:  
CCOUNT:CONDITION BETWEEN;COUNT1 10;  
COUNT2 63;:TRIGGER:EINTERVAL:EVENT1:  
FLEXRAY:IDOR:IDDATA1:DATA:BORDER BIG;  
CONDITION BETWEEN;DATA1 1.0000000E+00;  
DATA2 255.00000E+00;MSBLSB 1, 0;  
PATTERN "11011111";SIGN SIGN;:TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
FID:CONDITION BETWEEN;ID1 100;ID2 100;;  
TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDOR:IDDATA1:INDICATOR:  
CONDITION DONTCARE;NFRAME DONTCARE;  
PPREAMBLE DONTCARE;STFRAME DONTCARE;  
SYFRAME DONTCARE;:TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDOR:IDDATA1:MODE 1;;  
TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA2:CCOUNT:CONDITION DONTCARE.....

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDOR:DPOSITION**

**Function** Sets the position for pattern comparison of the data of the Data Field of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:DPOSITION {<NRF>}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:DPOSITION?  
<x> = 1, 2  
<NRF> = 0 to 253

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
DPOSITION 1  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDOR:DPOSITION? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDOR:DPOSITION 1

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDOR:DSIZE**

**Function** Sets the number of bytes of data in the Data Field of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:DSIZE {<NRF>}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:DSIZE?  
<x> = 1, 2  
<NRF> = 1 to 8

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
DSIZE 1  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
DSIZE? -> :TRIGGER:EINTERVAL:EVENT1:  
FLEXRAY:IDOR:DSIZE 1

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDOR:IDData<x>?**

**Function** Queries all settings related to each IDData of the OR condition of the FLEXRAY bus signal trigger

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1? -> :TRIGGER:EINTERVAL:EVENT1:  
FLEXRAY:IDOR:IDDATA1:CCOUNT:  
CONDITION BETWEEN;COUNT1 10;COUNT2 63;;  
TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:DATA:BORDER BIG;  
CONDITION BETWEEN;DATA1 1.0000000E+00;  
DATA2 255.00000E+00;MSBLSB 1, 0;  
PATTERN "11011111";SIGN SIGN;:TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
FID:CONDITION BETWEEN;ID1 100;ID2 100;;  
TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:CONDITION DONTCARE;  
NFRAME DONTCARE;PPREAMBLE DONTCARE;  
STFRAME DONTCARE;SYFRAME DONTCARE;;  
TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:MODE 1

### 5.31 TRIGger Group

#### **:TRIGger:EINterval:EVENT<x>:FLEXray: IDOR:IDData<x>:CCOunt?**

**Function** Queries all settings related to the Cycle Count of each IDData of the OR condition of the FLEXRAY bus signal trigger

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:CCOunt?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:CCOUNT? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDOR:IDDATA1:CCOUNT:  
CONDITION BETWEEN;COUNT1 10;COUNT2 63

#### **:TRIGger:EINterval:EVENT<x>:FLEXray: IDOR:IDData<x>:CCOunt:CONDition**

**Function** Sets each Cycle Count data condition of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:CCOunt:  
CONDition {BETween|DONTcare|FALSe|  
GTHan|LTHan|ORANge|TRUE}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:CCOunt:CONDition?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:CCOUNT:CONDITION BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:CCOUNT:CONDITION? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
CCOUNT:CONDITION BETWEEN

#### **:TRIGger:EINterval:EVENT<x>:FLEXray: IDOR:IDData<x>:CCOunt:COUnT<x>**

**Function** Sets each Cycle Count of the OR conditions of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:CCOunt:COUnT<x> {<NRf>}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:CCOunt:COUnT<x>?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<x> of COUnT<x> = 1, 2  
<NRf> = 0 to 63

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:CCOUNT:COUNT1 10  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:CCOUNT:COUNT1? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
CCOUNT:COUNT1 10

**Description**

- For :TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:CCOunt:CONDition GTHan, set using: TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:CCOunt:COUnT1.
- For :TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:CCOunt:CONDition LTHan, set using: TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:CCOunt:COUnT2.
- For :TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:CCOunt:CONDition BETWween|ORANge, set small values with: TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:CCOunt:COUnT1, and large values with: TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:CCOunt:COUnT2.

#### **:TRIGger:EINterval:EVENT<x>:FLEXray: IDOR:IDData<x>:DATA?**

**Function** Queries all settings related to each Data Field of the OR condition of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:DATA? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDOR:IDDATA1:DATA:  
BORDER BIG;CONDITION BETWEEN;  
DATA1 1.0000000E+00;  
DATA2 255.000000E+00;MSBLSB 1, 0;  
PATTERN "11011111";SIGN SIGN

**:TRIGger:EINTerval:EVENT<x>:FLEXray:****IDOR:IDData<x>:DATA:BORDER**

**Function** Sets the byte order of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:BORDER {BIG|LITTLE}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:BORDER?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:DATA:BORDER BIG  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDOR:IDDATA1:DATA:BORDER? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
DATA:BORDER BIG

**:TRIGger:EINTerval:EVENT<x>:FLEXray:****IDOR:IDData<x>:DATA:CONDition**

**Function** Sets the data condition of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:CONDition {BETWEEN|  
DONTcare|FALSE|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:CONDition?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:DATA:CONDITION BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:DATA:CONDITION? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
DATA:CONDITION BETWEEN

**:TRIGger:EINTerval:EVENT<x>:FLEXray:****IDOR:IDData<x>:DATA:DATA<x>**

**Function** Sets the comparison data of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:DATA<x> {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:DATA<x>?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<x> of DATA<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:DATA:DATA1 1  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDOR:IDDATA1:DATA:DATA1? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
DATA:DATA1 1.0000000E+00

**Description**

- For :TRIGger:EINTerval:EVENT<x>:FLEXray:IDOR:IDData<x>:DATA:CONDition GTHan, set using: TRIGger:EINTerval:EVENT<x>:FLEXray:IDOR:IDData<x>:DATA:DATA1.
- For :TRIGger:EINTerval:EVENT<x>:FLEXray:IDOR:IDData<x>:DATA:CONDition LTHan, set using: TRIGger:EINTerval:EVENT<x>:FLEXray:IDOR:IDData<x>:DATA:DATA2.
- For :TRIGger:EINTerval:EVENT<x>:FLEXray:IDOR:IDData<x>:DATA:CONDition BETWEEN|ORANge, set small values with: TRIGger:EINTerval:EVENT<x>:FLEXray:IDOR:IDData<x>:DATA:DATA1, and large values with: TRIGger:EINTerval:EVENT<x>:FLEXray:IDOR:IDData<x>:DATA:DATA2.

**:TRIGger:EINTerval:EVENT<x>:FLEXray:****IDOR:IDData<x>:DATA:HEXA**

**Function** Sets the data in each Data Field of the OR condition of the FLEXRAY bus signal trigger in hexadecimal.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:HEXA {<string>}  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<string> = Up to 16 characters by combining '0' to 'F' and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:DATA:HEXA "A9"



## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:FLEXray:**

#### **IDOR:IDData<x>:DATA:MSBLSb**

**Function** Sets the MSB/LSB bit of data in each Data Field of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:  
MSBLSb {<Nrf>, <Nrf>}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:MSBLSb?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:DATA:MSBLSB 1, 0  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDOR:IDDATA1:DATA:MSBLSB? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
DATA:MSBLSB 1, 0

### **:TRIGger:EINTerval:EVENT<x>:FLEXray:**

#### **IDOR:IDData<x>:DATA:PATtern**

**Function** Sets the data of each Data Field of the OR conditions of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:PATtern {<string>}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:PATtern?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<string> = Up to 64 characters by combining '0,' '1,'  
and 'X,' units of 1 byte)

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:DATA:PATTERN "11011111"  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:DATA:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
DATA:PATTERN "11011111"

### **:TRIGger:EINTerval:EVENT<x>:FLEXray:**

#### **IDOR:IDData<x>:DATA:SIGN**

**Function** Sets the data sign of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:SIGN {SIGN|UNSign}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:DATA:SIGN?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:DATA:SIGN SIGN  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDOR:IDDATA1:DATA:SIGN? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
DATA:SIGN SIGN

### **:TRIGger:EINTerval:EVENT<x>:FLEXray:**

#### **IDOR:IDData<x>:FID?**

**Function** Queries all settings related to each Frame ID of the OR condition of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:FID?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:FID? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDOR:IDDATA1:FID:  
CONDITION BETWEEN;ID1 100;ID2 100

### **:TRIGger:EINTerval:EVENT<x>:FLEXray:**

#### **IDOR:IDData<x>:FID:CONDition**

**Function** Sets each Frame ID data condition of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:FID:CONDition {BETween|  
DONTcare|FALSe|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:EINTerval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:FID:CONDition?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:FID:CONDITION BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:FID:CONDITION? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
FID:CONDITION BETWEEN

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDOR:IDData<x>:FID:ID<x>**

**Function** Sets each Frame ID value of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:FID:ID<x> {<NRF>}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:FID:ID<x>?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<x> of ID<x> = 1, 2  
<NRF> = 1 to 2047

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:FID:ID1 100  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:FID:ID1? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDOR:IDDATA1:FID:ID1 100

**Description**

- For :TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:FID:CONDition GTHan, set using: TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:FID:ID1.
- For :TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:FID:CONDition LTHan, set using: TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:FID:ID2.
- For :TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:FID:CONDition BETWeen|ORANge, set small values with: TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:FID:ID1, and large values with: TRIGger:EINterval:EVENT<x>:FLEXray:IDOR:IDData<x>:FID:ID2.

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDOR:IDData<x>:INDicator?**

**Function** Queries all settings related to each Indicator of the OR condition of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:INDicator?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDOR:IDDATA1:INDICATOR? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:CONDITION DONTCARE;  
NFRAME DONTCARE;PPREAMBLE DONTCARE;  
STFRAME DONTCARE;SYFRAME DONTCARE

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDOR:IDData<x>:INDicator:CONDition**

**Function** Sets each Indicator data condition of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:INDicator:  
CONDition {DONTcare|FALSE|TRUE}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:INDicator:CONDition?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:CONDITION DONTCARE  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:CONDITION? ->  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:CONDITION DONTCARE

**:TRIGger:EINterval:EVENT<x>:FLEXray:****IDOR:IDData<x>:INDicator:NFRame**

**Function** Sets each Indicator Null frame of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:INDicator:NFRame  
{DONTcare|OFF|ON}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:INDicator:NFRame?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:NFRAME DONTCARE  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:NFRAME? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:NFRAME DONTCARE

### 5.31 TRIGger Group

#### **:TRIGger:EINterval:EVENT<x>:FLEXray:**

##### **IDOR:IDData<x>:INDicator:PPReamble**

**Function** Sets each Indicator Payload preamble of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:INDicator:  
PPReamble {DONTcare|OFF|ON}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:INDicator:PPReamble?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:PPREAMBLE DONTCARE  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
IDOR:IDDATA1:INDICATOR:PPREAMBLE? ->  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:PPREAMBLE DONTCARE

#### **:TRIGger:EINterval:EVENT<x>:FLEXray:**

##### **IDOR:IDData<x>:INDicator:STFRame**

**Function** Sets each Indicator Start frame of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:INDicator:  
STFRame {DONTcare|OFF|ON}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:INDicator:STFRame?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:STFRAME DONTCARE  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:STFRAME? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:STFRAME DONTCARE

#### **:TRIGger:EINterval:EVENT<x>:FLEXray:**

##### **IDOR:IDData<x>:INDicator:SYFRame**

**Function** Sets each Indicator Synch frame of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:INDicator:  
SYFRame {DONTcare|OFF|ON}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:INDicator:SYFRame?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:SYFRAME DONTCARE  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:SYFRAME? -> :TRIGGER:  
EINTERVAL:EVENT1:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:SYFRAME DONTCARE

#### **:TRIGger:EINterval:EVENT<x>:FLEXray:**

##### **IDOR:IDData<x>:MODE**

**Function** Enables (1) or disables (0) each condition for each OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:MODE {<Boolean>}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
IDOR:IDData<x>:MODE?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:MODE ON  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:IDOR:  
IDDATA1:MODE? -> :TRIGGER:EINTERVAL:  
EVENT1:FLEXRAY:IDOR:IDDATA1:MODE 1

#### **:TRIGger:EINterval:EVENT<x>:FLEXray:**

##### **MODE**

**Function** Sets the FLEXRAY bus signal trigger mode or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
MODE {ERRor|FSTart|IDData|IDOR}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
MODE?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
MODE ERROR  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:MODE?  
-> :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
MODE ERROR

#### **:TRIGger:EINterval:EVENT<x>:FLEXray:**

##### **SOURCE**

**Function** Sets the FLEXRAY bus signal trigger source or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:FLEXray:  
SOURCE {<Nrf>}  
:TRIGger:EINterval:EVENT<x>:FLEXray:  
SOURCE?  
<x> = 1, 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:FLEXRAY:  
SOURCE? -> :TRIGGER:EINTERVAL:EVENT1:  
FLEXRAY:SOURCE 1

**:TRIGger:EINTerval:EVENT<x>:I2Cbus?**

**Function** Queries all settings related to the I<sup>2</sup>C bus trigger of the event.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS?  
-> :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
ADATA:BIT10ADDRESS:  
PATTERN "10111011111";:  
TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7ADDRESS:PATTERN "11011110";:  
TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:PATTERN "10101011";:  
TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:PATTERN "10101011";:  
TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
TYPE BIT10ADDRESS;:TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:CLOCK:SOURCE 1;:TRIGGER:  
EINTERVAL:EVENT1:I2CBUS:DATA:BYTE 1;  
CONDITION TRUE;DPOSITION 1;MODE 1;  
PATTERN1 "10101011";  
PATTERN2 "10101010";  
PATTERN3 "10101111";  
PATTERN4 "10101011";PMODE DONTCARE;  
SOURCE 1;:TRIGGER:EINTERVAL:EVENT1:  
I2CBUS:GCALL:BIT7MADDRESS:  
PATTERN "1010101";:TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:GCALL:  
SBYTE BIT7MADDRESS;:TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:MODE ADATA;NAIGNORE:  
HSMODE 1;RACCESS 1;SBYTE 1;:TRIGGER:  
EINTERVAL:EVENT1:I2CBUS:SBHSMODE:  
TYPE HSMODE

**:TRIGger:EINTerval:EVENT<x>:I2Cbus:****ADATa?**

**Function** Queries all settings related to the address of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA?  
-> :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
ADATA:BIT10ADDRESS:  
PATTERN "10111011111";:TRIGGER:  
EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7ADDRESS:PATTERN "11011110";:  
TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:PATTERN "10101011";:  
TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:PATTERN "10101011";:  
TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
TYPE BIT10ADDRESS

**:TRIGger:EINTerval:EVENT<x>:I2Cbus:****ADATa:BIT10address?**

**Function** Queries all settings related to the 10-bit address of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT10address?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT10ADDRESS? -> :TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:ADATA:BIT10ADDRESS:  
PATTERN "10111011111"

**:TRIGger:EINTerval:EVENT<x>:I2Cbus:****ADATa:BIT10address:HEXA**

**Function** Sets the 10-bit address of the I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT10address:HEXA {<String>}  
<x> = 1 or 2

<String> = 3 characters by combining '0' to 'F' and 'X' (bit 8 is the R/W bit)

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT10ADDRESS:HEXA "7AB"

**:TRIGger:EINTerval:EVENT<x>:I2Cbus:****ADATa:BIT10address:PATtern**

**Function** Sets the 10-bit address of the I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT10address:PATtern {<String>}  
:TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT10address:PATtern?  
<x> = 1 or 2

<String> = 11 characters by combining '0', '1', and 'X' (bit 8 is the R/W bit)

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT10ADDRESS:PATTERN "10111011111"  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT10ADDRESS:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT10ADDRESS:PATTERN "10111011111"

**:TRIGger:EINTerval:EVENT<x>:I2Cbus:****ADATa:BIT7Address?**

**Function** Queries all settings related to the 7-bit address of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7Address?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7ADDRESS? -> :TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:ADATA:BIT7ADDRESS:  
PATTERN "11011110"

## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

#### **ADATa:BIT7Address:HEXA**

**Function** Sets the 7-bit address of the I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7Address:HEXA {<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X'  
(bit 0 is the R/W bit)

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7ADDRESS:HEXA "DE"

### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

#### **ADATa:BIT7Address:PATtern**

**Function** Sets the 7-bit address of the I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7Address:PATtern {<String>}  
:TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7Address:PATtern?  
<x> = 1 or 2  
<String> = 8 characters by combining '0', '1', and 'X'  
(bit 0 is the R/W bit)

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7ADDRESS:PATTERN "11011110"  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7ADDRESS:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7ADDRESS:PATTERN "11011110"

### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

#### **ADATa:BIT7APsub?**

**Function** Queries all settings related to the 7-bit + Sub address of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7APsub?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
ADATA:BIT7APSUB? -> :TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:ADATA:BIT7APSUB:ADDRESS:  
PATTERN "10101011";:TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:ADATA:BIT7APSUB:SADDRESS:  
PATTERN "10101011"

### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

#### **ADATa:BIT7APsub:ADDRESS?**

**Function** Queries all settings related to the 7-bit + Sub address of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7APsub:ADDRESS?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS? -> :TRIGGER:  
EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:PATTERN "10101011"

### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

#### **ADATa:BIT7APsub:ADDRESS:HEXA**

**Function** Sets the 7-bit address of the 7-bit + Sub address of the I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7APsub:ADDRESS:HEXA {<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X'  
(bit 0 is the R/W bit)

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
ADATA:BIT7APSUB:ADDRESS:HEXA "AB"

### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

#### **ADATa:BIT7APsub:ADDRESS:PATtern**

**Function** Sets the 7-bit address of the 7-bit + Sub address of the I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7APsub:ADDRESS:PATtern  
{<String>}  
:TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7APsub:ADDRESS:PATtern?  
<x> = 1 or 2  
<String> = 8 characters by combining '0', '1', and 'X'  
(bit 0 is the R/W bit)

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:PATTERN "10101011"  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:PATTERN "10101011"

### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

#### **ADATa:BIT7APsub:SADDRESS?**

**Function** Queries all settings related to the Sub address of the 7-bit + Sub address of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7APsub:SADDRESS?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS? -> :TRIGGER:  
EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:PATTERN "10101011"

**:TRIGger:EINTerval:EVENT<x>:I2Cbus:****ADATa:BIT7APsub:SADdress:HEXA**

**Function** Sets the Sub address of the 7-bit + Sub address of the I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7APsub:SADdress:HEXA  
{<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:HEXA "EF"

**:TRIGger:EINTerval:EVENT<x>:I2Cbus:****ADATa:BIT7APsub:SADdress:PATtern**

**Function** Sets the Sub address of the 7-bit + Sub address of the I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7APsub:SADdress:PATtern  
{<String>}  
:TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:BIT7APsub:SADdress:PATtern?  
<x> = 1 or 2  
<String> = 8 characters by combining '0','1,' and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:PATTERN "10101011"  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:PATTERN?  
-> :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
ADATA:BIT7APSUB:SADDRESS:  
PATTERN "10101011"

**:TRIGger:EINTerval:EVENT<x>:I2Cbus:****ADATa:TYPE**

**Function** Sets the address type of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:TYPE {BIT10address|BIT7Address|  
BIT7APsub}  
:TRIGger:EINTerval:EVENT<x>:I2Cbus:  
ADATa:TYPE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
ADATA:TYPE BIT10ADDRESS  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:ADATA:  
TYPE? -> :TRIGGER:EINTERVAL:EVENT1:  
I2CBUS:ADATA:TYPE BIT10ADDRESS

**:TRIGger:EINTerval:EVENT<x>:I2Cbus:****CLOCK?**

**Function** Queries all settings related to the clock of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
CLOCK?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:CLOCK?  
-> :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
CLOCK:SOURCE 1

**:TRIGger:EINTerval:EVENT<x>:I2Cbus:****CLOCK:SOURCE**

**Function** Sets the clock trace of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
CLOCK:SOURCE {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:I2Cbus:  
CLOCK:SOURCE?  
<x> = 1 or 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:CLOCK:  
SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:CLOCK:  
SOURCE? -> :TRIGGER:EINTERVAL:EVENT1:  
I2CBUS:CLOCK:SOURCE 1

**:TRIGger:EINTerval:EVENT<x>:I2Cbus:****DATA?**

**Function** Queries all settings related to the data of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
DATA?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
DATA? -> :TRIGGER:EINTERVAL:EVENT1:  
I2CBUS:DATA:BYTE 1;CONDITION TRUE;  
DPOSITION 1;MODE 1;PATTERN1 "10101011";  
PATTERN2 "10101010";  
PATTERN3 "10101111";  
PATTERN4 "10101011";PMODE DONTCARE;  
SOURCE 1

### 5.31 TRIGger Group

#### **:TRIGger:EINterval:EVENT<x>:I2Cbus:**

##### **DATA:BYTE**

**Function** Sets the number of data bytes of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:I2Cbus:  
DATA:BYTE {<NRf>}  
:TRIGger:EINterval:EVENT<x>:I2Cbus:  
DATA:BYTE?  
<x> = 1 or 2  
<NRf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
BYTE 1  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
BYTE? -> :TRIGGER:EINTERVAL:EVENT1:  
I2CBUS:DATA:BYTE 1

#### **:TRIGger:EINterval:EVENT<x>:I2Cbus:**

##### **DATA:CONDition**

**Function** Sets the determination method (match or not match) of the data of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:I2Cbus:  
DATA:CONDition {FALSE|TRUE}  
:TRIGger:EINterval:EVENT<x>:I2Cbus:  
DATA:CONDition?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
CONDITION TRUE  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
CONDITION? -> :TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:DATA:CONDITION TRUE

#### **:TRIGger:EINterval:EVENT<x>:I2Cbus:**

##### **DATA:DPOSITion**

**Function** Sets the position for comparing the data pattern of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:I2Cbus:  
DATA:DPOSITion {<NRf>}  
:TRIGger:EINterval:EVENT<x>:I2Cbus:  
DATA:DPOSITion?  
<x> = 1 or 2  
<NRf> = 0 to 9999

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
DPOSITION 1  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
DPOSITION? -> :TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:DATA:DPOSITION 1

#### **:TRIGger:EINterval:EVENT<x>:I2Cbus:**

##### **DATA:HEXA<x>**

**Function** Sets the data of the I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:EINterval:EVENT<x>:I2Cbus:  
DATA:HEXA<x> {<String>}  
<x> of EVENT<x> = 1 or 2  
<x> of HEXA<x> = 1 to 4  
<String> = 2 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
HEXA1 "AB"

#### **:TRIGger:EINterval:EVENT<x>:I2Cbus:**

##### **DATA:MODE**

**Function** Enables/Disables the data conditions of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:I2Cbus:  
DATA:MODE {<Boolean>}  
:TRIGger:EINterval:EVENT<x>:I2Cbus:  
DATA:MODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
MODE ON  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
MODE? -> :TRIGGER:EINTERVAL:EVENT1:  
I2CBUS:DATA:MODE 1

#### **:TRIGger:EINterval:EVENT<x>:I2Cbus:**

##### **DATA:PATTern<x>**

**Function** Sets the data of the I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:I2Cbus:  
DATA:PATTern<x> {<String>}  
:TRIGger:EINterval:EVENT<x>:I2Cbus:  
DATA:PATTern<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of PATTern<x> = 1 to 4  
<String> = 8 characters by combining '0','1,' and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
PATTERN1 "10101011"  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
PATTERN1? -> :TRIGGER:EINTERVAL:EVENT1:  
I2CBUS:DATA:PATTERN1 "10101011"

**:TRIGger:EINTerval:EVENT<x>:I2CBus:****DATA:PMODE**

**Function** Sets the pattern comparison start position mode of the data of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2CBus:  
DATA:PMODE {DONTcare|SElect}  
:TRIGger:EINTerval:EVENT<x>:I2CBus:  
DATA:PMODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
PMODE SELECT  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:DATA:  
PMODE? -> :TRIGGER:EINTERVAL:EVENT1:  
I2CBUS:DATA:PMODE SELECT

**:TRIGger:EINTerval:EVENT<x>:I2CBus:****DATA:SOURCE**

**Function** Sets the data trace of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2CBus:  
DATA:SOURce {<NRf>}  
:TRIGger:EINTerval:EVENT<x>:I2CBus:  
DATA:SOURce?  
<x> = 1 or 2  
<NRf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
DATA:SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
DATA:SOURCE? -> :TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:DATA:SOURCE 1

**:TRIGger:EINTerval:EVENT<x>:I2CBus:****GCALL?**

**Function** Queries all settings related to the general call of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2CBus:  
GCALL?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:GCALL?  
-> :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
GCALL:BIT7MADDRESS:PATTERN "1010101";  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:GCALL:  
SBYTE BIT7MADDRESS

**:TRIGger:EINTerval:EVENT<x>:I2CBus:****GCALL:BIT7maddress?**

**Function** Queries all settings related to the 7-bit master address of the general call of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2CBus:  
GCALL:BIT7maddress?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:GCALL:  
BIT7MADDRESS? -> :TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:GCALL:BIT7MADDRESS:  
PATTERN "1010101"

**:TRIGger:EINTerval:EVENT<x>:I2CBus:****GCALL:BIT7maddress:HEXA**

**Function** Sets the 7-bit master address of the general call of the I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2CBus:  
GCALL:BIT7maddress:HEXA {<String>}  
<x> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X'  
(bit 0 is fixed 1)

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:GCALL:  
BIT7MADDRESS:HEXA "AB"

**:TRIGger:EINTerval:EVENT<x>:I2CBus:****GCALL:BIT7maddress:PATtern**

**Function** Sets the 7-bit master address of the general call of the I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2CBus:  
GCALL:BIT7maddress:PATtern {<String>}  
:TRIGger:EINTerval:EVENT<x>:I2CBus:  
GCALL:BIT7maddress:PATtern?  
<x> = 1 or 2

<String> = 7 characters by combining '0,' '1,' and 'X'  
**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN "1010101"  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN "1010101"



### 5.31 TRIGger Group

#### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

##### **GCALl:SBYTe (Second Byte)**

**Function** Sets the second byte type of the general call of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
GCALl:SBYTe {BIT7maddress|DONTcare|H04|H06}  
:TRIGger:EINTerval:EVENT<x>:I2Cbus:  
GCALl:SBYTe?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:GCALL:  
SBYTE BIT7MADDRESS  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:GCALL:  
SBYTE? -> :TRIGGER:EINTERVAL:EVENT1:  
I2CBUS:GCALL:SBYTE BIT7MADDRESS

#### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

##### **MODE**

**Function** Sets the trigger mode of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
MODE {ADATa|ESTart|GCALl|NAIGNore|SBHSmode}  
:TRIGger:EINTerval:EVENT<x>:I2Cbus:  
MODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
MODE ADATA  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:MODE?  
-> :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
MODE ADATA

#### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

##### **NAIGNore?**

**Function** Queries all settings related to the NON ACK ignore mode of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
NAIGNore?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
NAIGNORE? -> :TRIGGER:EINTERVAL:EVENT1:  
I2CBUS:NAIGNORE:HSMODE 1;RACCESS 1;  
SBYTE 1

#### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

##### **NAIGNore:HSMode**

**Function** Sets whether to ignore NON ACK in high speed mode of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
NAIGNore:HSMode {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:I2Cbus:  
NAIGNore:HSMode?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
NAIGNORE:HSMODE ON  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
NAIGNORE:HSMODE? -> :TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:NAIGNORE:HSMODE 1

#### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

##### **NAIGNore:RACcess**

**Function** Sets whether to ignore NON ACK in read access mode of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
NAIGNore:RACcess {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:I2Cbus:  
NAIGNore:RACcess?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
NAIGNORE:RACCESS ON  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
NAIGNORE:RACCESS? -> :TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:NAIGNORE:RACCESS 1

#### **:TRIGger:EINTerval:EVENT<x>:I2Cbus:**

##### **NAIGNore:SBYTe (Start Byte)**

**Function** Sets whether to ignore NON ACK in the start byte of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:I2Cbus:  
NAIGNore:SBYTe {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:I2Cbus:  
NAIGNore:SBYTe?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
NAIGNORE:SBYTE ON  
:TRIGGER:EINTERVAL:EVENT1:I2CBUS:  
NAIGNORE:SBYTE? -> :TRIGGER:EINTERVAL:  
EVENT1:I2CBUS:NAIGNORE:SBYTE 1



### 5.31 TRIGger Group

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **ERROR:CHECKsum**

**Function** Sets the LIN bus signal trigger Checksum error or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
ERROR:CHECKsum {<Boolean>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
ERROR:CHECKsum?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:ERROR:  
CHECKSUM ON  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:ERROR:  
CHECKSUM? -> :TRIGGER:EINTERVAL:EVENT1:  
LINBUS:ERROR:CHECKSUM 1

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **ERROR:DSIZE**

**Function** Sets the number of error data bytes for the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
ERROR:DSIZE {<Nrf>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
ERROR:DSIZE?  
<x> = 1, 2  
<Nrf> = 1 to 8

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:ERROR:  
DSIZE 1  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:ERROR:  
DSIZE? -> :TRIGGER:EINTERVAL:EVENT1:  
LINBUS:ERROR:DSIZE 1

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **ERROR:FRAMing**

**Function** Sets the LIN bus signal trigger Framing error or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
ERROR:FRAMing {<Boolean>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
ERROR:FRAMing?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:ERROR:  
FRAMING ON  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:ERROR:  
FRAMING? -> :TRIGGER:EINTERVAL:EVENT1:  
LINBUS:ERROR:FRAMING 1

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **ERROR:PARity**

**Function** Sets the LIN bus signal trigger Parity error or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
ERROR:PARity {<Boolean>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
ERROR:PARity?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:ERROR:  
PARITY ON  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:ERROR:  
PARITY? -> :TRIGGER:EINTERVAL:EVENT1:  
LINBUS:ERROR:PARITY 1

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **ERROR:SYNCh**

**Function** Sets the LIN bus signal trigger Synch error or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
ERROR:SYNCh {<Boolean>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
ERROR:SYNCh?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:ERROR:  
SYNCH ON  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:ERROR:  
SYNCH? -> :TRIGGER:EINTERVAL:EVENT1:  
LINBUS:ERROR:SYNCH 1

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **ERROR:TOUT**

**Function** Sets the LIN bus signal trigger Timeout error or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
ERROR:TOUT {<Boolean>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
ERROR:TOUT?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:ERROR:  
TOUT ON  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:ERROR:  
TOUT? -> :TRIGGER:EINTERVAL:EVENT1:  
LINBUS:ERROR:TOUT 1

**:TRIGger:EINTerval:EVENT<x>:LINBus:****IDData?**

**Function** Queries all settings related to the IDData of the LIN bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LINBus:  
IDData?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA? -> :TRIGGER:EINTERVAL:EVENT1:  
LINBUS:IDDATA:DATA:BORDER BIG;  
CONDITION DONTCARE;DATA1  
0.0000000E+00;DATA2 255.000000E+00;  
DSIZE 8;MSBLSB 7, 0;PATTERN "XXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXX";SIGN UNSIGN;:TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDDATA:ID:  
PATTERN "XXXXXX"

**:TRIGger:EINTerval:EVENT<x>:LINBus:****IDData:DATA?**

**Function** Queries all settings related to the Data Field of the LIN bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LINBus:  
IDData:DATA?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA? -> :TRIGGER:EINTERVAL:  
EVENT1:LINBUS:IDDATA:DATA:BORDER BIG;  
CONDITION DONTCARE;DATA1 0.0000000E+00;  
DATA2 255.000000E+00;DSIZE 8;MSBLSB 7, 0;  
PATTERN "XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX";  
SIGN UNSIGN

**:TRIGger:EINTerval:EVENT<x>:LINBus:****IDData:DATA:BORDER**

**Function** Sets the data byte order of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LINBus:  
IDData:DATA:BORDER {BIG|LITtle}  
:TRIGger:EINTerval:EVENT<x>:LINBus:  
IDData:DATA:BORDER?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:BORDER BIG  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:BORDER? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDDATA:DATA:  
BORDER BIG

**:TRIGger:EINTerval:EVENT<x>:LINBus:****IDData:DATA:CONDition**

**Function** Sets the data conditions of the Data Field of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LINBus:  
IDData:DATA:CONDition {BETween|  
DONTcare|FALSe|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:EINTerval:EVENT<x>:LINBus:  
IDData:DATA:CONDition?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:CONDITION BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:CONDITION? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDDATA:DATA:  
CONDITION BETWEEN

**:TRIGger:EINTerval:EVENT<x>:LINBus:****IDData:DATA:DATA<x>**

**Function** Sets the comparison data of the LIN bus signal trigger data or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LINBus:  
IDData:DATA:DATA<x> {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:LINBus:  
IDData:DATA:DATA<x>?  
<x> of EVENT<x> = 1, 2  
DATA<x>□<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:DATA1 1  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:DATA1? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDDATA:DATA:  
DATA1 1.0000000E+00

**Description**

- For :TRIGger:EINTerval:EVENT<x>:LINBus:IDData:DATA:CONDition GTHan, set using: TRIGger:EINTerval:EVENT<x>:LINBus:IDData:DATA:DATA1.
- For :TRIGger:EINTerval:EVENT<x>:LINBus:IDData:DATA:CONDition LTHan, set using: TRIGger:EINTerval:EVENT<x>:LINBus:IDData:DATA:DATA2.
- For :TRIGger:EINTerval:EVENT<x>:LINBus:IDData:DATA:CONDition BETween|ORANge, set small values with: TRIGger:EINTerval:EVENT<x>:LINBus:IDData:DATA:DATA1, and large values with: TRIGger:EINTerval:EVENT<x>:LINBus:IDData:DATA:DATA2.

## 5.31 TRIGger Group

### **:TRIGger:EINterval:EVENT<x>:LINBus:**

#### **IDData:DATA:DSIZE**

**Function** Sets the number of bytes of data in the Data Field of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
IDData:DATA:DSIZE {<Nrf>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
IDData:DATA:DSIZE?  
<x> = 1, 2  
<Nrf> = 1 to 8

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:DSIZE 1  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:DSIZE? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDDATA:DATA:  
DSIZE 1

### **:TRIGger:EINterval:EVENT<x>:LINBus:**

#### **IDData:DATA:HEXA**

**Function** Sets the data in the Data Field of the LIN bus signal trigger in hexadecimal.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
IDData:DATA:HEXA {<string>}  
<x> = 1, 2  
<string> = Up to 16 characters by combining '0' to 'F',  
and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:HEXA "A9"

### **:TRIGger:EINterval:EVENT<x>:LINBus:**

#### **IDData:DATA:MSBLSb**

**Function** Sets the MSB/LSB bit of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
IDData:DATA:MSBLSb {<Nrf>, <Nrf>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
IDData:DATA:MSBLSb?  
<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:MSBLSB 1, 0  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:MSBLSB? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDDATA:DATA:  
MSBLSB 1, 0

### **:TRIGger:EINterval:EVENT<x>:LINBus:**

#### **IDData:DATA:PATtern**

**Function** Sets the data of the Data Field of the LIN bus signal trigger in binary or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
IDData:DATA:PATtern {<string>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
IDData:DATA:PATtern?  
<x> = 1, 2  
<string> = Up to 64 characters by combining '0', '1',  
and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:PATTERN "11011111"  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDDATA:DATA:  
PATTERN "11011111"

### **:TRIGger:EINterval:EVENT<x>:LINBus:**

#### **IDData:DATA:SIGN**

**Function** Sets the data sign of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
IDData:DATA:SIGN {SIGN|UNSign}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
IDData:DATA:SIGN?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:SIGN SIGN  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:DATA:SIGN? -> :TRIGGER:EINTERVAL:  
EVENT1:LINBUS:IDDATA:DATA:SIGN SIGN

### **:TRIGger:EINterval:EVENT<x>:LINBus:**

#### **IDData:ID?**

**Function** Queries all settings related to the ID of the LIN bus signal trigger.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
IDData:ID?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDDATA:ID? -> :TRIGGER:EINTERVAL:  
EVENT1:LINBUS:IDDATA:ID:  
PATTERN "101111"



### 5.31 TRIGger Group

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **IDOR:IDData<x>:DATA:BORDER**

**Function** Sets the byte order of each data of the OR conditions of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:BORDER {BIG|LITtle}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:BORDER?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:DATA:BORDER BIG  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:DATA:BORDER? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDOR:IDDATA1:  
DATA:BORDER BIG

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **IDOR:IDData<x>:DATA:CONDition**

**Function** Sets the data condition of the Data Field of each OR condition of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:CONDition {BETween|  
DONTcare|FALSe|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:CONDition?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:DATA:CONDITION BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:DATA:CONDITION? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDOR:IDDATA1:  
DATA:CONDITION BETWEEN

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **IDOR:IDData<x>:DATA:DATA<x>**

**Function** Sets the comparison data of each data of the OR conditions of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:DATA<x> {<NRf>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:DATA<x>?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<x> of DATA<x> = 1, 2  
<NRf> = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:DATA:DATA1 1  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDOR:IDDATA1:DATA:DATA1? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDOR:IDDATA1:  
DATA:DATA1 1.0000000E+00

**Description** • For :TRIGger:EINterval:EVENT<x>:LINBus:IDOR:  
IDData<x>:DATA:CONDition GTHan, set using:  
TRIGger:EINterval:EVENT<x>:LINBus:IDOR:  
IDData<x>:DATA:DATA1.  
• For :TRIGger:EINterval:EVENT<x>:LINBus:IDOR:  
IDData<x>:DATA:CONDition LTHan, set using:  
TRIGger:EINterval:EVENT<x>:LINBus:IDOR:  
IDData<x>:DATA:DATA2.  
• For :TRIGger:EINterval:EVENT<x>:LINBus:IDOR:  
IDData<x>:DATA:CONDition BETWEE|ORANge,  
set small values with: TRIGger:EINterval:  
EVENT<x>:LINBus:IDOR:IDData<x>:DATA:  
DATA1, and large values with: TRIGger:EINterval:  
EVENT<x>:LINBus:IDOR:IDData<x>:DATA:DATA2.

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **IDOR:IDData<x>:DATA:HEXA**

**Function** Sets the data in each Data Field of the OR condition of the LIN bus signal trigger in hexadecimal.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:HEXA {<string>}  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<string> = Up to 16 characters by combining '0' to 'F'  
and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:DATA:HEXA "A9"

**:TRIGger:EINTerval:EVENT<x>:LINBus:****IDOR:IDData<x>:DATA:MSBLsb**

**Function** Sets the MSB/LSB bit of each data of the OR condition of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:  
MSBLsb {<Nrf>, <Nrf>}  
:TRIGger:EINTerval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:MSBLsb?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:DATA:MSBLSB 1, 0  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:DATA:MSBLSB? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDOR:IDDATA1:  
DATA:MSBLSB 1, 0

**:TRIGger:EINTerval:EVENT<x>:LINBus:****IDOR:IDData<x>:DATA:PATtern**

**Function** Sets the data of each Data Field of the OR conditions of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:PATtern {<string>}  
:TRIGger:EINTerval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:PATtern?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<string> =Up to 64 characters by combining'0', '1',  
and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:DATA:PATTERN "11011111"  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:DATA:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDOR:IDDATA1:  
DATA:PATTERN "11011111"

**:TRIGger:EINTerval:EVENT<x>:LINBus:****IDOR:IDData<x>:DATA:SIGN**

**Function** Sets the sign of each data of the OR conditions of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:SIGN {SIGN|UNSign}  
:TRIGger:EINTerval:EVENT<x>:LINBus:  
IDOR:IDData<x>:DATA:SIGN?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:DATA:SIGN SIGN  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDOR:IDDATA1:DATA:SIGN? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDOR:IDDATA1:  
DATA:SIGN SIGN

**:TRIGger:EINTerval:EVENT<x>:LINBus:****IDOR:IDData<x>:ID?**

**Function** Queries all settings related to each ID of the OR condition of the LIN bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LINBus:  
IDOR:IDData<x>:ID?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:ID? -> :TRIGGER:EINTERVAL:  
EVENT1:LINBUS:IDOR:IDDATA1:ID:  
PATTERN "101111"

**:TRIGger:EINTerval:EVENT<x>:LINBus:****IDOR:IDData<x>:ID:HEXA**

**Function** Sets each ID of the OR conditions of the LIN bus signal trigger in hexadecimal.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LINBus:  
IDOR:IDData<x>:ID:HEXA {<string>}  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<string> = 2 characters by combining'0' to 'F', and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:ID:HEXA "2A"

**:TRIGger:EINTerval:EVENT<x>:LINBus:****IDOR:IDData<x>:ID:PATtern**

**Function** Sets each ID of the OR conditions of the LIN bus signal trigger binary or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LINBus:  
IDOR:IDData<x>:ID:PATtern {<string>}  
:TRIGger:EINTerval:EVENT<x>:LINBus:  
IDOR:IDData<x>:ID:PATtern?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<string> = 6 characters by combining '0', '1', and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:ID:PATTERN "101111"  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
IDOR:IDDATA1:ID:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:LINBUS:IDOR:IDDATA1:  
ID:PATTERN "101111"



### 5.31 TRIGger Group

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **IDOR:IDData<x>:MODE**

**Function** Enables (1) or disables (0) each condition for each OR condition of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
IDOR:IDData<x>:MODE {<Boolean>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
IDOR:IDData<x>:MODE?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:MODE ON  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:IDOR:  
IDDATA1:MODE? -> :TRIGGER:EINTERVAL:  
EVENT1:LINBUS:IDOR:IDDATA1:MODE 1

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **MODE**

**Function** Sets the LIN bus signal trigger mode or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
MODE {BSYNch|ERRor|IDData|IDOR}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
MODE?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
MODE BSYNCH  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:MODE?  
-> :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
MODE BSYNCH

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **REvision**

**Function** Sets the LIN bus signal trigger revision (1.3 or 2.0) or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
REvision {LIN1\_3|LIN2\_0}  
:TRIGger:EINterval:EVENT<x>:LINBus:REvision?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
REVISION LIN1\_3  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
REVISION? -> :TRIGGER:EINTERVAL:EVENT1:  
LINBUS:REVISION LIN1\_3

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **SOURCE**

**Function** Sets the LIN bus signal trigger source or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
SOURCE {<Nrf>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
SOURCE?  
<x> = 1, 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
SOURCE? -> :TRIGGER:EINTERVAL:EVENT1:  
LINBUS:SOURCE 1

#### **:TRIGger:EINterval:EVENT<x>:LINBus:**

##### **SPOint**

**Function** Sets the LIN bus signal trigger sample point or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LINBus:  
SPOint {<Nrf>}  
:TRIGger:EINterval:EVENT<x>:LINBus:  
SPOint?  
<x> = 1, 2  
<Nrf> = 18.8 to 90.6(%)

**Example** :TRIGGER:EINTERVAL:EVENT1:LINBUS:  
SPOINT 18.8  
:TRIGGER:EINTERVAL:EVENT1:LINBUS:  
SPOINT? -> :TRIGGER:EINTERVAL:EVENT1:  
LINBUS:SPOINT 18.8E+00

**:TRIGger:EINTerval:EVENT<x>:LOGic?**

**Function** Queries all settings related to the logic trigger of the event.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC? ->  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:CLOCK:  
POLARITY RISE;SOURCE A0;:TRIGGER:  
EINTERVAL:EVENT1:LOGIC:ESTATE:  
POLARITY RISE;SOURCE A0;:TRIGGER:  
EINTERVAL:EVENT1:LOGIC:I2CBUS:ADATA:  
BIT10ADDRESS:PATTERN "XXXXXXXXXX";:  
TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7ADDRESS:  
PATTERN "XXXXXXXX";:TRIGGER:EINTERVAL:  
EVENT1:LOGIC:I2CBUS:ADATA:BIT7APSUB:  
ADDRESS:PATTERN "XXXXXXXX";:TRIGGER:  
EINTERVAL:EVENT1:LOGIC:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:PATTERN "XXXXXXXX";:  
TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
ADATA:TYPE BIT7ADDRESS;:TRIGGER:  
EINTERVAL:EVENT1:LOGIC:I2CBUS:CLOCK:  
SOURCE A0;:TRIGGER:EINTERVAL:EVENT1:  
LOGIC:I2CBUS:DATA:BYTE 1;  
CONDITION TRUE;DPOSITION 0;MODE 0;  
PATTERN1 "XXXXXXXX";PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";PATTERN4 "XXXXXXXX";  
PMODE DONTCARE;SOURCE A1;:TRIGGER:  
EINTERVAL:EVENT1:LOGIC:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN "XXXXXXXX1";:  
TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
GCALL:SBYTE DONTCARE....

**:TRIGger:EINTerval:EVENT<x>:LOGic:  
CLOCK?**

**Function** Queries all settings related to the logic trigger clock.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
CLOCK?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
CLOCK? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:CLOCK:POLARITY RISE;SOURCE A0

**:TRIGger:EINTerval:EVENT<x>:LOGic:****CLOCK:POLarity**

**Function** Sets the polarity of the logic trigger clock or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
CLOCK:POLarity {FALL|RISE}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
CLOCK:POLarity?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
CLOCK:POLARITY FALL  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
CLOCK:POLARITY? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:CLOCK:POLARITY FALL

**:TRIGger:EINTerval:EVENT<x>:LOGic:****CLOCK:SOURce**

**Function** Sets the clock source of the logic trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
CLOCK:SOURce {A<y>|B<y>|C<y>|D<y>|  
DONTcare}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
CLOCK:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
CLOCK:SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
CLOCK:SOURCE? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:CLOCK:SOURCE A0

**Description** For the SB5310, only {A<y>|DONTcare} are valid.

**:TRIGger:EINTerval:EVENT<x>:LOGic:****ESTate?**

**Function** Queries all settings related to the edge/state trigger of the logic.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
ESTate?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
ESTATE? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:ESTATE:POLARITY RISE;SOURCE A0

### 5.31 TRIGger Group

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **ESTate:POLarity**

**Function** Sets the polarity of the edge/state trigger of the logic or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
ESTate:POLarity {ENTer|EXIT|FALL|RISE}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
ESTate:POLarity?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
ESTATE:POLARITY ENTER  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
ESTATE:POLARITY? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:  
ESTATE:POLARITY ENTER

**Description** • {ENTer|EXIT} is valid if :TRIGger:EINTerval:  
EVENT<x>:TYPE LState.  
• {FALL|RISE} is valid if not :TRIGger:EINTerval:  
EVENT<x>:TYPE LState.

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **ESTate:SOURce**

**Function** Sets the edge/state trigger source of the logic or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
ESTate:SOURce {A<y>|B<y>|C<y>|D<y>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
ESTate:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
ESTATE:SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
ESTATE:SOURCE? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:ESTATE:SOURCE A0

**Description** For the SB5310, only {A<y>} are valid.

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **I2CBus?**

**Function** Queries all settings related to the logic I<sup>2</sup>C bus trigger for each event.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT10ADDRESS:  
PATTERN "10111011111";:TRIGGER:  
EINTERVAL:EVENT1:LOGIC:I2CBUS:ADATA:  
BIT7ADDRESS:PATTERN "11011110";:  
TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
ADATA:BIT7APSUB:ADDRESS:  
PATTERN "10101011";:TRIGGER:EINTERVAL:  
EVENT1:LOGIC:I2CBUS:ADATA:BIT7APSUB:  
SADDRESS:PATTERN "10101011";:  
TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
ADATA:TYPE BIT7ADDRESS;:TRIGGER:  
EINTERVAL:EVENT1:LOGIC:I2CBUS:CLOCK:  
SOURCE A0;:TRIGGER:EINTERVAL:EVENT1:  
LOGIC:I2CBUS:DATA:BYTE 1;  
CONDITION FALSE;DPOSITION 1;MODE 1;  
PATTERN1 "10101011";  
PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";PMODE DONTCARE;  
SOURCE A0;:TRIGGER:EINTERVAL:EVENT1:  
LOGIC:I2CBUS:GCALL:BIT7MADDRESS:  
PATTERN "1010101";:TRIGGER:EINTERVAL:  
EVENT1:LOGIC:I2CBUS:GCALL:  
SBYTE BIT7MADDRESS;:TRIGGER:EINTERVAL:  
EVENT1:LOGIC:I2CBUS:MODE ADATA;  
NAIGNORE:HSMODE 1;RACCESS 1;SBYTE 1;:  
TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
SBHSMODE:TYPE HSMODE

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:ADATa?**

Function Queries all settings related to the address of the logic I<sup>2</sup>C bus trigger.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:ADATa?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATa?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATa:BIT10ADDRESS:  
PATTERN "10111011111";:TRIGGER:  
EINTERVAL:EVENT1:LOGIC:I2CBUS:ADATa:  
BIT7ADDRESS:PATTERN "11011110";:  
TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
ADATa:BIT7APSUB:ADDRESS:  
PATTERN "10101011";:TRIGGER:EINTERVAL:  
EVENT1:LOGIC:I2CBUS:ADATa:BIT7APSUB:  
SADDRESS:PATTERN "10101011";:TRIGGER:  
EINTERVAL:EVENT1:LOGIC:I2CBUS:ADATa:  
TYPE BIT7ADDRESS

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:ADATa:BIT10address?**

Function Queries all settings related to the 10-bit address of the logic I<sup>2</sup>C bus trigger.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT10address?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
ADATa:BIT10ADDRESS?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATa:BIT10ADDRESS:  
PATTERN "10111011111"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:ADATa:BIT10address:HEXA**

Function Sets the 10-bit address of the logic I<sup>2</sup>C bus trigger in hexadecimal notation.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT10address:HEXA  
{<string>}  
<x> = 1 or 2  
<string> = combination of 3 characters (0-F, and X),  
where bit 8 is R/W bit.

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATa:BIT10ADDRESS:HEXA "7AB"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:ADATa:BIT10address:PATtern**

Function Sets the 10-bit address of the logic I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT10address:PATtern  
{<string>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT10address:PATtern?  
<x> = 1 or 2  
<string> = combination of 11 characters (0, 1, and X),  
where bit 8 is R/W bit.

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATa:BIT10ADDRESS:  
PATTERN "10111011111"  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATa:BIT10ADDRESS:PATTERN?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATa:BIT10ADDRESS:  
PATTERN "10111011111"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:ADATa:BIT7Address?**

Function Queries all settings related to the 7-bit address of the logic I<sup>2</sup>C bus trigger.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT7Address?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATa:BIT7ADDRESS?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATa:BIT7ADDRESS:PATTERN  
"11011110"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:ADATa:BIT7Address:HEXA**

Function Sets the 7-bit address of the logic I<sup>2</sup>C bus trigger in hexadecimal notation.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT7Address:HEXA  
{<string>}  
<x> = 1 or 2  
<string> = combination of 2 characters (0-F, and X),  
where bit 0 is R/W bit.

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATa:BIT7ADDRESS:HEXA "DE"

## 5.31 TRIGger Group

### **:TRIGger:EINterval:EVENT<x>:LOGic:**

#### **I2CBus:ADATa:BIT7AdDress:PATtern**

Function Sets the 7-bit address of the logic I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

Syntax :TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT7AdDress:  
PATtern {<string>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT7AdDress:PATtern?  
<x> = 1 or 2  
<string> = combination of 8 characters (0, 1, and X),  
where bit 0 is R/W bit.

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7ADDRESS:PATTERN  
"11011110"  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7ADDRESS:PATTERN?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7ADDRESS:  
PATTERN "11011110"

### **:TRIGger:EINterval:EVENT<x>:LOGic:**

#### **I2CBus:ADATa:BIT7APsub:**

Function Queries all settings related to the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger.

Syntax :TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT7APsub?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7APSUB?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:ADDRESS:  
PATTERN "10101011";:TRIGGER:EINTERVAL:  
EVENT1:LOGIC:I2CBUS:ADATA:BIT7APSUB:  
SADDRESS:PATTERN "10101011"

### **:TRIGger:EINterval:EVENT<x>:LOGic:**

#### **I2CBus:ADATa:BIT7APsub:ADDRess?**

Function Queries all settings related to the 7-bit address of the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger.

Syntax :TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT7APsub:ADDRess?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:ADDRESS?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:ADDRESS:  
PATTERN "10101011"

### **:TRIGger:EINterval:EVENT<x>:LOGic:**

#### **I2CBus:ADATa:BIT7APsub:ADDRess:HEXA**

Function Sets the 7-bit address of the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger in hexadecimal notation.

Syntax :TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT7APsub:ADDRess:  
HEXA {<string>}  
<x> = 1 or 2  
<string> = combination of 2 characters (0-F, and X),  
where bit 0 is R/W bit.

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
ADATA:BIT7APSUB:ADDRESS:HEXA "AB"

### **:TRIGger:EINterval:EVENT<x>:LOGic:**

#### **I2CBus:ADATa:BIT7APsub:ADDRess:PATtern**

Function Sets the 7-bit address of the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

Syntax :TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT7APsub:ADDRess:  
PATtern {<string>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT7APsub:ADDRess:PATtern?  
<x> = 1 or 2  
<string> = combination of 8 characters (0, 1, and X),  
where bit 0 is R/W bit.

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:ADDRESS:  
PATTERN "10101011"  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
ADATA:BIT7APSUB:ADDRESS:PATTERN?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:ADDRESS:  
PATTERN "10101011"

### **:TRIGger:EINterval:EVENT<x>:LOGic:**

#### **I2CBus:ADATa:BIT7APsub:SADDRess?**

Function Queries all settings related to the sub address of the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger.

Syntax :TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:ADATa:BIT7APsub:SADDRess?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:SADDRESS?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:SADDRESS:  
PATTERN "10101011"

**:TRIGger:EINterval:EVENT<x>:LOGic:****I2Cbus:ADATa:BIT7APsub:SADDRESS:HEXA**

Function Sets the sub address of the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger in hexadecimal notation.

Syntax :TRIGger:EINterval:EVENT<x>:LOGic:  
I2Cbus:ADATa:BIT7APsub:SADDRESS:HEXA  
{<string>}  
<x> = 1 or 2  
<string> = Combination of up to 2 characters (0-F and X)

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
ADATA:BIT7APSUB:SADDRESS:HEXA "EF"

**:TRIGger:EINterval:EVENT<x>:LOGic:****I2Cbus:ADATa:BIT7APsub:SADDRESS:****PATtern**

Function Sets the sub address of the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

Syntax :TRIGger:EINterval:EVENT<x>:LOGic:  
I2Cbus:ADATa:BIT7APsub:SADDRESS:  
PATtern {<string>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
I2Cbus:ADATa:BIT7APsub:SADDRESS:  
PATtern?  
<x> = 1 or 2  
<string> = combination of 8 characters (0, 1, and X).

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:SADDRESS:  
PATTERN "10101011"  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
ADATA:BIT7APSUB:SADDRESS:PATTERN?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:SADDRESS:  
PATTERN "10101011"

**:TRIGger:EINterval:EVENT<x>:LOGic:****I2Cbus:ADATa:TYPE**

Function Sets the address type of the logic I<sup>2</sup>C bus trigger or queries the current setting.

Syntax :TRIGger:EINterval:EVENT<x>:LOGic:  
I2Cbus:ADATa:TYPE {BIT10address|  
BIT7Address|BIT7APsub}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
I2Cbus:ADATa:TYPE?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:TYPE BIT10ADDRESS  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:TYPE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:ADATA:TYPE BIT10ADDRESS

**:TRIGger:EINterval:EVENT<x>:LOGic:****I2Cbus:CLOCK?**

Function Queries all settings related to the clock of the logic I<sup>2</sup>C bus trigger.

Syntax :TRIGger:EINterval:EVENT<x>:LOGic:  
I2Cbus:CLOCK?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
CLOCK?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:CLOCK:SOURCE A0

**:TRIGger:EINterval:EVENT<x>:LOGic:****I2Cbus:CLOCK:SOURce**

Function Sets the clock trace for the logic I<sup>2</sup>C bus trigger or queries the current setting.

Syntax :TRIGger:EINterval:EVENT<x>:LOGic:  
I2Cbus:CLOCK:SOURce {A<y>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
I2Cbus:CLOCK:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
CLOCK:SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
CLOCK:SOURCE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:CLOCK:SOURCE A0

**:TRIGger:EINterval:EVENT<x>:LOGic:****I2Cbus:DATA?**

Function Queries all settings related to the data of the logic I<sup>2</sup>C bus trigger.

Syntax :TRIGger:EINterval:EVENT<x>:LOGic:  
I2Cbus:DATA?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:DATA:BYTE 1;CONDITION FALSE;  
DPOSITION 1;MODE 1;PATTERN1 "10101011";  
PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";PMODE DONTCARE;  
SOURCE A0

### 5.31 TRIGger Group

#### **:TRIGger:EINterval:EVENT<x>:LOGic:**

##### **I2CBus:DATA:BYTE**

**Function** Sets the number of settings for the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:DATA:BYTE {<NRf>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:DATA:BYTE?  
<x> = 1 or 2  
<NRf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:BYTE 1  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:BYTE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:DATA:BYTE 1

#### **:TRIGger:EINterval:EVENT<x>:LOGic:**

##### **I2CBus:DATA:CONDition**

**Function** Sets the determination method for the data of the logic I<sup>2</sup>C bus trigger (match / no match) or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:DATA:CONDition {FALSE|TRUE}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:DATA:CONDition?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:CONDITION FALSE  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:CONDITION?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:DATA:CONDITION FALSE

#### **:TRIGger:EINterval:EVENT<x>:LOGic:**

##### **I2CBus:DATA:DPOSITion**

**Function** Sets the pattern comparison position for the data of the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:DATA:DPOSITion {<NRf>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:DATA:DPOSITion?  
<x> = 1 or 2  
<NRf>=0 to 9999

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:DPOSITION 1  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:DPOSITION?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:DATA:DPOSITION 1

#### **:TRIGger:EINterval:EVENT<x>:LOGic:**

##### **I2CBus:DATA:HEXA<x>**

**Function** Sets the data of the logic I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:DATA:HEXA<x> {<string>}  
<x> of EVENT<x> = 1 or 2  
<x> of HEXA<x> = 1 to 4  
<string> = Combination of up to 2 characters (0-F and X)

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:HEXA1 "AB"

#### **:TRIGger:EINterval:EVENT<x>:LOGic:**

##### **I2CBus:DATA:MODE**

**Function** Enables/disables the data conditions of the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:DATA:MODE {<Boolean>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:DATA:MODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:MODE ON  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:MODE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:DATA:MODE 1

#### **:TRIGger:EINterval:EVENT<x>:LOGic:**

##### **I2CBus:DATA:PATtern<x>**

**Function** Sets the data for the logic I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:DATA:PATtern<x> {<string>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
I2CBus:DATA:PATtern<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of PATtern<x> = 1 to 4  
<string> = combination of 8 characters (0, 1, and X).

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:PATTERN1 "10101011"  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:PATTERN1?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:DATA:PATTERN1 "10101011"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:DATA:PMODE**

**Function** Sets the pattern comparison start position for the data of the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:DATA:PMODE {DONTcare|SElect}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:DATA:PMODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:PMODE DONTCARE  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:PMODE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:DATA:PMODE DONTCARE

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:DATA:SOURce**

**Function** Sets the data trace for the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:DATA:SOURce {A<y>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:DATA:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
DATA:SOURCE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:DATA:SOURCE A0

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:GCALl?**

**Function** Queries all settings related to the general call of the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:GCALl?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
GCALL?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:GCALL:BIT7MADDRESS:PATTERN  
"1010101";:TRIGGER:EINTERVAL:EVENT1:  
LOGIC:I2CBUS:GCALL:SBYTE BIT7MADDRESS

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:GCALl:BIT7maddress?**

**Function** Queries all settings related to the 7-bit master address of the general call of the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:GCALl:BIT7maddress?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
GCALL:BIT7MADDRESS?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:GCALL:BIT7MADDRESS:  
PATTERN "1010101"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:GCALl:BIT7maddress:HEXA**

**Function** Sets the 7-bit master address of the general call of the logic I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:GCALl:BIT7maddress:  
HEXA {<string>}  
<x> = 1 or 2  
<string> = combination of 2 characters (0-F and X),  
where bit 0 is fixed to '1.'

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
GCALL:BIT7MADDRESS:HEXA "AB"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:GCALl:BIT7maddress:PATtern**

**Function** Sets the 7-bit master address of the general call of the logic I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:GCALl:BIT7maddress:PATtern  
{<string>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:GCALl:BIT7maddress:PATtern?  
<x> = 1 or 2  
<string> = combination of 7 characters (0, 1, and X).

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
GCALL:BIT7MADDRESS:PATTERN "1010101"  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
GCALL:BIT7MADDRESS:PATTERN?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:GCALL:BIT7MADDRESS:  
PATTERN "1010101"



### 5.31 TRIGger Group

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **I2CBus:GCALl:SBYTe (Second Byte)**

**Function** Sets the type of the second byte of the general call of the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:GCALl:SBYTe {BIT7maddress |  
DONTcare |H04 |H06}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:GCALl:SBYTe?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:GCALL:SBYTE BIT7MADDRESS  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:GCALL:SBYTE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:GCALL:SBYTE BIT7MADDRESS

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **I2CBus:MODE**

**Function** Sets the trigger mode for the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:MODE {ADATa |ESTart |GCALl |  
NAIGNore |SBHSmode}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:MODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
MODE ADATA  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
MODE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:MODE ADATA

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **I2CBus:NAIGNore?**

**Function** Queries all settings related to the NON-ACK Ignore mode of the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:NAIGNore?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:NAIGNORE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:NAIGNORE:HSMODE 1;RACCESS 1;  
SBYTE 1

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **I2CBus:NAIGNore:HSMode**

**Function** Sets whether to ignore NON ACK in high speed mode of the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:NAIGNore:HSMode {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:NAIGNore:HSMode?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
NAIGNORE:HSMODE ON  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
NAIGNORE:HSMODE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:NAIGNORE:HSMODE 1

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **I2CBus:NAIGNore:RACcess**

**Function** Sets whether to ignore NON ACK in read access mode of the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:NAIGNore:RACcess {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:NAIGNore:RACcess?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
NAIGNORE:RACCESS ON  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
NAIGNORE:RACCESS?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:NAIGNORE:RACCESS 1

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **I2CBus:NAIGNore:SBYTe (Start Byte)**

**Function** Sets whether to ignore NON ACK in the start byte of the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:NAIGNore:SBYTe {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:NAIGNore:SBYTe?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
NAIGNORE:SBYTE ON  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
NAIGNORE:SBYTE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:NAIGNORE:SBYTE 1

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:SBHSmode?**

**Function** Queries all settings related to the start byte/high speed mode of the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:SBHSmode?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
SBHSMODE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:SBHSMODE:TYPE HSMODE

**:TRIGger:EINTerval:EVENT<x>:LOGic:****I2CBus:SBHSmode:TYPE**

**Function** Sets the type of the start byte/high speed mode of the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:SBHSmode:TYPE {HSMode|SBYTE}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
I2CBus:SBHSmode:TYPE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
SBHSMODE:TYPE HSMODE  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:I2CBUS:  
SBHSMODE:TYPE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
I2CBUS:SBHSMODE:TYPE HSMODE

**:TRIGger:EINTerval:EVENT<x>:LOGic:****LINBus?**

**Function** Queries all settings related to the logic LIN bus signal trigger of each event.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
LINBUS:BLENGTH 11;BRATE 19200;ERROR:  
CHECKSUM 0;DSIZE 8;FRAMING 0;PARITY 0;  
SYNCH 0;TOUT 0;:TRIGGER:EINTERVAL:  
EVENT1:LOGIC:LINBUS:IDDATA:DATA:  
BORDER BIG;CONDITION DONTCARE;  
DATA1 0.0000000E+00;  
DATA2 255.00000E+00;DSIZE 8;MSBLSB 7, 0;  
PATTERN "XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XX";  
SIGN UNSIGN;:TRIGGER:EINTERVAL:  
EVENT1:LOGIC:LINBUS:IDDATA:ID:  
PATTERN "XXXXXX";:TRIGGER:EINTERVAL:  
EVENT1:LOGIC:LINBUS:IDOR:DSIZE 8;  
IDDATA1:DATA:BORDER BIG;  
CONDITION DONTCARE;  
DATA1 0.0000000E+00;  
DATA2 255.00000E+00;MSBLSB 7, 0;  
PATTERN "XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XX";  
SIGN UNSIGN;:TRIGGER:EINTERVAL:EVENT1:  
LOGIC:LINBUS:IDOR:IDDATA1:ID:  
PATTERN "XXXXXX";:TRIGGER:EINTERVAL:  
EVENT1:LOGIC:LINBUS:IDOR:IDDATA1:  
MODE 0.....

**:TRIGger:EINTerval:EVENT<x>:LOGic:****LINBus:BLENght**

**Function** Sets the logic LIN bus signal trigger Break length or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:BLENght {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:BLENght?  
<x> = 1, 2  
<Nrf> = 10 to 13

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
BLENGTH 10  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
BLENGTH? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:LINBUS:BLENGTH 10

### 5.31 TRIGger Group

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **LINBus:BRATe**

Function Sets the bit rate (data transfer rate) of the logic LIN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:BRATe {<Nrf>|USER,<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:BRATe?  
<x> = 1 or 2  
<Nrf>=1200,2400,4800,9600,19200  
<Nrf> for USER = See the main unit user's manual.

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
BRATE 19200  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
BRATE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
LINBUS:BRATE 19200

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **LINBus:ERRor?**

Function Queries all settings related to the logic LIN bus signal trigger error.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:ERRor?  
<x> = 1, 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
ERROR? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:LINBUS:ERROR:CHECKSUM 1;DSIZE 1;  
FRAMING 1;PARITY 1;SYNCH 1;TOUT 1

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **LINBus:ERRor:CHECksum**

Function Sets the logic LIN bus signal trigger Checksum error or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:ERRor:CHECksum {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:ERRor:CHECksum?  
<x> = 1, 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
ERROR:CHECKSUM ON  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
ERROR:CHECKSUM? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:LINBUS:ERROR:CHECKSUM 1

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **LINBus:ERRor:DSIZe**

Function Sets the number of error data bytes for the logic LIN bus signal trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:ERRor:DSIZe {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:ERRor:DSIZe?  
<x> = 1, 2  
<Nrf> = 1 to 8

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
ERROR:DSIZE 1  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
ERROR:DSIZE? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:LINBUS:ERROR:DSIZE 1

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **LINBus:ERRor:FRAMing**

Function Sets the logic LIN bus signal trigger Framing error or queries the current setting

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:ERRor:FRAMing {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:ERRor:FRAMing?  
<x> = 1, 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
ERROR:FRAMING ON  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
ERROR:FRAMING? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:LINBUS:ERROR:FRAMING 1

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **LINBus:ERRor:PARity**

Function Sets the logic LIN bus signal trigger Parity error or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:ERRor:PARity {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:ERRor:PARity?  
<x> = 1, 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
ERROR:PARITY ON  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
ERROR:PARITY? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:LINBUS:ERROR:PARITY 1



### 5.31 TRIGger Group

#### **:TRIGger:EINterval:EVENT<x>:LOGic:**

##### **LINBus:IDData:DATA:DATA<x>**

**Function** Sets the comparison data of the logic LIN bus signal trigger data or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:IDData:DATA:DATA<x> {<Nrf>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:IDData:DATA:DATA<x>?  
<x> of EVENT<x> = 1, 2  
<x> of DATA<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDDATA:DATA:DATA1 1  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
LINBUS:IDDATA:DATA:DATA1? -> :TRIGGER:  
EINTERVAL:EVENT1:LOGIC:LINBUS:IDDATA:  
DATA:DATA1 1.000000E+00

**Description**

- For :TRIGger:EINterval:EVENT<x>:LINBus:IDData:DATA:CONDition GTHan, set using: TRIGger:EINterval:EVENT<x>:LINBus:IDData:DATA:DATA1.
- For :TRIGger:EINterval:EVENT<x>:LINBus:IDData:DATA:CONDition LTHan, set using: TRIGger:EINterval:EVENT<x>:LINBus:IDData:DATA:DATA2.
- For :TRIGger:EINterval:EVENT<x>:LINBus:IDData:DATA:CONDition BETWEEen|ORANge, set small values with: TRIGger:EINterval:EVENT<x>:LINBus:IDData:DATA:DATA1, and large values with: TRIGger:EINterval:EVENT<x>:LINBus:IDData:DATA:DATA2.

#### **:TRIGger:EINterval:EVENT<x>:LOGic:**

##### **LINBus:IDData:DATA:DSIZE**

**Function** Sets the number of bytes of data in the Data Field of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:IDData:DATA:DSIZE {<Nrf>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:IDData:DATA:DSIZE?  
<x> = 1, 2  
<Nrf> = 1 to 8

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDDATA:DATA:DSIZE 1  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
LINBUS:IDDATA:DATA:DSIZE? -> :TRIGGER:  
EINTERVAL:EVENT1:LOGIC:LINBUS:IDDATA:  
DATA:DSIZE 1

#### **:TRIGger:EINterval:EVENT<x>:LOGic:**

##### **LINBus:IDData:DATA:HEXA**

**Function** Sets the data in the Data Field of the logic LIN bus signal trigger in hexadecimal.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:IDData:DATA:HEXA {<string>}  
<x> = 1, 2  
<string> = Up to 64 characters by combining '0','1,'  
and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDDATA:DATA:HEXA "A9"

#### **:TRIGger:EINterval:EVENT<x>:LOGic:**

##### **LINBus:IDData:DATA:MSBLsb**

**Function** Sets the MSB/LSB bit of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:IDData:DATA:  
MSBLsb {<Nrf>, <Nrf>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:IDData:DATA:MSBLsb?  
<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDDATA:DATA:MSBLSB 1, 0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDDATA:DATA:MSBLSB? -> :TRIGGER:  
EINTERVAL:EVENT1:LOGIC:LINBUS:IDDATA:  
DATA:MSBLSB 1, 0

#### **:TRIGger:EINterval:EVENT<x>:LOGic:**

##### **LINBus:IDData:DATA:PATtern**

**Function** Sets the data of the Data Field of the logic LIN bus signal trigger in binary or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:IDData:DATA:PATtern {<string>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:IDData:DATA:PATtern?  
<x> = 1, 2  
<string> =Up to 64 characters by combining '0','1,'  
and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDDATA:DATA:PATTERN "11011111"  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDDATA:DATA:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:LOGIC:LINBUS:IDDATA:  
DATA:PATTERN "11011111"



### 5.31 TRIGger Group

**:TRIGger:EINTerval:EVENT<x>:LOGic:**

**LINBus:IDOR:DSIZE**

**Function** Sets the number of bytes of data in the Data Field of the OR condition of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:DSIZE {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:DSIZE?  
<x> = 1, 2  
<Nrf> = 1 to 8

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:DSIZE 1  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:DSIZE? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:LINBUS:IDOR:DSIZE 1

**:TRIGger:EINTerval:EVENT<x>:LOGic:**

**LINBus:IDOR:IDData<x>?**

**Function** Queries all settings related to each IDData of the OR condition of the logic LIN bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:LINBUS:IDOR:IDDATA1:DATA:  
BORDER BIG;CONDITION DONTCARE;  
DATA1 0.000000E+00;  
DATA2 255.00000E+00;MSBLSB 7, 0;  
PATTERN "XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XX";  
SIGN UNSIGN;:TRIGGER:EINTERVAL:EVENT1:  
LOGIC:LINBUS:IDOR:IDDATA1:ID:  
PATTERN "XXXXXX";:TRIGGER:EINTERVAL:  
EVENT1:LOGIC:LINBUS:IDOR:IDDATA1:  
MODE 0

**:TRIGger:EINTerval:EVENT<x>:LOGic:**

**LINBus:IDOR:IDData<x>:DATA?**

**Function** Queries all settings related to each Data Field of the OR condition of the logic LIN bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
LINBUS:IDOR:IDDATA1:DATA? -> :TRIGGER:  
EINTERVAL:EVENT1:LOGIC:LINBUS:IDOR:  
IDDATA1:DATA:BORDER BIG;  
CONDITION DONTCARE;  
DATA1 0.000000E+00;  
DATA2 255.00000E+00;MSBLSB 7, 0;  
PATTERN "XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XX";  
SIGN UNSIGN

**:TRIGger:EINTerval:EVENT<x>:LOGic:**

**LINBus:IDOR:IDData<x>:DATA:BORDER**

**Function** Sets the byte order of each data of the OR conditions of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:  
BORDER {BIG|LITTLE}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:BORDER?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:BORDER BIG  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:BORDER? -> :TRIGGER:  
EINTERVAL:EVENT1:LOGIC:LINBUS:IDOR:  
IDDATA1:DATA:BORDER BIG

**:TRIGger:EINTerval:EVENT<x>:LOGic:****LINBus:IDOR:IDData<x>:DATA:CONDition**

**Function** Sets the data condition of the Data Field of each OR condition of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:  
CONDition {BETWeen|DONTcare|FALSe|  
GTHan|LTHan|ORANge|TRUE}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:CONDition?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:CONDITION BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:CONDITION? ->  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:CONDITION BETWEEN

**:TRIGger:EINTerval:EVENT<x>:LOGic:****LINBus:IDOR:IDData<x>:DATA:DATA<x>**

**Function** Sets the comparison data of each data of the OR conditions of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:  
DATA<x> {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:DATA<x>?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<x> of DATA<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:DATA1 1  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:DATA1? -> :TRIGGER:  
EINTERVAL:EVENT1:LOGIC:LINBUS:IDOR:  
IDDATA1:DATA:DATA1 1.000000E+00

**Description**

- For :TRIGger:EINTerval:EVENT<x>:LINBus:IDData:DATA:CONDition GTHan, set using: TRIGger: EINTerval:EVENT<x>:LINBus:IDData:DATA:DATA1.
- For :TRIGger:EINTerval:EVENT<x>:LINBus:IDData:DATA:CONDition LTHan, set using: TRIGger: EINTerval:EVENT<x>:LINBus:IDData:DATA:DATA2.
- For :TRIGger:EINTerval:EVENT<x>:LINBus:IDData:DATA:CONDition BETWeen|ORANge, set small values with: TRIGger:EINTerval:EVENT<x>:LINBus:IDData:DATA:DATA1, and large values with: TRIGger:EINTerval:EVENT<x>:LINBus:IDData:DATA:DATA2.

**:TRIGger:EINTerval:EVENT<x>:LOGic:****LINBus:IDOR:IDData<x>:DATA:HEXA**

**Function** Sets the data in each Data Field of the OR condition of the logic LIN bus signal trigger in hexadecimal.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:  
HEXA {<string>}  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<string> = Up to 16 characters by combining '0' to 'F' and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:HEXA "A9"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****LINBus:IDOR:IDData<x>:DATA:MSBLsb**

**Function** Sets the MSB/LSB bit of each data of the OR condition of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:  
MSBLsb {<Nrf>, <Nrf>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:MSBLsb?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:MSBLSB 1, 0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:MSBLSB? -> :TRIGGER:  
EINTERVAL:EVENT1:LOGIC:LINBUS:IDOR:  
IDDATA1:DATA:MSBLSB 1, 0

**:TRIGger:EINTerval:EVENT<x>:LOGic:****LINBus:IDOR:IDData<x>:DATA:PATTern**

**Function** Sets the data of each Data Field of the OR conditions of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:  
PATTern {<string>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:PATTern?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<string> = Up to 64 characters by combining '0,' '1,' and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:PATTERN "11011111"  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:LOGIC:LINBUS:IDOR:  
IDDATA1:DATA:PATTERN "11011111"



### 5.31 TRIGger Group

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **LINBus:IDOR:IDData<x>:DATA:SIGN**

**Function** Sets the sign of each data of the OR conditions of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:  
SIGN {SIGN|UNSign}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:DATA:SIGN?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:SIGN SIGN  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:SIGN? -> :TRIGGER:  
EINTERVAL:EVENT1:LOGIC:LINBUS:IDOR:  
IDDATA1:DATA:SIGN SIGN

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **LINBus:IDOR:IDData<x>:ID?**

**Function** Queries all settings related to each ID of the OR condition of the logic LIN bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:ID?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:ID? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:LINBUS:IDOR:IDDATA1:ID:  
PATTERN "101010"

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **LINBus:IDOR:IDData<x>:ID:HEXA**

**Function** Sets each ID of the OR conditions of the logic LIN bus signal trigger in hexadecimal.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:ID:  
HEXA {<string>}  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<string> = 2 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:ID:HEXA "2A"

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **LINBus:IDOR:IDData<x>:ID:PATtern**

**Function** Sets each ID of the OR conditions of the logic LIN bus signal trigger binary or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:ID:  
PATtern {<string>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:ID:PATtern?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4  
<string> = 6 characters by combining '0','1,' and 'X.'

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:ID:PATTERN "101111"  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:ID:PATTERN? -> :TRIGGER:  
EINTERVAL:EVENT1:LOGIC:LINBUS:IDOR:  
IDDATA1:ID:PATTERN "101111"

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **LINBus:IDOR:IDData<x>:MODE**

**Function** Enables (1) or disables (0) each condition for each OR condition of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:MODE {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:IDOR:IDData<x>:MODE?  
<x> of EVENT<x> = 1, 2  
<x> of IDData<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
IDOR:IDDATA1:MODE ON  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
LINBUS:IDOR:IDDATA1:MODE? -> :TRIGGER:  
EINTERVAL:EVENT1:LOGIC:LINBUS:IDOR:  
IDDATA1:MODE 1

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **LINBus:MODE**

**Function** Sets the logic LIN bus signal trigger mode or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:MODE {BSYNch|ERRor|IDData|IDOR}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
LINBus:MODE?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
MODE BSYNCH  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
MODE? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:LINBUS:MODE BSYNCH

**:TRIGger:EINterval:EVENT<x>:LOGic:****LINBus:REVision**

**Function** Sets the logic LIN bus signal trigger revision (1.3 or 2.0) or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:REVision {LIN1\_3|LIN2\_0}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:REVision?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
REVISION LIN1\_3  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
REVISION? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:LINBUS:REVISION LIN1\_3

**:TRIGger:EINterval:EVENT<x>:LOGic:****LINBus:SOURce**

**Function** Sets the trigger source of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:SOURce {A<y>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
SOURCE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
LINBUS:SOURCE A0

**:TRIGger:EINterval:EVENT<x>:LOGic:****LINBus:SPOint**

**Function** Sets the logic LIN bus signal trigger sample point or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:SPOint {<NRf>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
LINBus:SPOint?  
<x> = 1, 2  
<NRf> = 18.8 to 90.6(%)

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
SPOINT 18.8  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:LINBUS:  
SPOINT? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:LINBUS:SPOINT 18.8E+00

**:TRIGger:EINterval:EVENT<x>:LOGic:****SPATtern? (Serial Pattern)**

**Function** Queries all settings related to the logic serial pattern trigger of each event.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
SPATtern?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:BITRATE 1.0000000E+03;  
CLOCK:MODE 1;POLARITY FALL;SOURCE A0;:  
TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CS 1;DATA:ACTIVE HIGH;  
SOURCE A0;:TRIGGER:EINTERVAL:EVENT1:  
LOGIC:SPATTERN:LATCH:SOURCE A0;  
POLARITY FALL;:TRIGGER:EINTERVAL:  
EVENT1:LOGIC:SPATTERN:  
PATTERN "1100110111101111"

**:TRIGger:EINterval:EVENT<x>:LOGic:****SPATtern:BITRate**

**Function** Sets the bit rate for the logic serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
SPATtern:BITRate {<NRf>}  
:TRIGger:EINterval:EVENT<x>:LOGic:  
SPATtern:BITRate?  
<x> = 1 or 2  
<NRf>=1 to 50M(bps)

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:BITRATE 1  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:BITRATE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:BITRATE 1.000E+00

**Description** This command is valid when :TRIGger:  
EINterval:EVENT<x>:LOGic:SPATtern:  
CLOCK:MODE OFF.

**:TRIGger:EINterval:EVENT<x>:LOGic:****SPATtern:CLEar**

**Function** Clears (set to don't care) all patterns of the logic serial pattern trigger.

**Syntax** :TRIGger:EINterval:EVENT<x>:LOGic:  
SPATtern:CLEar  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CLEAR

## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:LOGic:SPATtern:CLOCK?**

**Function** Queries all settings related to the clock for the logic serial pattern trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:CLOCK?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CLOCK?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CLOCK:MODE 1;POLARITY FALL;  
SOURCE A0

### **:TRIGger:EINTerval:EVENT<x>:LOGic:SPATtern:CLOCK:MODE**

**Function** Enables/disables the clock for the logic serial analysis pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:CLOCK:MODE {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:CLOCK:MODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CLOCK:MODE ON  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CLOCK:MODE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CLOCK:MODE 1

### **:TRIGger:EINTerval:EVENT<x>:LOGic:SPATtern:CLOCK:POLarity**

**Function** Sets the polarity of the clock trace of the logic serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:CLOCK:POLarity {FALL|RISE}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:CLOCK:POLarity?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CLOCK:POLARITY FALL  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CLOCK:POLARITY?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CLOCK:POLARITY FALL

**Description** This command is valid when :TRIGger:  
EINTerval:EVENT<x>:LOGic:SPATtern:  
CLOCK:MODE ON.

### **:TRIGger:EINTerval:EVENT<x>:LOGic:SPATtern:CLOCK:SOURce**

**Function** Sets the clock trace for the logic serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:CLOCK:SOURce {A<y>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:CLOCK:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CLOCK:SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CLOCK:SOURCE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CLOCK:SOURCE A0

**Description**• This command is valid when :TRIGger:  
EINTerval:EVENT<x>:LOGic:SPATtern:  
CLOCK:MODE ON.

### **:TRIGger:EINTerval:EVENT<x>:LOGic:SPATtern:CS**

**Function** Enables/disables the chip select for the logic serial analysis pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:CS {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:CS?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CS ON  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CS?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:CS 1

**Description** This command is valid when :TRIGger:  
EINTerval:EVENT<x>:LOGic:SPATtern:  
CLOCK:MODE ON

### **:TRIGger:EINTerval:EVENT<x>:LOGic:SPATtern:DATA?**

**Function** Queries all settings related to the data for the logic serial pattern trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:DATA?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:DATA?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:DATA:ACTIVE HIGH;SOURCE A0

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPATtern:DATA:ACTive**

Function Sets the active level of the data for the logic serial pattern trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:DATA:ACTive {HIGH|LOW}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:DATA:ACTive?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:DATA:ACTIVE HIGH  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:DATA:ACTIVE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:DATA:ACTIVE HIGH

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPATtern:DATA:SOURce**

Function Sets the data rate for the logic serial pattern trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:DATA:SOURce {A<y>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:DATA:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:DATA:SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:DATA:SOURCE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:DATA:SOURCE A0

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPATtern:HEXA**

Function Sets the pattern of the logic serial pattern trigger in hexadecimal notation.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:HEXA {<string>}  
<x> = 1 or 2  
<string> = combination of up to 32 characters (0-F and X)

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:HEXA "ABCD"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPATtern:LATCh?**

Function Queries all settings related to the latch for the logic serial pattern trigger.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:LATCh?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:LATCH?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:LATCH:SOURCE A0;POLARITY FALL

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPATtern:LATCh:POLarity**

Function Sets the polarity of the latch trace of the logic serial pattern trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:LATCh:POLarity {FALL|RISE}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:LATCh:POLarity?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:LATCH:POLARITY FALL  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:LATCH:POLARITY?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:LATCH:POLARITY FALL

Description • This command is valid when :TRIGger:  
EINTerval:EVENT<x>:LOGic:SPATtern:  
CLOCK:MODE ON  
• This command is valid when :TRIGger:  
EINTerval:EVENT<x>:LOGic:SPATtern:  
LATCh:SOURce DONTcare

## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **SPATtern:LATCh:SOURce**

**Function** Sets the latch trace for the logic serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:LATCh:SOURce {A<y>|DONTcare}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:LATCh:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:LATCH:SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:LATCH:SOURCE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:LATCH:SOURCE A0

**Description** • This command is valid when :TRIGger:  
EINTerval:EVENT<x>:LOGic:SPATtern:  
CLOCK:MODE ON

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **SPATtern:PATtern**

**Function** Sets the pattern of the logic serial pattern trigger in binary notation, or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:PATtern {<string>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPATtern:PATtern?  
<x> = 1 or 2  
<string> = combination of up to 128 characters (0, 1, and X)

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:PATTERN "1100110111101111"  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:PATTERN?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPATTERN:PATTERN "1100110111101111"

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **SPIBUS?**

**Function** Queries all settings related to the logic SPI bus trigger for each event.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBUS?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:BITORDER LSBFIRST;CLOCK:  
POLARITY FALL;SOURCE A0;:TRIGGER:  
EINTERVAL:EVENT1:LOGIC:SPIBUS:CS:  
ACTIVE HIGH;SOURCE A0;:TRIGGER:  
EINTERVAL:EVENT1:LOGIC:SPIBUS:DATA1:  
BYTE 1;CONDITION FALSE;DPOSITION 1;  
PATTERN1 "10101011";  
PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";SOURCE A0;:  
TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA2:BYTE 1;CONDITION TRUE;  
DPOSITION 0;PATTERN1 "XXXXXXXX";  
PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";SOURCE A2;:  
TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
MODE WIRE3

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **SPIBUS:BITOrder**

**Function** Sets the bit order for the logic SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBUS:BITOrder {LSBFirst|MSBFirst}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBUS:BITOrder?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
BITORDER LSBFIRST  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
BITORDER?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:BITORDER LSBFIRST

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPIBus:CLOck?**

Function Queries all settings related to the clock of the logic SPI bus trigger.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:CLOCK?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
CLOCK?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:CLOCK:POLARITY FALL;SOURCE A0

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPIBus:CLOCK:POLarity**

Function Sets the polarity of the clock trace for the logic SPI bus trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:CLOCK:POLarity {FALL|RISE}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:CLOCK:POLarity?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:CLOCK:POLARITY FALL  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:CLOCK:POLARITY?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:CLOCK:POLARITY FALL

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPIBus:CLOCK:SOURce**

Function Sets the clock trace for the logic SPI bus trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:CLOCK:SOURce {A<y>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:CLOCK:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
CLOCK:SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
CLOCK:SOURCE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:CLOCK:SOURCE A0

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPIBus:CS?**

Function Queries all settings related to the chip select of the logic SPI bus trigger.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:CS?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
CS?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:CS:ACTIVE HIGH;SOURCE A0

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPIBus:CS:ACTive**

Function Sets the active level of the chip select for the logic SPI bus trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:CS:ACTive {HIGH|LOW}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:CS:ACTive?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
CS:ACTIVE HIGH  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
CS:ACTIVE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:CS:ACTIVE HIGH

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPIBus:CS:SOURce**

Function Sets the chip select trace for the logic SPI bus trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:CS:SOURce {A<y>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:CS:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
CS:SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
CS:SOURCE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:CS:SOURCE A0

## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **SPIBus:DATA<x>?**

**Function** Queries all settings related to each data of the logic SPI bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:DATA<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA1?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:DATA1:BYTE 1;CONDITION FALSE;  
DPOSITION 1;PATTERN1 "10101011";  
PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";SOURCE A0

**Description** DATA2 is only valid when :TRIGger:  
EINTerval:EVENT<x>:LOGic:SPIBus:  
MODE WIRE4

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **SPIBus:DATA<x>:BYTE**

**Function** Sets the number of settings for each data of the logic SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:DATA<x>:BYTE {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:DATA<x>:BYTE?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA1:BYTE 1  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA1:BYTE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:DATA1:BYTE 1

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **SPIBus:DATA<x>:CONDition**

**Function** Sets the determination method for the data of the logic SPI bus trigger (match / no match) or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:DATA<x>:CONDition {FALSE|TRUE}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:DATA<x>:CONDition?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA1:CONDITION FALSE  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA1:CONDITION?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:DATA1:CONDITION FALSE

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **SPIBus:DATA<x>:DPOSITion**

**Function** Sets the pattern comparison start position for the data of the logic SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:DATA<x>:DPOSITion {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:DATA<x>:DPOSITion?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<Nrf> = 0 to 9999

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA1:DPOSITION 1  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA1:DPOSITION?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:DATA1:DPOSITION 1

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **SPIBus:DATA<x>:HEXA<x>**

**Function** Sets the data of the logic SPI bus trigger in hexadecimal notation.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:DATA<x>:HEXA<x> {<string>}  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<x> of HEXA<x> = 1 to 4  
<string> = Combination of up to 2 characters (0-F and X)

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA1:HEXA1 "AB"

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **SPIBus:DATA<x>:PATTern<x>**

**Function** Sets each data of the logic SPI bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:DATA<x>:PATTern<x> {<string>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:DATA<x>:PATTern<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<x> of PATTern<x> = 1 to 4  
<string> = combination of 8 characters (0, 1, and X).

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA1:PATTERN1 "10101011"  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA1:PATTERN1?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:DATA1:PATTERN1 "10101011"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPIBus:DATA<x>:SOURCE**

**Function** Sets the trace of each data of the logic SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:DATA<x>:SOURCE {A<y>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:DATA<x>:SOURCE?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<y> = 0 to 7

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA1:SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
DATA1:SOURCE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:DATA1:SOURCE A0

**:TRIGger:EINTerval:EVENT<x>:LOGic:****SPIBus:MODE**

**Function** Sets the wiring method (3-wire/4-wire) of the logic SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:MODE {WIRE3|WIRE4}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
SPIBus:MODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
MODE WIRE3  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:SPIBUS:  
MODE?  
-> :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
SPIBUS:MODE WIRE3

**:TRIGger:EINTerval:EVENT<x>:LOGic:****STATE?**

**Function** Queries all settings related to the logic state trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
STATE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
STATE? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:STATE:BIT:  
A0 DONTCARE;A1 DONTCARE;A2 DONTCARE;  
A3 DONTCARE;A4 DONTCARE;A5 DONTCARE;  
A6 DONTCARE;A7 DONTCARE;B0 DONTCARE;  
B1 DONTCARE;B2 DONTCARE;B3 DONTCARE;  
B4 DONTCARE;B5 DONTCARE;B6 DONTCARE;  
B7 DONTCARE;C0 DONTCARE;C1 DONTCARE;  
C2 DONTCARE;C3 DONTCARE;C4 DONTCARE;  
C5 DONTCARE;C6 DONTCARE;C7 DONTCARE;  
D0 DONTCARE;D1 DONTCARE;D2 DONTCARE;  
D3 DONTCARE;D4 DONTCARE;D5 DONTCARE;  
D6 DONTCARE;D7 DONTCARE;LOGIC AND;  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
GROUP1:CONDITION DONTCARE;  
PATTERN "XXXXXXXX";  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
GROUP2:CONDITION TRUE;  
PATTERN "XXXXXXXX";  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
GROUP3:CONDITION TRUE;  
PATTERN "XXXXXXXX";  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
GROUP4:CONDITION TRUE;  
PATTERN "XXXXXXXX";  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
GROUP5:CONDITION DONTCARE;  
PATTERN " ";  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
TYPE BIT



## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **STATE:BIT?**

**Function** Queries all settings related to the bit of the logic state trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
STATE:BIT?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
BIT? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:STATE:  
BIT:A0 DONTCARE;A1 DONTCARE;  
A2 DONTCARE;A3 DONTCARE;A4 DONTCARE;  
A5 DONTCARE;A6 DONTCARE;A7 DONTCARE;  
B0 DONTCARE;B1 DONTCARE;B2 DONTCARE;  
B3 DONTCARE;B4 DONTCARE;B5 DONTCARE;  
B6 DONTCARE;B7 DONTCARE;C0 DONTCARE;  
C1 DONTCARE;C2 DONTCARE;C3 DONTCARE;  
C4 DONTCARE;C5 DONTCARE;C6 DONTCARE;  
C7 DONTCARE;D0 DONTCARE;D1 DONTCARE;  
D2 DONTCARE;D3 DONTCARE;D4 DONTCARE;  
D5 DONTCARE;D6 DONTCARE;D7 DONTCARE;  
LOGIC AND

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **STATE:BIT:{A<y>|B<y>|C<y>|D<y>}**

**Function** Sets the condition to be satisfied for the bit of the logic state trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
STATE:BIT:{A<y>|B<y>|C<y>|  
D<y>} {DONTcare|HIGH|LOW}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
STATE:BIT:{A<y>|B<y>|C<y>|D<y>}?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
BIT:A0 DONTCARE  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
BIT:A0? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:STATE:  
BIT:A0 DONTCARE

**Description** For the SB5310, only {A<y>} are valid.

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **STATE:BIT:CLEar**

**Function** Clears the entire condition to be satisfied for the bit of the logic state trigger (set to don't care) or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
STATE:BIT:CLEar  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
STATE:BIT:CLEAR

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **STATE:BIT:LOGic**

**Function** Sets the logic of the logic state trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
STATE:BIT:LOGic {AND|OR}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
STATE:BIT:LOGic?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
BIT:LOGIC AND  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
BIT:LOGIC? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:STATE:BIT:LOGIC AND

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **STATE:GROup<x>?**

**Function** Queries all settings related to the group of the logic state trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
STATE:GROup<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of GROup<x> = 1 to 5

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
STATE:GROUP1? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:STATE:GROUP1:  
CONDITION DONTCARE;PATTERN "11110000111  
100001111000011110000"

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **STATE:GROup<x>:CLEar**

**Function** Clears the entire condition to be satisfied for the group of the logic state trigger (set to don't care) or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
STATE:GROup<x>:CLEar  
<x> of EVENT<x> = 1 or 2  
<x> of GROup<x> = 1 to 5

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
GROUP1:CLEAR

**:TRIGger:EINTerval:EVENT<x>:LOGic:****STATe:GROup<x>:CONDition**

**Function** Sets the determination condition for the group of the logic state trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
 STATe:GROup<x>:CONDition {DONTcare|  
 TRUE}  
 :TRIGger:EINTerval:EVENT<x>:LOGic:  
 STATe:GROup<x>:CONDition?  
 <x> of EVENT<x> = 1 or 2  
 <x> of GROup<x> = 1 to 5

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
 GROUP1:CONDITION DONTCARE  
 :TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
 GROUP1:CONDITION? -> :TRIGGER:EINTERVAL:  
 EVENT1:LOGIC:STATE:GROUP1:  
 CONDITION DONTCARE

**:TRIGger:EINTerval:EVENT<x>:LOGic:****STATe:GROup<x>:HEXA**

**Function** Sets the condition to be satisfied for the group of the logic state trigger in hexadecimal notation.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
 STATe:GROup<x>:HEXA {<String>}  
 <x> of EVENT<x> = 1 or 2  
 <x> of GROup<x> = 1 to 5  
 <String> = Up to 8 characters by combining '0' to 'F'  
 and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
 STATE:GROUP1:HEXA "1A3F24CD"

**Description** If the number of bit mappings specified with :LOGic:GROup<x>:MAPPING is too large, the lower bits are set to X. If the number is too small, the top bits are set.

**:TRIGger:EINTerval:EVENT<x>:LOGic:****STATe:GROup<x>:PATTern**

**Function** Sets the condition to be satisfied for the group of the logic state trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
 STATe:GROup<x>:PATTern {<String>}  
 :TRIGger:EINTerval:EVENT<x>:LOGic:  
 STATe:GROup<x>:PATTern?  
 <x> of EVENT<x> = 1 or 2  
 <x> of GROup<x> = 1 to 5  
 <String> = Up to 32 characters by combining '0', '1',  
 and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
 GROUP1:PATTERN "11110000111100001111  
 000011110000"  
 :TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
 GROUP1:PATTERN? -> :TRIGGER:EINTERVAL:  
 EVENT1:LOGIC:STATE:GROUP1  
 :PATTERN "11110000111100001111000011110  
 000"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****STATe:GROup<x>:SYMBOL**

**Function** Sets the symbol item for each group of the logic state trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
 STATe:GROup<x>:SYMBOL {<string>}  
 <x> of EVENT<x> = 1, 2  
 <x> of GROup<x> = 1 to 5  
 <string> = Up to 16 characters

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
 GROUP1:SYMBOL "TEST"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****STATe:TYPE**

**Function** Sets the setup type of the logic state trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
 STATe:TYPE {BIT|GROup}  
 :TRIGger:EINTerval:EVENT<x>:LOGic:  
 STATe:TYPE?  
 <x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
 TYPE BIT  
 :TRIGGER:EINTERVAL:EVENT1:LOGIC:STATE:  
 TYPE? -> :TRIGGER:EINTERVAL:EVENT1:  
 LOGIC:STATE:TYPE BIT

**:TRIGger:EINTerval:EVENT<x>:LOGic:****UART?**

**Function** Queries all settings related to the logic UART bus signal trigger of each event.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:UART?  
 <x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
 UART? -> :TRIGGER:EINTERVAL:EVENT1:  
 LOGIC:UART:BRATE 19200;DATA:  
 BITORDER LSBFIRST;DSIZE 1;  
 PATTERN "X0101001";:TRIGGER:EINTERVAL:  
 EVENT1:LOGIC:UART:ERROR:FRAMING 1;  
 PARITY 1;PMODE EVEN;:TRIGGER:EINTERVAL:  
 EVENT1:LOGIC:UART:FORMAT BIT7PARITY;  
 MODE DATA;POLARITY NEGATIVE;  
 SOURCE A0;SPOINT 18.8E+00

## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **UART:BRATe**

**Function** Sets the logic UART bus signal trigger bit rate (data transfer rate) or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
BRATe {<Nrf>|USER, <Nrf>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
BRATe?  
<x> = 1, 2  
<Nrf> = 1200, 2400, 4800, 9600, 19200, 38400,  
57600, 115200  
<Nrf> of USER = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
BRATE 19200  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
BRATE? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:UART:BRATE 19200

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **UART:DATA?**

**Function** Queries all settings related to data of the logic UART bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
DATA?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
DATA? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:UART:DATA:BITORDER LSBFIRST;  
DSIZE 1;PATTERN "X0101001"

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **UART:DATA:BITorder**

**Function** Sets the data bit order of the logic UART bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
DATA:BITorder {LSBFirst|MSBFirst}  
:TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
DATA:BITorder?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
DATA:BITORDER LSBFIRST  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
DATA:BITORDER? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:UART:DATA:  
BITORDER LSBFIRST

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **UART:DATA:DSIZe**

**Function** Sets the number of data bytes of the logic UART bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
DATA:DSIZe {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
DATA:DSIZe?  
<x> = 1, 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
DATA:DSIZE 1  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
DATA:DSIZE? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:UART:DATA:DSIZE 1

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **UART:DATA:HEXA**

**Function** Sets the logic UART bus signal trigger data in hexadecimal.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
DATA:HEXA {<string>}  
<x> = 1, 2  
<string> = Up to 8 characters by combining '0' to 'F'  
and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
DATA:HEXA "A9"

### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

#### **UART:DATA:PATtern**

**Function** Sets the data of the logic UART bus signal trigger in binary or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
DATA:PATtern {<string>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
DATA:PATtern?  
<x> = 1, 2  
<string> = Up to 32 characters by combining '0,' 'F,'  
and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
DATA:PATTERN "11011111"  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
DATA:PATTERN? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:UART:DATA:PATTERN  
"11011111"

**:TRIGger:EINTerval:EVENT<x>:LOGic:****UART:ERRor?**

Function Queries all settings related to the logic UART bus signal trigger error.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
ERRor?  
<x> = 1, 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
ERROR? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:UART:ERROR:FRAMING 1;  
PARITY 1;PMODE EVEN

**:TRIGger:EINTerval:EVENT<x>:LOGic:****UART:ERRor:FRAMing**

Function Sets the logic UART bus signal trigger Framing error or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
ERRor:FRAMing {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
ERRor:FRAMing?  
<x> = 1, 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
ERROR:FRAMING ON  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
ERROR:FRAMING? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:UART:ERROR:FRAMING 1

**:TRIGger:EINTerval:EVENT<x>:LOGic:****UART:ERRor:PARity**

Function Sets the logic UART bus signal trigger Parity error or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
ERRor:PARity {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
ERRor:PARity?  
<x> = 1, 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
ERROR:PARITY ON  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
ERROR:PARITY? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:UART:ERROR:PARITY 1

**:TRIGger:EINTerval:EVENT<x>:LOGic:****UART:ERRor:PMODE**

Function Sets the logic UART bus signal trigger Parity mode or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
ERRor:PMODE {EVEN|ODD}  
:TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
ERRor:PMODE?  
<x> = 1, 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
ERROR:PMODE EVEN  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
ERROR:PMODE? -> :TRIGGER:EINTERVAL:  
EVENT1:LOGIC:UART:ERROR:PMODE EVEN

**:TRIGger:EINTerval:EVENT<x>:LOGic:****UART:FORMat**

Function Sets the logic UART bus signal trigger format or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
FORMat {BIT7parity|BIT8Noparity|  
BIT8Parity}  
:TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
FORMat?  
<x> = 1, 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
FORMAT BIT7PARITY  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
FORMAT? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:UART:FORMAT BIT7PARITY

**:TRIGger:EINTerval:EVENT<x>:LOGic:****UART:MODE**

Function Sets the logic UART bus signal trigger mode or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
MODE {DATA|ERROR}  
:TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
MODE?  
<x> = 1, 2

Example :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
MODE DATA  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
MODE? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:UART:MODE DATA

### 5.31 TRIGger Group

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **UART:POLarity**

**Function** Sets the logic UART bus signal trigger polarity or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
POLarity {NEGative|POSitive}  
:TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
POLarity?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
POLARITY NEGATIVE  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
POLARITY? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:UART:POLARITY NEGATIVE

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **UART:SOURce**

**Function** Sets the logic UART bus signal trigger source or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
SOURce {A<y>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
SOURce?  
<x> = 1, 2  
<y> = 0 to 7

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
SOURCE? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:UART:SOURCE A0

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **UART:SPOint**

**Function** Sets the logic UART bus signal trigger sample point or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
SPOint {<NRf>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:UART:  
SPOint?  
<x> = 1, 2  
<NRf> = 18.8 to 90.6(%)

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
SPOINT 18.8  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:UART:  
SPOINT? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:UART:SPOINT 18.8E+00

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **WIDTH?**

**Function** Queries all settings related to the logic pulse width trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
WIDTH?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
WIDTH? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:WIDTH:MODE OUT;POLARITY POSITIVE;  
SOURCE A0;TIME1 1.0000000E-09;  
TIME2 1.0000000E-09

#### **:TRIGger:EINTerval:EVENT<x>:LOGic:**

##### **WIDTH:MODE**

**Function** Sets the determination mode of the logic pulse width trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
WIDTH:MODE {BETween|IN|NOTBetween|  
OUT|TIMEout}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
WIDTH:MODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:WIDTH:  
MODE BETWEEN  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:WIDTH:  
MODE? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:WIDTH:MODE BETWEEN

**:TRIGger:EINTerval:EVENT<x>:LOGic:****WIDTh:POLarity**

**Function** Sets the polarity of the logic pulse width trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
WIDTh:POLarity {FALSe|NEGative|  
POSitive|TRUE}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
WIDTh:POLarity?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:WIDTH:  
POLARITY FALSE  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:WIDTH:  
POLARITY? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:WIDTH:POLARITY FALSE

**Description** • {FALSe|TRUE} is valid if :TRIGger:EINTerval:  
EVENT<x>:TYPE LPState.  
• {NEGative|POSitive} is valid if :TRIGger:EINTerval:  
EVENT<x>:TYPE LPULse.

**:TRIGger:EINTerval:EVENT<x>:LOGic:****WIDTh:SOURce**

**Function** Sets the trigger source of the logic pulse width trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
WIDTh:SOURce {A<y>|B<y>|C<y>|D<y>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
WIDTh:SOURce?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:WIDTH:  
SOURCE A0  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:WIDTH:  
SOURCE? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:WIDTH:SOURCE A0

**Description** For the SB5310, only {A<y>} are valid.

**:TRIGger:EINTerval:EVENT<x>:LOGic:****WIDTh:TIME<x>**

**Function** Sets the logic pulse width of the pulse width trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:LOGic:  
WIDTh:TIME<x> {<Time>}  
:TRIGger:EINTerval:EVENT<x>:LOGic:  
WIDTh:TIME<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of TIME<x> = 1 or 2  
<Time> = 1 ns to 10 s (500 ps steps)

**Example** :TRIGGER:EINTERVAL:EVENT1:LOGIC:  
WIDTH:TIME1 1S  
:TRIGGER:EINTERVAL:EVENT1:LOGIC:WIDTH:  
TIME1? -> :TRIGGER:EINTERVAL:EVENT1:  
LOGIC:WIDTH:TIME1 1.000E+00

**Description** TIME2 is valid if :TRIGger:EINTerval:  
EVENT<x>:WIDTh:MODE BETWeen|NOTBetween.

**:TRIGger:EINTerval:EVENT<x>:SPATtern?****(Serial Pattern)**

**Function** Queries all settings related to the serial pattern trigger of the event.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN?  
-> :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
BITRATE 1.000E+00;CLOCK:MODE 1;  
POLARITY FALL;SOURCE 1;:TRIGGER:  
EINTERVAL:EVENT1:SPATTERN:CS 1;DATA:  
ACTIVE HIGH;SOURCE 1;:TRIGGER:  
EINTERVAL:EVENT1:SPATTERN:LATCH:  
SOURCE 1;POLARITY FALL;:TRIGGER:  
EINTERVAL:EVENT1:SPATTERN:  
PATTERN "1100110111101111"

**:TRIGger:EINTerval:EVENT<x>:SPATtern:****BITRate**

**Function** Sets the bit rate of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
BITRate {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:SPATtern:  
BITRate?  
<x> = 1 or 2  
<Nrf> = 1 to 50M (bps)

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
BITRATE 1  
:TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
BITRATE? -> :TRIGGER:EINTERVAL:EVENT1:  
SPATTERN:BITRATE 1.000E+00

**Description** This command is valid when :TRIGger:EINTerval:  
EVENT<x>:SPATtern:CLOCK:  
MODE OFF.

## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:SPATtern:**

#### **CLEAr**

**Function** Clears the entire pattern of the serial pattern trigger (to don't care).

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
CLEAr  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
CLEAR

### **:TRIGger:EINTerval:EVENT<x>:SPATtern:**

#### **CLOCK?**

**Function** Queries all settings related to clock of the serial pattern trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
CLOCK?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
CLOCK? -> :TRIGGER:EINTERVAL:EVENT1:  
SPATTERN:CLOCK:MODE 1;POLARITY FALL;  
SOURCE 1

### **:TRIGger:EINTerval:EVENT<x>:SPATtern:**

#### **CLOCK:MODE**

**Function** Enables/Disables the clock of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
CLOCK:MODE {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:SPATtern:  
CLOCK:MODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
CLOCK:MODE ON  
:TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
CLOCK:MODE? -> :TRIGGER:EINTERVAL:  
EVENT1:SPATTERN:CLOCK:MODE 1

### **:TRIGger:EINTerval:EVENT<x>:SPATtern:**

#### **CLOCK:POLarity**

**Function** Sets the polarity of the clock trace of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
CLOCK:POLarity {FALL|RISE}  
:TRIGger:EINTerval:EVENT<x>:SPATtern:  
CLOCK:POLarity?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
CLOCK:POLARITY FALL  
:TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
CLOCK:POLARITY? -> :TRIGGER:EINTERVAL:  
EVENT1:SPATTERN:CLOCK:POLARITY FALL

**Description** This command is valid when :TRIGger:EINTerval:  
EVENT<x>:SPATtern:CLOCK:  
MODE ON.

### **:TRIGger:EINTerval:EVENT<x>:SPATtern:**

#### **CLOCK:SOURCE**

**Function** Sets the clock trace of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
CLOCK:SOURCE {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:SPATtern:  
CLOCK:SOURCE?  
<x> = 1 or 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
CLOCK:SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
CLOCK:SOURCE? -> :TRIGGER:EINTERVAL:  
EVENT1:SPATTERN:CLOCK:SOURCE 1

**Description** This command is valid when :TRIGger:EINTerval:  
EVENT<x>:SPATtern:CLOCK:  
MODE ON.

### **:TRIGger:EINTerval:EVENT<x>:SPATtern:**

#### **CS**

**Function** Enables/Disables the chip select of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
CS {<Boolean>}  
:TRIGger:EINTerval:EVENT<x>:SPATtern:  
CS?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
CS ON  
:TRIGGER:EINTERVAL:EVENT1:SPATTERN:CS?  
-> :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
CS 1

**Description** This command is valid when :TRIGger:EINTerval:  
EVENT<x>:SPATtern:CLOCK:  
MODE ON.

### **:TRIGger:EINTerval:EVENT<x>:SPATtern:**

#### **DATA?**

**Function** Queries all settings related to data of the serial pattern trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
DATA?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
DATA? -> :TRIGGER:EINTERVAL:EVENT1:  
SPATTERN:DATA:ACTIVE HIGH;SOURCE 1

**:TRIGger:EINTerval:EVENT<x>:SPATtern:  
DATA:ACTive**

**Function** Sets the active level of the data of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
DATA:ACTive {HIGH|LOW}  
:TRIGger:EINTerval:EVENT<x>:SPATtern:  
DATA:ACTive?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
DATA:ACTIVE HIGH  
:TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
DATA:ACTIVE? -> :TRIGGER:EINTERVAL:  
EVENT1:SPATTERN:DATA:ACTIVE HIGH

**:TRIGger:EINTerval:EVENT<x>:SPATtern:  
DATA:SOURce**

**Function** Sets the data trace of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
DATA:SOURce {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:SPATtern:  
DATA:SOURce?  
<x> = 1 or 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
DATA:SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
DATA:SOURCE? -> :TRIGGER:EINTERVAL:  
EVENT1:SPATTERN:DATA:SOURCE 1

**:TRIGger:EINTerval:EVENT<x>:SPATtern:  
HEXA**

**Function** Sets the pattern of the serial pattern trigger in hexadecimal notation.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
HEXA {<String>}  
<x> = 1 or 2  
<String> = Up to 32 characters by combining '0' to 'F'  
and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
HEXA "ABCD"

**:TRIGger:EINTerval:EVENT<x>:SPATtern:  
LATCh?**

**Function** Queries all settings related to latch of the serial pattern trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
LATCh?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
LATCH? -> :TRIGGER:EINTERVAL:EVENT1:  
SPATTERN:LATCH:SOURCE 1;POLARITY FALL

**:TRIGger:EINTerval:EVENT<x>:SPATtern:  
LATCh:POLarity**

**Function** Sets the polarity of the latch trace of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
LATCh:POLarity {FALL|RISE}  
:TRIGger:EINTerval:EVENT<x>:SPATtern:  
LATCh:POLarity?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
LATCH:POLARITY FALL  
:TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
LATCH:POLARITY? -> :TRIGGER:EINTERVAL:  
EVENT1:SPATTERN:LATCH:POLARITY FALL

**Description**• This command is valid when :TRIGger:EINTerval:  
EVENT<x>:SPATtern:CLOCK:MODE ON.  
• This command is invalid if :TRIGger:EINTerval:  
EVENT<x>:SPATtern:LATCH:SOURce NONE.

**:TRIGger:EINTerval:EVENT<x>:SPATtern:  
LATCh:SOURce**

**Function** Sets the latch trace of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
LATCh:SOURce {<Nrf>|NONE}  
:TRIGger:EINTerval:EVENT<x>:SPATtern:  
LATCh:SOURce?  
<x> = 1 or 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
LATCH:SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
LATCH:SOURCE? -> :TRIGGER:EINTERVAL:  
EVENT1:SPATTERN:LATCH:SOURCE 1

**Description** This command is valid when :TRIGger:EINTerval:  
EVENT<x>:SPATtern:CLOCK:  
MODE ON.



## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:SPATtern:PATtern**

**Function** Sets the pattern of the serial pattern trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPATtern:  
PATtern {<String>}  
:TRIGger:EINTerval:EVENT<x>:SPATtern:  
PATtern?  
<x> = 1 or 2  
<String> = Up to 128 characters by combining '0', '1',  
and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
PATTERN "1100110111101111"  
:TRIGGER:EINTERVAL:EVENT1:SPATTERN:  
PATTERN? -> :TRIGGER:EINTERVAL:EVENT1:  
SPATTERN:PATTERN "1100110111101111"

### **:TRIGger:EINTerval:EVENT<x>:SPIBus?**

**Function** Queries all settings related to the SPI bus trigger of the event.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPIBus?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPIBUS?  
-> :TRIGGER:EINTERVAL:EVENT1:SPIBUS:  
BITORDER LSBFIRST;CLOCK:POLARITY FALL;  
SOURCE 1;:TRIGGER:EINTERVAL:EVENT1:  
SPIBUS:CS:ACTIVE HIGH;SOURCE 1;:  
TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1:  
BYTE 1;CONDITION TRUE;DPOSITION 1;  
PATTERN1 "00010010";  
PATTERN2 "00110100";  
PATTERN3 "01010110";  
PATTERN4 "00010010";SOURCE 3;:TRIGGER:  
EINTERVAL:EVENT1:SPIBUS:DATA2:BYTE 4;  
CONDITION TRUE;DPOSITION 1;  
PATTERN1 "00010010";  
PATTERN2 "00110100";  
PATTERN3 "01010110";  
PATTERN4 "00010010";SOURCE 3;:TRIGGER:  
EINTERVAL:EVENT1:SPIBUS:MODE WIRE3

### **:TRIGger:EINTerval:EVENT<x>:SPIBus:**

#### **BITOrder**

**Function** Sets the bit order of the SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPIBus:  
BITOrder {LSBFirst|MSBFirst}  
:TRIGger:EINTerval:EVENT<x>:SPIBus:  
BITOrder?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPIBUS:  
BITORDER LSBFIRST  
:TRIGGER:EINTERVAL:EVENT1:SPIBUS:  
BITORDER? -> :TRIGGER:EINTERVAL:  
EVENT1:SPIBUS:BITORDER LSBFIRST

### **:TRIGger:EINTerval:EVENT<x>:SPIBus:CLOCK?**

**Function** Queries all settings related to the clock of the SPI bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPIBus:  
CLOCK?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPIBUS:CLOCK?  
-> :TRIGGER:EINTERVAL:EVENT1:SPIBUS:  
CLOCK:POLARITY FALL;SOURCE 1

### **:TRIGger:EINTerval:EVENT<x>:SPIBus:**

#### **CLOCK:POLarity**

**Function** Sets the polarity of the clock trace of the SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPIBus:  
CLOCK:POLarity {FALL|RISE}  
:TRIGger:EINTerval:EVENT<x>:SPIBus:  
CLOCK:POLarity?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPIBUS:CLOCK:  
POLARITY FALL  
:TRIGGER:EINTERVAL:EVENT1:SPIBUS:CLOCK:  
POLARITY? -> :TRIGGER:EINTERVAL:EVENT1:  
SPIBUS:CLOCK:POLARITY FALL

### **:TRIGger:EINTerval:EVENT<x>:SPIBus:**

#### **CLOCK:SOURce**

**Function** Sets the clock trace of the SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPIBus:  
CLOCK:SOURce {<NRf>}  
:TRIGger:EINTerval:EVENT<x>:SPIBus:  
CLOCK:SOURce?  
<x> = 1 or 2  
<NRf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:SPIBUS:CLOCK:  
SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:SPIBUS:CLOCK:  
SOURCE? -> :TRIGGER:EINTERVAL:EVENT1:  
SPIBUS:CLOCK:SOURCE 1

### **:TRIGger:EINTerval:EVENT<x>:SPIBus:CS?**

**Function** Queries all settings related to the chip select of the SPI bus trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPIBus:CS?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPIBUS:CS?  
-> :TRIGGER:EINTERVAL:EVENT1:SPIBUS:CS:  
ACTIVE HIGH;SOURCE 1

**:TRIGger:EINTerval:EVENT<x>:SPIBus:CS:****ACTive**

Function Sets the active level of the chip select of the SPI bus trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:SPIBus:CS:  
ACTive {HIGH|LOW}  
:TRIGger:EINTerval:EVENT<x>:SPIBus:CS:  
ACTive?  
<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:SPIBUS:CS:  
ACTIVE HIGH  
:TRIGGER:EINTERVAL:EVENT1:SPIBUS:CS:  
ACTIVE? -> :TRIGGER:EINTERVAL:EVENT1:  
SPIBUS:CS:ACTIVE HIGH

**:TRIGger:EINTerval:EVENT<x>:SPIBus:CS:****SOURce**

Function Sets the chip select trace of the SPI bus trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:SPIBus:CS:  
SOURce {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:SPIBus:CS:  
SOURce?  
<x> = 1 or 2  
<Nrf> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:SPIBUS:CS:  
SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:SPIBUS:CS:  
SOURCE? -> :TRIGGER:EINTERVAL:EVENT1:  
SPIBUS:CS:SOURCE 1

**:TRIGger:EINTerval:EVENT<x>:SPIBus:****DATA<x>?**

Function Queries all settings related to the data of the SPI bus trigger.

Syntax :TRIGger:EINTerval:EVENT<x>:SPIBus:  
DATA<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1?  
-> :TRIGGER:EINTERVAL:EVENT1:SPIBUS:  
DATA1:BYTE 1;CONDITION TRUE;  
DPOSITION 1;PATTERN1 "00010010";  
PATTERN2 "00110100";  
PATTERN3 "01010110";  
PATTERN4 "00010010";SOURCE 3

Description DATA2 is valid when :TRIGger:EINTerval:EVENT<x>:  
SPIBus:MODE WIRE4.

**:TRIGger:EINTerval:EVENT<x>:SPIBus:****DATA<x>:BYTE**

Function Sets the number of bytes of the data of the SPI bus trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:SPIBus:  
DATA<x>:BYTE {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:SPIBus:  
DATA<x>:BYTE?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<Nrf> = 1 to 4

Example :TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1:  
BYTE 1  
:TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1:  
BYTE? -> :TRIGGER:EINTERVAL:EVENT1:  
SPIBUS:DATA1:BYTE 1

**:TRIGger:EINTerval:EVENT<x>:SPIBus:****DATA<x>:CONDition**

Function Sets the determination method (match or not match) of the data of the SPI bus trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:SPIBus:  
DATA<x>:CONDition {FALSe|TRUE}  
:TRIGger:EINTerval:EVENT<x>:SPIBus:  
DATA<x>:CONDition?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2

Example :TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1:  
CONDITION TRUE  
:TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1:  
CONDITION? -> :TRIGGER:EINTERVAL:  
EVENT1:SPIBUS:DATA1:CONDITION TRUE

**:TRIGger:EINTerval:EVENT<x>:SPIBus:****DATA<x>:DPOSITion**

Function Sets the pattern comparison start position of the data of the SPI bus trigger or queries the current setting.

Syntax :TRIGger:EINTerval:EVENT<x>:SPIBus:  
DATA<x>:DPOSITion {<Nrf>}  
:TRIGger:EINTerval:EVENT<x>:SPIBus:  
DATA<x>:DPOSITion?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<Nrf> = 0 to 9999

Example :TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1:  
DPOSITION 1  
:TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1:  
DPOSITION? -> :TRIGGER:EINTERVAL:  
EVENT1:SPIBUS:DATA1:DPOSITION 1

## 5.31 TRIGger Group

### **:TRIGger:EINTerval:EVENT<x>:SPIBUS:**

#### **DATA<x>:HEXA<x>**

**Function** Sets the data of the SPI bus trigger in hexadecimal notation.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPIBUS:  
DATA<x>:HEXA<x> {<String>}  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<x> of HEXA<x> = 1 to 4  
<String> = 2 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1:  
HEXA1 "AB"

### **:TRIGger:EINTerval:EVENT<x>:SPIBUS:**

#### **DATA<x>:PATTern<x>**

**Function** Sets the data of the SPI bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPIBUS:  
DATA<x>:PATTern<x> {<String>}  
:TRIGger:EINTerval:EVENT<x>:SPIBUS:  
DATA<x>:PATTern<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<x> of PATTern<x> = 1 to 4  
<String> = 8 characters by combining '0,' '1,' and 'X'

**Example** :TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1:  
PATTERN1 "10101011"  
:TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1:  
PATTERN1? -> :TRIGGER:EINTERVAL:EVENT1:  
SPIBUS:DATA1:PATTERN1 "10101011"

### **:TRIGger:EINTerval:EVENT<x>:SPIBUS:**

#### **DATA<x>:SOURce**

**Function** Sets the trace of the data of the SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPIBUS:  
DATA<x>:SOURce {<NRf>}  
:TRIGger:EINTerval:EVENT<x>:SPIBUS:  
DATA<x>:SOURce?  
<x> of EVENT<x> = 1 or 2  
<x> of DATA<x> = 1 or 2  
<NRf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1:  
SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:SPIBUS:DATA1:  
SOURCE? -> :TRIGGER:EINTERVAL:EVENT1:  
SPIBUS:DATA1:SOURCE 1

### **:TRIGger:EINTerval:EVENT<x>:SPIBUS:**

#### **MODE**

**Function** Sets the wiring system of the SPI bus trigger (three-wire or four-wire) or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:SPIBUS:  
MODE {WIRE3|WIRE4}  
:TRIGger:EINTerval:EVENT<x>:SPIBUS:  
MODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:SPIBUS:  
MODE WIRE3  
:TRIGGER:EINTERVAL:EVENT1:SPIBUS:MODE?  
-> :TRIGGER:EINTERVAL:EVENT1:SPIBUS:  
MODE WIRE3

### **:TRIGger:EINTerval:EVENT<x>:STATE?**

**Function** Queries all settings related to condition to be satisfied of the event.

**Syntax** :TRIGger:EINTerval:EVENT<x>:STATE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:STATE?  
-> :TRIGGER:EINTERVAL:EVENT1:STATE:  
CHANNEL1 DONTCARE;CHANNEL2 DONTCARE;  
CHANNEL3 DONTCARE;CHANNEL4 DONTCARE;  
LOGIC AND

### **:TRIGger:EINTerval:EVENT<x>:STATE:**

#### **CHANnel<x>**

**Function** Sets the condition to be satisfied of the channel or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:STATE:  
CHANnel<x> {DONTcare|HIGH|LOW}  
:TRIGger:EINTerval:EVENT<x>:STATE:  
CHANnel<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of CHANnel<x> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:STATE:  
CHANNEL1 HIGH  
:TRIGGER:EINTERVAL:EVENT1:STATE:  
CHANNEL1? -> :TRIGGER:EINTERVAL:EVENT1:  
STATE:CHANNEL1 HIGH

**Description**• This command is valid when :TRIGger:EINTerval:EVENT<x>:TYPE EQUalify|I2CBus|PQUalify|PSTate|SPATtern|STATE.  
• {HIGH|LOW} is valid when :TRIGger:EINTerval:EVENT<x>:TYPE I2CBus|SPATtern.  
• For :TRIGger:EINTerval:EVENT<x>:TYPE EQUalify|PQUalify|PSTate|STATE and TRIGger:SOURce:CHANnel<x>:WINDow ON, the choices in the SB5000 menu are IN/OUT. {HIGH} corresponds to IN, and {LOW} corresponds to OUT.

**:TRIGger:EINTerval:EVENT<x>:STATE:****LOGic**

**Function** Sets the logic of the condition to be satisfied or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:STATE:  
LOGic {AND|OR}  
:TRIGger:EINTerval:EVENT<x>:STATE:  
LOGic?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:STATE:  
LOGIC AND  
:TRIGGER:EINTERVAL:EVENT1:STATE:LOGIC?  
-> :TRIGGER:EINTERVAL:EVENT1:STATE:  
LOGIC AND

**Description** This command is valid when :TRIGger:EINTerval:  
EVENT<x>:TYPE EQUalify|  
I2Cbus|PQUalify|PSTATE|SPATtern|STATE.

**:TRIGger:EINTerval:EVENT<x>:TYPE**

**Function** Sets the trigger type of the event or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:  
TYPE {CANBus|EDGE|EQUalify|FLEXray|  
I2Cbus|LEDGe|LINBus|LI2Cbus|LLINbus|  
LSPATtern|LSPiBus|LPState|LPULse|  
LQUalify|LState|LUART|PQUalify|PState|  
PULSe|SPATtern|SPIBus|STATE|UART}  
:TRIGger:EINTerval:EVENT<x>:TYPE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:TYPE CANBUS  
:TRIGGER:EINTERVAL:EVENT1:TYPE?  
-> :TRIGGER:EINTERVAL:EVENT1:  
TYPE CANBUS

**:TRIGger:EINTerval:EVENT<x>:UART?**

**Function** Queries all settings related to the UART bus signal trigger of each event.

**Syntax** :TRIGger:EINTerval:EVENT<x>:UART?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:UART? ->  
:TRIGGER:EINTERVAL:EVENT1:UART:  
BRATE 19200;DATA:BITORDER LSBFIRST;  
DSIZE 1;PATTERN "X0101001";:TRIGGER:  
EINTERVAL:EVENT1:UART:ERROR:  
FRAMING 1;PARITY 1;PMODE EVEN;:  
TRIGGER:EINTERVAL:EVENT1:UART:  
FORMAT BIT7PARITY;MODE DATA;P  
OLARITY NEGATIVE;SOURCE 1;  
SPOINT 18.8E+00

**:TRIGger:EINTerval:EVENT<x>:UART:BRATe**

**Function** Sets the UART bus signal trigger bit rate (data transfer rate) or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:UART:  
BRATe {<NRf>|USER, <NRf>}  
:TRIGger:EINTerval:EVENT<x>:UART:BRATe?  
<x> = 1, 2  
<NRf> = 1200, 2400, 4800, 9600, 19200, 38400,  
57600, 115200  
<NRf> of USER = See the SB5000 User's Manual

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:  
BRATE 19200  
:TRIGGER:EINTERVAL:EVENT1:UART:BRATE?  
-> :TRIGGER:EINTERVAL:EVENT1:UART:  
BRATE 19200

**:TRIGger:EINTerval:EVENT<x>:UART:DATA?**

**Function** Queries all settings related to data of the UART bus signal trigger.

**Syntax** :TRIGger:EINTerval:EVENT<x>:UART:DATA?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:DATA? ->  
:TRIGGER:EINTERVAL:EVENT1:UART:  
DATA:BITORDER LSBFIRST;DSIZE 1;  
PATTERN "X0101001"

**:TRIGger:EINTerval:EVENT<x>:UART:DATA:****BITOrder**

**Function** Sets the data bit order of the UART bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINTerval:EVENT<x>:UART:DATA:  
BITOrder {LSBFirst|MSBFirst}  
:TRIGger:EINTerval:EVENT<x>:UART:DATA:  
BITOrder?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:DATA:  
BITORDER LSBFIRST  
:TRIGGER:EINTERVAL:EVENT1:UART:DATA:  
BITORDER? -> :TRIGGER:EINTERVAL:EVENT1:  
UART:DATA:BITORDER LSBFIRST

## 5.31 TRIGger Group

### **:TRIGger:EINterval:EVENT<x>:UART:DATA:DSIZE**

**Function** Sets the number of data bytes of the UART bus signal trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:UART:DATA:DSIZE {<Nrf>}  
:TRIGger:EINterval:EVENT<x>:UART:DATA:DSIZE?  
<x> = 1, 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:DATA:DSIZE 1  
:TRIGGER:EINTERVAL:EVENT1:UART:DATA:DSIZE? -> :TRIGGER:EINTERVAL:EVENT1:UART:DATA:DSIZE 1

### **:TRIGger:EINterval:EVENT<x>:UART:DATA:HEXA**

**Function** Sets the UART bus signal trigger data in hexadecimal.

**Syntax** :TRIGger:EINterval:EVENT<x>:UART:DATA:HEXA {<string>}  
<x> = 1, 2  
<string> = Up to 8 characters by combining '0' to 'F' and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:DATA:HEXA "A9"

### **:TRIGger:EINterval:EVENT<x>:UART:DATA:PATtern**

#### **PATtern**

**Function** Sets the data of the UART bus signal trigger in binary or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:UART:DATA:PATtern {<string>}  
:TRIGger:EINterval:EVENT<x>:UART:DATA:PATtern?  
<x> = 1, 2  
<string> = Up to 32 characters by combining '0','1,' and 'X,' units of 1 byte

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:DATA:PATtern "11011111"  
:TRIGGER:EINTERVAL:EVENT1:UART:DATA:PATtern? -> :TRIGGER:EINTERVAL:EVENT1:UART:DATA:PATtern "11011111"

### **:TRIGger:EINterval:EVENT<x>:UART:ERROR?**

#### **ERROR?**

**Function** Queries all settings related to the UART bus signal trigger error.

**Syntax** :TRIGger:EINterval:EVENT<x>:UART:ERROR?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:ERROR?  
-> :TRIGGER:EINTERVAL:EVENT1:UART:ERROR:FRAMING 1;PARITY 1;PMODE EVEN

### **:TRIGger:EINterval:EVENT<x>:UART:ERROR:FRAMing**

**Function** Sets the UART bus signal trigger Framing error or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:UART:ERROR:FRAMing {<Boolean>}  
:TRIGger:EINterval:EVENT<x>:UART:ERROR:FRAMing?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:ERROR:FRAMING ON  
:TRIGGER:EINTERVAL:EVENT1:UART:ERROR:FRAMING? -> :TRIGGER:EINTERVAL:EVENT1:UART:ERROR:FRAMING 1

### **:TRIGger:EINterval:EVENT<x>:UART:ERROR:PARity**

#### **ERROR:PARity**

**Function** Sets the UART bus signal trigger Parity error or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:UART:ERROR:PARity {<Boolean>}  
:TRIGger:EINterval:EVENT<x>:UART:ERROR:PARity?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:ERROR:PARITY ON  
:TRIGGER:EINTERVAL:EVENT1:UART:ERROR:PARITY? -> :TRIGGER:EINTERVAL:EVENT1:UART:ERROR:PARITY 1

### **:TRIGger:EINterval:EVENT<x>:UART:ERROR:PMODE**

#### **ERROR:PMODE**

**Function** Sets the UART bus signal trigger Parity mode or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:UART:ERROR:PMODE {EVEN|ODD}  
:TRIGger:EINterval:EVENT<x>:UART:ERROR:PMODE?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:ERROR:PMODE EVEN  
:TRIGGER:EINTERVAL:EVENT1:UART:ERROR:PMODE? -> :TRIGGER:EINTERVAL:EVENT1:UART:ERROR:PMODE EVEN

**:TRIGger:EINterval:EVENT<x>:UART:****FORMat**

**Function** Sets the UART bus signal trigger format or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:UART:  
FORMat {BIT7parity|BIT8Noparity|  
BIT8Parity}  
:TRIGger:EINterval:EVENT<x>:UART:  
FORMat?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:  
FORMAT BIT7PARITY  
:TRIGGER:EINTERVAL:EVENT1:UART:FORMAT?  
-> :TRIGGER:EINTERVAL:EVENT1:UART:  
FORMAT BIT7PARITY

**:TRIGger:EINterval:EVENT<x>:UART:MODE**

**Function** Sets the UART bus signal trigger mode or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:UART:  
MODE {DATA|ERRor}  
:TRIGger:EINterval:EVENT<x>:UART:MODE?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:  
MODE DATA  
:TRIGGER:EINTERVAL:EVENT1:UART:MODE? ->  
:TRIGGER:EINTERVAL:EVENT1:UART:  
MODE DATA

**:TRIGger:EINterval:EVENT<x>:UART:****POLarity**

**Function** Sets the UART bus signal trigger polarity or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:UART:  
POLarity {NEGative|POSitive}  
:TRIGger:EINterval:EVENT<x>:UART:  
POLarity?  
<x> = 1, 2

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:  
POLARITY NEGATIVE  
:TRIGGER:EINTERVAL:EVENT1:UART:  
POLARITY? -> :TRIGGER:EINTERVAL:EVENT1:  
UART:POLARITY NEGATIVE

**:TRIGger:EINterval:EVENT<x>:UART:****SOURCE**

**Function** Sets the UART bus signal trigger source or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:UART:  
SOURCE {<Nrf>}  
:TRIGger:EINterval:EVENT<x>:UART:  
SOURCE?  
<x> = 1, 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:SOURCE 1  
:TRIGGER:EINTERVAL:EVENT1:UART:SOURCE?  
-> :TRIGGER:EINTERVAL:EVENT1:UART:  
SOURCE 1

**:TRIGger:EINterval:EVENT<x>:UART:****SPOint**

**Function** Sets the UART bus signal trigger sample point or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:UART:  
SPOint {<Nrf>}  
:TRIGger:EINterval:EVENT<x>:UART:  
SPOint?  
<x> = 1, 2  
<Nrf> = 18.8 to 90.6(%)

**Example** :TRIGGER:EINTERVAL:EVENT1:UART:  
SPOINT 18.8  
:TRIGGER:EINTERVAL:EVENT1:UART:SPOINT?  
-> :TRIGGER:EINTERVAL:EVENT1:UART:  
SPOINT 18.8E+00

**:TRIGger:EINterval:EVENT<x>:WIDTH?**

**Function** Queries all settings related to the pulse width trigger of the event.

**Syntax** :TRIGger:EINterval:EVENT<x>:WIDTH?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:WIDTH?  
-> :TRIGGER:EINTERVAL:EVENT1:WIDTH:  
MODE TIMEOUT;POLARITY POSITIVE;  
SOURCE EXTERNAL;TIME1 1.000E+00;  
TIME2 1.000E+00

## 5.31 TRIGger Group

### **:TRIGger:EINterval:EVENT<x>:WIDTH:**

#### **MODE**

**Function** Sets the determination mode of the pulse width trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:WIDTH:  
MODE {BETween|IN|NOTBetween|OUT|  
TIMEout}  
:TRIGger:EINterval:EVENT<x>:WIDTH:MODE?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:WIDTH:MODE  
TIMEOUT  
:TRIGGER:EINTERVAL:EVENT1:WIDTH:MODE?  
-> :TRIGGER:EINTERVAL:EVENT1:WIDTH:  
MODE TIMEOUT

### **:TRIGger:EINterval:EVENT<x>:WIDTH:**

#### **POLarity**

**Function** Sets the polarity of the pulse width trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:WIDTH:  
POLarity {FALSE|NEGative|POSitive|TRUE}  
:TRIGger:EINterval:EVENT<x>:WIDTH:  
POLarity?  
<x> = 1 or 2

**Example** :TRIGGER:EINTERVAL:EVENT1:WIDTH:  
POLARITY POSITIVE  
:TRIGGER:EINTERVAL:EVENT1:WIDTH:  
POLARITY? -> :TRIGGER:EINTERVAL:EVENT1:  
WIDTH:POLARITY POSITIVE

**Description** • For :TRIGger:EINterval:EVENT<x>:TYPE PQUalify|PULSe and :TRIGger:SOURce:CHANnel<x>:WINDow ON, the choices in the SB5000 menu are IN/OUT. {POSitive} corresponds to IN, and {NEGative} corresponds to OUT.

- {FALSE|TRUE} is valid when :TRIGger:EINterval:EVENT<x>:TYPE PSTate.

### **:TRIGger:EINterval:EVENT<x>:WIDTH:**

#### **SOURCE**

**Function** Sets the trigger source of the pulse width trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:WIDTH:  
SOURce {<NRf>|EXTernal}  
:TRIGger:EINterval:EVENT<x>:WIDTH:  
SOURce?  
<x> = 1 or 2  
<NRf> = 1 to 4

**Example** :TRIGGER:EINTERVAL:EVENT1:WIDTH:  
SOURCE EXTERNAL  
:TRIGGER:EINTERVAL:EVENT1:WIDTH:SOURCE?  
-> :TRIGGER:EINTERVAL:EVENT1:WIDTH:  
SOURCE EXTERNAL

**Description** This command is valid when :TRIGger:EINterval:EVENT<x>:TYPE PQUalify|PULSe.

### **:TRIGger:EINterval:EVENT<x>:WIDTH:**

#### **TIME<x>**

**Function** Sets the pulse width of the pulse width trigger or queries the current setting.

**Syntax** :TRIGger:EINterval:EVENT<x>:WIDTH:  
TIME<x> {<Time>}  
:TRIGger:EINterval:EVENT<x>:WIDTH  
:TIME<x>?  
<x> of EVENT<x> = 1 or 2  
<x> of TIME<x> = 1 or 2  
<Time> = 1 ns to 10 s (500 ps steps)

**Example** :TRIGGER:EINTERVAL:EVENT1:WIDTH:  
TIME1 1S  
:TRIGGER:EINTERVAL:EVENT1:WIDTH:TIME1?  
-> :TRIGGER:EINTERVAL:EVENT1:WIDTH:  
TIME1 1.000E+00

**Description** TIME2 is valid when :TRIGger:EINterval:EVENT<x>:WIDTH:MODE BETWween|NOTBetween.

### **:TRIGger:EINterval:MODE**

**Function** Sets the determination mode of the event interval or queries the current setting.

**Syntax** :TRIGger:EINterval:MODE {BETWween|IN|  
NOTBetween|OUT|TIMEout}  
:TRIGger:EINterval:MODE?

**Example** :TRIGGER:EINTERVAL:MODE BETWEEN  
:TRIGGER:EINTERVAL:MODE? -> :TRIGGER:  
EINTERVAL:MODE BETWEEN







**:TRIGger:ENHanced:CANBus:DATA:DATA<x>**

**Function** Sets the comparison data of the CAN bus signal trigger data or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:DATA:DATA<x> {<NRf>}  
:TRIGger:ENHanced:CANBus:DATA:DATA<x>?<x> = 1, 2  
<NRf> = See the User's Manual (IM701361-01E).

**Example** :TRIGGER:ENHANCED:CANBUS:DATA:DATA1 1  
:TRIGGER:ENHANCED:CANBUS:DATA:DATA1? -> :TRIGGER:ENHANCED:CANBUS:DATA:DATA1 1.0000000E+00

**Description**

- Use :TRIGger:ENHANCED:CANBus:DATA:DATA1 when :TRIGger:ENHANCED:CANBus:DATA:CONDition GTHan is specified.
- Use :TRIGger:ENHANCED:CANBus:DATA:DATA2 when :TRIGger:ENHANCED:CANBus:DATA:CONDition LTHan is specified.
- Use :TRIGger:ENHANCED:CANBus:DATA:DATA1 to set the smaller value and :TRIGger:ENHANCED:CANBus:DATA:DATA2 to set the larger value when :TRIGger:ENHANCED:CANBus:DATA:CONDition BETWEEN|ORANge is specified.

**:TRIGger:ENHanced:CANBus:DATA:DLC**

**Function** Sets the number of valid bytes (DLC) of the CAN bus signal trigger data or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:DATA:DLC {<NRf>}  
:TRIGger:ENHanced:CANBus:DATA:DLC?<NRf> = 0 to 8

**Example** :TRIGGER:ENHANCED:CANBUS:DATA:DLC 0  
:TRIGGER:ENHANCED:CANBUS:DATA:DLC?  
-> :TRIGGER:ENHANCED:CANBUS:DATA:DLC 0

**:TRIGger:ENHanced:CANBus:DATA:HEXA**

**Function** Sets the CAN bus signal trigger data in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:CANBus:DATA:HEXA {<String>}  
<String> = Up to 16 characters by combining '0' to 'F' and 'X' (in one-byte unit)

**Example** :TRIGGER:ENHANCED:CANBUS:DATA:HEXA "A9"

**:TRIGger:ENHanced:CANBus:DATA:MSBLSb**

**Function** Sets the MSB and LSB bits of the CAN bus signal trigger data or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:DATA:MSBLSb {<NRf>, <NRf>}  
:TRIGger:ENHanced:CANBus:DATA:MSBLSb?<NRf> = See the User's Manual (IM701361-01E).

**Example** :TRIGGER:ENHANCED:CANBUS:DATA:MSBLSB 1, 0  
:TRIGGER:ENHANCED:CANBUS:DATA:MSBLSB? -> :TRIGGER:ENHANCED:CANBUS:DATA:MSBLSB 1, 0

**:TRIGger:ENHanced:CANBus:DATA:PATtern**

**Function** Sets the CAN bus signal trigger data in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:DATA:PATtern {<String>}  
:TRIGger:ENHanced:CANBus:DATA:PATtern?<String> = Up to 64 characters by combining '0', '1', and 'X' (in one-byte unit)

**Example** :TRIGGER:ENHANCED:CANBUS:DATA:PATTERN "11011111"  
:TRIGGER:ENHANCED:CANBUS:DATA:PATTERN? -> :TRIGGER:ENHANCED:CANBUS:DATA:PATTERN "11011111"

**:TRIGger:ENHanced:CANBus:DATA:SIGN**

**Function** Sets the sign of the CAN bus signal trigger data or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:DATA:SIGN {SIGN|UNSign}  
:TRIGger:ENHanced:CANBus:DATA:SIGN?

**Example** :TRIGGER:ENHANCED:CANBUS:DATA:SIGN SIGN  
:TRIGGER:ENHANCED:CANBUS:DATA:SIGN? -> :TRIGGER:ENHANCED:CANBUS:DATA:SIGN SIGN

**:TRIGger:ENHanced:CANBus:IDEXt?**

**Function** Queries all settings related to the ID of the extended format of the CAN bus signal trigger.

**Syntax** :TRIGger:ENHanced:CANBus:IDEXt?

**Example** :TRIGGER:ENHANCED:CANBUS:IDEXT? -> :TRIGGER:ENHANCED:CANBUS:IDEXT:PATTERN "110010110111000011101110111111"

## 5.31 TRIGger Group

### **:TRIGger:ENHanced:CANBus:IDExt:HEXA**

**Function** Sets the ID of the extended format of the CAN bus signal trigger in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:CANBus:IDExt:  
HEXA {<String>}  
<String> = 8 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:ENHANCED:CANBUS:IDEXT:  
HEXA "1AEF5906"

### **:TRIGger:ENHanced:CANBus:IDExt:PATtern**

**Function** Sets the ID of the extended format of the CAN bus signal trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDExt:  
PATtern {<String>}  
:TRIGger:ENHanced:CANBus:IDExt:  
PATtern?  
<String> = 29 characters by combining '0','1,' and 'X'

**Example** :TRIGGER:ENHANCED:CANBUS:IDEXT:  
PATTERN "11001011011100001110111011111"  
:TRIGGER:ENHANCED:CANBUS:IDEXT:  
PATTERN? -> :TRIGGER:ENHANCED:CANBUS:  
IDEXT:PATTERN "1100101101110000111011  
1011111"

### **:TRIGger:ENHanced:CANBus:IDOR?**

**Function** Queries all settings related to the OR condition of the CAN bus signal trigger.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR?

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR?  
-> :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
ACK DONTCARE;DATA:BORDER BIG;  
CONDITION DONTCARE;DATA1 0.0000000E+00;  
DATA2 255.00000E+00;DLC 8;MSBLSB 7,0;  
PATTERN "00000001001000110100010101  
10011110001001101010111100110111101  
111";SIGN UNSIGN;:TRIGGER:ENHANCED:  
CANBUS:IDOR:ID1:FORMAT STD;IDEXT:  
PATTERN "1101010111100110111101111000  
0";:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
IDSTD:PATTERN "00100100011";:TRIGGER:  
ENHANCED:CANBUS:IDOR:ID1:  
MODE 0;RTR DATA;:TRIGGER:ENHANCED:  
CANBUS:IDOR:ID2:ACK DONTCARE;DATA:  
BORDER BIG;CONDITION DONTCARE;  
DATA1 0.0000000E+00;  
DATA2 255.00000E+00;DLC 8;MSBLSB 7,0;  
PATTERN "11111110110111001011101010  
01100001110110010101000011001000010  
000";SIGN UNSIGN;:TRIGGER:ENHANCED:  
CANBUS:IDOR:ID2:FORMAT STD;IDEXT:  
PATTERN "1001000110100010101100111100  
0";:TRIGGER:ENHANCED:CANBUS:IDOR:ID2:  
IDSTD:PATTERN "10001010110";:TRIGGER:  
ENHANCED:CANBUS:IDOR:ID2:  
MODE 0;RTR DATA;:TRIGGER:ENHANCED:  
CANBUS:IDOR:ID3:ACK DONTCARE;DATA:  
BORDER BIG;CONDITION DONTCARE;  
DATA1 0.0000000E+00;  
DATA2 255.00000E+00;DLC 8.....

### **:TRIGger:ENHanced:CANBus:IDOR:ID<x>?**

**Function** Queries all settings related to each ID of the OR condition of the CAN bus signal trigger.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1?  
-> :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
ACK DONTCARE;DATA:BORDER BIG;  
CONDITION DONTCARE;DATA1 0.0000000E+00;  
DATA2 255.00000E+00;DLC 8;MSBLSB 7,0;  
PATTERN "00000001001000110100010101  
10011110001001101010111100110111101  
111";SIGN UNSIGN;:TRIGGER:ENHANCED:  
CANBUS:IDOR:ID1:FORMAT STD;IDEXT:  
PATTERN "1101010111100110111101111000  
0";:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
IDSTD:PATTERN "00100100011";:TRIGGER:  
ENHANCED:CANBUS:IDOR:ID1:MODE 0;  
RTR DATA

**:TRIGger:ENHanced:CANBus:IDOR:ID<x>:****ACK**

**Function** Sets each ACK condition of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
ACK {ACK|ACKBoth|DONTcare|NONack}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
ACK?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
ACK ACK  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
ACK? -> :TRIGGER:ENHANCED:CANBUS:  
IDOR:ID1:ACK ACK

**:TRIGger:ENHanced:CANBus:IDOR:ID<x>:****DATA?**

**Function** Queries all settings related to each data of the OR condition of the CAN bus signal trigger.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA? -> :TRIGGER:ENHANCED:CANBUS:  
IDOR:ID1:DATA:BORDER BIG;  
CONDITION DONTCARE;DATA1 0.0000000E+00;  
DATA2 255.00000E+00;DLC 8;MSBSLB 7,0;  
PATTERN "00000001001000110100010101100  
11110001001101010111100110111101111"  
;SIGN UNSIGN

**:TRIGger:ENHanced:CANBus:IDOR:ID<x>:****DATA:BORDER**

**Function** Sets byte order of each data of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:BORDER {BIG|LITTLE}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:BORDER?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:BORDER BIG  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:BORDER? -> :TRIGGER:ENHANCED:  
CANBUS:IDOR:ID1:DATA:BORDER BIG

**:TRIGger:ENHanced:CANBus:IDOR:ID<x>:****DATA:CONDition**

**Function** Sets each data condition of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:CONDition {BETween|DONTcare|  
FALSe|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:CONDition?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:CONDITION BETWEEN  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:CONDITION? -> :TRIGGER:ENHANCED:  
CANBUS:IDOR:ID1:DATA:  
CONDITION BETWEEN

**:TRIGger:ENHanced:CANBus:IDOR:ID<x>:****DATA:DATA<x>**

**Function** Sets comparison data of each data of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:DATA<x> {<Nrf>}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:DATA<x>?  
<x> of ID<x> = 1 to 4  
<x> of DATA<x> = 1 or 2  
<Nrf> = See the User's Manual (IM701361-01E).

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:DATA1 1  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:DATA1? -> :TRIGGER:ENHANCED:  
CANBUS:IDOR:ID1:DATA:  
DATA1 1.0000000E+00

**Description**

- Use :TRIGger:ENHANCED:CANBus:IDOR:ID<x>:DATA:DATA1 when :TRIGger:ENHANCED:CANBus:IDOR:ID<x>:DATA:CONDition GTHan is specified.
- Use :TRIGger:ENHANCED:CANBus:IDOR:ID<x>:DATA:DATA2 when :TRIGger:ENHANCED:CANBus:IDOR:ID<x>:DATA:CONDition LTHan is specified.
- Use :TRIGger:ENHANCED:CANBus:IDOR:ID<x>:DATA:DATA1 to set the smaller value and :TRIGger:ENHANCED:CANBus:IDOR:ID<x>:DATA:DATA2 to set the larger value when :TRIGger:ENHANCED:CANBus:IDOR:ID<x>:DATA:CONDition BETWEEN|ORANge is specified.

## 5.31 TRIGger Group

### **:TRIGger:ENHanced:CANBus:IDOR:ID<x>:**

#### **DATA:DLC**

**Function** Sets the number of valid bytes (DLC) of each data of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:DLC {<NRf>}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:DLC?  
<x> = 1 to 4  
<NRf> = 0 to 8

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:DLC 0  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:DLC? -> :TRIGGER:ENHANCED:  
CANBUS:IDOR:ID1:DATA:DLC 0

### **:TRIGger:ENHanced:CANBus:IDOR:ID<x>:**

#### **DATA:HEXA**

**Function** Sets each data of the OR condition of the CAN bus signal trigger in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:HEXA {<String>}  
<x> = 1 to 4  
<String> = Up to 16 characters by combining '0' to 'F' and 'X' (in one-byte unit)

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:HEXA "A9"

### **:TRIGger:ENHanced:CANBus:IDOR:ID<x>:**

#### **DATA:MSBLSb**

**Function** Sets the MSB and LSB bits of each data of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:MSBLSb {<NRf>,<NRf>}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:MSBLSb?  
<x> = 1 to 4  
<NRf> = See the User's Manual (IM701361-01E).

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:MSBLSB 1,0  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:MSBLSB? -> :TRIGGER:ENHANCED:  
CANBUS:IDOR:ID1:DATA:MSBLSB 1,0

### **:TRIGger:ENHanced:CANBus:IDOR:ID<x>:**

#### **DATA:PATtern**

**Function** Sets each data of the OR condition of the CAN bus signal trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:PATtern {<String>}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:PATtern?  
<x> = 1 to 4  
<String> = Up to 64 characters by combining '0','1,' and 'X' (in one-byte unit)

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:PATTERN "11011111"  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:PATTERN? -> :TRIGGER:ENHANCED:  
CANBUS:IDOR:ID1:DATA:PATTERN  
"11011111"

### **:TRIGger:ENHanced:CANBus:IDOR:ID<x>:**

#### **DATA:SIGN**

**Function** Sets sign of each data of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:SIGN {SIGN|UNSign}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
DATA:SIGN?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:SIGN SIGN  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
DATA:SIGN? -> :TRIGGER:ENHANCED:  
CANBUS:IDOR:ID1:DATA:SIGN SIGN

### **:TRIGger:ENHanced:CANBus:IDOR:ID<x>:**

#### **FORMat**

**Function** Sets each message format (standard or extended) of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
FORMat {STD|EXT}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
FORMat?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
FORMAT STD  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
FORMAT? -> :TRIGGER:ENHANCED:CANBUS:  
IDOR:ID1:FORMAT STD

**:TRIGger:ENHanced:CANBus:IDOR:ID<x>:IDEXt?**

**Function** Queries all settings related to the ID of each extended format of the OR condition of the CAN bus signal trigger.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
IDEXt?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
IDEXT? -> :TRIGGER:ENHANCED:CANBUS:  
IDOR:ID1:IDEXT:PATTERN "1100101101110  
0001110111011111"

**:TRIGger:ENHanced:CANBus:IDOR:ID<x>:IDEXt:HEXA**

**Function** Sets the ID of each extended format of the OR condition of the CAN bus signal trigger in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
IDEXt:HEXA {<String>}  
<x> = 1 to 4  
<String> = 8 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
IDEXT:HEXA "1AEF5906"

**:TRIGger:ENHanced:CANBus:IDOR:ID<x>:IDEXt:PATtern**

**Function** Sets the ID of each extended format of the OR condition of the CAN bus signal trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
IDEXt:PATtern {<String>}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
IDEXt:PATtern?  
<x> = 1 to 4  
<String> = 29 characters by combining '0','1,' and 'X'

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
IDEXT:PATTERN "1100101101110000111011  
1011111"  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
IDEXT:PATTERN? -> :TRIGGER:ENHANCED:  
CANBUS:IDOR:ID1:IDEXT:PATTERN "110010  
11011100001110111011111"

**:TRIGger:ENHanced:CANBus:IDOR:ID<x>:IDSTd?**

**Function** Queries all settings related to the ID of each standard format of the OR condition of the CAN bus signal trigger.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
IDSTd?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
IDSTD? -> :TRIGGER:ENHANCED:CANBUS:  
IDOR:ID1:IDSTD:PATTERN "00011111101"

**:TRIGger:ENHanced:CANBus:IDOR:ID<x>:IDSTd:HEXA**

**Function** Sets the ID of each standard format of the OR condition of the CAN bus signal trigger in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
IDSTd:HEXA {<String>}  
<x> = 1 to 4  
<String> = 3 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
IDSTD:HEXA "5DF"

**:TRIGger:ENHanced:CANBus:IDOR:ID<x>:IDSTd:PATtern**

**Function** Sets the ID of each standard format of the OR condition of the CAN bus signal trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
IDSTd:PATtern {<String>}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
IDSTd:PATtern?  
<x> = 1 to 4  
<String> = 11 characters by combining '0','1,' and 'X'

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
IDSTD:PATTERN "10111011111"  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
IDSTD:PATTERN? -> :TRIGGER:ENHANCED:  
CANBUS:IDOR:ID1:IDSTD:PATTERN  
"10111011111"

## 5.31 TRIGger Group

### **:TRIGger:ENHanced:CANBus:IDOR:ID<x>:**

#### **MODE**

**Function** Enables or disables each condition of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
MODE {<Boolean>}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
MODE?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
MODE ON  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
MODE? -> :TRIGGER:ENHANCED:CANBUS:  
IDOR:ID1:MODE 1

### **:TRIGger:ENHanced:CANBus:IDOR:ID<x>:**

#### **RTR**

**Function** Sets each RTR of the OR condition of the CAN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
RTR {DATA|DONTcare|REMOte}  
:TRIGger:ENHanced:CANBus:IDOR:ID<x>:  
RTR?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
RTR DATA  
:TRIGGER:ENHANCED:CANBUS:IDOR:ID1:  
RTR? -> :TRIGGER:ENHANCED:CANBUS:  
IDOR:ID1:RTR DATA

### **:TRIGger:ENHanced:CANBus:IDSTd?**

**Function** Queries all settings related to the ID of the standard format of the CAN bus signal trigger.

**Syntax** :TRIGger:ENHanced:CANBus:IDSTd?

**Example** :TRIGGER:ENHANCED:CANBUS:IDSTD?  
-> :TRIGGER:ENHANCED:CANBUS:IDSTD:  
PATTERN "000111111101"

### **:TRIGger:ENHanced:CANBus:IDSTd:HEXA**

**Function** Sets the ID of the standard format of the CAN bus signal trigger in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:CANBus:IDSTd:HEXA  
{<String>}  
<String> = 3 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:ENHANCED:CANBUS:IDSTD:  
HEXA "5DF"

### **:TRIGger:ENHanced:CANBus:IDSTd:PATtern**

**Function** Sets the ID of the standard format of the CAN bus signal trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:IDSTd:  
PATtern {<String>}  
:TRIGger:ENHanced:CANBus:IDSTd:  
PATtern?  
<String> = 11 characters by combining '0', '1,' and 'X'

**Example** :TRIGGER:ENHANCED:CANBUS:IDSTD:  
PATTERN "10111011111"  
:TRIGGER:ENHANCED:CANBUS:IDSTD:  
PATTERN? -> :TRIGGER:ENHANCED:CANBUS:  
IDSTD:PATTERN "10111011111"

### **:TRIGger:ENHanced:CANBus:MODE**

**Function** Sets the CAN bus signal trigger mode or queries the current setting.

**Syntax** :TRIGger:ENHanced:CANBus:MODE {EFrame |  
IDExt | IDOR | IDSTd | MSIGnal | SOF}  
:TRIGger:ENHanced:CANBus:MODE?

**Example** :TRIGGER:ENHANCED:CANBUS:MODE EFRAME  
:TRIGGER:ENHANCED:CANBUS:MODE?  
-> :TRIGGER:ENHANCED:CANBUS:MODE EFRAME

### **:TRIGger:ENHanced:CANBus:MSIGnal?**

**Function** Queries all settings related to the message signal of the CAN bus signal trigger .

**Syntax** :TRIGger:ENHanced:CANBus:MSIGnal?

**Example** :TRIGGER:ENHANCED:CANBUS:MSIGNAL? ->  
:TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
MESSAGE1:MODE 1;:TRIGGER:ENHANCED:  
CANBUS:MSIGNAL:MESSAGE2:MODE 0;:  
TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
MESSAGE3:MODE 0;:TRIGGER:ENHANCED:  
CANBUS:MSIGNAL:MESSAGE4:MODE 0;:  
TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
SELECT MESSAGE;SIGNAL1:  
CONDITION BETWEEN;DATA1 0.0000000E+00;  
DATA2 255.000000E+00;MODE 1;:TRIGGER:  
ENHANCED:CANBUS:MSIGNAL:SIGNAL2:  
CONDITION DONTCARE;DATA1 0.0000000E+00;  
DATA2 255.000000E+00;MODE 0;:TRIGGER:  
ENHANCED:CANBUS:MSIGNAL:SIGNAL3:  
CONDITION DONTCARE;DATA1 0.0000000E+00;  
DATA2 255.000000E+00;MODE 0;:TRIGGER:  
ENHANCED:CANBUS:MSIGNAL:SIGNAL4:  
CONDITION DONTCARE;DATA1 0.0000000E+00;  
DATA2 255.000000E+00;MODE 0

**:TRIGger:ENHanced:CANBus:MSIGnal:****MESSAge<x>?**

Function Queries all settings related to the message of the CAN bus signal trigger.

Syntax :TRIGger:ENHanced:CANBus:MSIGnal:  
MESSAge<x>?  
<x> = 1 to 4

Example :TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
MESSAGE1? -> :TRIGGER:ENHANCED:CANBUS:  
MSIGNAL:MESSAGE1:MODE 1

**:TRIGger:ENHanced:CANBus:MSIGnal:****MESSAge<x>:ITEM**

Function Sets the CAN bus signal trigger message item.

Syntax :TRIGger:ENHanced:CANBus:MSIGnal:  
MESSAge<x>:ITEM {<string>}  
<x> = 1 to 4  
<string> = Up to 32 characters

Example :TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
MESSAGE1:ITEM "TEST"

**:TRIGger:ENHanced:CANBus:MSIGnal:****MESSAge<x>:MODE**

Function Turns ON/OFF the CAN bus signal trigger message or queries the current setting.

Syntax :TRIGger:ENHanced:CANBus:MSIGnal:  
MESSAge<x>:MODE {<Boolean>}  
:TRIGger:ENHanced:CANBus:MSIGnal:  
MESSAge<x>:MODE?  
<x> = 1 to 4

Example :TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
MESSAGE1:MODE ON  
:TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
MESSAGE1:MODE? -> :TRIGGER:ENHANCED:  
CANBUS:MSIGNAL:MESSAGE1:MODE 1

**:TRIGger:ENHanced:CANBus:MSIGnal:****SELEct**

Function Sets the message signal conditions for the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:ENHanced:CANBus:MSIGnal:  
SELEct {MESSAge|SIGnal}  
:TRIGger:ENHanced:CANBus:MSIGnal:  
SELEct?

Example :TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
SELECT MESSAGE  
:TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
SELECT? -> :TRIGGER:ENHANCED:CANBUS:  
MSIGNAL:SELECT MESSAGE

**:TRIGger:ENHanced:CANBus:MSIGnal:****SIGnal<x>?**

Function Queries all settings related to the signal of the CAN bus signal trigger.

Syntax :TRIGger:ENHanced:CANBus:MSIGnal:  
SIGnal<x>?  
<x> = 1 to 4

Example :TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
SIGNAL1? -> :TRIGGER:ENHANCED:CANBUS:  
MSIGNAL:SIGNAL1:CONDITION BETWEEN;  
DATA1 0.000000E+00;  
DATA2 255.00000E+00;MODE 1

**:TRIGger:ENHanced:CANBus:MSIGnal:****SIGnal<x>:CONDition**

Function Sets the signal data conditions for the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:ENHanced:CANBus:MSIGnal:  
SIGnal<x>:CONDition {BETween|DONTcare|  
FALSe|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:ENHanced:CANBus:MSIGnal:  
SIGnal<x>:CONDition?  
<x> = 1 to 4

Example :TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
SIGNAL1:CONDITION BETWEEN  
:TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
SIGNAL1:CONDITION? -> :TRIGGER:  
ENHANCED:CANBUS:MSIGNAL:SIGNAL1:  
CONDITION BETWEEN

**:TRIGger:ENHanced:CANBus:MSIGnal:****SIGnal<x>:DATA<x>**

Function Sets the signal data comparison data for the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:ENHanced:CANBus:MSIGnal:  
SIGnal<x>:DATA<x> {<Nrf>}  
:TRIGger:ENHanced:CANBus:MSIGnal:  
SIGnal<x>:DATA<x>?  
<x> of SIGnal<x> = 1 to 4  
<x> of DATA<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

Example :TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
SIGNAL1:DATA1 1  
:TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
SIGNAL1:DATA1? -> :TRIGGER:ENHANCED:  
CANBUS:MSIGNAL:SIGNAL1:  
DATA1 1.000000E+00



## 5.31 TRIGger Group

### **:TRIGger:ENHanced:CANBus:MSIGnal:**

#### **SIGNal<x>:ITEM**

Function Sets the CAN bus signal trigger signal item.

Syntax :TRIGger:ENHanced:CANBus:MSIGnal:  
SIGNal<x>:ITEM {<string>, <string>}  
<x> = 1 to 4  
<string> = Up to 32 characters

Example :TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
SIGNAL1:ITEM "ENGINE", "TEST"

Description The first string sets the signal, and the next string sets the message.

### **:TRIGger:ENHanced:CANBus:MSIGnal:**

#### **SIGNal<x>:MODE**

Function Turns ON/OFF the CAN bus signal trigger signal or queries the current setting.

Syntax :TRIGger:ENHanced:CANBus:MSIGnal:  
SIGNal<x>:MODE {<Boolean>}  
:TRIGger:ENHanced:CANBus:MSIGnal:  
SIGNal<x>:MODE?  
<x> = 1 to 4

Example :TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
SIGNAL1:MODE ON  
:TRIGGER:ENHANCED:CANBUS:MSIGNAL:  
SIGNAL1:MODE? -> :TRIGGER:ENHANCED:  
CANBUS:MSIGNAL:SIGNAL1:MODE 1

### **:TRIGger:ENHanced:CANBus:RECESSive**

Function Sets the recessive level (bus level) of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:ENHanced:CANBus:  
RECESSive {HIGH|LOW}  
:TRIGger:ENHanced:CANBus:RECESSive?

Example :TRIGGER:ENHANCED:CANBUS:  
RECESSIVE HIGH  
:TRIGGER:ENHANCED:CANBUS:RECESSIVE?  
-> :TRIGGER:ENHANCED:CANBUS:  
RECESSIVE HIGH

### **:TRIGger:ENHanced:CANBus:RTR**

Function Sets the RTR of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:ENHanced:CANBus:  
RTR {DATA|DONTcare|REMOte}  
:TRIGger:ENHanced:CANBus:RTR?

Example :TRIGGER:ENHANCED:CANBUS:RTR DATA  
:TRIGGER:ENHANCED:CANBUS:RTR?  
-> :TRIGGER:ENHANCED:CANBUS:RTR DATA

### **:TRIGger:ENHanced:CANBus:SOURce**

Function Sets the trigger source of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:ENHanced:CANBus:SOURce  
{<Nrf>}  
:TRIGger:ENHanced:CANBus:SOURce?  
<Nrf> = 1 to 4

Example :TRIGGER:ENHANCED:CANBUS:SOURCE 1  
:TRIGGER:ENHANCED:CANBUS:SOURCE?  
-> :TRIGGER:ENHANCED:CANBUS:SOURCE 1

### **:TRIGger:ENHanced:CANBus:SPOint**

Function Sets the sample point of the CAN bus signal trigger or queries the current setting.

Syntax :TRIGger:ENHanced:CANBus:SPOint  
{<Nrf>}  
:TRIGger:ENHanced:CANBus:SPOint?  
<Nrf> = 18.8 to 90.6(%)

Example :TRIGGER:ENHANCED:CANBUS:SPOINT 18.8  
:TRIGGER:ENHANCED:CANBUS:  
SPOINT? -> :TRIGGER:ENHANCED:CANBUS:  
SPOINT 18.8E+00

### **:TRIGger:ENHanced:FLEXray?**

Function Queries all settings related to the FLEXRAY bus signal trigger.

Syntax :TRIGger:ENHanced:FLEXray?

Example :TRIGGER:ENHANCED:FLEXRAY? -> :TRIGGER:  
ENHANCED:FLEXRAY:BRATE 5000000;ERROR:  
BSS 1;CHANNEL DUAL;CRC 1;CRCBUS1 A;  
CRCBUS2 A;FES 1;SOURCE1 1;SOURCE2 1;:  
TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
CCOUNT:CONDITION BETWEEN;COUNT1 10;  
COUNT2 63;:TRIGGER:ENHANCED:FLEXRAY:  
IDDATA:DATA:BORDER BIG;  
CONDITION BETWEEN;DATA1 1.0000000E+00;  
DATA2 1.0000000E+00;DPOSITION 1;  
DSIZE 1;MSBLSB 1, 0;  
PATTERN "10101001";SIGN SIGN;:  
TRIGGER:ENHANCED:FLEXRAY:IDDATA:FID:  
CONDITION BETWEEN;ID1 100;ID2 2047;:  
TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
INDICATOR:CONDITION DONTCARE;  
NFRAME DONTCARE;PPREAMBLE DONTCARE;  
STFRAME DONTCARE;SYFRAME DONTCARE;:  
TRIGGER:ENHANCED:FLEXRAY:IDOR:  
DPOSITION 0;DSIZE 1;IDDATA1:CCOUNT:  
CONDITION BETWEEN;COUNT1 0;COUNT2 0;:  
TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:BORDER BIG;CONDITION BETWEEN;  
DATA1 1.0000000E+00;  
DATA2 255.000000E+00;MSBLSB 1, 0.....

**:TRIGger:ENHanced:FLEXray:BRATe**

**Function** Sets the FLEXRAY bus signal trigger bit rate (data transfer rate) or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:BRATe {<Nrf>}  
:TRIGger:ENHanced:FLEXray:BRATe?  
<Nrf> = 2500000, 5000000, 10000000

**Example** :TRIGGER:ENHANCED:FLEXRAY:BRATE 5000000  
:TRIGGER:ENHANCED:FLEXRAY:BRATE? ->  
:TRIGGER:ENHANCED:FLEXRAY:BRATE 5000000

**:TRIGger:ENHanced:FLEXray:ERROR?**

**Function** Queries all settings related to the FLEXRAY bus signal trigger error.

**Syntax** :TRIGger:ENHanced:FLEXray:ERROR?

**Example** :TRIGGER:ENHANCED:FLEXRAY:ERROR? ->  
:TRIGGER:ENHANCED:FLEXRAY:ERROR:BSS  
1;CHANNEL DUAL;CRC 1;CRCBUS1 A;CRCBUS2  
A;FES 1;SOURCE1 1;SOURCE2 1

**:TRIGger:ENHanced:FLEXray:ERROR:BSS**

**Function** Sets the FLEXRAY bus signal trigger BSS error or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:ERROR:BSS  
{<Boolean>}  
:TRIGger:ENHanced:FLEXray:ERROR:BSS?

**Example** :TRIGGER:ENHANCED:FLEXRAY:ERROR:BSS ON  
:TRIGGER:ENHANCED:FLEXRAY:ERROR:BSS? ->  
:TRIGGER:ENHANCED:FLEXRAY:ERROR:BSS 1

**:TRIGger:ENHanced:FLEXray:ERROR:CHANnel**

**Function** Sets the FLEXRAY bus signal trigger error channel or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:ERROR:CHANnel {DUAL|SINGLE}  
:TRIGger:ENHanced:FLEXray:ERROR:CHANnel?

**Example** :TRIGGER:ENHANCED:FLEXRAY:ERROR:CHANNEL DUAL  
:TRIGGER:ENHANCED:FLEXRAY:ERROR:CHANNEL? -> :TRIGGER:ENHANCED:FLEXRAY:ERROR:CHANNEL DUAL

**:TRIGger:ENHanced:FLEXray:ERROR:CRC**

**Function** Sets the FLEXRAY bus signal trigger CRC error or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:ERROR:CRC {<Boolean>}  
:TRIGger:ENHanced:FLEXray:ERROR:CRC?

**Example** :TRIGGER:ENHANCED:FLEXRAY:ERROR:CRC ON  
:TRIGGER:ENHANCED:FLEXRAY:ERROR:CRC? ->  
:TRIGGER:ENHANCED:FLEXRAY:ERROR:CRC 1

**:TRIGger:ENHanced:FLEXray:ERROR:CRCBUS<x>**

**Function** Sets the target channel of the FLEXRAY bus signal trigger CRC error or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:ERROR:CRCBUS<x> {A|B}  
:TRIGger:ENHanced:FLEXray:ERROR:CRCBUS<x>?  
<x> = 1, 2

**Example** :TRIGGER:ENHANCED:FLEXRAY:ERROR:CRCBUS1 A  
:TRIGGER:ENHANCED:FLEXRAY:ERROR:CRCBUS1? -> :TRIGGER:ENHANCED:FLEXRAY:ERROR:CRCBUS1 A

**:TRIGger:ENHanced:FLEXray:ERROR:FES**

**Function** Sets the FLEXRAY bus signal trigger FES error or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:ERROR:FES {<Boolean>}  
:TRIGger:ENHanced:FLEXray:ERROR:FES?

**Example** :TRIGGER:ENHANCED:FLEXRAY:ERROR:FES ON  
:TRIGGER:ENHANCED:FLEXRAY:ERROR:FES? ->  
:TRIGGER:ENHANCED:FLEXRAY:ERROR:FES 1

**:TRIGger:ENHanced:FLEXray:ERROR:SOURce<x>**

**Function** Sets the FLEXRAY bus signal trigger error source or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:ERROR:SOURce<x> {<Nrf>}  
:TRIGger:ENHanced:FLEXray:ERROR:SOURce<x>?  
<x> = 1, 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:ERROR:SOURCE1 1  
:TRIGGER:ENHANCED:FLEXRAY:ERROR:SOURCE1? -> :TRIGGER:ENHANCED:FLEXRAY:ERROR:SOURCE1 1

## 5.31 TRIGger Group

### **:TRIGger:ENHanced:FLEXray:IDData?**

**Function** Queries all settings related to the IDData of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA? ->  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
CCOUNT:CONDITION BETWEEN;COUNT1 10;  
COUNT2 63;:TRIGGER:ENHANCED:FLEXRAY:  
IDDATA:DATA:BORDER BIG;  
CONDITION BETWEEN;DATA1 1.0000000E+00;  
DATA2 1.0000000E+00;DPOSITION 1;DSIZE 1;  
MSBLSB 1, 0;PATTERN "10101001";  
SIGN SIGN;:TRIGGER:ENHANCED:FLEXRAY:  
IDDATA:FID:CONDITION BETWEEN;ID1 100;  
ID2 2047;:TRIGGER:ENHANCED:FLEXRAY:  
IDDATA:INDICATOR:CONDITION DONTCARE;  
NFRAME DONTCARE;PPREAMBLE DONTCARE;  
STFRAME DONTCARE;SYFRAME DONTCARE

### **:TRIGger:ENHanced:FLEXray:IDData:**

#### **CCOUNT?**

**Function** Queries all settings related to the Cycle Count of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:  
CCOUNT?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
CCOUNT? -> :TRIGGER:ENHANCED:FLEXRAY:  
IDDATA:CCOUNT:CONDITION BETWEEN;  
COUNT1 10;COUNT2 63

### **:TRIGger:ENHanced:FLEXray:IDData:**

#### **CCOUNT:CONDition**

**Function** Sets the Cycle Count data conditions of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:  
CCOUNT:CONDition {BETween|DONTcare|  
FALSE|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:ENHanced:FLEXray:IDData:  
CCOUNT:CONDition?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
CCOUNT:CONDITION BETWEEN  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
CCOUNT:CONDITION? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDDATA:CCOUNT:CONDITION BETWEEN

### **:TRIGger:ENHanced:FLEXray:IDData:**

#### **CCOUNT:COUNT<x>**

**Function** Sets the FLEXRAY bus signal trigger Cycle Count or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:  
CCOUNT:COUNT<x> {<NRF>}  
:TRIGger:ENHanced:FLEXray:IDData:  
CCOUNT:COUNT<x>?  
<x> = 1, 2  
<NRF> = 0 to 63

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
CCOUNT:COUNT1 10  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
CCOUNT:COUNT1? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDDATA:CCOUNT:COUNT1 10

**Description**

- For :TRIGger:ENHanced:FLEXray:IDData:  
CCOUNT:CONDition GTHan, set using: TRIGger:  
ENHanced:FLEXray:IDData:CCOUNT:COUNT1.
- For :TRIGger:ENHanced:FLEXray:IDData:CCOUNT:  
CONDition LTHan, set using: TRIGger:ENHanced:  
FLEXray:IDData:CCOUNT:COUNT2.
- For :TRIGger:ENHanced:FLEXray:IDData:  
CCOUNT:CONDition BETWEEN|ORANge, set small  
values with: TRIGger:ENHanced:FLEXray:IDData:  
CCOUNT:COUNT1, and large values with: TRIGger:  
ENHanced:FLEXray:IDData:CCOUNT:COUNT2.

### **:TRIGger:ENHanced:FLEXray:IDData:DATA?**

**Function** Queries all settings related to the Data Field of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:DATA?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
DATA? -> :TRIGGER:ENHANCED:FLEXRAY:  
IDDATA:DATA:BORDER BIG;CONDITION  
BETWEEN;DATA1 1.0000000E+00;  
DATA2 1.0000000E+00;DPOSITION 1;  
DSIZE 1;MSBLSB 1, 0;PATTERN "10101001";  
SIGN SIGN

### **:TRIGger:ENHanced:FLEXray:IDData:**

#### **DATA:BORDER**

**Function** Sets the byte order of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:DATA:  
BORDER {BIG|LITTLE}  
:TRIGger:ENHanced:FLEXray:IDData:DATA:  
BORDER?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:  
BORDER BIG  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:  
BORDER? -> :TRIGGER:ENHANCED:FLEXRAY:  
IDDATA:DATA:BORDER BIG

**:TRIGger:ENHanced:FLEXray:IDData:****DATA:CONDition**

**Function** Sets the data conditions of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:DATA:CONDition {BETWeen|DONTcare|FALSE|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:ENHanced:FLEXray:IDData:DATA:CONDition?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:CONDITION BETWEEN  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:CONDITION? -> :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:CONDITION BETWEEN

**:TRIGger:ENHanced:FLEXray:IDData:****DATA:DATA<x>**

**Function** Sets the comparison data of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:DATA:DATA<x> {<Nrf>}  
:TRIGger:ENHanced:FLEXray:IDData:DATA:DATA<x>?  
<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:DATA1 1  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:DATA1? -> :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:DATA1 1.0000000E+00

**Description**

- For :TRIGger:ENHanced:FLEXray:IDData:DATA:CONDition GTHan, set using: TRIGger:ENHanced:FLEXray:IDData:DATA:DATA1.
- For :TRIGger:ENHanced:FLEXray:IDData:DATA:CONDition LTHan, set using: TRIGger:ENHanced:FLEXray:IDData:DATA:DATA2.
- For :TRIGger:ENHanced:FLEXray:IDData:DATA:CONDition BETWeen|ORANge, set small values with: TRIGger:ENHanced:FLEXray:IDData:DATA:DATA1, and large values with: TRIGger:ENHanced:FLEXray:IDData:DATA:DATA2.

**:TRIGger:ENHanced:FLEXray:IDData:DATA:****DPOSITION**

**Function** Sets the position for pattern comparison of the data of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:DATA:DPOSITION {<Nrf>}  
:TRIGger:ENHanced:FLEXray:IDData:DATA:DPOSITION?  
<Nrf> = 0 to 253

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:DPOSITION 1  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:DPOSITION? -> :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:DPOSITION 1

**:TRIGger:ENHanced:FLEXray:IDData:****DATA:DSIZE**

**Function** Sets the number of bytes of data in the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:DATA:DSIZE {<Nrf>}  
:TRIGger:ENHanced:FLEXray:IDData:DATA:DSIZE?  
<Nrf> = 1 to 8

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:DSIZE 1  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:DSIZE? -> :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:DSIZE 1

**:TRIGger:ENHanced:FLEXray:IDData:****DATA:HEXA**

**Function** Sets the data in the Data Field of the FLEXRAY bus signal trigger in hexadecimal.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:DATA:HEXA {<string>}  
<string> = Up to 16 characters by combining '0' to 'F,' and 'X,' units of 1 byte

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:HEXA "A9"

## 5.31 TRIGger Group

### **:TRIGger:ENHanced:FLEXray:IDData:**

#### **DATA:MSBLSb**

**Function** Sets the MSB/LSB bit of data in the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:DATA:MSBLSb {<Nrf>, <Nrf>}  
:TRIGger:ENHanced:FLEXray:IDData:DATA:MSBLSb?  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:MSBLSB 1, 0  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:MSBLSB? -> :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:MSBLSB 1, 0

### **:TRIGger:ENHanced:FLEXray:IDData:**

#### **DATA:PATtern**

**Function** Sets the data of the Data Field of the FLEXRAY bus signal trigger in binary or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:DATA:PATtern {<string>}  
:TRIGger:ENHanced:FLEXray:IDData:DATA:PATtern?  
<string> = Up to 32 characters by combining '0','1,' and 'X,' units of 1 byte

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:PATTERN "11011111"  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:PATTERN? -> :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:PATTERN "11011111"

### **:TRIGger:ENHanced:FLEXray:IDData:**

#### **DATA:SIGN**

**Function** Sets the data sign of the Data Field of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:DATA:SIGN {SIGN|UNSign}  
:TRIGger:ENHanced:FLEXray:IDData:DATA:SIGN?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:SIGN SIGN  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:SIGN? -> :TRIGGER:ENHANCED:FLEXRAY:IDDATA:DATA:SIGN SIGN

### **:TRIGger:ENHanced:FLEXray:IDData:FID?**

**Function** Queries all settings related to the Frame ID of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:FID?  
**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:FID? -> :TRIGGER:ENHANCED:FLEXRAY:IDDATA:FID:CONDITION BETWEEN;ID1 100;ID2 2047

### **:TRIGger:ENHanced:FLEXray:IDData:**

#### **FID:CONDition**

**Function** Sets the Frame ID data conditions of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:FID:CONDition {BETween|DONTcare|FALSe|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:ENHanced:FLEXray:IDData:FID:CONDition?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:FID:CONDITION BETWEEN  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:FID:CONDITION? -> :TRIGGER:ENHANCED:FLEXRAY:IDDATA:FID:CONDITION BETWEEN

### **:TRIGger:ENHanced:FLEXray:IDData:**

#### **FID:ID<x>**

**Function** Sets the Frame ID data conditions of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:FID:ID<x> {<Nrf>}  
:TRIGger:ENHanced:FLEXray:IDData:FID:ID<x>?  
<x> = 1, 2  
<Nrf> = 1 to 2047

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:FID:ID1 100  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:FID:ID1? -> :TRIGGER:ENHANCED:FLEXRAY:IDDATA:FID:ID1 100

**Description**

- For :TRIGger:ENHanced:FLEXray:IDData:FID:CONDition GTHan, set using: TRIGger:ENHanced:FLEXray:IDData:FID:ID1.
- For :TRIGger:ENHanced:FLEXray:IDData:FID:CONDition LTHan, set using: TRIGger:ENHanced:FLEXray:IDData:FID:ID2.
- For :TRIGger:ENHanced:FLEXray:IDData:FID:CONDition BETWEEN|ORANge, set small values with: TRIGger:ENHanced:FLEXray:IDData:FID:ID1, and large values with: TRIGger:ENHanced:FLEXray:IDData:FID:ID2.

### **:TRIGger:ENHanced:FLEXray:IDData:**

#### **INDicator?**

**Function** Queries all settings related to the Indicator of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:INDicator?  
**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:INDICATOR? -> :TRIGGER:ENHANCED:FLEXRAY:IDDATA:INDICATOR:CONDITION DONTCARE;NFRAME DONTCARE;PPREAMBLE DONTCARE;STFRAME DONTCARE;SYFRAME DONTCARE

**:TRIGger:ENHanced:FLEXray:IDData:****INDicator:CONDition**

**Function** Sets the data conditions of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:  
IDData:INDicator:  
CONDition {DONTcare|FALSE|TRUE}  
:TRIGger:ENHanced:FLEXray:IDData:  
INDicator:CONDition?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
INDICATOR:CONDITION DONTCARE  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
INDICATOR:CONDITION? -> :TRIGGER:  
ENHANCED:FLEXRAY:IDDATA:INDICATOR:  
CONDITION DONTCARE

**:TRIGger:ENHanced:FLEXray:IDData:****INDicator:NFRame**

**Function** Sets the Null frame of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:  
INDicator:NFRame {DONTcare|OFF|ON}  
:TRIGger:ENHanced:FLEXray:IDData:  
INDicator:NFRame?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
INDICATOR:NFRAME DONTCARE  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
INDICATOR:NFRAME? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDDATA:INDICATOR:NFRAME  
DONTCARE

**:TRIGger:ENHanced:FLEXray:IDData:****INDicator:PPReamble**

**Function** Sets the Payload preamble of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:  
INDicator:PPReamble {DONTcare|OFF|ON}  
:TRIGger:ENHanced:FLEXray:IDData:  
INDicator:PPReamble?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
INDICATOR:PPREAMBLE DONTCARE  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
INDICATOR:PPREAMBLE? -> :TRIGGER:  
ENHANCED:FLEXRAY:IDDATA:INDICATOR:  
PPREAMBLE DONTCARE

**:TRIGger:ENHanced:FLEXray:IDData:****INDicator:STFRame**

**Function** Sets the Start frame of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:  
INDicator:STFRame {DONTcare|OFF|ON}  
:TRIGger:ENHanced:FLEXray:IDData:  
INDicator:STFRame?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
INDICATOR:STFRAME DONTCARE  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
INDICATOR:STFRAME? -> :TRIGGER:  
ENHANCED:FLEXRAY:IDDATA:INDICATOR:  
STFRAME DONTCARE

**:TRIGger:ENHanced:FLEXray:IDData:****INDicator:SYFRame**

**Function** Sets the Sync frame of the Indicator of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDData:  
INDicator:SYFRame {DONTcare|OFF|ON}  
:TRIGger:ENHanced:FLEXray:IDData:  
INDicator:SYFRame?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
INDICATOR:SYFRAME DONTCARE  
:TRIGGER:ENHANCED:FLEXRAY:IDDATA:  
INDICATOR:SYFRAME? -> :TRIGGER:  
ENHANCED:FLEXRAY:IDDATA:INDICATOR:  
SYFRAME DONTCARE

**:TRIGger:ENHanced:FLEXray:IDOR?**

**Function** Queries all settings related to the OR condition of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR?

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR? ->  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:  
DPOSITION 0;DSIZE 1;IDDATA1:CCOUNT:  
CONDITION BETWEEN;COUNT1 10;COUNT2 10;:  
TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:BORDER BIG;CONDITION BETWEEN;DATA1  
1.0000000E+00;DATA2 255.00000E+00;  
MSBLSB 1, 0;PATTERN "10101001";  
SIGN SIGN;:TRIGGER:ENHANCED:FLEXRAY:  
IDOR:IDDATA1:FID:CONDITION BETWEEN;  
ID1 100;ID2 1;:TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:INDICATOR:  
CONDITION DONTCARE;NFRAME DONTCARE;  
PPREAMBLE DONTCARE;STFRAME DONTCARE;  
SYFRAME DONTCARE;:TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:MODE 1;:TRIGGER:  
ENHANCED:FLEXRAY:IDOR:IDDATA2:CCOUNT:  
CONDITION DONTCARE;COUNT1 10;  
COUNT2 10.....

## 5.31 TRIGger Group

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **DPOsition**

**Function** Sets the position for pattern comparison of the data of the Data Field of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
DPOsition {<NRf>}  
:TRIGger:ENHanced:FLEXray:IDOR:  
DPOsition?  
<NRf> = 0 to 253

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:  
DPOSITION 1  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:  
DPOSITION? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:DPOSITION 1

### **:TRIGger:ENHanced:FLEXray:IDOR:DSIZE**

**Function** Sets the number of bytes of data in the Data Field of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
DSIZE {<NRf>}  
:TRIGger:ENHanced:FLEXray:IDOR:DSIZE?  
<NRf> = 1 to 8

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:DSIZE 1  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:DSIZE?  
-> :TRIGGER:ENHANCED:FLEXRAY:IDOR:  
DSIZE 1

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>?**

**Function** Queries all settings related to each IDData of the OR condition of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1?  
-> :TRIGGER:ENHANCED:FLEXRAY:IDOR:  
IDDATA1:CCOUNT:CONDITION BETWEEN;  
COUNT1 10;COUNT2 10;:TRIGGER:  
ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:BORDER BIG;CONDITION BETWEEN;  
DATA1 1.0000000E+00;DATA2 255.00000E+00;  
MSBLSB 1, 0;PATTERN "10101001";  
SIGN SIGN;:TRIGGER:ENHANCED:FLEXRAY:  
IDOR:IDDATA1:FID:CONDITION BETWEEN;  
ID1 100;ID2 1;:TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:INDICATOR:  
CONDITION DONTCARE;NFRAME DONTCARE;  
PPREAMBLE DONTCARE;STFRAME DONTCARE;  
SYFRAME DONTCARE;:TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:MODE 1

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:CCOunt?**

**Function** Queries all settings related to the Cycle Count of each IDData of the OR condition of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:CCOunt?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:  
IDDATA1:CCOUNT? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:CCOUNT:  
CONDITION BETWEEN;COUNT1 10;COUNT2 10

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:CCOunt:CONDition**

**Function** Sets each Cycle Count data condition of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:CCOunt:CONDition {BETween|  
DONTcare|FALSe|GTHan|LTHan|ORANGE|TRUE}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:CCOunt:CONDition?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
CCOUNT:CONDITION BETWEEN  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
CCOUNT:CONDITION? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:CCOUNT:  
CONDITION BETWEEN

**:TRIGger:ENHanced:FLEXray:IDOR:****IDData<x>:CCOunt:COUnT<x>**

**Function** Sets each Cycle Count of the OR conditions of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:CCOunt:COUnT<x> {<NRf>}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:CCOunt:COUnT<x>?  
<x> of IDData<x> = 1 to 4  
<x> of COUnT<x> = 1, 2  
<NRf> = 0 to 63

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
CCOUNT:COUNT1 10  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
CCOUNT:COUNT1? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:CCOUNT:COUNT1 10

**Description**

- For :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:CCOunt:CONDition GTHan, set using:  
TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:  
CCOunt:COUnT1.
- For :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:CCOunt:CONDition LTHan, set using:  
TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:  
CCOunt:COUnT2.
- For :TRIGger:ENHanced:FLEXray:  
IDOR:IDData<x>:CCOunt:CONDition  
BETWeen|ORANge, set small values with:  
TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:  
CCOunt:COUnT1, and large values with: TRIGger:  
ENHanced:FLEXray:IDOR:IDData<x>:CCOunt:  
COUnT2.

**:TRIGger:ENHanced:FLEXray:IDOR:****IDData<x>:DATA?**

**Function** Queries all settings related to each Data Field of the OR condition of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA? -> :TRIGGER:ENHANCED:FLEXRAY:  
IDOR:IDDATA1:DATA:BORDER BIG;  
CONDITION BETWEEN;DATA1 1.0000000E+00;  
DATA2 255.000000E+00;MSBLSB 1, 0;  
PATTERN "10101001";SIGN SIGN

**:TRIGger:ENHanced:FLEXray:IDOR:****IDData<x>:DATA:BORDER**

**Function** Sets the byte order of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:BORDER {BIG|LITtle}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:BORDER?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:BORDER BIG  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:BORDER? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:DATA:BORDER BIG

**:TRIGger:ENHanced:FLEXray:IDOR:****IDData<x>:DATA:CONDition**

**Function** Sets the data condition of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:CONDition {BETWeen|  
DONTcare|FALSe|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:CONDition?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:CONDITION BETWEEN  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:CONDITION? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:DATA:  
CONDITION BETWEEN



## 5.31 TRIGger Group

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:DATA:DATA<x>**

**Function** Sets the comparison data of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:DATA<x> {<Nrf>}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:DATA<x>?  
<x> of IDData<x> = 1 to 4  
<x> of DATA<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:DATA1 1  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:DATA1? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:DATA:DATA1  
1.0000000E+00

**Description**

- For :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:CONDition GTHan, set using:  
TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:  
DATA:DATA1.
- For :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:CONDition LTHan, set using:  
TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:  
DATA:DATA2.
- For :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:CONDition BETWeen|ORANge,  
set small values with: TRIGger:ENHanced:  
FLEXray:IDOR:IDData<x>:DATA:DATA1, and large  
values with: TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:DATA2.

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:DATA:HEXA**

**Function** Sets the data in each Data Field of the OR condition of the FLEXRAY bus signal trigger in hexadecimal.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:HEXA {<string>}  
<x> = 1 to 4  
<string> = Up to 16 characters by combining '0' to 'F,'  
and 'X,' units of 1 byte

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:HEXA "A9"

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:DATA:MSBLSb**

**Function** Sets the MSB/LSB bit of data in each Data Field of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:MSBLSb {<Nrf>, <Nrf>}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:MSBLSb?  
<x> = 1 to 4  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:MSBLSB 1, 0  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:MSBLSB? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:DATA:MSBLSB 1, 0

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:DATA:PATtern**

**Function** Sets the data of each Data Field of the OR conditions of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:PATtern {<string>}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:PATtern?  
<x> = 1 to 4  
<string> = Up to 64 characters by combining '0,' '1,'  
and 'X,' units of 1 byte

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:PATTERN "11011111"  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:PATTERN? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:DATA:  
PATTERN "11011111"

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:DATA:SIGN**

**Function** Sets the data sign of the Data Field of each OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:SIGN {SIGN|UNSign}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:DATA:SIGN?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:SIGN SIGN  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
DATA:SIGN? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:DATA:SIGN SIGN

**:TRIGger:ENHanced:FLEXray:IDOR:****IDData<x>:FID?**

**Function** Queries all settings related to each Frame ID of the OR condition of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:FID?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
FID? -> :TRIGGER:ENHANCED:FLEXRAY:  
IDOR:IDDATA1:FID:CONDITION BETWEEN;  
ID1 100;ID2 1

**:TRIGger:ENHanced:FLEXray:IDOR:****IDData<x>:FID:CONditiON**

**Function** Sets each Frame ID data condition of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:FID:CONditiON {BETWEE|  
DONTcare|FALSE|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:FID:CONditiON?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
FID:CONDITION BETWEEN  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
FID:CONDITION? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:FID:  
CONDITION BETWEEN

**:TRIGger:ENHanced:FLEXray:IDOR:****IDData<x>:FID:ID<x>**

**Function** Sets each Frame ID value of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:FID:ID<x> {<NRf>}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:FID:ID<x>?  
<x> of IDData<x> = 1 to 4  
<x> of ID<x> = 1, 2  
<NRf> = 1 to 2047

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
FID:ID1 100  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
FID:ID1? -> :TRIGGER:ENHANCED:FLEXRAY:  
IDOR:IDDATA1:FID:ID1 100

**Description**

- For :TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:FID:CONditiON GTHan, set using: TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:FID:ID1.
- For :TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:FID:CONditiON LTHan, set using: TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:FID:ID2.
- For :TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:FID:CONditiON BETWEE|ORANge, set small values with: TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:FID:ID1, and large values with: TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:FID:ID2

**:TRIGger:ENHanced:FLEXray:IDOR:****IDData<x>:INDicator?**

**Function** Queries all settings related to each Indicator of the OR condition of the FLEXRAY bus signal trigger.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:INDicator?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
INDICATOR? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:INDICATOR:  
CONDITION DONTCARE;NFRAME DONTCARE;  
PPREAMBLE DONTCARE;STFRAME DONTCARE;  
SYFRAME DONTCARE

## 5.31 TRIGger Group

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:INDicator:CONDition**

**Function** Sets each Indicator data condition of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:INDicator:  
CONDition {DONTcare|FALSE|TRUE}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:INDicator:CONDition?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:CONDITION DONTCARE  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:CONDITION? ->  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:CONDITION DONTCARE

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:INDicator:NFRame**

**Function** Sets each Indicator Null frame of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:INDicator:  
NFRame {DONTcare|OFF|ON}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:INDicator:NFRame?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:NFRAME DONTCARE  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:NFRAME? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:INDICATOR:  
NFRAME DONTCARE

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:INDicator:PPReamble**

**Function** Sets each Indicator Payload preamble of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:INDicator:  
PPReamble {DONTcare|OFF|ON}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:INDicator:PPReamble?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:PPREAMBLE DONTCARE  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:  
IDDATA1:INDICATOR:PPREAMBLE? ->  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:PPREAMBLE DONTCARE

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:INDicator:STFRame**

**Function** Sets each Indicator Start frame of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:  
INDicator:STFRame {DONTcare|OFF|ON}  
:TRIGger:ENHanced:FLEXray:IDOR:IDData<x>:  
INDicator:STFRame?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:STFRAME DONTCARE  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:STFRAME? -> :TRIGGER:ENHANCED:  
FLEXRAY:IDOR:IDDATA1:INDICATOR:STFRAME  
DONTCARE

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:INDicator:SYFRame**

**Function** Sets each Indicator Synch frame of the OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:INDicator:  
SYFRame {DONTcare|OFF|ON}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:INDicator:SYFRame?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:SYFRAME DONTCARE  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:SYFRAME? -> :TRIGGER:  
ENHANCED:FLEXRAY:IDOR:IDDATA1:  
INDICATOR:SYFRAME DONTCARE

### **:TRIGger:ENHanced:FLEXray:IDOR:**

#### **IDData<x>:MODE**

**Function** Enables (1) or disables (0) each condition for each OR condition of the FLEXRAY bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:MODE {<Boolean>}  
:TRIGger:ENHanced:FLEXray:IDOR:  
IDData<x>:MODE?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
MODE ON  
:TRIGGER:ENHANCED:FLEXRAY:IDOR:IDDATA1:  
MODE? -> :TRIGGER:ENHANCED:FLEXRAY:  
IDOR:IDDATA1:MODE 1

**:TRIGger:ENHanced:FLEXray:MODE**

**Function** Sets the FLEXRAY bus signal trigger mode or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:MODE {ERROR | FStart | IDData | IDOR}  
:TRIGger:ENHanced:FLEXray:MODE?

**Example** :TRIGGER:ENHANCED:FLEXRAY:MODE ERROR  
:TRIGGER:ENHANCED:FLEXRAY:MODE? ->  
:TRIGGER:ENHANCED:FLEXRAY:MODE ERROR

**:TRIGger:ENHanced:FLEXray:SOURce**

**Function** Sets the FLEXRAY bus signal trigger source or queries the current setting.

**Syntax** :TRIGger:ENHanced:FLEXray:  
SOURce {<Nrf>}  
:TRIGger:ENHanced:FLEXray:SOURce?  
<Nrf> = 1 to 4

**Example** :TRIGGER:ENHANCED:FLEXRAY:SOURCE 1  
:TRIGGER:ENHANCED:FLEXRAY:SOURCE? ->  
:TRIGGER:ENHANCED:FLEXRAY:SOURCE 1

**:TRIGger:ENHanced:I2Cbus?**

**Function** Queries all settings related to the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:ENHanced:I2Cbus?

**Example** :TRIGGER:ENHANCED:I2CBUS? -> :TRIGGER:  
ENHANCED:I2CBUS:ADATA:BIT10ADDRESS:  
PATTERN "10111011111";:TRIGGER:  
ENHANCED:I2CBUS:ADATA:BIT7ADDRESS:  
PATTERN "11011110";:TRIGGER:ENHANCED:  
I2CBUS:ADATA:BIT7APSUB:ADDRESS:  
PATTERN "10101011";:TRIGGER:ENHANCED:  
I2CBUS:ADATA:BIT7APSUB:SADDRESS:  
PATTERN "10101011";:TRIGGER:ENHANCED:  
I2CBUS:ADATA:TYPE BIT10ADDRESS;:  
TRIGGER:ENHANCED:I2CBUS:CLOCK:  
SOURCE 1;:TRIGGER:ENHANCED:I2CBUS:DATA:  
BYTE 1,CONDITION TRUE,DPOSITION 1;  
MODE 1,PATTERN1 "10101011";  
PATTERN2 "10101010";  
PATTERN3 "10101111";  
PATTERN4 "10101011";PMODE DONTCARE;  
SOURCE 1;:TRIGGER:ENHANCED:I2CBUS:  
GCALL:BIT7MADDRESS:PATTERN "1010101";:  
TRIGGER:ENHANCED:I2CBUS:GCALL:  
SBYTE BIT7MADDRESS;:TRIGGER:ENHANCED:  
I2CBUS:MODE ADATA,NAIGNORE:HSMODE 1;  
RACCESS 1;SBYTE 1;:TRIGGER:ENHANCED:  
I2CBUS:SBHSMODE:TYPE HSMODE

**:TRIGger:ENHanced:I2Cbus:ADATa?**

**Function** Queries all settings related to the address of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:ENHanced:I2Cbus:ADATa?

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATa?  
-> :TRIGGER:ENHANCED:I2CBUS:ADATa:  
BIT10ADDRESS:PATTERN "10111011111";:  
TRIGGER:ENHANCED:I2CBUS:ADATa:  
BIT7ADDRESS:PATTERN "11011110";:  
TRIGGER:ENHANCED:I2CBUS:ADATa:  
BIT7APSUB:ADDRESS:PATTERN "10101011";:  
TRIGGER:ENHANCED:I2CBUS:ADATa:  
BIT7APSUB:SADDRESS:PATTERN "10101011";:  
TRIGGER:ENHANCED:I2CBUS:ADATa:  
TYPE BIT10ADDRESS

**:TRIGger:ENHanced:I2Cbus:ADATa:BIT10address?**

**Function** Queries all settings related to the 10-bit address of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:ENHanced:I2Cbus:ADATa:  
BIT10address?

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATa:  
BIT10ADDRESS? -> :TRIGGER:ENHANCED:  
I2CBUS:ADATa:BIT10ADDRESS:  
PATTERN "10111011111"

**:TRIGger:ENHanced:I2Cbus:ADATa:BIT10address:HEXA**

**Function** Sets the 10-bit address of the I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:I2Cbus:ADATa:  
BIT10address:HEXA {<String>}

<String> = 3 characters by combining '0' to 'F' and 'X' (bit 8 is the R/W bit)

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATa:  
BIT10ADDRESS:HEXA "7AB"

**:TRIGger:ENHanced:I2Cbus:ADATa:BIT10address:PATtern**

**Function** Sets the 10-bit address of the I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:ADATa:  
BIT10address:PATtern {<String>}  
:TRIGger:ENHanced:I2Cbus:ADATa:  
BIT10address:PATtern?

<String> = 11 characters by combining '0', '1', and 'X' (bit 8 is the R/W bit)

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATa:  
BIT10ADDRESS:PATTERN "10111011111"  
:TRIGGER:ENHANCED:I2CBUS:ADATa:  
BIT10ADDRESS:PATTERN? -> :TRIGGER:  
ENHANCED:I2CBUS:ADATa:  
BIT10ADDRESS:PATTERN "10111011111"

## 5.31 TRIGger Group

### **:TRIGger:ENHanced:I2CBus:ADATa:**

#### **BIT7Address?**

**Function** Queries all settings related to the 7-bit address of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:ENHanced:I2CBus:ADATa:  
BIT7Address?

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATA:  
BIT7ADDRESS? -> :TRIGGER:ENHANCED:  
I2CBUS:ADATA:BIT7ADDRESS:  
PATTERN "11011110"

### **:TRIGger:ENHanced:I2CBus:ADATa:**

#### **BIT7Address:HEXA**

**Function** Sets the 7-bit address of the I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:I2CBus:ADATa:  
BIT7Address:HEXA {<String>}  
<String> = 2 characters by combining '0' to 'F' and 'X'  
(bit 0 is the R/W bit)

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATA:  
BIT7ADDRESS:HEXA "DE"

### **:TRIGger:ENHanced:I2CBus:ADATa:**

#### **BIT7Address:PATtern**

**Function** Sets the 7-bit address of the I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2CBus:ADATa:  
BIT7Address:PATtern {<String>}  
:TRIGger:ENHanced:I2CBus:ADATa:  
BIT7Address:PATtern?  
<String> = 8 characters by combining '0', '1', and 'X'  
(bit 0 is the R/W bit)

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATA:  
BIT7ADDRESS:PATTERN "11011110"  
:TRIGGER:ENHANCED:I2CBUS:ADATA:  
BIT7ADDRESS:PATTERN? -> :TRIGGER:  
ENHANCED:I2CBUS:ADATA:BIT7ADDRESS:  
PATTERN "11011110"

### **:TRIGger:ENHanced:I2CBus:ADATa:**

#### **BIT7APsub?**

**Function** Queries all settings related to the 7-bit + Sub address of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:ENHanced:I2CBus:ADATa:  
BIT7APsub?

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATA:  
BIT7APSUB? -> :TRIGGER:ENHANCED:I2CBUS:  
ADATA:BIT7APSUB:ADDRESS:  
PATTERN "10101011"; :TRIGGER:ENHANCED:  
I2CBUS:ADATA:BIT7APSUB:SADDRESS:  
PATTERN "10101011"

### **:TRIGger:ENHanced:I2CBus:ADATa:**

#### **BIT7APsub:ADDRESS?**

**Function** Queries all settings related to the 7-bit address of the 7-bit + Sub address of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:ENHanced:I2CBus:ADATa:  
BIT7APsub:ADDRESS?

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS? -> :TRIGGER:ENHANCED:  
I2CBUS:ADATA:BIT7APSUB:ADDRESS:  
PATTERN "10101011"

### **:TRIGger:ENHanced:I2CBus:ADATa:**

#### **BIT7APsub:ADDRESS:HEXA**

**Function** Sets the 7-bit address of the 7-bit + Sub address of the I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:I2CBus:ADATa:  
BIT7APsub:ADDRESS:HEXA {<String>}  
<String> = 2 characters by combining '0' to 'F' and 'X'  
(bit 0 is the R/W\_bit)

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:HEXA "AB"

### **:TRIGger:ENHanced:I2CBus:ADATa:**

#### **BIT7APsub:ADDRESS:PATtern**

**Function** Sets the 7-bit address of the 7-bit + Sub address of the I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2CBus:ADATa:  
BIT7APsub:ADDRESS:PATtern {<String>}  
:TRIGger:ENHanced:I2CBus:ADATa:  
BIT7APsub:ADDRESS:PATtern?  
<String> = 8 characters by combining '0', '1', and 'X'  
(bit 0 is the R/W\_bit)

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:PATTERN "10101011"  
:TRIGGER:ENHANCED:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:PATTERN? -> :TRIGGER:  
ENHANCED:I2CBUS:ADATA:BIT7APSUB:  
ADDRESS:PATTERN "10101011"

### **:TRIGger:ENHanced:I2CBus:ADATa:**

#### **BIT7APsub:SADDRESS?**

**Function** Queries all settings related to the Sub address of the 7-bit + Sub address of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:ENHanced:I2CBus:ADATa:  
BIT7APsub:SADDRESS?

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS? -> :TRIGGER:  
ENHANCED:I2CBUS:ADATA:BIT7APSUB:  
SADDRESS:PATTERN "10101011"

**:TRIGger:ENHanced:I2Cbus:ADATa:****BIT7APsub:SADdress:HEXA**

**Function** Sets the Sub address of the 7-bit + Sub address of the I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:I2Cbus:ADATa:  
BIT7APsub:SADdress:HEXA {<String>}  
<String> = 2 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATa:  
BIT7APSUB:SADDRESS:HEXA "EF"

**:TRIGger:ENHanced:I2Cbus:ADATa:****BIT7APsub:SADdress:PATtern**

**Function** Sets the Sub address of the 7-bit + Sub address of the I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:ADATa:  
BIT7APsub:SADdress:PATtern {<String>}  
:TRIGger:ENHanced:I2Cbus:ADATa:  
BIT7APsub:SADdress:PATtern?  
<String> = 8 characters by combining '0', '1', and 'X'

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATa:  
BIT7APSUB:SADDRESS:PATTERN "10101011"  
:TRIGGER:ENHANCED:I2CBUS:ADATa:  
BIT7APSUB:SADDRESS:PATTERN?  
-> :TRIGGER:ENHANCED:I2CBUS:ADATa:  
BIT7APSUB:SADDRESS:PATTERN "10101011"

**:TRIGger:ENHanced:I2Cbus:ADATa:TYPE**

**Function** Sets the address type of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:ADATa:  
TYPE {BIT10address|BIT7Address|  
BIT7APsub}  
:TRIGger:ENHanced:I2Cbus:ADATa:TYPE?

**Example** :TRIGGER:ENHANCED:I2CBUS:ADATa:  
TYPE BIT10ADDRESS  
:TRIGGER:ENHANCED:I2CBUS:ADATa:TYPE?  
-> :TRIGGER:ENHANCED:I2CBUS:ADATa:  
TYPE BIT10ADDRESS

**:TRIGger:ENHanced:I2Cbus:CLOCK?**

**Function** Queries all settings related to the clock of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:ENHanced:I2Cbus:CLOCK?

**Example** :TRIGGER:ENHANCED:I2CBUS:CLOCK?  
-> :TRIGGER:ENHANCED:I2CBUS:CLOCK:  
SOURCE 1

**:TRIGger:ENHanced:I2Cbus:CLOCK:SOURce**

**Function** Sets the clock trace of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:CLOCK:  
SOURce {<Nrf>}  
:TRIGger:ENHanced:I2Cbus:CLOCK:SOURce?  
<Nrf> = 1 to 4

**Example** :TRIGGER:ENHANCED:I2CBUS:CLOCK:SOURCE 1  
:TRIGGER:ENHANCED:I2CBUS:CLOCK:SOURCE?  
-> :TRIGGER:ENHANCED:I2CBUS:CLOCK:  
SOURCE 1

**:TRIGger:ENHanced:I2Cbus:DATA?**

**Function** Queries all settings related to the data of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:ENHanced:I2Cbus:DATA?  
<x> = 1 or 2

**Example** :TRIGGER:ENHANCED:I2CBUS:DATA?  
-> :TRIGGER:ENHANCED:I2CBUS:DATA:BYTE 1;  
CONDITION TRUE;DPOSITION 1;MODE 1;  
PATTERN1 "10101011";  
PATTERN2 "10101010";  
PATTERN3 "10101111";  
PATTERN4 "10101011";PMODE DONTCARE;  
SOURCE 1

**:TRIGger:ENHanced:I2Cbus:DATA:BYTE**

**Function** Sets the number of data bytes of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:DATA:  
BYTE {<Nrf>}  
:TRIGger:ENHanced:I2Cbus:DATA:BYTE?  
<Nrf> = 1 to 4

**Example** :TRIGGER:ENHANCED:I2CBUS:DATA:BYTE 1  
:TRIGGER:ENHANCED:I2CBUS:DATA:BYTE?  
-> :TRIGGER:ENHANCED:I2CBUS:DATA:BYTE 1

**:TRIGger:ENHanced:I2Cbus:DATA:****CONDition**

**Function** Sets the determination method (match or not match) of the data of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:DATA:  
CONDition {FALSE|TRUE}  
:TRIGger:ENHanced:I2Cbus:DATA:  
CONDition?

**Example** :TRIGGER:ENHANCED:I2CBUS:DATA:  
CONDITION TRUE  
:TRIGGER:ENHANCED:I2CBUS:DATA:  
CONDITION? -> :TRIGGER:ENHANCED:I2CBUS:  
DATA:CONDITION TRUE

## 5.31 TRIGger Group

### **:TRIGger:ENHanced:I2Cbus:DATA:**

#### **DPOSITION**

**Function** Sets the position for comparing the data pattern of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:DATA:  
DPOSITION {<Nrf>}  
:TRIGger:ENHanced:I2Cbus:DATA:  
DPOSITION?  
<Nrf> = 0 to 9999

**Example** :TRIGGER:ENHANCED:I2CBUS:DATA:  
DPOSITION 1  
:TRIGGER:ENHANCED:I2CBUS:DATA:  
DPOSITION? -> :TRIGGER:ENHANCED:I2CBUS:  
DATA:DPOSITION 1

### **:TRIGger:ENHanced:I2Cbus:DATA:HEXA<x>**

**Function** Sets the data of the I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:I2Cbus:DATA:  
HEXA<x> {<String>}  
<x> = 1 to 4  
<String> = 2 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:ENHANCED:I2CBUS:DATA:  
HEXA1 "AB"

### **:TRIGger:ENHanced:I2Cbus:DATA:MODE**

**Function** Enables/Disables the data conditions of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:DATA:  
MODE {<Boolean>}  
:TRIGger:ENHanced:I2Cbus:DATA:MODE?

**Example** :TRIGGER:ENHANCED:I2CBUS:DATA:MODE ON  
:TRIGGER:ENHANCED:I2CBUS:DATA:MODE?  
-> :TRIGGER:ENHANCED:I2CBUS:DATA:MODE 1

### **:TRIGger:ENHanced:I2Cbus:DATA:**

#### **PATtern<x>**

**Function** Sets the data of the I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:DATA:  
PATtern<x> {<String>}  
:TRIGger:ENHanced:I2Cbus:DATA:  
PATtern<x>?  
<x> = 1 to 4  
<String> = 8 characters by combining '0', '1,' and 'X'

**Example** :TRIGGER:ENHANCED:I2CBUS:DATA:  
PATTERN1 "10101011"  
:TRIGGER:ENHANCED:I2CBUS:DATA:PATTERN1?  
-> :TRIGGER:ENHANCED:I2CBUS:DATA:  
PATTERN1 "10101011"

### **:TRIGger:ENHanced:I2Cbus:DATA:PMODE**

**Function** Sets the pattern comparison start position mode of the data of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:DATA:  
PMODE {DONTcare|SElect}  
:TRIGger:ENHanced:I2Cbus:DATA:PMODE?

**Example** :TRIGGER:ENHANCED:I2CBUS:DATA:  
PMODE SELECT  
:TRIGGER:ENHANCED:I2CBUS:DATA:PMODE?  
-> :TRIGGER:ENHANCED:I2CBUS:DATA:  
PMODE SELECT

### **:TRIGger:ENHanced:I2Cbus:DATA:SOURce**

**Function** Sets the data trace of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:DATA:  
SOURce {<Nrf>}  
:TRIGger:ENHanced:I2Cbus:DATA:SOURce?  
<Nrf> = 1 to 4

**Example** :TRIGGER:ENHANCED:I2CBUS:DATA:SOURCE 1  
:TRIGGER:ENHANCED:I2CBUS:DATA:SOURCE?  
-> :TRIGGER:ENHANCED:I2CBUS:DATA:  
SOURCE 1

### **:TRIGger:ENHanced:I2Cbus:GCALL?**

**Function** Queries all settings related to the general call of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:ENHanced:I2Cbus:GCALL?  
<x> = 1 or 2

**Example** :TRIGGER:ENHANCED:I2CBUS:GCALL?  
-> :TRIGGER:ENHANCED:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN "1010101";  
:TRIGGER:ENHANCED:I2CBUS:GCALL:  
SBYTE BIT7MADDRESS

### **:TRIGger:ENHanced:I2Cbus:GCALL:**

#### **BIT7maddress?**

**Function** Queries all settings related to the 7-bit master address of the general call of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:ENHanced:I2Cbus:GCALL:  
BIT7maddress?  
<x> = 1 or 2

**Example** :TRIGGER:ENHANCED:I2CBUS:GCALL:  
BIT7MADDRESS? -> :TRIGGER:ENHANCED:  
I2CBUS:GCALL:BIT7MADDRESS:  
PATTERN "1010101"

**:TRIGger:ENHanced:I2Cbus:GCALl:****BIT7maddress:HEXA**

**Function** Sets the 7-bit master address of the general call of the I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:I2Cbus:GCALl:  
BIT7maddress:HEXA {<String>}  
<X> = 1 or 2  
<String> = 2 characters by combining '0' to 'F' and 'X' (bit 0 is fixed 1)

**Example** :TRIGGER:ENHANCED:I2CBUS:GCALL:  
BIT7MADDRESS:HEXA "AB"

**:TRIGger:ENHanced:I2Cbus:GCALl:****BIT7maddress:PATtern**

**Function** Sets the 7-bit master address of the general call of the I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:GCALl:  
BIT7maddress:PATtern {<String>}  
:TRIGger:ENHanced:I2Cbus:GCALl:  
BIT7maddress:PATtern?  
<X> = 1 or 2  
<String> = 7 characters by combining '0', '1', and 'X'

**Example** :TRIGGER:ENHANCED:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN "1010101"  
:TRIGGER:ENHANCED:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN? -> :TRIGGER:  
ENHANCED:I2CBUS:GCALL:BIT7MADDRESS:  
PATTERN "1010101"

**:TRIGger:ENHanced:I2Cbus:GCALl:SBYTE**  
**(Second Byte)**

**Function** Sets the second byte type of the general call of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:GCALl:  
SBYTE {BIT7maddress|DONTcare|H04|H06}  
:TRIGger:ENHanced:I2Cbus:GCALl:SBYTE?

**Example** :TRIGGER:ENHANCED:I2CBUS:GCALL:  
SBYTE BIT7MADDRESS  
:TRIGGER:ENHANCED:I2CBUS:GCALL:SBYTE?  
-> :TRIGGER:ENHANCED:I2CBUS:GCALL:  
SBYTE BIT7MADDRESS

**:TRIGger:ENHanced:I2Cbus:MODE**

**Function** Sets the trigger mode of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:MODE {ADATa|  
ESTart|GCALl|NAIGNore|SBHSmode}  
:TRIGger:ENHanced:I2Cbus:MODE?

**Example** :TRIGGER:ENHANCED:I2CBUS:MODE ADATA  
:TRIGGER:ENHANCED:I2CBUS:MODE?  
-> :TRIGGER:ENHANCED:I2CBUS:MODE ADATA

**:TRIGger:ENHanced:I2Cbus:NAIGNore?**

**Function** Queries all settings related to the NON ACK ignore mode of the I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:ENHanced:I2Cbus:NAIGNore?

**Example** :TRIGGER:ENHANCED:I2CBUS:NAIGNORE?  
-> :TRIGGER:ENHANCED:I2CBUS:NAIGNORE:  
HSMODE 1;RACCESS 1;SBYTE 1

**:TRIGger:ENHanced:I2Cbus:NAIGNore:****HSMode**

**Function** Sets whether to ignore NON ACK in high speed mode of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:NAIGNore:  
HSMode {<Boolean>}  
:TRIGger:ENHanced:I2Cbus:NAIGNore:  
HSMode?

**Example** :TRIGGER:ENHANCED:I2CBUS:NAIGNORE:  
HSMODE ON  
:TRIGGER:ENHANCED:I2CBUS:NAIGNORE:  
HSMODE? -> :TRIGGER:ENHANCED:I2CBUS:  
NAIGNORE:HSMODE 1

**:TRIGger:ENHanced:I2Cbus:NAIGNore:****RACcess**

**Function** Sets whether to ignore NON ACK in read access mode of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:NAIGNore:  
RACcess {<Boolean>}  
:TRIGger:ENHanced:I2Cbus:NAIGNore:  
RACcess?

**Example** :TRIGGER:ENHANCED:I2CBUS:NAIGNORE:  
RACCESS ON  
:TRIGGER:ENHANCED:I2CBUS:NAIGNORE:  
RACCESS? -> :TRIGGER:ENHANCED:I2CBUS:  
NAIGNORE:RACCESS 1

**:TRIGger:ENHanced:I2Cbus:NAIGNore:****SBYTE (Start Byte)**

**Function** Sets whether to ignore NON ACK in the start byte of the I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:I2Cbus:NAIGNore:  
SBYTE {<Boolean>}  
:TRIGger:ENHanced:I2Cbus:NAIGNore:  
SBYTE?

**Example** :TRIGGER:ENHANCED:I2CBUS:NAIGNORE:  
SBYTE ON  
:TRIGGER:ENHANCED:I2CBUS:NAIGNORE:  
SBYTE? -> :TRIGGER:ENHANCED:I2CBUS:  
NAIGNORE:SBYTE 1







### 5.31 TRIGger Group

#### **:TRIGger:ENHanced:LINBus:IDData:**

##### **DATA:CONDition**

**Function** Sets the data conditions of the Data Field of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:IDData:DATA:CONDition {BETWeen|DONTcare|FALSE|GTHan|LTHan|ORANge|TRUE}  
:TRIGger:ENHanced:LINBus:IDData:DATA:CONDition?

**Example** :TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:CONDITION BETWEEN  
:TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:CONDITION? -> :TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:CONDITION BETWEEN

#### **:TRIGger:ENHanced:LINBus:IDData:**

##### **DATA:DATA<x>**

**Function** Sets the comparison data of the LIN bus signal trigger data or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:IDData:DATA:DATA<x> {<Nrf>}  
:TRIGger:ENHanced:LINBus:IDData:DATA:DATA<x>?  
<x> = 1, 2  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:DATA1 1  
:TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:DATA1? -> :TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:DATA1 1.0000000E+00

**Description**

- For :TRIGger:ENHanced:LINBus:IDData:DATA:CONDition GTHan, set using: TRIGger:ENHanced:LINBus:IDData:DATA:DATA1.
- For :TRIGger:ENHanced:LINBus:IDData:DATA:CONDition LTHan, set using: TRIGger:ENHanced:LINBus:IDData:DATA:DATA2.
- For :TRIGger:ENHanced:LINBus:IDData:DATA:CONDition BETWeen|ORANge, set small values with: TRIGger:ENHanced:LINBus:IDData:DATA:DATA1, and large values with: TRIGger:ENHanced:LINBus:IDData:DATA:DATA2.

#### **:TRIGger:ENHanced:LINBus:IDData:**

##### **DATA:DSIZE**

**Function** Sets the number of bytes of data in the Data Field of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:IDData:DATA:DSIZE {<Nrf>}  
:TRIGger:ENHanced:LINBus:IDData:DATA:DSIZE?  
<Nrf> = 1 to 8

**Example** :TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:DSIZE 1  
:TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:DSIZE? -> :TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:DSIZE 1

#### **:TRIGger:ENHanced:LINBus:IDData:**

##### **DATA:HEXA**

**Function** Sets the data in the Data Field of the LIN bus signal trigger in hexadecimal.

**Syntax** :TRIGger:ENHanced:LINBus:IDData:DATA:HEXA {<string>}  
<string> = Up to 16 characters by combining '0' to 'F' and 'X,' units of 1 byte

**Example** :TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:HEXA "A9"

#### **:TRIGger:ENHanced:LINBus:IDData:**

##### **DATA:MSBLsb**

**Function** Sets the MSB/LSB bit of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:IDData:DATA:MSBLsb {<Nrf>, <Nrf>}  
:TRIGger:ENHanced:LINBus:IDData:DATA:MSBLsb?  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:MSBLSB 1, 0  
:TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:MSBLSB? -> :TRIGGER:ENHANCED:LINBUS:IDDATA:DATA:MSBLSB 1, 0





**:TRIGger:ENHanced:LINBus:IDOR:****IDData<x>:DATA:HEXA**

**Function** Sets the data in each Data Field of the OR condition of the LIN bus signal trigger in hexadecimal.

**Syntax** :TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:DATA:HEXA {<string>}  
<x> = 1 to 4  
<string> = Up to 16 characters by combining '0' to 'F,'  
and 'X,' units of 1 byte

**Example** :TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
DATA:HEXA "A9"

**:TRIGger:ENHanced:LINBus:IDOR:****IDData<x>:DATA:MSBLSb**

**Function** Sets the MSB/LSB bit of each data of the OR condition of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:DATA:MSBLSb {<Nrf>, <Nrf>}  
:TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:DATA:MSBLSb?  
<x> = 1 to 4  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
DATA:MSBLSB 1, 0  
:TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
DATA:MSBLSB? -> :TRIGGER:ENHANCED:  
LINBUS:IDOR:IDDATA1:DATA:MSBLSB 1, 0

**:TRIGger:ENHanced:LINBus:IDOR:****IDData<x>:DATA:PATtern**

**Function** Sets the data of each Data Field of the OR conditions of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:DATA:PATtern {<string>}  
:TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:DATA:PATtern?  
<x> = 1 to 4  
<string> = Up to 64 characters by combining '0,' '1,'  
and 'X,' units of 1 byte

**Example** :TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
DATA:PATTERN "11011111"  
:TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
DATA:PATTERN? -> :TRIGGER:ENHANCED:  
LINBUS:IDOR:IDDATA1:DATA:  
PATTERN "11011111"

**:TRIGger:ENHanced:LINBus:IDOR:****IDData<x>:DATA:SIGN**

**Function** Sets the sign of each data of the OR conditions of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:DATA:SIGN {SIGN|UNSign}  
:TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:DATA:SIGN?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
DATA:SIGN SIGN  
:TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
DATA:SIGN? -> :TRIGGER:ENHANCED:LINBUS:  
IDOR:IDDATA1:DATA:SIGN SIGN

**:TRIGger:ENHanced:LINBus:IDOR:****IDData<x>:ID?**

**Function** Queries all settings related to each ID of the OR condition of the LIN bus signal trigger.

**Syntax** :TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:ID?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
ID? -> :TRIGGER:ENHANCED:LINBUS:IDOR:  
IDDATA1:ID:PATTERN "101010"

**:TRIGger:ENHanced:LINBus:IDOR:****IDData<x>:ID:HEXA**

**Function** Sets each ID of the OR conditions of the LIN bus signal trigger in hexadecimal.

**Syntax** :TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:ID:HEXA {<string>}  
<x> = 1 to 4  
<string> = 2 characters by combining '0'  
to 'F,' and 'X'

**Example** :TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
ID:HEXA "2A"

**:TRIGger:ENHanced:LINBus:IDOR:****IDData<x>:ID:PATtern**

**Function** Sets each ID of the OR conditions of the LIN bus signal trigger binary or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:ID:PATtern {<string>}  
:TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:ID:PATtern?  
<x> = 1 to 4  
<string> =6 characters by combining '0,' '1,' and 'X'

**Example** :TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
ID:PATTERN "101111"  
:TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
ID:PATTERN? -> :TRIGGER:ENHANCED:  
LINBUS:IDOR:IDDATA1:ID:PATTERN "101111"

## 5.31 TRIGger Group

### **:TRIGger:ENHanced:LINBus:IDOR:**

#### **IDData<x>:MODE**

**Function** Enables (1) or disables (0) each condition for each OR condition of the LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:MODE {<Boolean>}  
:TRIGger:ENHanced:LINBus:IDOR:  
IDData<x>:MODE?  
<x> = 1 to 4

**Example** :TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
MODE ON  
:TRIGGER:ENHANCED:LINBUS:IDOR:IDDATA1:  
MODE? -> :TRIGGER:ENHANCED:LINBUS:IDOR:  
IDDATA1:MODE 1

### **:TRIGger:ENHanced:LINBus:MODE**

**Function** Sets the LIN bus signal trigger mode or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:MODE {BSYNch|  
ERRor|IDData|IDOR}  
:TRIGger:ENHanced:LINBus:MODE?

**Example** :TRIGGER:ENHANCED:LINBUS:MODE BSYNCH  
:TRIGGER:ENHANCED:LINBUS:MODE? ->  
:TRIGGER:ENHANCED:LINBUS:MODE BSYNCH

### **:TRIGger:ENHanced:LINBus:REVisIon**

**Function** Sets the LIN bus signal trigger revision (1.3 or 2.0) or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:  
REVisIon {LIN1\_3|LIN2\_0}  
:TRIGger:ENHanced:LINBus:REVisIon?

**Example** :TRIGGER:ENHANCED:LINBUS:  
REVISION LIN1\_3  
:TRIGGER:ENHANCED:LINBUS:REVISION? ->  
:TRIGGER:ENHANCED:LINBUS:  
REVISION LIN1\_3

### **:TRIGger:ENHanced:LINBus:SOURce**

**Function** Sets the LIN bus signal trigger source or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:SOURce {<Nrf>}  
:TRIGger:ENHanced:LINBus:SOURce?  
<Nrf> = 1 to 4

**Example** :TRIGGER:ENHANCED:LINBUS:SOURCE 1  
:TRIGGER:ENHANCED:LINBUS:SOURCE?  
-> :TRIGGER:ENHANCED:LINBUS:SOURCE 1

### **:TRIGger:ENHanced:LINBus:SPOint**

**Function** Sets the LIN bus signal trigger sample point or queries the current setting.

**Syntax** :TRIGger:ENHanced:LINBus:SPOint {<Nrf>}  
:TRIGger:ENHanced:LINBus:SPOint?  
<Nrf> = 18.8 to 90.6(%)

**Example** :TRIGGER:ENHANCED:LINBUS:SPOINT 18.8  
:TRIGGER:ENHANCED:LINBUS:SPOINT? -> :  
TRIGGER:ENHANCED:LINBUS:SPOINT 18.8E+00

### **:TRIGger:ENHanced:SPATtern?**

#### **(Serial Pattern)**

**Function** Queries all settings related to the serial pattern trigger.

**Syntax** :TRIGger:ENHanced:SPATtern?

**Example** :TRIGGER:ENHANCED:SPATTERN?  
-> :TRIGGER:ENHANCED:SPATTERN:  
BITRATE 1.000E+00;CLOCK:MODE 1;  
POLARITY FALL;SOURCE 1;:TRIGGER:  
ENHANCED:SPATTERN:CS 1;DATA:  
ACTIVE HIGH;SOURCE 1;:TRIGGER:ENHANCED:  
SPATTERN:LATCH:SOURCE 1;POLARITY FALL;:  
TRIGGER:ENHANCED:SPATTERN:  
PATTERN "1100110111101111"

### **:TRIGger:ENHanced:SPATtern:BITRate**

**Function** Sets the bit rate of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPATtern:  
BITRate {<Nrf>}  
:TRIGger:ENHanced:SPATtern:BITRate?  
<Nrf> = 1 to 50M (bps)

**Example** :TRIGGER:ENHANCED:SPATTERN:BITRATE 1  
:TRIGGER:ENHANCED:SPATTERN:BITRATE?  
-> :TRIGGER:ENHANCED:SPATTERN:  
BITRATE 1.000E+00

**Description** This command is valid when :TRIGger:ENHanced:SPATtern:CLOCK:MODE OFF.

### **:TRIGger:ENHanced:SPATtern:CLEar**

**Function** Clears the entire pattern of the serial pattern trigger (to don't care).

**Syntax** :TRIGger:ENHanced:SPATtern:CLEar  
**Example** :TRIGGER:ENHANCED:SPATTERN:CLEAR

### **:TRIGger:ENHanced:SPATtern:CLOCK?**

**Function** Queries all settings related to clock of the serial pattern trigger.

**Syntax** :TRIGger:ENHanced:SPATtern:CLOCK?  
**Example** :TRIGGER:ENHANCED:SPATTERN:CLOCK?  
-> :TRIGGER:ENHANCED:SPATTERN:CLOCK:  
MODE 1;POLARITY FALL;SOURCE 1

**:TRIGger:ENHanced:SPATtern:CLOCK:MODE**

**Function** Enables/Disables the clock of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPATtern:CLOCK:MODE {<Boolean>}  
:TRIGger:ENHanced:SPATtern:CLOCK:MODE?

**Example** :TRIGGER:ENHANCED:SPATTERN:CLOCK:MODE ON  
:TRIGGER:ENHANCED:SPATTERN:CLOCK:MODE?  
-> :TRIGGER:ENHANCED:SPATTERN:CLOCK:MODE 1

**:TRIGger:ENHanced:SPATtern:CLOCK:POLarity**

**Function** Sets the polarity of the clock trace of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPATtern:CLOCK:POLarity {FALL|RISE}  
:TRIGger:ENHanced:SPATtern:CLOCK:POLarity?

**Example** :TRIGGER:ENHANCED:SPATTERN:CLOCK:POLARITY FALL  
:TRIGGER:ENHANCED:SPATTERN:CLOCK:POLARITY? -> :TRIGGER:ENHANCED:SPATTERN:CLOCK:POLARITY FALL

**Description** This command is valid if :TRIGger:ENHanced:SPATtern:CLOCK:MODE ON.

**:TRIGger:ENHanced:SPATtern:CLOCK:SOURce**

**Function** Sets the clock trace of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPATtern:CLOCK:SOURce {<Nrf>}  
:TRIGger:ENHanced:SPATtern:CLOCK:SOURce?  
<Nrf> = 1 to 4

**Example** :TRIGGER:ENHANCED:SPATTERN:CLOCK:SOURCE 1  
:TRIGGER:ENHANCED:SPATTERN:CLOCK:SOURCE? -> :TRIGGER:ENHANCED:SPATTERN:CLOCK:SOURCE 1

**Description** This command is valid when :TRIGger:ENHanced:SPATtern:CLOCK:MODE ON.

**:TRIGger:ENHanced:SPATtern:CS**

**Function** Enables/Disables the chip select of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPATtern:CS {<Boolean>}  
:TRIGger:ENHanced:SPATtern:CS?

**Example** :TRIGGER:ENHANCED:SPATTERN:CS ON  
:TRIGGER:ENHANCED:SPATTERN:CS?  
-> :TRIGGER:ENHANCED:SPATTERN:CS 1

**Description** This command is valid when :TRIGger:ENHanced:SPATtern:CLOCK:MODE ON.

**:TRIGger:ENHanced:SPATtern:DATA?**

**Function** Queries all settings related to data of the serial pattern trigger.

**Syntax** :TRIGger:ENHanced:SPATtern:DATA?

**Example** :TRIGGER:ENHANCED:SPATTERN:DATA?  
-> :TRIGGER:ENHANCED:SPATTERN:DATA:ACTIVE HIGH;SOURCE 1

**:TRIGger:ENHanced:SPATtern:DATA:ACTive**

**Function** Sets the active level of the data of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPATtern:DATA:ACTive {HIGH|LOW}  
:TRIGger:ENHanced:SPATtern:DATA:ACTive?

**Example** :TRIGGER:ENHANCED:SPATTERN:DATA:ACTIVE HIGH  
:TRIGGER:ENHANCED:SPATTERN:DATA:ACTIVE?  
-> :TRIGGER:ENHANCED:SPATTERN:DATA:ACTIVE HIGH

**:TRIGger:ENHanced:SPATtern:DATA:SOURce**

**Function** Sets the data trace of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPATtern:DATA:SOURce {<Nrf>}  
:TRIGger:ENHanced:SPATtern:DATA:SOURce?  
<Nrf> = 1 to 4

**Example** :TRIGGER:ENHANCED:SPATTERN:DATA:SOURCE 1  
:TRIGGER:ENHANCED:SPATTERN:DATA:SOURCE?  
-> :TRIGGER:ENHANCED:SPATTERN:DATA:SOURCE 1

**:TRIGger:ENHanced:SPATtern:HEXA**

**Function** Sets the pattern of the serial pattern trigger in hexadecimal notation.

**Syntax** :TRIGger:ENHanced:SPATtern:HEXA {<String>}  
<String> = Up to 32 characters by combining '0' to 'F' and 'X'

**Example** :TRIGGER:ENHANCED:SPATTERN:HEXA "ABCD"

**:TRIGger:ENHanced:SPATtern:LATCH?**

**Function** Queries all settings related to latch of the serial pattern trigger.

**Syntax** :TRIGger:ENHanced:SPATtern:LATCH?

**Example** :TRIGGER:ENHANCED:SPATTERN:LATCH?  
-> :TRIGGER:ENHANCED:SPATTERN:LATCH:SOURCE 1;POLARITY FALL



## 5.31 TRIGger Group

### **:TRIGger:ENHanced:SPATtern:LATCh:**

#### **POLarity**

**Function** Sets the polarity of the latch trace of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPATtern:LATCh:  
POLarity {FALL|RISE}  
:TRIGger:ENHanced:SPATtern:LATCh:  
POLarity?

**Example** :TRIGGER:ENHANCED:SPATTERN:LATCH:  
POLARITY FALL  
:TRIGGER:ENHANCED:SPATTERN:LATCH:  
POLARITY? -> :TRIGGER:ENHANCED:  
SPATTERN:LATCH:POLARITY FALL

**Description** • This command is valid when :TRIGger:ENHanced:  
SPATtern:CLOCK:MODE ON.  
• This command is invalid if :TRIGger:ENHanced:  
SPATtern:LATCh:SOURce NONE.

### **:TRIGger:ENHanced:SPATtern:LATCh:**

#### **SOURCE**

**Function** Sets the latch trace of the serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPATtern:LATCh:  
SOURCE {<NRF>|NONE}  
:TRIGger:ENHanced:SPATtern:LATCh:  
SOURCE?  
<NRF> = 1 to 4

**Example** :TRIGGER:ENHANCED:SPATTERN:LATCH:  
SOURCE 1  
:TRIGGER:ENHANCED:SPATTERN:LATCH:  
SOURCE? -> :TRIGGER:ENHANCED:SPATTERN:  
LATCH:SOURCE 1

**Description** This command is valid when :TRIGger:ENHanced:  
SPATtern:CLOCK:MODE ON.

### **:TRIGger:ENHanced:SPATtern:PATtern**

**Function** Sets the pattern of the serial pattern trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPATtern:  
PATtern {<String>}  
:TRIGger:ENHanced:SPATtern:PATtern?  
<String> = Up to 128 characters by combining '0', '1',  
and 'X'

**Example** :TRIGGER:ENHANCED:SPATTERN:PATTERN  
"1100110111101111"  
:TRIGGER:ENHANCED:SPATTERN:PATTERN?  
-> :TRIGGER:ENHANCED:SPATTERN:  
PATTERN "1100110111101111"

### **:TRIGger:ENHanced:SPIBus?**

**Function** Queries all settings related to the SPI bus trigger.

**Syntax** :TRIGger:ENHanced:SPIBus?

**Example** :TRIGGER:ENHANCED:SPIBUS? -> :TRIGGER:  
ENHANCED:SPIBUS:BITORDER LSBFIRST;  
CLOCK:POLARITY FALL;SOURCE 1;:TRIGGER:  
ENHANCED:SPIBUS:CS:ACTIVE HIGH;  
SOURCE 1;:TRIGGER:ENHANCED:SPIBUS:  
DATA1:BYTE 1;CONDITION TRUE;  
DPOSITION 1;PATTERN1 "00010010";  
PATTERN2 "00110100";  
PATTERN3 "01010110";  
PATTERN4 "00010010";SOURCE 3;:TRIGGER:  
ENHANCED:SPIBUS:DATA2:BYTE 4;  
CONDITION TRUE;DPOSITION 1;  
PATTERN1 "00010010";  
PATTERN2 "00110100";  
PATTERN3 "01010110";  
PATTERN4 "00010010";SOURCE 3;:TRIGGER:  
ENHANCED:SPIBUS:MODE WIRE3

### **:TRIGger:ENHanced:SPIBus:BITOrder**

**Function** Sets the bit order of the SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPIBus:  
BITOrder {LSBFirst|MSBFirst}  
:TRIGger:ENHanced:SPIBus:BITOrder?

**Example** :TRIGGER:ENHANCED:SPIBUS:  
BITORDER LSBFIRST  
:TRIGGER:ENHANCED:SPIBUS:BITORDER?  
-> :TRIGGER:ENHANCED:SPIBUS:  
BITORDER LSBFIRST

### **:TRIGger:ENHanced:SPIBus:CLOCK?**

**Function** Queries all settings related to the clock of the SPI bus trigger.

**Syntax** :TRIGger:ENHanced:SPIBus:CLOCK?

**Example** :TRIGGER:ENHANCED:SPIBUS:CLOCK?  
-> :TRIGGER:ENHANCED:SPIBUS:CLOCK:  
POLARITY FALL;SOURCE 1

### **:TRIGger:ENHanced:SPIBus:CLOCK:**

#### **POLarity**

**Function** Sets the polarity of the clock trace of the SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPIBus:CLOCK:  
POLarity {FALL|RISE}  
:TRIGger:ENHanced:SPIBus:CLOCK:  
POLarity?

**Example** :TRIGGER:ENHANCED:SPIBUS:CLOCK:  
POLARITY FALL  
:TRIGGER:ENHANCED:SPIBUS:CLOCK:  
POLARITY? -> :TRIGGER:ENHANCED:SPIBUS:  
CLOCK:POLARITY FALL

**:TRIGger:ENHanced:SPIBus:CLOCK:SOURce**

Function Sets the clock trace of the SPI bus trigger or queries the current setting.

Syntax :TRIGger:ENHanced:SPIBus:CLOCK:  
SOURce {<NRf>}  
:TRIGger:ENHanced:SPIBus:CLOCK:SOURce?  
<NRf> = 1 to 4

Example :TRIGGER:ENHANCED:SPIBUS:CLOCK:SOURCE 1  
:TRIGGER:ENHANCED:SPIBUS:CLOCK:SOURCE?  
-> :TRIGGER:ENHANCED:SPIBUS:CLOCK:  
SOURCE 1

**:TRIGger:ENHanced:SPIBus:CS?**

Function Queries all settings related to the chip select of the SPI bus trigger.

Syntax :TRIGger:ENHanced:SPIBus:CS?

Example :TRIGGER:ENHANCED:SPIBUS:CS?  
-> :TRIGGER:ENHANCED:SPIBUS:CS:  
ACTIVE HIGH;SOURCE 1

**:TRIGger:ENHanced:SPIBus:CS:ACTIVE**

Function Sets the active level of the chip select of the SPI bus trigger or queries the current setting.

Syntax :TRIGger:ENHanced:SPIBus:CS:  
ACTIve {HIGH|LOW}

Example :TRIGGER:ENHANCED:SPIBUS:CS:ACTIVE HIGH  
:TRIGGER:ENHANCED:SPIBUS:CS:ACTIVE?  
-> :TRIGGER:ENHANCED:SPIBUS:CS:  
ACTIVE HIGH

**:TRIGger:ENHanced:SPIBus:CS:SOURce**

Function Sets the chip select trace of the SPI bus trigger or queries the current setting.

Syntax :TRIGger:ENHanced:SPIBus:CS:  
SOURce {<NRf>}  
:TRIGger:ENHanced:SPIBus:CS:SOURce?  
<NRf> = 1 to 4

Example :TRIGGER:ENHANCED:SPIBUS:CS:SOURCE 1  
:TRIGGER:ENHANCED:SPIBUS:CS:SOURCE?  
-> :TRIGGER:ENHANCED:SPIBUS:CS:SOURCE 1

**:TRIGger:ENHanced:SPIBus:DATA<x>?**

Function Queries all settings related to the data of the SPI bus trigger.

Syntax :TRIGger:ENHanced:SPIBus:DATA<x>?  
<x> = 1 or 2

Example :TRIGGER:ENHANCED:SPIBUS:DATA1?  
-> :TRIGGER:ENHANCED:SPIBUS:DATA1:  
BYTE 1;CONDITION TRUE;DPOSITION 1;  
PATTERN1 "00010010";  
PATTERN2 "00110100";  
PATTERN3 "01010110";  
PATTERN4 "00010010";SOURCE 3

Description DATA2 is valid when :TRIGger:ENHanced:SPIBus:  
MODE WIRE4 is specified.

**:TRIGger:ENHanced:SPIBus:DATA<x>:BYTE**

Function Sets the number of bytes of the data of the SPI bus trigger or queries the current setting.

Syntax :TRIGger:ENHanced:SPIBus:DATA<x>:  
BYTE {<NRf>}  
:TRIGger:ENHanced:SPIBus:DATA<x>:BYTE?  
<x> = 1 or 2  
<NRf> = 1 to 4

Example :TRIGGER:ENHANCED:SPIBUS:DATA1:BYTE 1  
:TRIGGER:ENHANCED:SPIBUS:DATA1:BYTE?  
-> :TRIGGER:ENHANCED:SPIBUS:DATA1:  
BYTE 1

**:TRIGger:ENHanced:SPIBus:DATA<x>:CONDITION**

Function Sets the determination method (match or not match) of the data of the SPI bus trigger or queries the current setting.

Syntax :TRIGger:ENHanced:SPIBus:DATA<x>:  
CONDItion {FALSe|TRUE}  
:TRIGger:ENHanced:SPIBus:DATA<x>:  
CONDItion?  
<x> = 1 or 2

Example :TRIGGER:ENHANCED:SPIBUS:DATA1:  
CONDITION TRUE  
:TRIGGER:ENHANCED:SPIBUS:DATA1:  
CONDITION? -> :TRIGGER:ENHANCED:SPIBUS:  
DATA1:CONDITION TRUE

**:TRIGger:ENHanced:SPIBus:DATA<x>:DPOSITION**

Function Sets the pattern comparison start position of the data of the SPI bus trigger or queries the current setting.

Syntax :TRIGger:ENHanced:SPIBus:DATA<x>:  
DPOSITIon {<NRf>}  
:TRIGger:ENHanced:SPIBus:DATA<x>:  
DPOSITIon?  
<x> = 1 or 2  
<NRf> = 0 to 9999

Example :TRIGGER:ENHANCED:SPIBUS:DATA1:  
DPOSITION 1  
:TRIGGER:ENHANCED:SPIBUS:DATA1:  
DPOSITION? -> :TRIGGER:ENHANCED:SPIBUS:  
DATA1:DPOSITION 1

**:TRIGger:ENHanced:SPIBus:DATA<x>:HEXA<x>**

Function Sets the data of the SPI bus trigger in hexadecimal notation.

Syntax :TRIGger:ENHanced:SPIBus:DATA<x>:  
HEXA<x> {<String>}  
<x> of DATA<x> = 1 or 2  
<x> of HEXA<x> = 1 to 4  
<String> = 2 characters by combining '0' to 'F' and 'X'

Example :TRIGGER:ENHANCED:SPIBUS:DATA1:  
HEXA1 "AB"

## 5.31 TRIGger Group

### **:TRIGger:ENHanced:SPIBus:DATA<x>:**

#### **PATtern<x>**

**Function** Sets the data of the SPI bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPIBus:DATA<x>:  
PATtern<x> {<String>}  
:TRIGger:ENHanced:SPIBus:DATA<x>:  
PATtern<x>?  
<x> of DATA<x> = 1 or 2  
<x> of PATtern<x> = 1 to 4  
<String> = 8 characters by combining '0','1,' and 'X'

**Example** :TRIGGER:ENHANCED:SPIBUS:DATA1:  
PATTERN1 "10101011"  
:TRIGGER:ENHANCED:SPIBUS:DATA1:  
PATTERN1? -> :TRIGGER:ENHANCED:SPIBUS:  
DATA1:PATTERN1 "10101011"

### **:TRIGger:ENHanced:SPIBus:DATA<x>:**

#### **SOURCE**

**Function** Sets the trace of the data of the SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPIBus:DATA<x>:  
SOURCE {<Nrf>}  
:TRIGger:ENHanced:SPIBus:DATA<x>:  
SOURCE?  
<x> = 1 or 2  
<Nrf> = 1 to 4

**Example** :TRIGGER:ENHANCED:SPIBUS:DATA1:SOURCE 1  
:TRIGGER:ENHANCED:SPIBUS:DATA1:SOURCE?  
-> :TRIGGER:ENHANCED:SPIBUS:DATA1:  
SOURCE 1

### **:TRIGger:ENHanced:SPIBus:MODE**

**Function** Sets the wiring system of the SPI bus trigger (three-wire or four-wire) or queries the current setting.

**Syntax** :TRIGger:ENHanced:SPIBus:MODE {WIRE3 |  
WIRE4}  
:TRIGger:ENHanced:SPIBus:MODE?

**Example** :TRIGGER:ENHANCED:SPIBUS:MODE WIRE3  
:TRIGGER:ENHANCED:SPIBUS:MODE?  
-> :TRIGGER:ENHANCED:SPIBUS:MODE WIRE3

### **:TRIGger:ENHanced:UART?**

**Function** Queries all settings related to the UART bus signal trigger.

**Syntax** :TRIGger:ENHanced:UART?  
**Example** :TRIGGER:ENHANCED:UART? -> :TRIGGER:  
ENHANCED:UART:BRATE 19200;DATA:BITORDER  
LSBFIRST;DSIZE 1;PATTERN "X0101001";:  
TRIGGER:ENHANCED:UART:ERROR:FRAMING 1;  
PARITY 1;PMODE EVEN;:TRIGGER:ENHANCED:  
UART:FORMAT BIT7PARITY;MODE DATA;  
POLARITY NEGATIVE;SOURCE 1;  
SPOINT 18.8E+00

### **:TRIGger:ENHanced:UART:BRATe**

**Function** Sets the UART bus signal trigger bit rate (data transfer rate) or queries the current setting.

**Syntax** :TRIGger:ENHanced:UART:  
BRATe {<Nrf>|USER, <Nrf>}  
:TRIGger:ENHanced:UART:BRATe?  
<Nrf> = 1200, 2400, 4800, 9600, 19200, 38400,  
57600, 115200  
<Nrf> of USER = See the SB5000 User's Manual

**Example** :TRIGGER:ENHANCED:UART:BRATE 19200  
:TRIGGER:ENHANCED:UART:BRATE? ->  
:TRIGGER:ENHANCED:UART:BRATE 19200

### **:TRIGger:ENHanced:UART:DATA?**

**Function** Queries all settings related to data of the UART bus signal trigger.

**Syntax** :TRIGger:ENHanced:UART:DATA?  
**Example** :TRIGGER:ENHANCED:UART:DATA? ->  
:TRIGGER:ENHANCED:UART:DATA:  
BITORDER LSBFIRST;DSIZE 1;  
PATTERN "X0101001"

### **:TRIGger:ENHanced:UART:DATA:BITorder**

**Function** Sets the data bit order of the UART bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:UART:DATA:  
BITorder {LSBFirst|MSBFirst}  
:TRIGger:ENHanced:UART:DATA:BITorder?

**Example** :TRIGGER:ENHANCED:UART:DATA:  
BITORDER LSBFIRST  
:TRIGGER:ENHANCED:UART:DATA:BITORDER?  
-> :TRIGGER:ENHANCED:UART:DATA:  
BITORDER LSBFIRST

### **:TRIGger:ENHanced:UART:DATA:DSIZE**

**Function** Sets the number of data bytes of the UART bus signal trigger or queries the current setting.

**Syntax** :TRIGger:ENHanced:UART:DATA:  
DSIZE {<Nrf>}  
:TRIGger:ENHanced:UART:DATA:DSIZE?  
<Nrf> = 1 to 4

**Example** :TRIGGER:ENHANCED:UART:DATA:DSIZE 1  
:TRIGGER:ENHANCED:UART:DATA:DSIZE? ->  
:TRIGGER:ENHANCED:UART:DATA:DSIZE 1

### **:TRIGger:ENHanced:UART:DATA:HEXA**

**Function** Sets the UART bus signal trigger data in hexadecimal.

**Syntax** :TRIGger:ENHanced:UART:DATA:  
HEXA {<string>}  
<string> = 8 characters by combining '0' to 'F' and 'X,'  
units of 1 byte

**Example** :TRIGGER:ENHANCED:UART:DATA:HEXA "A9"

**:TRIGger:ENHanced:UART:DATA:PATtern**

**Function** Sets the data of the UART bus signal trigger in binary or queries the current setting.

**Syntax** :TRIGger:ENHanced:UART:DATA:  
PATtern {<string>}  
:TRIGger:ENHanced:UART:DATA:PATtern?  
<string> = 32 characters by combining '0,' '1,' and 'X,'  
units of 1 byte

**Example** :TRIGGER:ENHANCED:UART:DATA:  
PATTERN "11011111"  
:TRIGGER:ENHANCED:UART:DATA:  
PATTERN? -> :TRIGGER:ENHANCED:UART:  
DATA:PATTERN "11011111"

**:TRIGger:ENHanced:UART:ERRor?**

**Function** Queries all settings related to the UART bus signal trigger error.

**Syntax** :TRIGger:ENHanced:UART:ERRor?  
**Example** :TRIGGER:ENHANCED:UART:ERROR? ->  
:TRIGGER:ENHANCED:UART:ERROR:FRAMING 1;  
PARITY 1;PMODE EVEN

**:TRIGger:ENHanced:UART:ERRor:FRAMing**

**Function** Sets the UART bus signal trigger Framing error or queries the current setting.

**Syntax** :TRIGger:ENHanced:UART:ERRor:  
FRAMing {<Boolean>}  
:TRIGger:ENHanced:UART:ERRor:FRAMing?

**Example** :TRIGGER:ENHANCED:UART:ERROR:FRAMING ON  
:TRIGGER:ENHANCED:UART:ERROR:FRAMING?  
-> :TRIGGER:ENHANCED:UART:ERROR:  
FRAMING 1

**:TRIGger:ENHanced:UART:ERRor:PARity**

**Function** Sets the UART bus signal trigger Parity error or queries the current setting.

**Syntax** :TRIGger:ENHanced:UART:ERRor:  
PARity {<Boolean>}  
:TRIGger:ENHanced:UART:ERRor:PARity?

**Example** :TRIGGER:ENHANCED:UART:ERROR:PARITY ON  
:TRIGGER:ENHANCED:UART:ERROR:PARITY? ->  
:TRIGGER:ENHANCED:UART:ERROR:PARITY 1

**:TRIGger:ENHanced:UART:ERRor:PMODE**

**Function** Sets the UART bus signal trigger Parity mode or queries the current setting.

**Syntax** :TRIGger:ENHanced:UART:ERRor:  
PMODE {EVEN|ODD}  
:TRIGger:ENHanced:UART:ERRor:PMODE?

**Example** :TRIGGER:ENHANCED:UART:ERROR:PMODE EVEN  
:TRIGGER:ENHANCED:UART:ERROR:PMODE? ->  
:TRIGGER:ENHANCED:UART:ERROR:PMODE EVEN

**:TRIGger:ENHanced:UART:FORMat**

**Function** Sets the UART bus signal trigger format or queries the current setting.

**Syntax** :TRIGger:ENHanced:UART:  
FORMat {BIT7parity|BIT8Noparity|  
BIT8Parity}  
:TRIGger:ENHanced:UART:FORMat?

**Example** :TRIGGER:ENHANCED:UART:  
FORMAT BIT7PARITY  
:TRIGGER:ENHANCED:UART:FORMAT? ->  
:TRIGGER:ENHANCED:UART:  
FORMAT BIT7PARITY

**:TRIGger:ENHanced:UART:MODE**

**Function** Sets the UART bus signal trigger mode or queries the current setting.

**Syntax** :TRIGger:ENHanced:UART:  
MODE {DATA|ERROR}  
:TRIGger:ENHanced:UART:MODE?

**Example** :TRIGGER:ENHANCED:UART:MODE DATA  
:TRIGGER:ENHANCED:UART:MODE? ->  
:TRIGGER:ENHANCED:UART:MODE DATA

**:TRIGger:ENHanced:UART:POLarity**

**Function** Sets the UART bus signal trigger polarity or queries the current setting.

**Syntax** :TRIGger:ENHanced:UART:  
POLarity {NEGative|POSitive}  
:TRIGger:ENHanced:UART:POLarity?

**Example** :TRIGGER:ENHANCED:UART:  
POLARITY NEGATIVE  
:TRIGGER:ENHANCED:UART:POLARITY? ->  
:TRIGGER:ENHANCED:UART:  
POLARITY NEGATIVE

**:TRIGger:ENHanced:UART:SOURce**

**Function** Sets the UART bus signal trigger source or queries the current setting.

**Syntax** :TRIGger:ENHanced:UART:SOURce {<Nrf>}  
:TRIGger:ENHanced:UART:SOURce?  
<Nrf> = 1 to 4

**Example** :TRIGGER:ENHANCED:UART:SOURCE 1  
:TRIGGER:ENHANCED:UART:SOURCE? ->  
:TRIGGER:ENHANCED:UART:SOURCE 1

**:TRIGger:ENHanced:UART:SPOint**

**Function** Sets the UART bus signal trigger sample point or queries the current setting.

**Syntax** :TRIGger:ENHanced:UART:SPOint {<Nrf>}  
:TRIGger:ENHanced:UART:SPOint?  
<Nrf> = 18.8 to 90.6(%)

**Example** :TRIGGER:ENHANCED:UART:SPOINT 18.8  
:TRIGGER:ENHANCED:UART:SPOINT? ->  
:TRIGGER:ENHANCED:UART:SPOINT 18.8E+00

## 5.31 TRIGger Group

### :TRIGger:ESTate?

Function Queries all settings related to the edge/state trigger.

Syntax :TRIGger:ESTate?

Example :TRIGGER:ESTATE? -> :TRIGGER:ESTATE:  
EOR:CHANNEL1 DONTCARE;  
CHANNEL2 DONTCARE;CHANNEL3 DONTCARE;  
CHANNEL4 DONTCARE;:TRIGGER:ESTATE:  
SOURCE 1;POLARITY ENTER

### :TRIGger:ESTate:EOR?

Function Queries all settings related to the OR trigger.

Syntax :TRIGger:ESTate:EOR?

Example :TRIGGER:ESTATE:EOR? -> :TRIGGER:  
ESTATE:EOR:CHANNEL1 DONTCARE;  
CHANNEL2 DONTCARE;CHANNEL3 DONTCARE;  
CHANNEL4 DONTCARE

### :TRIGger:ESTate:EOR:CHANnel<x>

Function Sets the channel polarity of the OR trigger or queries the current setting.

Syntax :TRIGger:ESTate:EOR:  
CHANnel<x> {DONTcare|FALL|RISE}  
:TRIGger:ESTate:EOR:CHANnel<x>?  
<x> = 1 to 4

Example :TRIGGER:ESTATE:EOR:CHANNEL1 DONTCARE  
:TRIGGER:ESTATE:EOR:CHANNEL1? -> :  
TRIGGER:ESTATE:EOR:CHANNEL1 DONTCARE

Description• This command is valid when :TRIGger:  
TYPE EOR.  
• For :TRIGger:SOURce:CHANnel<x>:WINDow ON,  
the choices in the SB5000 menu are Enter/Exit.  
{RISE} corresponds to Enter, and {FALL}  
corresponds to Exit.

### :TRIGger:ESTate:POLarity

Function Sets the polarity of the edge/state trigger or queries the current setting.

Syntax :TRIGger:ESTate:POLarity {ENTER|EXIT|  
FALL|RISE}  
:TRIGger:ESTate:POLarity?

Example :TRIGGER:ESTATE:POLARITY ENTER  
:TRIGGER:ESTATE:POLARITY? -> :TRIGGER:  
ESTATE:POLARITY ENTER

Description• This command is valid when :TRIGger:  
TYPE EDGE|EQUalify|STATe.  
• This command is invalid when :TRIGger:  
TYPE EDGE and :TRIGger:ESTate:  
SOURce LINE.  
• For :TRIGger:TYPE EDGE|EQUalify and :TRIGger:  
SOURce:CHANnel<x>:WINDow ON, the choices  
in the SB5000 menu are Enter/Exit.  
{RISE} corresponds to Enter, and {FALL}  
corresponds to Exit.  
• {ENTER|EXIT} is valid when :TRIGger:  
TYPE STATE.

### :TRIGger:ESTate:SOURce

Function Sets the trigger source of the edge/state trigger or queries the current setting.

Syntax :TRIGger:ESTate:SOURce {<Nrf>|EXTernal|  
LINE}  
:TRIGger:ESTate:SOURce?  
<Nrf> = 1 to 4

Example :TRIGGER:ESTATE:SOURCE EXTERNAL  
:TRIGGER:ESTATE:SOURCE? -> :TRIGGER:  
ESTATE:SOURCE EXTERNAL

Description• This command is valid when :TRIGger:TYPE  
EDGE|EQUalify.  
• {<Nrf>|EXTernal|LINE} is valid when :TRIGger:  
TYPE EDGE.  
• {<Nrf>|EXTernal} is valid when :TRIGger:TYPE  
EQUalify.

### :TRIGger:HOLDoff

Function Sets the hold off time or queries the current setting.

Syntax :TRIGger:HOLDoff {<Time>}  
:TRIGger:HOLDoff?  
<Time> = 20 ns to 10 s (5 ns steps)

Example :TRIGGER:HOLDOFF 1S  
:TRIGGER:HOLDOFF?  
-> :TRIGGER:HOLDOFF 1.000E+00

### :TRIGger:LOGic?

Function Queries all settings related to the logic trigger.

Syntax :TRIGger:LOGic?

Example :TRIGGER:LOGIC? -> :TRIGGER:LOGIC:  
CLOCK:POLARITY RISE;SOURCE A0;:TRIGGER:  
LOGIC:ESTATE:POLARITY RISE;SOURCE A0;:  
TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT10ADDRESS:PATTERN "XXXXXXXXXXXX";:  
TRIGGER:LOGIC:I2CBUS:ADATA:BIT7ADDRESS:  
PATTERN "XXXXXXXX";:TRIGGER:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:ADDRESS:  
PATTERN "XXXXXXXX";:TRIGGER:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:SADDRESS:  
PATTERN "XXXXXXXX";:TRIGGER:LOGIC:  
I2CBUS:ADATA:TYPE BIT7ADDRESS;:TRIGGER:  
LOGIC:I2CBUS:CLOCK:SOURCE A0;:TRIGGER:  
LOGIC:I2CBUS:DATA:BYTE 1;  
CONDITION TRUE;DPOSITION 0;MODE 0;  
PATTERN1 "XXXXXXXX";  
PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";PMODE DONTCARE;  
SOURCE A1;:TRIGGER:LOGIC:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN "XXXXXXXX1";:  
TRIGGER:LOGIC:I2CBUS:GCALL:  
SBYTE DONTCARE;:TRIGGER:LOGIC:I2CBUS:  
MODE ESTART;NAIGNORE:HSMODE 0;  
RACCESS 0;SBYTE 0;:TRIGGER:LOGIC:  
I2CBUS:SBHSMODE:TYPE SBYTE.....

**:TRIGger:LOGic:CLOCK?**

**Function** Queries all settings related to the logic trigger clock.

**Syntax** :TRIGger:LOGic:CLOCK?

**Example** :TRIGGER:LOGIC:CLOCK? -> :TRIGGER:  
LOGIC:CLOCK:POLARITY RISE;  
SOURCE A0

**:TRIGger:LOGic:CLOCK:POLarity**

**Function** Sets the polarity of the logic trigger clock or queries the current setting.

**Syntax** :TRIGger:LOGic:CLOCK:POLarity {FALL|  
RISE}  
:TRIGger:LOGic:CLOCK:POLarity?

**Example** :TRIGGER:LOGIC:CLOCK:POLARITY FALL  
:TRIGGER:LOGIC:CLOCK:POLARITY?  
-> :TRIGGER:LOGIC:CLOCK:POLARITY FALL

**:TRIGger:LOGic:CLOCK:SOURCE**

**Function** Sets the clock source of the logic trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:CLOCK:SOURCE {A<x>|B<x>|  
C<x>|D<x>|DONTcare}  
:TRIGger:LOGic:CLOCK:SOURCE?  
<x> = 0 to 7

**Example** :TRIGGER:LOGIC:CLOCK:SOURCE A0  
:TRIGGER:LOGIC:CLOCK:SOURCE?  
-> :TRIGGER:LOGIC:CLOCK:SOURCE A0

**Description** For the SB5310, only {A<x>|DONTcare} are valid

**:TRIGger:LOGic:ESTate?**

**Function** Queries all settings related to the edge/state trigger of the logic.

**Syntax** :TRIGger:LOGic:ESTate?

**Example** :TRIGGER:LOGIC:ESTATE? -> :TRIGGER:  
LOGIC:ESTATE:POLARITY RISE;SOURCE A0

**:TRIGger:LOGic:ESTate:POLarity**

**Function** Sets the polarity of the edge/state trigger of the logic or queries the current setting.

**Syntax** :TRIGger:LOGic:ESTate:POLarity {ENTER|  
EXIT|FALL|RISE}  
:TRIGger:LOGic:ESTate:POLarity?

**Example** :TRIGGER:LOGIC:ESTATE:POLARITY ENTER  
:TRIGGER:LOGIC:ESTATE:POLARITY?  
-> :TRIGGER:LOGIC:ESTATE:POLARITY ENTER

**Description** • {ENTER|EXIT} is valid if :TRIGger:TYPE LState.

- {FALL|RISE} is valid if not :TRIGger:TYPE LState.

**:TRIGger:LOGic:ESTate:SOURCE**

**Function** Sets the edge/state trigger source of the logic or queries the current setting.

**Syntax** :TRIGger:LOGic:ESTate:SOURCE {A<x>|  
B<x>|C<x>|D<x>}  
:TRIGger:LOGic:ESTate:SOURCE?  
<x> = 0 to 7

**Example** :TRIGGER:LOGIC:ESTATE:SOURCE A0  
:TRIGGER:LOGIC:ESTATE:SOURCE?  
-> :TRIGGER:LOGIC:ESTATE:SOURCE A0

**Description** For the SB5310, only {A<x>} are valid.

**:TRIGger:LOGic:I2CBus?**

**Function** Queries all settings related to the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:LOGic:I2CBus?

**Example** :TRIGGER:LOGIC:I2CBUS?  
-> :TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT10ADDRESS:PATTERN "10111011111";;  
TRIGGER:LOGIC:I2CBUS:ADATA:BIT7ADDRESS:  
PATTERN "11011110";:TRIGGER:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:ADDRESS:  
PATTERN "10101011";:TRIGGER:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:SADDRESS:  
PATTERN "10101011";:TRIGGER:LOGIC:  
I2CBUS:ADATA:TYPE BIT10ADDRESS;:  
TRIGGER:LOGIC:I2CBUS:CLOCK:SOURCE A0;:  
TRIGGER:LOGIC:I2CBUS:DATA:BYTE 1;  
CONDITION FALSE;DPOSITION 1;MODE 1;  
PATTERN1 "10101011";  
PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";PMODE DONTCARE;  
SOURCE A0;:TRIGGER:LOGIC:I2CBUS:  
GCALL:BIT7MADDRESS:PATTERN "1010101";:  
TRIGGER:LOGIC:I2CBUS:GCALL:  
SBYTE BIT7MADDRESS;:TRIGGER:LOGIC:  
I2CBUS:MODE ADATA;NAIGNORE:HSMODE 1;  
RACCESS 1;SBYTE 1;:TRIGGER:LOGIC:  
I2CBUS:SBHSMODE:TYPE HSMODE

**:TRIGger:LOGic:I2CBus:ADATa?**

**Function** Queries all settings related to the address of the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:LOGic:I2CBus:ADATa?

**Example** :TRIGGER:LOGIC:I2CBUS:ADATa?  
-> :TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT10ADDRESS:PATTERN "10111011111";;  
TRIGGER:LOGIC:I2CBUS:ADATA:BIT7ADDRESS:  
PATTERN "11011110";:TRIGGER:LOGIC:  
I2CBUS:ADATA:BIT7APSUB:ADDRESS:PATTERN  
"10101011";:TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:PATTERN "10101011";;  
TRIGGER:LOGIC:I2CBUS:ADATA:  
TYPE BIT10ADDRESS

## 5.31 TRIGger Group

### **:TRIGger:LOGic:I2Cbus:ADATa:**

#### **BIT10address?**

**Function** Queries all settings related to the 10-bit address of the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:LOGic:I2Cbus:ADATa:  
BIT10address?

**Example** :TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT10ADDRESS?  
-> :TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT10ADDRESS:PATTERN "10111011111"

### **:TRIGger:LOGic:I2Cbus:ADATa:**

#### **BIT10address:HEXA**

**Function** Sets the 10-bit address of the logic I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:LOGic:I2Cbus:ADATa:  
BIT10address:HEXA {<string>}  
<string> = combination of 3 characters (0-F, and X),  
where bit 8 is R/W bit.

**Example** :TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT10ADDRESS:HEXA "7AB"

### **:TRIGger:LOGic:I2Cbus:ADATa:**

#### **BIT10address:PATtern**

**Function** Sets the 10-bit address of the logic I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:LOGic:I2Cbus:ADATa:  
BIT10address:PATtern {<string>}  
:TRIGger:LOGic:I2Cbus:ADATa:  
BIT10address:PATtern?  
<string> = combination of 11 characters (0, 1, and X),  
where bit 8 is R/W bit.

**Example** :TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT10ADDRESS:PATTERN "10111011111"  
:TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT10ADDRESS:PATTERN?  
->:TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT10ADDRESS:PATTERN "10111011111"

### **:TRIGger:LOGic:I2Cbus:ADATa:**

#### **BIT7Address?**

**Function** Queries all settings related to the 7-bit address of the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:LOGic:I2Cbus:ADATa:  
BIT7Address?

**Example** :TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT7ADDRESS?  
-> :TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT7ADDRESS:PATTERN "11011110"

### **:TRIGger:LOGic:I2Cbus:ADATa:**

#### **BIT7Address:HEXA**

**Function** Sets the 7-bit address of the logic I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:LOGic:I2Cbus:ADATa:  
BIT7Address:HEXA {<string>}  
<string> = combination of 2 characters (0-F, and X),  
where bit 0 is R/W bit.

**Example** :TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT7ADDRESS:HEXA "DE"

### **:TRIGger:LOGic:I2Cbus:ADATa:**

#### **BIT7Address:PATtern**

**Function** Sets the 7-bit address of the logic I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:LOGic:I2Cbus:ADATa:  
BIT7Address:PATtern {<string>}  
:TRIGger:LOGic:I2Cbus:ADATa:  
BIT7Address:PATtern?  
<string> = combination of 8 characters (0, 1, and X),  
where bit 0 is R/W bit.

**Example** :TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT7ADDRESS:PATTERN "11011110"  
:TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT7ADDRESS:PATTERN?  
-> :TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT7ADDRESS:PATTERN "11011110"

### **:TRIGger:LOGic:I2Cbus:ADATa:BIT7APsub?**

**Function** Queries all settings related to the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:LOGic:I2Cbus:ADATa:BIT7APsub?

**Example** :TRIGGER:LOGIC:I2CBUS:ADATa:BIT7APSUB?  
-> :TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT7APSUB:ADDRESS:PATTERN "10101011";  
:TRIGGER:LOGIC:I2CBUS:ADATa:BIT7APSUB:  
SADDRESS:PATTERN "10101011"

### **:TRIGger:LOGic:I2Cbus:ADATa:**

#### **BIT7APsub:ADDRESS?**

**Function** Queries all settings related to the 7-bit address of the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:LOGic:I2Cbus:ADATa:  
BIT7APsub:ADDRESS?

**Example** :TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT7APSUB:ADDRESS?  
-> :TRIGGER:LOGIC:I2CBUS:ADATa:  
BIT7APSUB:ADDRESS:PATTERN "10101011"

**:TRIGger:LOGic:I2CBus:ADATa:****BIT7APsub:ADDRESS:HEXA**

**Function** Sets the 7-bit address of the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:LOGic:I2CBus:ADATa:  
BIT7APsub:ADDRESS:HEXA {<string>}  
<string> = combination of 2 characters (0-F, and X), where bit 0 is R/W bit.

**Example** :TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:HEXA "AB"

**:TRIGger:LOGic:I2CBus:ADATa:****BIT7APsub:ADDRESS:PATtern**

**Function** Sets the 7-bit address of the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:LOGic:I2CBus:ADATa:  
BIT7APsub:ADDRESS:PATtern {<string>}  
:TRIGger:LOGic:I2CBus:ADATa:  
BIT7APsub:ADDRESS:PATtern?  
<string> = combination of 8 characters (0, 1, and X), where bit 0 is R/W\_bit.

**Example** :TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:PATTERN "10101011"  
:TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:PATTERN?  
-> :TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT7APSUB:ADDRESS:PATTERN "10101011"

**:TRIGger:LOGic:I2CBus:ADATa:****BIT7APsub:SADDRESS?**

**Function** Queries all settings related to the sub address of the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:LOGic:I2CBus:ADATa:  
BIT7APsub:SADDRESS?

**Example** :TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS?  
-> :TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:PATTERN "10101011"

**:TRIGger:LOGic:I2CBus:ADATa:****BIT7APsub:SADDRESS:HEXA**

**Function** Sets the sub address of the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:LOGic:I2CBus:ADATa:  
BIT7APsub:SADDRESS:HEXA {<string>}  
<string> = Combination of up to 2 characters (0-F and X)

**Example** :TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:HEXA "EF"

**:TRIGger:LOGic:I2CBus:ADATa:****BIT7APsub:SADDRESS:PATtern**

**Function** Sets the sub address of the 7-bit + Sub address of the logic I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:LOGic:I2CBus:ADATa:  
BIT7APsub:SADDRESS:PATtern {<string>}  
:TRIGger:LOGic:I2CBus:ADATa:  
BIT7APsub:SADDRESS:PATtern?  
<string> = combination of 8 characters (0, 1, and X).

**Example** :TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:PATTERN "10101011"  
:TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:PATTERN?  
-> :TRIGGER:LOGIC:I2CBUS:ADATA:  
BIT7APSUB:SADDRESS:PATTERN "10101011"

**:TRIGger:LOGic:I2CBus:ADATa:TYPE**

**Function** Sets the address type of the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:I2CBus:ADATa:  
TYPE {BIT10address|BIT7Address|  
BIT7APsub}  
:TRIGger:LOGic:I2CBus:ADATa:TYPE?

**Example** :TRIGGER:LOGIC:I2CBUS:ADATA:  
TYPE BIT10ADDRESS  
:TRIGGER:LOGIC:I2CBUS:ADATa:TYPE?  
-> :TRIGGER:LOGIC:I2CBUS:ADATa:  
TYPE BIT10ADDRESS

**:TRIGger:LOGic:I2CBus:CLOCK?**

**Function** Queries all settings related to the clock of the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:LOGic:I2CBus:CLOCK?

**Example** :TRIGGER:LOGIC:I2CBUS:CLOCK?  
-> :TRIGGER:LOGIC:I2CBUS:CLOCK:  
SOURCE A0

**:TRIGger:LOGic:I2CBus:CLOCK:SOURce**

**Function** Sets the clock trace for the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:I2CBus:CLOCK:  
SOURce {A<x>}  
:TRIGger:LOGic:I2CBus:CLOCK:SOURce?  
<x> = 0 to 7

**Example** :TRIGGER:LOGIC:I2CBUS:CLOCK:SOURCE A0  
:TRIGGER:LOGIC:I2CBUS:CLOCK:SOURCE?  
-> :TRIGGER:LOGIC:I2CBUS:CLOCK:  
SOURCE A0



## 5.31 TRIGger Group

### **:TRIGger:LOGic:I2CBus:DATA?**

**Function** Queries all settings related to the data of the logic I<sup>2</sup>C bus trigger.

**Syntax** :TRIGger:LOGic:I2CBus:DATA?

**Example** :TRIGGER:LOGIC:I2CBUS:DATA?  
-> :TRIGGER:LOGIC:I2CBUS:DATA:BYTE 1;  
CONDITION FALSE;DPOSITION 1;MODE 1;  
PATTERN1 "10101011";  
PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";PMODE DONTCARE;  
SOURCE A0

### **:TRIGger:LOGic:I2CBus:DATA:BYTE**

**Function** Sets the number of settings for the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:I2CBus:DATA:BYTE {<NRf>}  
:TRIGger:LOGic:I2CBus:DATA:BYTE?  
<NRf> = 1 to 4

**Example** :TRIGGER:LOGIC:I2CBUS:DATA:BYTE 1  
:TRIGGER:LOGIC:I2CBUS:DATA:BYTE?  
-> :TRIGGER:LOGIC:I2CBUS:DATA:BYTE 1

### **:TRIGger:LOGic:I2CBus:DATA:CONDition**

**Function** Sets the determination method for the data of the logic I<sup>2</sup>C bus trigger (match / no match) or queries the current setting.

**Syntax** :TRIGger:LOGic:I2CBus:DATA:  
CONDition {FALSE|TRUE}  
:TRIGger:LOGic:I2CBus:DATA:CONDition?

**Example** :TRIGGER:LOGIC:I2CBUS:DATA:  
CONDITION FALSE  
:TRIGGER:LOGIC:I2CBUS:DATA:CONDITION?  
-> :TRIGGER:LOGIC:I2CBUS:DATA:  
CONDITION FALSE

### **:TRIGger:LOGic:I2CBus:DATA:DPOSITION**

**Function** Sets the pattern comparison position for the data of the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:I2CBus:DATA:  
DPOSITION {<NRf>}  
:TRIGger:LOGic:I2CBus:DATA:DPOSITION?  
<NRf> = 0 to 9999

**Example** :TRIGGER:LOGIC:I2CBUS:DATA:DPOSITION 1  
:TRIGGER:LOGIC:I2CBUS:DATA:DPOSITION?  
-> :TRIGGER:LOGIC:I2CBUS:DATA:  
DPOSITION 1

### **:TRIGger:LOGic:I2CBus:DATA:HEXA<x>**

**Function** Sets the data of the logic I<sup>2</sup>C bus trigger in hexadecimal notation.

**Syntax** :TRIGger:LOGic:I2CBus:DATA:  
HEXA<x> {<string>}  
<x> of HEXA<x> = 1 to 4  
<string> = Combination of up to 2 characters (0-F and X)

**Example** :TRIGGER:LOGIC:I2CBUS:DATA:HEXA1 "AB"

### **:TRIGger:LOGic:I2CBus:DATA:MODE**

**Function** Enables/disables the data conditions of the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:I2CBus:DATA:  
MODE {<Boolean>}  
:TRIGger:LOGic:I2CBus:DATA:MODE?  
**Example** :TRIGGER:LOGIC:I2CBUS:DATA:MODE ON  
:TRIGGER:LOGIC:I2CBUS:DATA:MODE?  
-> :TRIGGER:LOGIC:I2CBUS:DATA:MODE 1

### **:TRIGger:LOGic:I2CBus:DATA:PATtern<x>**

**Function** Sets the data for the logic I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:LOGic:I2CBus:DATA:  
PATtern<x> {<string>}  
:TRIGger:LOGic:I2CBus:DATA:PATtern<x>?  
<x> = 1 to 4  
<string> = combination of 8 characters (0, 1, and X).

**Example** :TRIGGER:LOGIC:I2CBUS:DATA:  
PATTERN1 "10101011"  
:TRIGGER:LOGIC:I2CBUS:DATA:PATTERN1?  
-> :TRIGGER:LOGIC:I2CBUS:DATA:  
PATTERN1 "10101011"

### **:TRIGger:LOGic:I2CBus:DATA:PMODE**

**Function** Sets the pattern comparison start position for the data of the logic I<sup>2</sup>C bus trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:I2CBus:DATA:PMODE  
{DONTcare|SElect}  
:TRIGger:LOGic:I2CBus:DATA:PMODE?  
**Example** :TRIGGER:LOGIC:I2CBUS:DATA:  
PMODE DONTCARE  
:TRIGGER:LOGIC:I2CBUS:DATA:PMODE?  
-> :TRIGGER:LOGIC:I2CBUS:DATA:  
PMODE DONTCARE

**:TRIGger:LOGic:I2Cbus:DATA:SOURce**

Function Sets the data trace for the logic I<sup>2</sup>C bus trigger or queries the current setting.

Syntax :TRIGger:LOGic:I2Cbus:DATA:  
SOURce {A<x>}  
:TRIGger:LOGic:I2Cbus:DATA:SOURce?  
<x> = 0 to 7

Example :TRIGGER:LOGIC:I2CBUS:DATA:SOURCE A0  
:TRIGGER:LOGIC:I2CBUS:DATA:SOURCE?  
-> :TRIGGER:LOGIC:I2CBUS:DATA:SOURCE A0

**:TRIGger:LOGic:I2Cbus:GCALl?**

Function Queries all settings related to the general call of the logic I<sup>2</sup>C bus trigger.

Syntax :TRIGger:LOGic:I2Cbus:GCALl?

Example :TRIGGER:LOGIC:I2CBUS:GCALL?  
-> :TRIGGER:LOGIC:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN "1010101";;  
TRIGGER:LOGIC:I2CBUS:GCALL:  
SBYTE BIT7MADDRESS

**:TRIGger:LOGic:I2Cbus:GCALl:****BIT7maddress?**

Function Queries all settings related to the 7-bit master address of the general call of the logic I<sup>2</sup>C bus trigger.

Syntax :TRIGger:LOGic:I2Cbus:GCALl:  
BIT7maddress?

Example :TRIGGER:LOGIC:I2CBUS:GCALL:  
BIT7MADDRESS?  
-> :TRIGGER:LOGIC:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN "1010101"

**:TRIGger:LOGic:I2Cbus:GCALl:****BIT7maddress:HEXA**

Function Sets the 7-bit master address of the general call of the logic I<sup>2</sup>C bus trigger in hexadecimal notation.

Syntax :TRIGger:LOGic:I2Cbus:GCALl:  
BIT7maddress:HEXA {<string>}  
<string> = combination of 2 characters (0-F and X),  
where bit 0 is fixed to '1.'

Example :TRIGGER:LOGIC:I2CBUS:GCALL:  
BIT7MADDRESS:HEXA "AB"

**:TRIGger:LOGic:I2Cbus:GCALl:****BIT7maddress:PATtern**

Function Sets the 7-bit master address of the general call of the logic I<sup>2</sup>C bus trigger in binary notation or queries the current setting.

Syntax :TRIGger:LOGic:I2Cbus:GCALl:  
BIT7maddress:PATtern {<string>}  
:TRIGger:LOGic:I2Cbus:GCALl:  
BIT7maddress:PATtern?  
<string> = combination of 7 characters (0, 1, and X).

Example :TRIGGER:LOGIC:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN "1010101"  
:TRIGGER:LOGIC:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN?  
-> :TRIGGER:LOGIC:I2CBUS:GCALL:  
BIT7MADDRESS:PATTERN "1010101"

**:TRIGger:LOGic:I2Cbus:GCALl:SBYTE  
(Second Byte)**

Function Sets the type of the second byte of the general call of the logic I<sup>2</sup>C bus trigger or queries the current setting.

Syntax :TRIGger:LOGic:I2Cbus:GCALl:  
SBYTE {BIT7maddress|DONTcare|H04|H06}  
:TRIGger:LOGic:I2Cbus:GCALl:SBYTE?

Example :TRIGGER:LOGIC:I2CBUS:GCALL:  
SBYTE BIT7MADDRESS  
:TRIGGER:LOGIC:I2CBUS:GCALL:SBYTE?  
-> :TRIGGER:LOGIC:I2CBUS:GCALL:  
SBYTE BIT7MADDRESS

**:TRIGger:LOGic:I2Cbus:MODE**

Function Sets the trigger mode for the logic I<sup>2</sup>C bus trigger or queries the current setting.

Syntax :TRIGger:LOGic:I2Cbus:MODE {ADATa|  
ESTart|GCALl|NAIGNore|SBHSmode}  
:TRIGger:LOGic:I2Cbus:MODE?

Example :TRIGGER:LOGIC:I2CBUS:MODE ADATA  
:TRIGGER:LOGIC:I2CBUS:MODE?  
-> :TRIGGER:LOGIC:I2CBUS:MODE ADATA

**:TRIGger:LOGic:I2Cbus:NAIGNore?**

Function Queries all settings related to the NON-ACK Ignore mode of the logic I<sup>2</sup>C bus trigger.

Syntax :TRIGger:LOGic:I2Cbus:NAIGNore?

Example :TRIGGER:LOGIC:I2CBUS:NAIGNORE?  
-> :TRIGGER:LOGIC:I2CBUS:NAIGNORE:  
HSMODE 1;RACCESS 1;SBYTE 1

### 5.31 TRIGger Group

#### **:TRIGger:LOGic:I2CBus:NAIgnore:HSMoDe**

Function Sets whether to ignore NON ACK in high speed mode of the logic I<sup>2</sup>C bus trigger or queries the current setting.

Syntax :TRIGger:LOGic:I2CBus:NAIgnore:  
HSMoDe {<Boolean>}  
:TRIGger:LOGic:I2CBus:NAIgnore:HSMoDe?

Example :TRIGGER:LOGIC:I2CBUS:NAIGNORE:  
HSMODE ON  
:TRIGGER:LOGIC:I2CBUS:NAIGNORE:HSMODE?  
-> :TRIGGER:LOGIC:I2CBUS:NAIGNORE:  
HSMODE 1

#### **:TRIGger:LOGic:I2CBus:NAIgnore:RACceSS**

Function Sets whether to ignore NON ACK in read access mode of the logic I<sup>2</sup>C bus trigger or queries the current setting.

Syntax :TRIGger:LOGic:I2CBus:NAIgnore:  
RACceSS {<Boolean>}  
:TRIGger:LOGic:I2CBus:NAIgnore:  
RACceSS?

Example :TRIGGER:LOGIC:I2CBUS:NAIGNORE:  
RACCESS ON  
:TRIGGER:LOGIC:I2CBUS:NAIGNORE:  
RACCESS?  
-> :TRIGGER:LOGIC:I2CBUS:NAIGNORE:  
RACCESS 1

#### **:TRIGger:LOGic:I2CBus:NAIgnore:SBYTe (Start Byte)**

Function Sets whether to ignore NON ACK in the start byte of the logic I<sup>2</sup>C bus trigger or queries the current setting.

Syntax :TRIGger:LOGic:I2CBus:NAIgnore:  
SBYTe {<Boolean>}  
:TRIGger:LOGic:I2CBus:NAIgnore:SBYTe?

Example :TRIGGER:LOGIC:I2CBUS:NAIGNORE:SBYTE ON  
:TRIGGER:LOGIC:I2CBUS:NAIGNORE:SBYTE?  
-> :TRIGGER:LOGIC:I2CBUS:NAIGNORE:  
SBYTE 1

#### **:TRIGger:LOGic:I2CBus:SBHSMoDe?**

Function Queries all settings related to the start byte/high speed mode of the logic I<sup>2</sup>C bus trigger.

Syntax :TRIGger:LOGic:I2CBus:SBHSMoDe?

Example :TRIGGER:LOGIC:I2CBUS:SBHSMODE?  
-> :TRIGGER:LOGIC:I2CBUS:SBHSMODE:  
TYPE HSMODE

#### **:TRIGger:LOGic:I2CBus:SBHSMoDe:TYPE**

Function Sets the type of the start byte/high speed mode of the logic I<sup>2</sup>C bus trigger or queries the current setting.

Syntax :TRIGger:LOGic:I2CBus:SBHSMoDe:  
TYPE {HSMoDe|SBYTe}  
:TRIGger:LOGic:I2CBus:SBHSMoDe:TYPE?

Example :TRIGGER:LOGIC:I2CBUS:SBHSMODE:  
TYPE HSMODE  
:TRIGGER:LOGIC:I2CBUS:SBHSMODE:TYPE?  
-> :TRIGGER:LOGIC:I2CBUS:SBHSMODE:  
TYPE HSMODE

#### **:TRIGger:LOGic:LINBus?**

Function Queries all settings related to the logic LIN bus signal triggers.

Syntax :TRIGger:LOGic:LINBus?

Example :TRIGGER:LOGIC:LINBUS? -> :TRIGGER:  
LOGIC:LINBUS:BLENGTH 11;BRATE 19200;  
ERROR:CHECKSUM 0;DSIZE 8;FRAMING 0;  
PARITY 0;SYNCH 0;TOUT 0;:TRIGGER:LOGIC:  
LINBUS:IDDATA:DATA:BORDER BIG;  
CONDITION DONTCARE;DATA1 0.000000E+00;  
DATA2 255.00000E+00;DSIZE 8;MSBLSB 7, 0;  
PATTERN "XXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX";  
SIGN UNSIGN;:TRIGGER:LOGIC:LINBUS:  
IDDATA:ID:PATTERN "XXXXXX";:TRIGGER:  
LOGIC:LINBUS:IDOR:DSIZE 8;IDDATA1:DATA:  
BORDER BIG;CONDITION DONTCARE;  
DATA1 0.000000E+00;DATA2 255.00000E+00;  
MSBLSB 7, 0;PATTERN "XXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXX";SIGN UNSIGN;:TRIGGER:  
LOGIC:LINBUS:IDOR:IDDATA1:ID:  
PATTERN "XXXXXX";:TRIGGER:LOGIC:  
LINBUS:IDOR:IDDATA1:MODE 0;:TRIGGER:  
LOGIC:LINBUS:IDOR:IDDATA2:DATA:  
BORDER BIG;CONDITION DONTCARE;  
DATA1 0.000000E+00;  
DATA2 255.00000E+00;MSBLSB 7, 0.....

#### **:TRIGger:LOGic:LINBus:BLENgtH**

Function Sets the logic LIN bus signal trigger Break length or queries the current setting.

Syntax :TRIGger:LOGic:LINBus:BLENgtH {<NRf>}  
:TRIGger:LOGic:LINBus:BLENgtH?

<NRf> = 10 to 13  
Example :TRIGGER:LOGIC:LINBUS:BLENGTH 10  
:TRIGGER:LOGIC:LINBUS:BLENGTH? ->  
:TRIGGER:LOGIC:LINBUS:BLENGTH 10



## 5.31 TRIGger Group

### **:TRIGger:LOGic:LINBus:IDData:DATA?**

**Function** Queries all settings related to the Data Field of the logic LIN bus signal trigger.

**Syntax** :TRIGger:LOGic:LINBus:IDData:DATA?

**Example** :TRIGGER:LOGIC:LINBUS:IDDATA:DATA? ->  
:TRIGGER:LOGIC:LINBUS:IDDATA:DATA:  
BORDER BIG;CONDITION DONTCARE;  
DATA1 0.000000E+00;  
DATA2 255.00000E+00;DSIZE 8;  
MSBLSB 7, 0;PATTERN "XXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXXXX";SIGN UNSIGN

### **:TRIGger:LOGic:LINBus:IDData:DATA:**

#### **BORDER**

**Function** Sets the data byte order of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:LINBus:IDData:DATA:

BORDER {BIG|LITTLE}

:TRIGger:LOGic:LINBus:IDData:DATA:

BORDER?

**Example** :TRIGGER:LOGIC:LINBUS:IDDATA:DATA:

BORDER BIG

:TRIGGER:LOGIC:LINBUS:IDDATA:DATA:

BORDER? -> :TRIGGER:LOGIC:LINBUS:

IDDATA:DATA:BORDER BIG

### **:TRIGger:LOGic:LINBus:IDData:DATA:**

#### **CONDition**

**Function** Sets the data conditions of the Data Field of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:LINBus:IDData:DATA:

CONDition {BETween|DONTcare|FALSE|  
GTHan|LTHan|ORANge|TRUE}

:TRIGger:LOGic:LINBus:IDData:DATA:

CONDition?

**Example** :TRIGGER:LOGIC:LINBUS:IDDATA:DATA:

CONDITION BETWEEN

:TRIGGER:LOGIC:LINBUS:IDDATA:DATA:

CONDITION? -> :TRIGGER:LOGIC:LINBUS:

IDDATA:DATA:CONDITION BETWEEN

### **:TRIGger:LOGic:LINBus:IDData:DATA:**

#### **DATA<x>**

**Function** Sets the comparison data of the logic LIN bus signal trigger data or queries the current setting

**Syntax** :TRIGger:LOGic:LINBus:IDData:DATA:

DATA<x> {<NRF>}

:TRIGger:LOGic:LINBus:IDData:DATA:

DATA<x>?

<x> = 1, 2

<NRF> = See the SB5000 User's Manual

**Example** :TRIGGER:LOGIC:LINBUS:IDDATA:DATA:

DATA1 1

:TRIGGER:LOGIC:LINBUS:IDDATA:DATA:

DATA1? -> :TRIGGER:LOGIC:LINBUS:IDDATA:

DATA:DATA1 1.000000E+00

**Description** • For :TRIGger:LOGic:LINBus:IDData:DATA:

CONDition GTHan, set using: TRIGger:LOGic:  
LINBus:IDData:DATA:DATA1.

• For :TRIGger:LOGic:LINBus:IDData:DATA:  
CONDition LTHan, set using: TRIGger:LOGic:  
LINBus:IDData:DATA:DATA2.

• For :TRIGger:LOGic:LINBus:IDData:DATA:  
CONDition BETWEEen|ORANge, set small values  
with: TRIGger:LOGic:LINBus:IDData:DATA:DATA1,  
and large values with: TRIGger:LOGic:LINBus:  
IDData:DATA:DATA2.

### **:TRIGger:LOGic:LINBus:IDData:DATA:**

#### **DSIZE**

**Function** Sets the number of bytes of data in the Data Field of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:LINBus:IDData:DATA:

DSIZE {<NRF>}

:TRIGger:LOGic:LINBus:IDData:DATA:

DSIZE?

<NRF> = 1 to 8

**Example** :TRIGGER:LOGIC:LINBUS:IDDATA:DATA:

DSIZE 1

:TRIGGER:LOGIC:LINBUS:IDDATA:DATA:

DSIZE? -> :TRIGGER:LOGIC:LINBUS:IDDATA:

DATA:DSIZE 1

### **:TRIGger:LOGic:LINBus:IDData:DATA:HEXA**

**Function** Sets the data in the Data Field of the logic LIN bus signal trigger in hexadecimal.

**Syntax** :TRIGger:LOGic:LINBus:IDData:DATA:

HEXA {<string>}

<string> = Up to 16 characters by combining '0' to 'F'  
and 'X,' units of 1 byte

**Example** :TRIGGER:LOGIC:LINBUS:IDDATA:DATA:

HEXA "A9"





**:TRIGger:LOGic:LINBus:IDOR:IDData<x>:****DATA:HEXA**

**Function** Sets the data in each Data Field of the OR condition of the logic LIN bus signal trigger in hexadecimal.

**Syntax** :TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
DATA:HEXA {<string>}  
<x> = 1 to 4  
<string> = Up to 16 characters by combining '0' to 'F' and 'X,' units of 1 byte

**Example** :TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:  
DATA:HEXA "A9"

**:TRIGger:LOGic:LINBus:IDOR:IDData<x>:****DATA:MSBLSb**

**Function** Sets the MSB/LSB bit of each data of the OR condition of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
DATA:MSBLSb {<Nrf>, <Nrf>}  
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
DATA:MSBLSb?  
<x> = 1 to 4  
<Nrf> = See the SB5000 User's Manual

**Example** :TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:  
DATA:MSBLSB 1, 0  
:TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:  
DATA:MSBLSB? -> :TRIGGER:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:MSBLSB 1, 0

**:TRIGger:LOGic:LINBus:IDOR:IDData<x>:****DATA:PATtern**

**Function** Sets the data of each Data Field of the OR conditions of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
DATA:PATtern {<string>}  
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
DATA:PATtern?  
<x> = 1 to 4  
<string> = up to 64 characters by combining '0,' '1,' and 'X,' units of 1 byte

**Example** :TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:  
DATA:PATTERN "11011111"  
:TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:  
DATA:PATTERN? -> :TRIGGER:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:PATTERN "11011111"

**:TRIGger:LOGic:LINBus:IDOR:IDData<x>:****DATA:SIGN**

**Function** Sets the sign of each data of the OR conditions of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
DATA:SIGN {SIGN|UNSign}  
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
DATA:SIGN?  
<x> = 1 to 4

**Example** :TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:  
DATA:SIGN SIGN  
:TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:  
DATA:SIGN? -> :TRIGGER:LOGIC:LINBUS:  
IDOR:IDDATA1:DATA:SIGN SIGN

**:TRIGger:LOGic:LINBus:IDOR:IDData<x>:****ID?**

**Function** Queries all settings related to each ID of the OR condition of the logic LIN bus signal trigger.

**Syntax** :TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
ID?  
<x> = 1 to 4

**Example** :TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:ID?  
-> :TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:  
ID:PATTERN "101010"

**:TRIGger:LOGic:LINBus:IDOR:IDData<x>:****ID:HEXA**

**Function** Sets each ID of the OR conditions of the logic LIN bus signal trigger in hexadecimal.

**Syntax** :TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
ID:HEXA {<string>}  
<x> = 1 to 4  
<string> = 2 characters by combining '0' to 'F,' and 'X'

**Example** :TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:ID:  
HEXA "2A"

**:TRIGger:LOGic:LINBus:IDOR:IDData<x>:****ID:PATtern**

**Function** Sets each ID of the OR conditions of the logic LIN bus signal trigger binary or queries the current setting.

**Syntax** :TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
ID:PATtern {<string>}  
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
ID:PATtern?  
<x> = 1 to 4  
<string> = 6 characters by combining '0,' '1,' and 'X'

**Example** :TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:ID:  
PATTERN "101111"  
:TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:ID:  
PATTERN? -> :TRIGGER:LOGIC:LINBUS:IDOR:  
IDDATA1:ID:PATTERN "101111"



## 5.31 TRIGger Group

### **:TRIGger:LOGic:LINBus:IDOR:IDData<x>:**

#### **MODE**

**Function** Enables (1) or disables (0) each condition for each OR condition of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
MODE {<Boolean>}  
:TRIGger:LOGic:LINBus:IDOR:IDData<x>:  
MODE?  
<x> = 1 to 4

**Example** :TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:  
MODE ON  
:TRIGGER:LOGIC:LINBUS:IDOR:IDDATA1:  
MODE? -> :TRIGGER:LOGIC:LINBUS:IDOR:  
IDDATA1:MODE 1

### **:TRIGger:LOGic:LINBus:MODE**

**Function** Sets the logic LIN bus signal trigger mode or queries the current setting.

**Syntax** :TRIGger:LOGic:LINBus:  
MODE {BSYNch|ERRor|IDData|IDOR}  
:TRIGger:LOGic:LINBus:MODE?

**Example** :TRIGGER:LOGIC:LINBUS:MODE BSYNCH  
:TRIGGER:LOGIC:LINBUS:MODE? ->  
:TRIGGER:LOGIC:LINBUS:MODE BSYNCH

### **:TRIGger:LOGic:LINBus:REvision**

**Function** Sets the logic LIN bus signal trigger revision (1.3 or 2.0) or queries the current setting.

**Syntax** :TRIGger:LOGic:LINBus:  
REvision {LIN1\_3|LIN2\_0}  
:TRIGger:LOGic:LINBus:REvision?

**Example** :TRIGGER:LOGIC:LINBUS:REVISION LIN1\_3  
:TRIGGER:LOGIC:LINBUS:REVISION? ->  
:TRIGGER:LOGIC:LINBUS:REVISION LIN1\_3

### **:TRIGger:LOGic:LINBus:SOURce**

**Function** Sets the trigger source of the logic LIN bus signal trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:LINBus:SOURce {A<x>}  
:TRIGger:LOGic:LINBus:SOURce?  
<x> = 0 to 7

**Example** :TRIGGER:LOGIC:LINBUS:SOURCE A0  
:TRIGGER:LOGIC:LINBUS:SOURCE?  
-> :TRIGGER:LOGIC:LINBUS:SOURCE A0

### **:TRIGger:LOGic:LINBus:SPOint**

**Function** Sets the logic LIN bus signal trigger sample point or queries the current setting.

**Syntax** :TRIGger:LOGic:LINBus:SPOint {<NRf>}  
:TRIGger:LOGic:LINBus:SPOint?  
<NRf> = 18.8 to 90.6(%)

**Example** :TRIGGER:LOGIC:LINBUS:SPOINT 18.8  
:TRIGGER:LOGIC:LINBUS:SPOINT? ->  
:TRIGGER:LOGIC:LINBUS:SPOINT 18.8E+00

### **:TRIGger:LOGic:SPATtern? (Serial Pattern)**

**Function** Queries all settings related to logic serial pattern trigger.

**Syntax** :TRIGger:LOGic:SPATtern?

**Example** :TRIGGER:LOGIC:SPATTERN?  
-> :TRIGGER:LOGIC:SPATTERN:  
BITRATE 1.0000000E+03;CLOCK:MODE 1;  
POLARITY FALL;SOURCE A0;:TRIGGER:  
LOGIC:SPATTERN:CS 1;DATA:ACTIVE HIGH;  
SOURCE A0;:TRIGGER:LOGIC:SPATTERN:  
LATCH:SOURCE A0;POLARITY FALL;:  
TRIGGER:LOGIC:SPATTERN:  
PATTERN "1100110111101111"

### **:TRIGger:LOGic:SPATtern:BITRate**

**Function** Sets the bit rate for the logic serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPATtern:BITRate {<NRf>}  
:TRIGger:LOGic:SPATtern:BITRate?  
<NRf> = 1 to 50M(bps)

**Example** :TRIGGER:LOGIC:SPATTERN:BITRATE 1  
:TRIGGER:LOGIC:SPATTERN:BITRATE?  
-> :TRIGGER:LOGIC:SPATTERN:  
BITRATE 1.000E+00

**Description** This command valid when :TRIGger:LOGic:  
SPATtern:CLOCK:MODE OFF.

### **:TRIGger:LOGic:SPATtern:CLEar**

**Function** Clears (set to don't care) all patterns of the logic serial pattern trigger.

**Syntax** :TRIGger:LOGic:SPATtern:CLEar

**Example** :TRIGGER:LOGIC:SPATTERN:CLEAR

### **:TRIGger:LOGic:SPATtern:CLOCK?**

**Function** Queries all settings related to the clock for the logic serial pattern trigger.

**Syntax** :TRIGger:LOGic:SPATtern:CLOCK?

**Example** :TRIGGER:LOGIC:SPATTERN:CLOCK?  
-> :TRIGGER:LOGIC:SPATTERN:CLOCK:  
MODE 1;POLARITY FALL;SOURCE A0

**:TRIGger:LOGic:SPATtern:CLOCK:MODE**

**Function** Enables/disables the clock for the logic serial analysis pattern trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPATtern:CLOCK:  
MODE {<Boolean>}  
:TRIGger:LOGic:SPATtern:CLOCK:MODE?

**Example** :TRIGGER:LOGIC:SPATTERN:CLOCK:MODE ON  
:TRIGGER:LOGIC:SPATTERN:CLOCK:MODE?  
-> :TRIGGER:LOGIC:SPATTERN:CLOCK:MODE 1

**:TRIGger:LOGic:SPATtern:CLOCK:POLarity**

**Function** Sets the polarity of the clock trace of the logic serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPATtern:CLOCK:  
POLarity {FALL|RISE}  
:TRIGger:LOGic:SPATtern:CLOCK:POLarity?

**Example** :TRIGGER:LOGIC:SPATTERN:CLOCK:  
POLARITY FALL  
:TRIGGER:LOGIC:SPATTERN:CLOCK:POLARITY?  
-> :TRIGGER:LOGIC:SPATTERN:CLOCK:  
POLARITY FALL

**Description** This command valid when :TRIGger:LOGic:SPATtern:CLOCK:MODE ON.

**:TRIGger:LOGic:SPATtern:CLOCK:SOURce**

**Function** Sets the clock trace for the logic serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPATtern:CLOCK:  
SOURce {A<x>}  
:TRIGger:LOGic:SPATtern:CLOCK:SOURce?  
<x>= 0 to 7

**Example** :TRIGGER:LOGIC:SPATTERN:CLOCK:SOURCE A0  
:TRIGGER:LOGIC:SPATTERN:CLOCK:SOURCE?  
-> :TRIGGER:LOGIC:SPATTERN:CLOCK:  
SOURCE A0

**Description** • This command valid when :TRIGger:LOGic:SPATtern:CLOCK:MODE ON.

**:TRIGger:LOGic:SPATtern:CS**

**Function** Enables/disables the chip select for the logic serial analysis pattern trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPATtern:CS {<Boolean>}  
:TRIGger:LOGic:SPATtern:CS?

**Example** :TRIGGER:LOGIC:SPATTERN:CS ON  
:TRIGGER:LOGIC:SPATTERN:CS?  
-> :TRIGGER:LOGIC:SPATTERN:CS 1

**Description** This command valid when :TRIGger:LOGic:SPATtern:CLOCK:MODE ON.

**:TRIGger:LOGic:SPATtern:DATA?**

**Function** Queries all settings related to the data for the logic serial pattern trigger.

**Syntax** :TRIGger:LOGic:SPATtern:DATA?  
**Example** :TRIGGER:LOGIC:SPATTERN:DATA?  
-> :TRIGGER:LOGIC:SPATTERN:DATA:  
ACTIVE HIGH;SOURCE A0

**:TRIGger:LOGic:SPATtern:DATA:ACTIVE**

**Function** Sets the active level of the data for the logic serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPATtern:DATA:  
ACTive {HIGH|LOW}  
:TRIGger:LOGic:SPATtern:DATA:ACTive?

**Example** :TRIGGER:LOGIC:SPATTERN:DATA:  
ACTIVE HIGH  
:TRIGGER:LOGIC:SPATTERN:DATA:ACTIVE?  
-> :TRIGGER:LOGIC:SPATTERN:DATA:  
ACTIVE HIGH

**:TRIGger:LOGic:SPATtern:DATA:SOURce**

**Function** Sets the data rate for the logic serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPATtern:DATA:  
SOURce {A<x>}  
:TRIGger:LOGic:SPATtern:DATA:SOURce?  
<x>= 0 to 7

**Example** :TRIGGER:LOGIC:SPATTERN:DATA:SOURCE A0  
:TRIGGER:LOGIC:SPATTERN:DATA:SOURCE?  
-> :TRIGGER:LOGIC:SPATTERN:DATA:  
SOURCE A0

**:TRIGger:LOGic:SPATtern:HEXA**

**Function** Sets the pattern of the logic serial pattern trigger in hexadecimal notation.

**Syntax** :TRIGger:LOGic:SPATtern:HEXA {<string>}  
<string> = combination of up to 32 characters (0-F and X)

**Example** :TRIGGER:LOGIC:SPATTERN:HEXA "ABCD"

**:TRIGger:LOGic:SPATtern:LATCH?**

**Function** Queries all settings related to the latch for the logic serial pattern trigger.

**Syntax** :TRIGger:LOGic:SPATtern:LATCH?  
**Example** :TRIGGER:LOGIC:SPATTERN:LATCH?  
-> :TRIGGER:LOGIC:SPATTERN:LATCH:  
SOURCE A0;POLARITY FALL

## 5.31 TRIGger Group

### **:TRIGger:LOGic:SPATtern:LATCh:POLarity**

**Function** Sets the polarity of the latch trace of the logic serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPATtern:LATCh:  
POLarity {FALL|RISE}  
:TRIGger:LOGic:SPATtern:LATCh:  
POLarity?

**Example** :TRIGGER:LOGIC:SPATTERN:LATCH:  
POLARITY FALL  
:TRIGGER:LOGIC:SPATTERN:LATCH:  
POLARITY?  
-> :TRIGGER:LOGIC:SPATTERN:LATCH:  
POLARITY FALL

**Description** • This command valid when :TRIGger:LOGic:  
SPATtern:CLOCK:MODE ON.  
• This command is invalid when :TRIGger:LOGic:  
SPATtern:LATCh:SOURce DONTcare

### **:TRIGger:LOGic:SPATtern:LATCh:SOURce**

**Function** Sets the latch trace for the logic serial pattern trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPATtern:LATCh:  
SOURce {A<x>|DONTcare}  
:TRIGger:LOGic:SPATtern:LATCh:SOURce?  
<x>= 0 to 7

**Example** :TRIGGER:LOGIC:SPATTERN:LATCH:SOURCE A0  
:TRIGGER:LOGIC:SPATTERN:LATCH:SOURCE?  
-> :TRIGGER:LOGIC:SPATTERN:LATCH:  
SOURCE A0

**Description** • This command valid when :TRIGger:LOGic:  
SPATtern:CLOCK:MODE ON.

### **:TRIGger:LOGic:SPATtern:PATtern**

**Function** Sets the pattern of the logic serial pattern trigger in binary notation, or queries the current setting.

**Syntax** :TRIGger:LOGic:SPATtern:  
PATtern {<string>}  
:TRIGger:LOGic:SPATtern:PATtern?  
<string> = combination of up to 128 characters (0, 1,  
and X)

**Example** :TRIGGER:LOGIC:SPATTERN:  
PATTERN "1100110111101111"  
:TRIGGER:LOGIC:SPATTERN:PATTERN?  
-> :TRIGGER:LOGIC:SPATTERN:  
PATTERN "1100110111101111"

### **:TRIGger:LOGic:SPIBus?**

**Function** Queries all settings related to the logic SPI bus trigger.

**Syntax** :TRIGger:LOGic:SPIBus?  
**Example** :TRIGGER:LOGIC:SPIBUS?  
-> :TRIGGER:LOGIC:SPIBUS:  
BITORDER LSBFIRST;CLOCK:POLARITY FALL;  
SOURCE A0;:TRIGGER:LOGIC:SPIBUS:CS:  
ACTIVE HIGH;SOURCE A0;:TRIGGER:LOGIC:  
SPIBUS:DATA1:BYTE 1;CONDITION FALSE;  
DPOSITION 1;PATTERN1 "10101011";  
PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";SOURCE A0;:  
TRIGGER:LOGIC:SPIBUS:DATA2:BYTE 1;  
CONDITION TRUE;DPOSITION 0;  
PATTERN1 "XXXXXXXX";  
PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";SOURCE A2;:  
TRIGGER:LOGIC:SPIBUS:MODE WIRE3

### **:TRIGger:LOGic:SPIBus:BITorder**

**Function** Sets the bit order for the logic SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPIBus:  
BITorder {LSBFirst|MSBFirst}  
:TRIGger:LOGic:SPIBus:BITorder?  
**Example** :TRIGGER:LOGIC:SPIBUS:BITORDER LSBFIRST  
:TRIGGER:LOGIC:SPIBUS:BITORDER?  
-> :TRIGGER:LOGIC:SPIBUS:  
BITORDER LSBFIRST

### **:TRIGger:LOGic:SPIBus:CLOCK?**

**Function** Queries all settings related to the clock of the logic SPI bus trigger.

**Syntax** :TRIGger:LOGic:SPIBus:CLOCK?  
**Example** :TRIGGER:LOGIC:SPIBUS:CLOCK?  
-> :TRIGGER:LOGIC:SPIBUS:CLOCK:  
POLARITY FALL;SOURCE A0

### **:TRIGger:LOGic:SPIBus:CLOCK:POLarity**

**Function** Sets the polarity of the clock trace for the logic SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPIBus:CLOCK:  
POLarity {FALL|RISE}  
:TRIGger:LOGic:SPIBus:CLOCK:POLarity?  
**Example** :TRIGGER:LOGIC:SPIBUS:CLOCK:  
POLARITY FALL  
:TRIGGER:LOGIC:SPIBUS:CLOCK:POLARITY?  
-> :TRIGGER:LOGIC:SPIBUS:CLOCK:  
POLARITY FALL

**:TRIGger:LOGic:SPIBus:CLOCK:SOURce**

Function Sets the clock trace for the logic SPI bus trigger or queries the current setting.

Syntax :TRIGger:LOGic:SPIBus:CLOCK:  
SOURce {A<x>}  
:TRIGger:LOGic:SPIBus:CLOCK:SOURce?  
<x>= 0 to 7

Example :TRIGGER:LOGIC:SPIBUS:CLOCK:SOURCE A0  
:TRIGGER:LOGIC:SPIBUS:CLOCK:SOURCE?  
-> :TRIGGER:LOGIC:SPIBUS:CLOCK:  
SOURCE A0

**:TRIGger:LOGic:SPIBus:CS?**

Function Queries all settings related to the chip select of the logic SPI bus trigger.

Syntax :TRIGger:LOGic:SPIBus:CS?

Example :TRIGGER:LOGIC:SPIBUS:CS?  
-> :TRIGGER:LOGIC:SPIBUS:CS:  
ACTIVE HIGH;SOURCE A0

**:TRIGger:LOGic:SPIBus:CS:ACTive**

Function Sets the active level of the chip select for the logic SPI bus trigger or queries the current setting.

Syntax :TRIGger:LOGic:SPIBus:CS:  
ACTive {HIGH|LOW}  
:TRIGger:LOGic:SPIBus:CS:ACTive?

Example :TRIGGER:LOGIC:SPIBUS:CS:ACTIVE HIGH  
:TRIGGER:LOGIC:SPIBUS:CS:ACTIVE?  
-> :TRIGGER:LOGIC:SPIBUS:CS:ACTIVE HIGH

**:TRIGger:LOGic:SPIBus:CS:SOURce**

Function Sets the chip select trace for the logic SPI bus trigger or queries the current setting.

Syntax :TRIGger:LOGic:SPIBus:CS:SOURce {A<x>}  
:TRIGger:LOGic:SPIBus:CS:SOURce?  
<x>= 0 to 7

Example :TRIGGER:LOGIC:SPIBUS:CS:SOURCE A0  
:TRIGGER:LOGIC:SPIBUS:CS:SOURCE?  
-> :TRIGGER:LOGIC:SPIBUS:CS:SOURCE A0

**:TRIGger:LOGic:SPIBus:DATA<x>?**

Function Queries all settings related to each data of the logic SPI bus trigger.

Syntax :TRIGger:LOGic:SPIBus:DATA<x>?  
<x>= 1 or 2

Example :TRIGGER:LOGIC:SPIBUS:DATA1?  
-> :TRIGGER:LOGIC:SPIBUS:DATA1:BYTE 1;  
CONDITION FALSE;DPOSITION 1;  
PATTERN1 "10101011";  
PATTERN2 "XXXXXXXX";  
PATTERN3 "XXXXXXXX";  
PATTERN4 "XXXXXXXX";SOURCE A0

**:TRIGger:LOGic:SPIBus:DATA<x>:BYTE**

Function Sets the number of settings for each data of the logic SPI bus trigger or queries the current setting.

Syntax :TRIGger:LOGic:SPIBus:DATA<x>:  
BYTE {<Nrf>}  
:TRIGger:LOGic:SPIBus:DATA<x>:BYTE?  
<x>= 1 or 2  
<Nrf>= 1 to 4

Example :TRIGGER:LOGIC:SPIBUS:DATA1:BYTE 1  
:TRIGGER:LOGIC:SPIBUS:DATA1:BYTE?  
-> :TRIGGER:LOGIC:SPIBUS:DATA1:BYTE 1

**:TRIGger:LOGic:SPIBus:DATA<x>:****CONDition**

Function Sets the determination method for the data of the logic SPI bus trigger (match / no match) or queries the current setting.

Syntax :TRIGger:LOGic:SPIBus:DATA<x>:  
CONDition {FALSE|TRUE}  
:TRIGger:LOGic:SPIBus:DATA<x>:  
CONDition?  
<x>= 1 or 2

Example :TRIGGER:LOGIC:SPIBUS:DATA1:  
CONDITION FALSE  
:TRIGGER:LOGIC:SPIBUS:DATA1:CONDITION?  
-> :TRIGGER:LOGIC:SPIBUS:DATA1:  
CONDITION FALSE

**:TRIGger:LOGic:SPIBus:DATA<x>:****DPOSITION**

Function Sets the pattern comparison start position for the data of the logic SPI bus trigger or queries the current setting.

Syntax :TRIGger:LOGic:SPIBus:DATA<x>:  
DPOSITION {<Nrf>}  
:TRIGger:LOGic:SPIBus:DATA<x>:  
DPOSITION?  
<x>= 1 or 2  
<Nrf>= 0 to 9999

Example :TRIGGER:LOGIC:SPIBUS:DATA1:DPOSITION 1  
:TRIGGER:LOGIC:SPIBUS:DATA1:DPOSITION?  
-> :TRIGGER:LOGIC:SPIBUS:DATA1:  
DPOSITION 1

## 5.31 TRIGger Group

### **:TRIGger:LOGic:SPIBus:DATA<x>:HEXA<x>**

**Function** Sets the data of the logic SPI bus trigger in hexadecimal notation.

**Syntax** :TRIGger:LOGic:SPIBus:DATA<x>:  
HEXA<x> {<string>}  
<x> of DATA<x> = 1 or 2  
<x> of HEXA<x> = 1 to 4  
<string> = Combination of up to 2 characters (0-F and X)

**Example** :TRIGGER:LOGIC:SPIBUS:DATA1:HEXA1 "AB"

### **:TRIGger:LOGic:SPIBus:DATA<x>:PATtern<x>**

**Function** Sets each data of the logic SPI bus trigger in binary notation or queries the current setting.

**Syntax** :TRIGger:LOGic:SPIBus:DATA<x>:  
PATtern<x> {<string>}  
:TRIGger:LOGic:SPIBus:DATA<x>:  
PATtern<x>?  
<x> of DATA<x> = 1 or 2  
<x> of PATtern<x> = 1 to 4  
<string> = combination of 8 characters (0, 1, and X).

**Example** :TRIGGER:LOGIC:SPIBUS:DATA1:  
PATTERN1 "10101011"  
:TRIGGER:LOGIC:SPIBUS:DATA1:PATTERN1?  
-> :TRIGGER:LOGIC:SPIBUS:DATA1:  
PATTERN1 "10101011"

### **:TRIGger:LOGic:SPIBus:DATA<x>:SOURCE**

**Function** Sets the trace of each data of the logic SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPIBus:DATA<x>:  
SOURCE {A<y>}  
:TRIGger:LOGic:SPIBus:DATA<x>:SOURCE?  
<x> = 1 or 2  
<y> = 0 to 7

**Example** :TRIGGER:LOGIC:SPIBUS:DATA1:SOURCE A0  
:TRIGGER:LOGIC:SPIBUS:DATA1:SOURCE?  
-> :TRIGGER:LOGIC:SPIBUS:DATA1:  
SOURCE A0

### **:TRIGger:LOGic:SPIBus:MODE**

**Function** Sets the wiring method (3-wire/4-wire) of the logic SPI bus trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:SPIBus:MODE {WIRE3 |  
WIRE4}  
:TRIGger:LOGic:SPIBus:MODE?

**Example** :TRIGGER:LOGIC:SPIBUS:MODE WIRE3  
:TRIGGER:LOGIC:SPIBUS:MODE?  
-> :TRIGGER:LOGIC:SPIBUS:MODE WIRE3

### **:TRIGger:LOGic:STATE?**

**Function** Queries all settings related to the logic state trigger.

**Syntax** :TRIGger:LOGic:STATE?

**Example** :TRIGGER:LOGIC:STATE? -> :TRIGGER:  
LOGIC:STATE:BIT:A0 DONTCARE;  
A1 DONTCARE;A2 DONTCARE;A3 DONTCARE;  
A4 DONTCARE;A5 DONTCARE;A6 DONTCARE;  
A7 DONTCARE;B0 DONTCARE;B1 DONTCARE;  
B2 DONTCARE;B3 DONTCARE;B4 DONTCARE;  
B5 DONTCARE;B6 DONTCARE;B7 DONTCARE;  
C0 DONTCARE;C1 DONTCARE;C2 DONTCARE;  
C3 DONTCARE;C4 DONTCARE;C5 DONTCARE;  
C6 DONTCARE;C7 DONTCARE;D0 DONTCARE;  
D1 DONTCARE;D2 DONTCARE;D3 DONTCARE;  
D4 DONTCARE;D5 DONTCARE;D6 DONTCARE;  
D7 DONTCARE;LOGIC AND;  
:TRIGGER:LOGIC:STATE:GROUP1:  
CONDITION DONTCARE;PATTERN "XXXXXXXX";  
:TRIGGER:LOGIC:STATE:GROUP2:  
CONDITION TRUE;PATTERN "XXXXXXXX";  
:TRIGGER:LOGIC:STATE:GROUP3:  
CONDITION TRUE;PATTERN "XXXXXXXX";  
:TRIGGER:LOGIC:STATE:GROUP4:  
CONDITION TRUE;PATTERN "XXXXXXXX";  
:TRIGGER:LOGIC:STATE:GROUP5:  
CONDITION DONTCARE;PATTERN "";  
:TRIGGER:LOGIC:STATE:TYPE BIT

### **:TRIGger:LOGic:STATE:BIT?**

**Function** Queries all settings related to the bit of the logic state trigger.

**Syntax** :TRIGger:LOGic:STATE:BIT?

**Example** :TRIGGER:LOGIC:STATE:BIT? -> :TRIGGER:  
LOGIC:STATE:BIT:A0 DONTCARE;  
A1 DONTCARE;A2 DONTCARE;A3 DONTCARE;  
A4 DONTCARE;A5 DONTCARE;A6 DONTCARE;  
A7 DONTCARE;B0 DONTCARE;B1 DONTCARE;  
B2 DONTCARE;B3 DONTCARE;B4 DONTCARE;  
B5 DONTCARE;B6 DONTCARE;B7 DONTCARE;  
C0 DONTCARE;C1 DONTCARE;C2 DONTCARE;  
C3 DONTCARE;C4 DONTCARE;C5 DONTCARE;  
C6 DONTCARE;C7 DONTCARE;D0 DONTCARE;  
D1 DONTCARE;D2 DONTCARE;D3 DONTCARE;  
D4 DONTCARE;D5 DONTCARE;D6 DONTCARE;  
D7 DONTCARE;LOGIC AND

**:TRIGger:LOGic:STATe:BIT:{A<x>|B<x>|C<x>|D<x>}**

Function Sets the condition to be satisfied for the bit of the logic state trigger or queries the current setting.

Syntax :TRIGger:LOGic:STATe:BIT:{A<x>|B<x>|C<x>|D<x>} {DONTcare|HIGH|LOW}  
:TRIGger:LOGic:STATe:BIT:{A<x>|B<x>|C<x>|D<x>}?  
<x> = 0 to 7

Example :TRIGGER:LOGIC:STATE:BIT:A0 DONTCARE  
:TRIGGER:LOGIC:STATE:BIT:A0?  
-> :TRIGGER:LOGIC:STATE:BIT:A0 DONTCARE

Description For the SB5310, only {A<x>} are valid.

**:TRIGger:LOGic:STATe:BIT:CLEar**

Function Clears the entire condition to be satisfied for the bit of the logic state trigger (set to don't care) or queries the current setting.

Syntax :TRIGger:LOGic:STATe:BIT:CLEar

Example :TRIGGER:LOGIC:STATE:BIT:CLEAR

**:TRIGger:LOGic:STATe:BIT:LOGic**

Function Sets the logic of the logic state trigger or queries the current setting.

Syntax :TRIGger:LOGic:STATe:BIT:LOGic {AND|OR}  
:TRIGger:LOGic:STATe:BIT:LOGic?

Example :TRIGGER:LOGIC:STATE:BIT:LOGIC AND  
:TRIGGER:LOGIC:STATE:BIT:LOGIC?  
-> :TRIGGER:LOGIC:STATE:BIT:LOGIC AND

**:TRIGger:LOGic:STATe:GROup<x>?**

Function Queries all settings related to the group of the logic state trigger.

Syntax :TRIGger:LOGic:STATe:GROup<x>?  
<x> = 1 to 5

Example :TRIGGER:LOGIC:STATE:GROUP1?  
-> :TRIGGER:LOGIC:STATE:GROUP1:  
CONDITION DONTCARE;PATTERN "11110000  
111100001111000011110000"

**:TRIGger:LOGic:STATe:GROup<x>:CLEar**

Function Clears the entire condition to be satisfied for the group of the logic state trigger (set to don't care) or queries the current setting.

Syntax :TRIGger:LOGic:STATe:GROup<x>:CLEar  
<x> = 1 to 5

Example :TRIGGER:LOGIC:STATE:GROUP1:CLEAR

**:TRIGger:LOGic:STATe:GROup<x>:CONDition**

Function Sets the determination condition for the group of the logic state trigger or queries the current setting.

Syntax :TRIGger:LOGic:STATe:GROup<x>:  
CONDition {DONTcare|TRUE}  
:TRIGger:LOGic:STATe:GROup<x>:  
CONDition?  
<x> = 1 to 5

Example :TRIGGER:LOGIC:STATE:GROUP1:  
CONDITION DONTCARE  
:TRIGGER:LOGIC:STATE:GROUP1:  
CONDITION? -> :TRIGGER:LOGIC:STATE:  
GROUP1:CONDITION DONTCARE

**:TRIGger:LOGic:STATe:GROup<x>:HEXA**

Function Sets the condition to be satisfied for the group of the logic state trigger in hexadecimal notation.

Syntax :TRIGger:LOGic:STATe:GROup<x>:  
HEXA {<String>}

<x> = 1 to 5

<String> = Up to 8 characters by combining '0' to 'F' and 'X'

Example :TRIGGER:LOGIC:STATE:GROUP1:  
HEXA "1A3F24CD"

Description If the number of bit mappings specified with :LOGic:GROup<x>:MAPPING is too large, the lower bits are set to X. If the number is too small, the top bits are set.

**:TRIGger:LOGic:STATe:GROup<x>:PATTern**

Function Sets the condition to be satisfied for the group of the logic state trigger in binary notation or queries the current setting.

Syntax :TRIGger:LOGic:STATe:GROup<x>:  
PATTern {<String>}  
:TRIGger:LOGic:STATe:GROup<x>:PATTern?  
<x> = 1 to 5  
<String> = Up to 32 characters by combining '0', '1', and 'X'

Example :TRIGGER:LOGIC:STATE:GROUP1:  
PATTERN "111100001111000011110000  
11110000"  
:TRIGGER:LOGIC:STATE:GROUP1:  
PATTERN? -> :TRIGGER:LOGIC:STATE:  
GROUP1:PATTERN "111100001111000011110000  
011110000"

## 5.31 TRIGger Group

### **:TRIGger:LOGic:STATe:GRoup<x>:SYMBOL**

**Function** Sets the symbol item for each group of the logic state trigger.

**Syntax** :TRIGger:LOGic:STATe:GRoup<x>:  
SYMBOL {<string>}  
<x> = 1 to 5  
<string> = Up to 16 characters

**Example** :TRIGGER:LOGIC:STATE:GROUP1:  
SYMBOL "TEST"

### **:TRIGger:LOGic:STATe:TYPE**

**Function** Sets the setup type of the logic state trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:STATe:TYPE {BIT|GRoup}  
:TRIGger:LOGic:STATe:TYPE?

**Example** :TRIGGER:LOGIC:STATE:TYPE BIT  
:TRIGGER:LOGIC:STATE:TYPE? -> :TRIGGER:  
LOGIC:STATE:TYPE BIT

### **:TRIGger:LOGic:UART?**

**Function** Queries all settings related to the logic UART bus signal trigger.

**Syntax** :TRIGger:LOGic:UART?

**Example** :TRIGGER:LOGIC:UART? -> :TRIGGER:  
LOGIC:UART:BRATE 19200;DATA:  
BITORDER LSBFIRST;DSIZE 1;  
PATTERN "X1011111";:TRIGGER:  
LOGIC:UART:ERROR:FRAMING 1;  
PARITY 1;PMODE EVEN;:TRIGGER:LOGIC:  
UART:FORMAT BIT7PARITY;MODE DATA;  
POLARITY NEGATIVE;SOURCE A0;  
SPOINT 18.8E+00

### **:TRIGger:LOGic:UART:BRATE**

**Function** Sets the logic UART bus signal trigger bit rate (data transfer rate) or queries the current setting.

**Syntax** :TRIGger:LOGic:UART:  
BRATE {<Nrf>|USER, <Nrf>}  
:TRIGger:LOGic:UART:BRATE?  
<Nrf> = 1200, 2400, 4800, 9600, 19200, 38400,  
57600, 115200  
<Nrf> of USER = See the main SB5000 User's  
Manual

**Example** :TRIGGER:LOGIC:UART:BRATE 19200  
:TRIGGER:LOGIC:UART:BRATE? -> :TRIGGER:  
LOGIC:UART:BRATE 19200

### **:TRIGger:LOGic:UART:DATA?**

**Function** Queries all settings related to data of the logic UART bus signal trigger.

**Syntax** :TRIGger:LOGic:UART:DATA?

**Example** :TRIGGER:LOGIC:UART:DATA? -> :TRIGGER:  
LOGIC:UART:DATA:BITORDER LSBFIRST;  
DSIZE 1;PATTERN "X1011111"

### **:TRIGger:LOGic:UART:DATA:BITOrder**

**Function** Sets the data bit order of the logic UART bus signal trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:UART:DATA:  
BITOrder {LSBFirst|MSBFirst}  
:TRIGger:LOGic:UART:DATA:BITOrder?

**Example** :TRIGGER:LOGIC:UART:DATA:  
BITORDER LSBFIRST  
:TRIGGER:LOGIC:UART:DATA:BITORDER? -> :  
TRIGGER:LOGIC:UART:DATA:  
BITORDER LSBFIRST

### **:TRIGger:LOGic:UART:DATA:DSIZE**

**Function** Sets the number of data bytes of the logic UART bus signal trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:UART:DATA:DSIZE {<Nrf>}  
:TRIGger:LOGic:UART:DATA:DSIZE?  
<Nrf> = 1 to 4

**Example** :TRIGGER:LOGIC:UART:DATA:DSIZE 1  
:TRIGGER:LOGIC:UART:DATA:DSIZE? ->  
:TRIGGER:LOGIC:UART:DATA:DSIZE 1

### **:TRIGger:LOGic:UART:DATA:HEXA**

**Function** Sets the logic UART bus signal trigger data in hexadecimal.

**Syntax** :TRIGger:LOGic:UART:DATA:  
HEXA {<string>}

<string> = Up to 8 characters by combining '0' to 'F' and 'X,' units of 1 byte

**Example** :TRIGGER:LOGIC:UART:DATA:HEXA "A9"

### **:TRIGger:LOGic:UART:DATA:PATtern**

**Function** Sets the data of the logic UART bus signal trigger in binary or queries the current setting.

**Syntax** :TRIGger:LOGic:UART:DATA:  
PATtern {<string>}  
:TRIGger:LOGic:UART:DATA:PATtern?  
<string> = Up to 32 characters by combining '0,' '1,'  
and 'X,' units of 1 byte

**Example** :TRIGGER:LOGIC:UART:DATA:  
PATTERN "11011111"  
:TRIGGER:LOGIC:UART:DATA:PATTERN? ->  
:TRIGGER:LOGIC:UART:DATA:  
PATTERN "11011111"

### **:TRIGger:LOGic:UART:ERROR?**

**Function** Queries all settings related to the logic UART bus signal trigger error.

**Syntax** :TRIGger:LOGic:UART:ERROR?

**Example** :TRIGGER:LOGIC:UART:ERROR? -> :TRIGGER:  
LOGIC:UART:ERROR:FRAMING 1;  
PARITY 1;PMODE EVEN

**:TRIGger:LOGic:UART:ERRor:FRAMing**

Function Sets the logic UART bus signal trigger Framing error or queries the current setting.

Syntax :TRIGger:LOGic:UART:ERRor:  
FRAMing {<Boolean>}  
:TRIGger:LOGic:UART:ERRor:FRAMing?

Example :TRIGGER:LOGIC:UART:ERROR:FRAMING ON  
:TRIGGER:LOGIC:UART:ERROR:FRAMING? ->  
:TRIGGER:LOGIC:UART:ERROR:FRAMING 1

**:TRIGger:LOGic:UART:ERRor:PARity**

Function Sets the logic UART bus signal trigger Parity error or queries the current setting.

Syntax :TRIGger:LOGic:UART:ERRor:  
PARity {<Boolean>}  
:TRIGger:LOGic:UART:ERRor:PARity?

Example :TRIGGER:LOGIC:UART:ERROR:PARITY ON  
:TRIGGER:LOGIC:UART:ERROR:PARITY? ->  
:TRIGGER:LOGIC:UART:ERROR:PARITY 1

**:TRIGger:LOGic:UART:ERRor:PMODE**

Function Sets the logic UART bus signal trigger Parity mode or queries the current setting.

Syntax :TRIGger:LOGic:UART:ERRor:  
PMODE {EVEN|ODD}  
:TRIGger:LOGic:UART:ERRor:PMODE?

Example :TRIGGER:LOGIC:UART:ERROR:PMODE EVEN  
:TRIGGER:LOGIC:UART:ERROR:PMODE? ->  
:TRIGGER:LOGIC:UART:ERROR:PMODE EVEN

**:TRIGger:LOGic:UART:FORMat**

Function Sets the logic UART bus signal trigger format or queries the current setting.

Syntax :TRIGger:LOGic:UART:FORMat {BIT7parity|  
BIT8Noparity|BIT8Parity}  
:TRIGger:LOGic:UART:FORMat?

Example :TRIGGER:LOGIC:UART:FORMAT BIT7PARITY  
:TRIGGER:LOGIC:UART:FORMAT? ->  
:TRIGGER:LOGIC:UART:FORMAT BIT7PARITY

**:TRIGger:LOGic:UART:MODE**

Function Sets the logic UART bus signal trigger mode or queries the current setting.

Syntax :TRIGger:LOGic:UART:MODE {DATA|ERRor}  
:TRIGger:LOGic:UART:MODE?

Example :TRIGGER:LOGIC:UART:MODE DATA  
:TRIGGER:LOGIC:UART:MODE? -> :TRIGGER:  
LOGIC:UART:MODE DATA

**:TRIGger:LOGic:UART:POLarity**

Function Sets the logic UART bus signal trigger polarity or queries the current setting.

Syntax :TRIGger:LOGic:UART:POLarity  
{NEGative|POSitive}  
:TRIGger:LOGic:UART:POLarity?

Example :TRIGGER:LOGIC:UART:POLARITY NEGATIVE  
:TRIGGER:LOGIC:UART:POLARITY? ->  
:TRIGGER:LOGIC:UART:POLARITY NEGATIVE

**:TRIGger:LOGic:UART:SOURce**

Function Sets the logic UART bus signal trigger source or queries the current setting.

Syntax :TRIGger:LOGic:UART:SOURce {A<x>}  
:TRIGger:LOGic:UART:SOURce?  
<x> = 0 to 7

Example :TRIGGER:LOGIC:UART:SOURCE A0  
:TRIGGER:LOGIC:UART:SOURCE? ->  
:TRIGGER:LOGIC:UART:SOURCE A0

**:TRIGger:LOGic:UART:SPOint**

Function Sets the logic UART bus signal trigger sample point or queries the current setting.

Syntax :TRIGger:LOGic:UART:SPOint {<NRf>}  
:TRIGger:LOGic:UART:SPOint?  
<NRf> = 18.8 to 90.6(%)

Example :TRIGGER:LOGIC:UART:SPOINT 18.8  
:TRIGGER:LOGIC:UART:SPOINT? ->  
:TRIGGER:LOGIC:UART:SPOINT 18.8E+00

**:TRIGger:LOGic:WIDTh?**

Function Queries all settings related to the logic pulse width trigger.

Syntax :TRIGger:LOGic:WIDTh?

Example :TRIGGER:LOGIC:WIDTH? -> :TRIGGER:  
LOGIC:WIDTH:MODE OUT;  
POLARITY POSITIVE;SOURCE A0;  
TIME1 1.0000000E-09;TIME2 1.0000000E-09

**:TRIGger:LOGic:WIDTh:MODE**

Function Sets the determination mode of the logic pulse width trigger or queries the current setting.

Syntax :TRIGger:LOGic:WIDTh:MODE {BETWEEN|IN|  
NOTBetween|OUT|TIMEout}  
:TRIGger:LOGic:WIDTh:MODE?

Example :TRIGGER:LOGIC:WIDTH:MODE BETWEEN  
:TRIGGER:LOGIC:WIDTH:MODE? -> :TRIGGER:  
LOGIC:WIDTH:MODE BETWEEN



## 5.31 TRIGger Group

### **:TRIGger:LOGic:WIDTh:POLarity**

**Function** Sets the polarity of the logic pulse width trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:WIDTh:POLarity {FALSE|NEGative|POSitive|TRUE}  
:TRIGger:LOGic:WIDTh:POLarity?

**Example** :TRIGGER:LOGIC:WIDTH:POLARITY FALSE  
:TRIGGER:LOGIC:WIDTH:POLARITY?  
-> :TRIGGER:LOGIC:WIDTH:POLARITY FALSE

**Description** • {FALSE|TRUE} is valid when :TRIGger:TYPE LPState.  
• {NEGative|POSitive} is valid if :TRIGger:TYPE LPULse.

### **:TRIGger:LOGic:WIDTh:SOURce**

**Function** Sets the trigger source of the logic pulse width trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:WIDTh:SOURce {A<x>|B<x>|C<x>|D<x>}  
:TRIGger:LOGic:WIDTh:SOURce?  
<x> = 0 to 7

**Example** :TRIGGER:LOGIC:WIDTH:SOURCE A0  
:TRIGGER:LOGIC:WIDTH:SOURCE?  
-> :TRIGGER:LOGIC:WIDTH:SOURCE A0

**Description** For the SB5310, only {A<x>} are valid.

### **:TRIGger:LOGic:WIDTh:TIME<x>**

**Function** Sets the logic pulse width of the pulse width trigger or queries the current setting.

**Syntax** :TRIGger:LOGic:WIDTh:TIME<x> {<Time>}  
:TRIGger:LOGic:WIDTh:TIME<x>?  
<x> = 1 or 2  
<Time> = 1 ns to 10 s (500 ps steps)

**Example** :TRIGGER:LOGIC:WIDTH:TIME1 1S  
:TRIGGER:LOGIC:WIDTH:TIME1?  
-> :TRIGGER:LOGIC:WIDTH:TIME1 1.000E+00

**Description** TIME2 is valid when :TRIGger:WIDTh:MODE BETWEEN|NOTBetween.

### **:TRIGger:MODE**

**Function** Sets the trigger mode or queries the current setting.

**Syntax** :TRIGger:MODE {ALEvel|AUTO|NORMal|NSINGle|SINGle}  
:TRIGger:MODE?

**Example** :TRIGGER:MODE ALEVEL  
:TRIGGER:MODE? -> :TRIGGER:MODE ALEVEL

### **:TRIGger:POSition**

**Function** Sets the trigger position or queries the current setting.

**Syntax** :TRIGger:POSition {<NRF>}  
:TRIGger:POSition?  
<NRF> = 0 to 100 (%)

**Example** :TRIGGER:POSITION 10  
:TRIGGER:POSITION?  
-> :TRIGGER:POSITION 10

### **:TRIGger:SCOUNT (Single(N) Count)**

**Function** Sets the number of times the trigger is to be activated when the trigger mode is Single(N) or queries the current setting.

**Syntax** :TRIGger:SCOUNT {<NRF>}  
:TRIGger:SCOUNT?  
<NRF> = See the SB5000 User's Manual.

**Example** :TRIGGER:SCOUNT 1  
:TRIGGER:SCOUNT? -> :TRIGGER:SCOUNT 1

### **:TRIGger:SOURce?**

**Function** Queries all settings related to the trigger source.

**Syntax** :TRIGger:SOURce?

**Example** :TRIGGER:SOURCE? -> :TRIGGER:SOURCE:  
CHANNEL1:COUPLING DC;HFREJECTION OFF;  
HYSTERESIS HIGH;LEVEL 1.000E+00;  
STATE HIGH;WIDTH 1.000E+00;WINDOW 0;:  
TRIGGER:SOURCE:CHANNEL2:COUPLING DC;  
HFREJECTION OFF;HYSTERESIS HIGH;  
LEVEL 1.000E+00;STATE HIGH;  
WIDTH 1.000E+00;WINDOW 0;:TRIGGER:  
SOURCE:CHANNEL3:COUPLING DC;  
HFREJECTION OFF;HYSTERESIS HIGH;  
LEVEL 1.000E+00;STATE HIGH;  
WIDTH 1.000E+00;WINDOW 0;:TRIGGER:  
SOURCE:CHANNEL4:COUPLING DC;  
HFREJECTION OFF;HYSTERESIS HIGH;  
LEVEL 1.000E+00;STATE HIGH;  
WIDTH 1.000E+00;WINDOW 0;:TRIGGER:  
SOURCE:EXTERNAL:LEVEL 0.000E+00;  
PROBE 1;:TRIGGER:SOURCE:LOGIC AND

### **:TRIGger:SOURce:CHANnel<x>?**

**Function** Queries all settings related to the channel of the trigger source.

**Syntax** :TRIGger:SOURce:CHANnel<x>?  
<x> = 1 to 4

**Example** :TRIGGER:SOURCE:CHANNEL1? -> :TRIGGER:  
SOURCE:CHANNEL1:COUPLING DC;  
HFREJECTION OFF;HYSTERESIS HIGH;  
LEVEL 1.000E+00;STATE HIGH;  
WIDTH 1.000E+00;WINDOW 0

**:TRIGger:SOURce:CHANnel<x>:COUPLing**

**Function** Sets the trigger coupling of the channel or queries the current setting.

**Syntax** :TRIGger:SOURce:CHANnel<x>:  
COUPLing {AC|DC}  
:TRIGger:SOURce:CHANnel<x>:COUPLing?  
<x> = 1 to 4

**Example** :TRIGGER:SOURCE:CHANNEL1:COUPLING AC  
:TRIGGER:SOURCE:CHANNEL1:COUPLING?  
-> :TRIGGER:SOURCE:CHANNEL1:COUPLING DC

**:TRIGger:SOURce:CHANnel<x>:****HFRejection (HighFrequencyREJECTION)**

**Function** Sets the low pass filter (HF rejection) of the channel or queries the current setting.

**Syntax** :TRIGger:SOURce:CHANnel<x>:  
HFRejection {<Frequency>|OFF}  
:TRIGger:SOURce:CHANnel<x>:HFRejection?  
<x> = 1 to 4  
<Frequency> = 20MHz or 15kHz

**Example** :TRIGGER:SOURCE:CHANNEL1:  
HFREJECTION OFF  
:TRIGGER:SOURCE:CHANNEL1:HFREJECTION?  
-> :TRIGGER:SOURCE:CHANNEL1:  
HFREJECTION OFF

**Description** This command is invalid when the trigger source is {EXTErnal|LINE}.

**:TRIGger:SOURce:CHANnel<x>:****HYSTeresis**

**Function** Sets the hysteresis of the channel or queries the current setting.

**Syntax** :TRIGger:SOURce:CHANnel<x>:  
HYSTeresis {HIGH|LOW}  
:TRIGger:SOURce:CHANnel<x>:HYSTeresis?  
<x> = 1 to 4

**Example** :TRIGGER:SOURCE:CHANNEL1:  
HYSTERESIS HIGH  
:TRIGGER:SOURCE:CHANNEL1:HYSTERESIS?  
-> :TRIGGER:SOURCE:CHANNEL1:  
HYSTERESIS HIGH

**:TRIGger:SOURce:CHANnel<x>:LEVel**

**Function** Sets the trigger level of the channel or queries the current setting.

**Syntax** :TRIGger:SOURce:CHANnel<x>:  
LEVel {<Voltage>|<Current>}  
:TRIGger:SOURce:CHANnel<x>:LEVel?  
<x> = 1 to 4  
<Voltage> and <Current> = See the SB5000 User's Manual.

**Example** :TRIGGER:SOURCE:CHANNEL1:LEVEL 1V  
:TRIGGER:SOURCE:CHANNEL1:LEVEL?  
-> :TRIGGER:SOURCE:CHANNEL1:  
LEVEL 1.000E+00

**:TRIGger:SOURce:CHANnel<x>:STATe**

**Function** Sets the condition to be satisfied of the channel or queries the current setting.

**Syntax** :TRIGger:SOURce:CHANnel<x>:  
STATe {DONTcare|HIGH|LOW}  
:TRIGger:SOURce:CHANnel<x>:STATe?  
<x> = 1 to 4

**Example** :TRIGGER:SOURCE:CHANNEL1:STATE HIGH  
:TRIGGER:SOURCE:CHANNEL1:STATE?  
-> :TRIGGER:SOURCE:CHANNEL1:STATE HIGH

**Description** • This command is valid when :TRIGger:TYPE EQUalify|I2CBus|PQQualify|PSTAtel|SPATtern|STATe.  
• {HIGH|LOW} is valid when :TRIGger:TYPE I2CBus|SPATtern.  
• For :TRIGger:TYPE EQUalify|PQQualify|PSTAtel|STATe and :TRIGger:SOURce:CHANnel<x>: WINDow ON, the choices in the SB5000 menu are IN/OUT. {High} corresponds to IN, and {LOW} corresponds to OUT.

**:TRIGger:SOURce:CHANnel<x>:WIDTh**

**Function** Sets the window trigger width of the channel or queries the current setting.

**Syntax** :TRIGger:SOURce:CHANnel<x>:  
WIDTh {<Voltage>|<Current>}  
:TRIGger:SOURce:CHANnel<x>:WIDTh?  
<x> = 1 to 4  
<Voltage> and <Current> = See the SB5000 User's Manual.

**Example** :TRIGGER:SOURCE:CHANNEL1:WIDTH 1V  
:TRIGGER:SOURCE:CHANNEL1:WIDTH?  
-> :TRIGGER:SOURCE:CHANNEL1:  
WIDTH 1.000E+00

**Description** This command is valid when :TRIGger:SOURce:CHANnel<x>:WINDow ON.

**:TRIGger:SOURce:CHANnel<x>:WINDow**

**Function** Turns ON/OFF the window of the channel or queries the current setting.

**Syntax** :TRIGger:SOURce:CHANnel<x>:  
WINDow {<Boolean>}  
:TRIGger:SOURce:CHANnel<x>:WINDow?  
<x> = 1 to 4

**Example** :TRIGGER:SOURCE:CHANNEL1:WINDOW ON  
:TRIGGER:SOURCE:CHANNEL1:WINDOW?  
-> :TRIGGER:SOURCE:CHANNEL1:WINDOW 1

**:TRIGger:SOURce:EXTErnal?**

**Function** Queries all settings related to the external trigger.

**Syntax** :TRIGger:SOURce:EXTErnal?  
**Example** :TRIGGER:SOURCE:EXTERNAL? -> :TRIGGER:  
SOURCE:EXTERNAL:LEVEL 0.000E+00;PROBE 1

## 5.31 TRIGger Group

### **:TRIGger:SOURce:EXTeRnal:LEVel**

**Function** Sets the trigger level of the external trigger or queries the current setting.

**Syntax** :TRIGger:SOURce:EXTeRnal:  
LEVel {<Voltage>|<Current>}  
:TRIGger:SOURce:EXTeRnal:LEVel?  
<x> = 1 to 4  
<Voltage> and <Current> = See the SB5000 User's Manual.

**Example** :TRIGGER:SOURCE:EXTERNAL:LEVEL 1V  
:TRIGGER:SOURCE:EXTERNAL:LEVEL?  
-> :TRIGGER:SOURCE:EXTERNAL:  
LEVEL 1.000E+00

**Description** This command is valid when :TRIGger:TYPE EDGE|EQUalify|PQUalify|PULSe.

### **:TRIGger:SOURce:EXTeRnal:PROBe**

**Function** Sets the probe attenuation of the external trigger or queries the current setting.

**Syntax** :TRIGger:SOURce:EXTeRnal:PROBe {<Nrf>}  
:TRIGger:SOURce:EXTeRnal:PROBe?  
<Nrf> = 1,10

**Example** :TRIGGER:SOURCE:EXTERNAL:PROBE 1  
:TRIGGER:SOURCE:EXTERNAL:PROBE?  
-> :TRIGGER:SOURCE:EXTERNAL:PROBE 1

**Description** This command is valid when :TRIGger:TYPE EDGE|EQUalify|PQUalify|PULSe.

### **:TRIGger:SOURce:LOGic**

**Function** Sets the trigger source logic or queries the current setting.

**Syntax** :TRIGger:SOURce:LOGic {AND|OR}  
:TRIGger:SOURce:LOGic?

**Example** :TRIGGER:SOURCE:LOGIC AND  
:TRIGGER:SOURCE:LOGIC? -> :TRIGGER:  
SOURCE:LOGIC AND

**Description** This command is valid when :TRIGger:TYPE EQUalify|I2CBus|PQUalify|PStAte|SPATtern|StAte.

### **:TRIGger:TYPE**

**Function** Sets the trigger type or queries the current setting.

**Syntax** :TRIGger:TYPE {CANBus|EDGE|EICycle|  
EIDelay|EISequence|EOR|EQUalify|  
FLEXray|I2CBus|LEdGE|LINBus|LI2Cbus|  
LLINbus|LSPAttern|LSPIbus|LPStAte|  
LPULse|LQUalify|LStAte|LUART|PQUalify|  
PStAte|PULSe|SPATtern|SPIBus|StAte|  
UART}  
:TRIGger:TYPE?

**Example** :TRIGGER:TYPE CANBUS:TRIGGER:TYPE?  
-> :TRIGGER:TYPE CANBUS

### **:TRIGger:WIDTh?**

**Function** Queries all settings related to the pulse width trigger.

**Syntax** :TRIGger:WIDTh?  
**Example** :TRIGGER:WIDTH? -> :TRIGGER:WIDTH:  
MODE OUT;POLARITY POSITIVE;SOURCE 1;  
TIME1 1.000E-09;TIME2 1.000E-09

### **:TRIGger:WIDTh:MODE**

**Function** Sets the determination mode of the pulse width trigger or queries the current setting.

**Syntax** :TRIGger:WIDTh:MODE {BETWeen|IN|  
NOTBetWeen|OUT|TIMEout}  
:TRIGger:WIDTh:MODE?

**Example** :TRIGGER:WIDTH:MODE BETWEEN  
:TRIGGER:WIDTH:MODE? -> :TRIGGER:WIDTH:  
MODE BETWEEN

### **:TRIGger:WIDTh:POLarity**

**Function** Sets the polarity of the pulse width trigger or queries the current setting.

**Syntax** :TRIGger:WIDTh:POLarity {FALSe|  
NEGAtive|POSitive|TRUE}  
:TRIGger:WIDTh:POLarity?

**Example** :TRIGGER:WIDTH:POLARITY POSITIVE  
:TRIGGER:WIDTH:POLARITY? -> :TRIGGER:  
WIDTH:POLARITY POSITIVE

**Description** • For :TRIGger:TYPE PQUalify|PULSe and :  
TRIGger:SOURce:CHANnel<x>:WINDow ON, the  
choices in the SB5000 menu are IN/OUT.  
{POSitive} corresponds to IN, and {NEGAtive}  
corresponds to OUT.  
• {FALSe|TRUE} is valid when :TRIGger:TYPE  
PStAte.

### **:TRIGger:WIDTh:SOURce**

**Function** Sets the trigger source of the pulse width trigger or queries the current setting.

**Syntax** :TRIGger:WIDTh:SOURce {<Nrf>|EXTeRnal}  
:TRIGger:WIDTh:SOURce?  
<Nrf> = 1 to 4

**Example** :TRIGGER:WIDTH:SOURCE EXTERNAL  
:TRIGGER:WIDTH:SOURCE? -> :TRIGGER:  
WIDTH:SOURCE EXTERNAL

**Description** This command is valid when :TRIGger:TYPE  
PQUalify|PULSe.

**:TRIGger:WIDTH:TIME<x>**

**Function** Sets the pulse width of the pulse width trigger or queries the current setting.

**Syntax** :TRIGger:WIDTH:TIME<x> {<Time>}  
:TRIGger:WIDTH:TIME<x>?  
<x> = 1 or 2  
<Time> = 1 ns to 10 s (500 ps steps)

**Example** :TRIGGER:WIDTH:TIME1 1S  
:TRIGGER:WIDTH:TIME1? -> :TRIGGER:  
WIDTH:TIME1 1.000E+00

**Description** TIME2 is valid when :TRIGger:WIDTH:MODE  
BETWeen|NOTBetween.

## 5.32 WAVEform Group

The commands in this group deal with acquired waveform data. There are no front panel keys that correspond to the commands in this group.

### **:WAVEform?**

Function Queries all information about the waveform data.

Syntax :WAVEform?

Example :WAVEFORM? -> :WAVEFORM:TRACE 1;  
RECORD 0;START 0;END 6249999;  
FORMAT WORD;BYTEORDER LSBFIRST

### **:WAVEform:BITS?**

Function Queries the bit length of the waveform data specified by ":WAVEform:TRACE".

Syntax :WAVEform:BITS?

Example :WAVEFORM:BITS? -> :WAVEFORM:BITS 16

### **:WAVEform:BYTeorder**

Function Sets the transmission order when using word format of two bytes or more or queries the current setting.

Syntax :WAVEform:BYTeorder {LSBFirst|MSBFirst}  
:WAVEform:BYTeorder?

Example :WAVEFORM:BYTEORDER LSBFIRST  
:WAVEFORM:BYTEORDER? -> :WAVEFORM:  
BYTEORDER LSBFIRST

### **:WAVEform:END**

Function Sets the last data point of the waveform specified by :WAVEform:TRACE or queries the current setting.

Syntax :WAVEform:END {<NRf>}  
:WAVEform:END?

<NRf> = 0 to 6,249,999

Example :WAVEFORM:END 12499  
:WAVEFORM:END? -> :WAVEFORM:END 12499

Description The total number of data points can be queried using :WAVEform:LENGth?.

### **:WAVEform:FORMat**

Function Sets the format of the data to be transmitted or queries the current setting.

Syntax :WAVEform:FORMat {ASCIi|BYTE|DWORD|  
RBYTe|WORD}  
:WAVEform:FORMat?

Example :WAVEFORM:FORMAT ASCII  
:WAVEFORM:FORMAT? ->  
:WAVEFORM:FORMAT ASCII

Description • For details on the differences in the format setting, see the description of :WAVEform:SEND?.

- {DWORD} is invalid if not :WAVEform:TRACE LGRoup<x>.
- {RBYTe} is invalid if :WAVEform:TRACE LGRoup<x>.

### **:WAVEform:LENGth?**

Function Queries the total number of points of the waveform specified by ":WAVEform:TRACE".

Syntax :WAVEform:LENGth?

Example :WAVEFORM:LENGTH?  
-> :WAVEFORM:LENGTH 12500

### **:WAVEform:OFFSet?**

Function Queries the offset value when converting the waveform data specified by :WAVEform:TRACE to physical values.

Syntax :WAVEform:OFFSet?

Example :WAVEFORM:OFFSET? -> 0.000E+00

Description • The offset value is used when converting the <Block data> that is output using :WAVEform:SEND? to physical values.  
• When :CHANnel<x>:OCANcel is ON, 0 is returned.  
• Returns 0 if :WAVEform:TRACE LGRoup<x>.

### **:WAVEform:POSition?**

Function Queries the vertical axis position used for converting to voltage when RBYTe is specified with: WAVEform:FORMat.

Syntax :WAVEform:POSition?

Example :WAVEFORM:POSITION? -> :WAVEFORM:  
POSITION 128

### **:WAVEform:RANGe?**

Function Queries the range value when converting the waveform data specified by :WAVEform:TRACE to physical values.

Syntax :WAVEform:RANGe?

Example :WAVEform:RANGe? -> 5.000E+00

Description The range value is used when converting the <Block data> that is output using :WAVEform:SEND? to physical values.

**:WAVEform:RECORD**

**Function** Sets the target record number for the commands in the WAVEform group or queries the current setting.

**Syntax** :WAVEform:RECORD  
 {AVERage|MINimum|<NRf>}  
 :WAVEform:RECORD?  
 <NRf> = 0 to -1999

**Example** :WAVEFORM:RECORD 0  
 :WAVEFORM:RECORD? -> :WAVEFORM:RECORD 0

**Description** • If "AVERage" is specified, the commands in the WAVEform group are applied to the average value of the history waveform. The record numbers to be averaged are set using the ":HISTory[:CURRent]:DISPlay" command. In addition, the highlight display mode must be set to "AVERage." Set the highlight display mode using the ":HISTory[:CURRent]:MODE" command.

- Specifying "MINimum" sets the record to the minimum record number. The selectable record number varies depending on the model and acquisition setting. For details, see the SB5000 User's Manual.

**:WAVEform:RECORD? MINimum**

**Function** Queries the minimum record number of the history of the target channel.

**Syntax** :WAVEform:RECORD? MINimum

**Example** :WAVEFORM:RECORD? MINimum -> :WAVEFORM:RECORD -1999

**:WAVEform:SEND?**

**Function** Queries the waveform data specified by ":WAVEform:TRACe".

**Syntax** :WAVEform:SEND? [{<NRf>}]  
 <NRf> = 1 to 2000

Varies depending on the record length setting.

**Example** :WAVEFORM:SEND? -> #8 (number of bytes, 8 digits) (data sequence)  
 or <NRf>,<NRf>,...

**Description** • The output format of :WAVEform:SEND? varies depending on the :WAVEform:FORMat setting.

- (1) When set to ASCII
  - Returned in the form <voltage>, <voltage>, ..., <voltage> if WAVEform:TRACe is not a logic group.
  - Returned in the form <NR1>, <NR1>, ..., <NR1> if WAVEform:TRACe is a logic group. <NR1> is a decimal representation of the logic bit pattern.
- (2) When set to BYTE, WORD, or DWORD
 

Returned in the <Block data> format. You can convert the value using the following equation.

Voltage (computed value) = (range x data / divisions\*) + offset

  - \* BYTE: Division = 12.5 (1 for the logic group)
  - WORD: Division = 3200 (1 for the logic group)
  - DWORD: Division = 1 (only for the logic group)

If the number of bit mappings specified with :LOGic:GROup<x>:MAPPING is too large, the lower bits are output according to the FORMat.
- (3) When set to RBYTE
 

Returned in the <Block data> format. You can convert the value using the following equation.

Voltage (computed value) = (range x (data - Position) / divisions\*) + offset

Divisions = 12.5

Position = Return value of ":WAVEform:POSition?".

  - <NRf> can be omitted. If <NRf> is attached, waveform data is queried <NRf> times in order from the record number specified by :WAVEform:RECORD - <NRf> + 1.

**:WAVEform:SIGN?**

**Function** Queries the existence of a sign when querying the waveform data specified by :WAVEform:TRACe using binary data.

**Syntax** :WAVEform:SIGN?

**Example** :WAVEFORM:SIGN? -> :WAVEFORM:SIGN 1

**Description** Returns 0 if :WAVEform:TRACe LGROup<x>.

## 5.32 WAVEform Group

---

### **:WAVEform:SRATE? (Sample RATE)**

Function Queries the sample rate of the record specified by :  
WAVEform:RECORD.

Syntax :WAVEform:SRATE?

Example :WAVEFORM:SRATE?

-> :WAVEFORM:SRATE 1.25E+09

### **:WAVEform:START**

Function Sets the first data point of the waveform specified by :  
WAVEform:TRACe or queries the current setting.

Syntax :WAVEform:START {<NRf>}

:WAVEform:START?

<NRf> = 0 to 6,249,999 (0 to 2,499,999 on 2.5 MW  
memory models)

Example :WAVEFORM:START 0

:WAVEFORM:START? -> :WAVEFORM:START 0

### **:WAVEform:TRACe**

Function Sets the target waveform or queries the current  
setting.

Syntax :WAVEform:TRACe {<NRf>|LGRoup<x>|

MATH<x>|REFerence<x>}

:WAVEform:TRACe?

<NRf> = 1 to 4

<x> of LGRoup<x> = 1 to 5

<x> of MATH<x> = 1 to 8

<x> of REFerence<x> = 1 to 4

Example :WAVEFORM:TRACE 1

:WAVEFORM:TRACE? -> :WAVEFORM:TRACE 1

### **:WAVEform:TRIGger?**

Function Queries the trigger position of the record specified by  
:WAVEform:RECORD.

Syntax :WAVEform:TRIGger?

Example :WAVEFORM:TRIGGER?

-> :WAVEFORM:TRIGGER 6250

Description Queries the number of points from the first point of  
the record length to the trigger position.

### **:WAVEform:TYPE?**

Function Queries the acquisition mode of the waveform  
specified by :WAVEform:TRACe.

Syntax :WAVEform:TYPE?

Example :WAVEFORM:TYPE?

-> :WAVEFORM:TYPE NORMAL

## 5.33 ZOOM Group

### : ZOOM?

**Function** Queries all settings related to the waveform zoom.

**Syntax** :ZOOM?

**Example** :ZOOM? -> :ZOOM:ALLOCATION1:TRACE1 1;  
TRACE2 1;TRACE3 1;TRACE4 1;TRACE5 1;  
TRACE6 1;TRACE7 1;TRACE8 1;:ZOOM:  
ALLOCATION2:TRACE1 1;TRACE2 1;TRACE3 1;  
TRACE4 1;TRACE5 1;TRACE6 1;TRACE7 1;  
TRACE8 1;:ZOOM:FORMAT1 MAIN;  
FORMAT2 MAIN;HLINKAGE 0;HORIZONTAL1:  
ASCROLL:SPEED 5;:ZOOM:HORIZONTAL1:  
MAG 2.000E+00;POSITION 0.000E+00;:ZOOM:  
HORIZONTAL2:ASCROLL:SPEED 5;:ZOOM:  
HORIZONTAL2:MAG 2.000E+00;  
POSITION 0.000E+00;:ZOOM:MODE MAIN;  
TYPE1 HORIZONTAL;TYPE2 HORIZONTAL;  
VERTICAL1:MAG 1.000E+00;  
POSITION 0.000E+00;TRACE 1;:ZOOM:  
VERTICAL2:MAG 1.000E+00;  
POSITION 0.000E+00;TRACE 1;:ZOOM:  
VLINKAGE 0

### : ZOOM:ALLocation<x>?

**Function** Queries all settings related to the zoom source waveform.

**Syntax** :ZOOM:ALLocation<x>?  
<x> = 1 or 2

**Example** :ZOOM:ALLOCATION1? -> :ZOOM:ALLOCATION1:  
TRACE1 1;TRACE2 1;TRACE3 1;TRACE4 1;  
TRACE5 1;TRACE6 1;TRACE7 1;TRACE8 1

### : ZOOM:ALLocation<x>:ALLon

**Function** Sets all waveforms to be zoomed.

**Syntax** :ZOOM:ALLocation<x>:ALLon  
<x> = 1 or 2

**Example** :ZOOM:ALLOCATION1:ALLON

### : ZOOM:ALLocation<x>:TRACe<x>

**Function** Turns ON/OFF the trace you wish to zoom or queries the current setting.

**Syntax** :ZOOM:ALLocation<x>:  
TRACe<x> {<Boolean>}  
:ZOOM:ALLocation<x>:TRACe<x>?  
<x> of ALLocation<x> = 1 or 2  
<x> of TRACe<x> = 1 to 8

**Example** :ZOOM:ALLOCATION1:TRACE1 ON  
:ZOOM:ALLOCATION1:TRACE1? -> :ZOOM:  
ALLOCATION1:TRACE1 1

### : ZOOM:FORMat<x>

**Function** Sets the display format of the zoom waveform or queries the current setting.

**Syntax** :ZOOM:FORMat<x> {DUAL|MAIN|QUAD|SINGLE|  
TRIad}  
:ZOOM:FORMat<x>?  
<x> = 1 or 2

**Example** :ZOOM:FORMAT1 SINGLE  
:ZOOM:FORMAT1? -> :ZOOM:FORMAT1 SINGLE

### : ZOOM:HLINKage

**Function** Turns ON/OFF the horizontal link or queries the current setting.

**Syntax** :ZOOM:HLINKage {<Boolean>}  
:ZOOM:HLINKage?

**Example** :ZOOM:HLINKAGE ON  
:ZOOM:HLINKAGE? -> :ZOOM:HLINKAGE 1

### : ZOOM:HORizontal<x>?

**Function** Queries all settings related to the horizontal zoom.

**Syntax** :ZOOM:HORizontal<x>?  
<x> = 1 or 2

**Example** :ZOOM:HORIZONTAL1? -> :ZOOM:HORIZONTAL1:  
ASCROLL:SPEED 5;:ZOOM:HORIZONTAL1:  
MAG 2.000E+00;POSITION 4.000E+00

### : ZOOM:HORizontal<x>:ASCRoll?

**Function** Queries all settings related to the auto scroll function.

**Syntax** :ZOOM:HORizontal<x>:ASCRoll?  
<x> = 1 or 2

**Example** :ZOOM:HORIZONTAL1:ASCROLL? -> :ZOOM:  
HORIZONTAL1:ASCROLL:SPEED 5

### : ZOOM:HORizontal<x>:ASCRoll:JUMP

**Function** Moves the zoom center position to the left or right edge of the main screen.

**Syntax** :ZOOM:HORizontal<x>:ASCRoll:JUMP {LEFT|  
RIGHT}  
<x> = 1 or 2

**Example** :ZOOM:HORIZONTAL1:ASCROLL:JUMP RIGHT

### : ZOOM:HORizontal<x>:ASCRoll:SPEEd

**Function** Sets the auto scroll speed or queries the current setting.

**Syntax** :ZOOM:HORizontal<x>:ASCRoll:SPEEd  
{<Nrf>}  
:ZOOM:HORizontal<x>:ASCRoll:SPEEd?  
<x> = 1 or 2  
<Nrf> = 1, 2, 5, 10, 20, 50

**Example** :ZOOM:HORIZONTAL1:ASCROLL:SPEED 1  
:ZOOM:HORIZONTAL1:ASCROLL:SPEED?  
-> :ZOOM:HORIZONTAL1:ASCROLL:SPEED 1



### 5.33 Zoom Group

#### **:ZOOM:HORizontal<x>:ASCROLL:START**

Function Starts auto scrolling.  
Syntax :ZOOM:HORizontal<x>:ASCROLL:START  
{LEFT|RIGHT}  
<x> = 1 or 2  
Example :ZOOM:HORIZONTAL1:ASCROLL:START LEFT

#### **:ZOOM:HORizontal<x>:ASCROLL:STOP**

Function Stops auto scrolling.  
Syntax :ZOOM:HORizontal<x>:ASCROLL:STOP  
<x> = 1 or 2  
Example :ZOOM:HORIZONTAL1:ASCROLL:STOP

#### **:ZOOM:HORizontal<x>:MAG**

Function Sets the horizontal zoom magnification or queries the current setting.  
Syntax :ZOOM:HORizontal<x>:MAG {<Nrf>}  
:ZOOM:HORizontal<x>:MAG?  
<x> = 1 or 2  
<Nrf> = See the SB5000 User's Manual.  
Example :ZOOM:HORIZONTAL1:MAG 2  
:ZOOM:HORIZONTAL1:MAG? -> :ZOOM:  
HORIZONTAL1:MAG 2.000E+00

#### **:ZOOM:HORizontal<x>:POSITION**

Function Sets the horizontal zoom center position or queries the current setting.  
Syntax :ZOOM:HORizontal<x>:POSITION {<Nrf>}  
:ZOOM:HORizontal<x>:POSITION?  
<x> = 1 or 2  
<Nrf> = -5 to 5 (div)  
Example :ZOOM:HORIZONTAL1:POSITION 1  
:ZOOM:HORIZONTAL1:POSITION? -> :ZOOM:  
HORIZONTAL1:POSITION 1.000E+00

#### **:ZOOM:MODE**

Function Sets the zoom waveform display format or queries the current setting.  
Syntax :ZOOM:MODE {MAIN|MAIN\_Z1|MAIN\_Z1\_Z2|  
MAIN\_Z2|Z1|Z1\_Z2|Z2}  
:ZOOM:MODE?  
Example :ZOOM:MODE MAIN\_Z1\_Z2  
:ZOOM:MODE? -> :ZOOM:MODE MAIN\_Z1\_Z2

#### **:ZOOM:TYPE<x>**

Function Sets the zoom type or queries the current setting.  
Syntax :ZOOM:TYPE<x> {HORizontal|VERTical}  
:ZOOM:TYPE<x>?  
<x> = 1 or 2  
Example :ZOOM:TYPE1 VERTICAL  
:ZOOM:TYPE1? -> :ZOOM:TYPE1 VERTICAL

#### **:ZOOM:VERTical<x>?**

Function Queries all settings related to the vertical zoom.  
Syntax :ZOOM:VERTical<x>?  
<x> = 1 or 2  
Example :ZOOM:VERTICAL1? -> :ZOOM:VERTICAL1:  
MAG 1.000E+00;POSITION 0.000E+00;  
TRACE 1

#### **:ZOOM:VERTical<x>:INITialize**

Function Initializes the vertical zoom.  
Syntax :ZOOM:VERTical<x>:INITialize  
<x> = 1 or 2  
Example :ZOOM:VERTICAL1:INITIALIZE

#### **:ZOOM:VERTical<x>:MAG**

Function Sets the vertical zoom magnification or queries the current setting.  
Syntax :ZOOM:VERTical<x>:MAG {<Nrf>}  
:ZOOM:VERTical<x>:MAG?  
<x> = 1 or 2  
<Nrf> = See the SB5000 User's Manual.  
Example :ZOOM:VERTICAL1:MAG 1  
:ZOOM:VERTICAL1:MAG? -> :ZOOM:VERTICAL1:  
MAG 1.000E+00

#### **:ZOOM:VERTical<x>:POSITION**

Function Sets the vertical zoom position or queries the current setting.  
Syntax :ZOOM:VERTical<x>:POSITION {<Nrf>}  
:ZOOM:VERTical<x>:POSITION?  
<x> = 1 or 2  
<Nrf> = -4 to 4 (div)  
Example :ZOOM:VERTICAL1:POSITION 1  
:ZOOM:VERTICAL1:POSITION? -> :ZOOM:  
VERTICAL1:POSITION 1.000E+00

#### **:ZOOM:VERTical<x>:TRACE**

Function Sets the trace you wish to display on the vertical zoom screen or queries the current setting.  
Syntax :ZOOM:VERTical<x>:TRACE {<Nrf>}  
:ZOOM:VERTical<x>:TRACE?  
<x> = 1 or 2  
<Nrf> = 1 to 8  
Example :ZOOM:VERTICAL1:TRACE 1  
:ZOOM:VERTICAL1:TRACE? -> :ZOOM:  
VERTICAL1:TRACE 1

#### **:ZOOM:VLINKage**

Function Turns ON/OFF the vertical link or queries the current setting.  
Syntax :ZOOM:VLINKage {<Boolean>}  
:ZOOM:VLINKage?  
Example :ZOOM:VLINKAGE ON  
:ZOOM:VLINKAGE? -> :ZOOM:VLINKAGE 1

## 5.34 Common Command Group

The commands in the common group are defined in the USBTMC-USB488 and are independent of the instrument's functions. There are no front panel keys that correspond to the commands in this group.

### **\*CAL? (CALibrate)**

Function Performs calibration and queries the result.

Syntax \*CAL?

Example \*CAL? -> 0

Description If the calibration terminates normally, 0 is returned. If an error is detected, 1 is returned.

### **\*CLS (CLear Status)**

Function Clears the standard event register, extended event register, and error queue.

Syntax \*CLS

Example \*CLS

Description • If the \*CLS command is located immediately after the program message terminator, the output queue is also cleared.  
• For details on the register and queue, see chapter 6.

### **\*ESE (standard Event Status Enable register)**

Function Sets the standard event enable register or queries the current setting.

Syntax \*ESE {<NRf>}

\*ESE?  
<NRf> = 0 to 255

Example \*ESE 251  
\*ESE? -> 251

Description • Specify the value as a sum of decimal values of each bit.  
• For example, specifying "\*ESE 251" will cause the standard enable register to be set to "11111011." In this case, bit 2 of the standard event register is disabled which means that bit 5 (ESB) of the status byte register is not set to 1, even if a "query error" occurs.  
• The default value is "\*ESE 0" (all bits disabled).  
• A query using \*ESE? will not clear the contents of the standard event enable register.  
• For details on the standard event enable register, see page 6-3.

### **\*ESR? (standard Event Status Register)**

Function Queries the standard event register and clears the register.

Syntax \*ESR?

Example \*ESR? -> 32

Description • A sum of decimal values of each bit is returned.  
• You can check what type of events occurred when an SRQ is generated.  
• For example, if a value of "32" is returned, this indicates that the standard event register is set to "00100000." In this case, you can see that the SRQ occurred due to a "command syntax error."  
• A query using \*ESR? will clear the contents of the standard event register.  
• For details on the standard event register, see page 6-3.

### **\*IDN? (IDeNtify)**

Description Queries the instrument model.

Syntax \*IDN?

Example \*IDN? -> YOKOGAWA,701351,27E100000,  
F4.00

Description The information is returned in the following form:  
<Manufacturer>,<Model>,<Serial No.>,<Firmware version> .  
<Model> returns the following: SB5310 = 701351;  
SB5710 = 701361.

### 5.34 Common Command Group

#### \*LRN? (LeaRN)

Function Queries collectively the current settings of the following command groups.

ACQUIRE, CHANNEL<x>, TIMEbase, TRIGGER

Syntax \*LRN?

```
Example *LRN? -> :ACQUIRE:AVERAGE:COUNT 2;
EWEIGHT 16;:ACQUIRE:HRMODE 0;
INTERLEAVE 0;INTERPOLATE 1;MODE NORMAL;
REPETITIVE 0;RLENGTH 12500;:CHANNEL1:
SELECT INPUT;DISPLAY 1;BWIDTH FULL;
COUPLING DC;DESKEW 0.000E+00;INVERT 0;
LABEL:DEFINE "CH1";MODE 1;:CHANNEL1:
OCANCEL 0;OFFSET 0.000E+00;
POSITION 0.000E+00;PROBE:MODE 1;:
CHANNEL1:SVALUE 0;VDIV 1.000E+00;:
CHANNEL2:SELECT INPUT;DISPLAY 1;
BWIDTH FULL;COUPLING DC;
DESKEW 0.000E+00;INVERT 0;LABEL:
DEFINE "CH2";MODE 1;:CHANNEL2:
OCANCEL 0;OFFSET 0.000E+00;
POSITION 0.000E+00;PROBE:MODE 1;:
CHANNEL2:SVALUE 0;VDIV 1.000E+00;:
CHANNEL3:SELECT INPUT;DISPLAY 1;
BWIDTH FULL;COUPLING DC;
DESKEW 0.000E+00;INVERT 0;LABEL:
DEFINE "CH3";MODE 1;:CHANNEL3:
OCANCEL 0;OFFSET 0.000E+00;
POSITION 0.000E+00;PROBE:MODE 1;:
CHANNEL3:SVALUE 0;VDIV 1.000E+00;:
CHANNEL4:SELECT INPUT;DISPLAY 1;
BWIDTH FULL;COUPLING DC;
DESKEW 0.000E+00;INVERT 0;LABEL:
DEFINE "CH4";MODE 1;:CHANNEL4:
OCANCEL 0;OFFSET 0.000E+00;
POSITION 0.000E+00;PROBE:MODE 1;:
CHANNEL4:SVALUE 0;VDIV 1.000E+00;:
TIMEBASE:TDIV 1.000E-06;:TRIGGER:
ACTION:ACQCOUNT 1;BUZZER 0;HCOPY 0;
MODE OFF;SAVE 0;:TRIGGER:TYPE EDGE;
CLOCK:SOURCE 1;POLARITY RISE;:TRIGGER:
DELAY:EDGECOUNT:COUNT 1;:TRIGGER:DELAY:
MODE 0;POLARITY RISE;SOURCE 1;
TIME 0.000E+00;TYPE BYTIME;:TRIGGER:
EINTERVAL:EVENT1:TYPE EDGE;CLOCK:
SOURCE 1;POLARITY RISE;:TRIGGER:
EINTERVAL:EVENT1:ESTATE:SOURCE 1;
POLARITY RISE;:TRIGGER:EINTERVAL:
EVENT1:STATE:CHANNEL1 DONTCARE;
CHANNEL2 DONTCARE;CHANNEL3 DONTCARE;
CHANNEL4 DONTCARE;LOGIC AND;:TRIGGER:
EINTERVAL:EVENT1:WIDTH:MODE OUT;
POLARITY POSITIVE;SOURCE 1;
TIME1 1.000E-09;TIME2 2.000E-09;:
TRIGGER:EINTERVAL:EVENT2:TYPE EDGE;
CLOCK:SOURCE 1;POLARITY RISE;:TRIGGER:
EINTERVAL:EVENT2:ESTATE:SOURCE 1;
```

```
POLARITY RISE;:TRIGGER:EINTERVAL:
EVENT2:STATE:CHANNEL1 DONTCARE;
CHANNEL2 DONTCARE;CHANNEL3 DONTCARE;
CHANNEL4 DONTCARE;LOGIC AND;:TRIGGER:
EINTERVAL:EVENT2:WIDTH:MODE OUT;
POLARITY POSITIVE;SOURCE 1;
TIME1 1.000E-09;TIME2 2.000E-09;:
TRIGGER:EINTERVAL:MODE OUT;
TIME1 1.500E-09;TIME2 2.000E-09;TRY:
MODE 0;SELECT 1;:TRIGGER:ENHANCED:TV:
CUSTOMIZE 0;FIELD 1;FRAME 1;HDTV:
LINE 2;POLARITY POSITIVE;:TRIGGER:
ENHANCED:TV:LEVEL 500.0E-03;NTSC:
LINE 5;POLARITY NEGATIVE;:TRIGGER:
ENHANCED:TV:PAL:LINE 2;
POLARITY NEGATIVE;:TRIGGER:ENHANCED:TV:
SGUARD 75;SOURCE 1;TYPE NTSC;
USERDEFINE:DEFINITION HD;
HFREJECTION OFF;HSYNC 31.500E+03;
LINE 2;POLARITY POSITIVE;:TRIGGER:
ESTATE:EOR:CHANNEL1 RISE;CHANNEL2 RISE;
CHANNEL3 RISE;CHANNEL4 RISE;:TRIGGER:
ESTATE:SOURCE 1;POLARITY RISE;:TRIGGER:
HOLDOFF 20.00E-09;MODE AUTO;
POSITION 50;SCOUNT 1;SOURCE:CHANNEL1:
COUPLING DC;HFREJECTION OFF;
HYSTERESIS LOW;LEVEL 0.000E+00;
STATE DONTCARE;WIDTH 1.000E+00;
WINDOW 0;:TRIGGER:SOURCE:CHANNEL2:
COUPLING DC;HFREJECTION OFF;
HYSTERESIS LOW;LEVEL 0.000E+00;
STATE DONTCARE;WIDTH 1.000E+00;
WINDOW 0;:TRIGGER:SOURCE:CHANNEL3:
COUPLING DC;HFREJECTION OFF;
HYSTERESIS LOW;LEVEL 0.000E+00;
STATE DONTCARE;WIDTH 1.000E+00;
WINDOW 0;:TRIGGER:SOURCE:CHANNEL4:
COUPLING DC;HFREJECTION OFF;
HYSTERESIS LOW;LEVEL 0.000E+00;
STATE DONTCARE;WIDTH 1.000E+00;
WINDOW 0;:TRIGGER:SOURCE:EXTERNAL:
LEVEL 0.000E+00;PROBE 1;:TRIGGER:
SOURCE:LOGIC AND;:TRIGGER:WIDTH:
MODE OUT;POLARITY POSITIVE;SOURCE 1;
TIME1 1.000E-09;TIME2 2.000E-09
```

**\*OPC (Operation Complete)**

**Function** Sets bit 0 (OPC bit) of the standard event register to 1 upon the completion of the specified overlap command.

**Syntax** \*OPC

**Example** \*OPC

**Description**

- For the description regarding how to synchronize the program using \*OPC, see page 4-7.
- The COMMunicate:OPSE command is used to specify the overlap command.
- If \*OPC is not the last command of the message, the operation is not guaranteed.

**\*OPC? (Operation Complete)**

**Function** If \*OPC? is transmitted and the specified overlap command is completed, ASCII code 1 is returned.

**Syntax** \*OPC?

**Example** \*OPC? -> 1

**Description**

- For the description regarding how to synchronize the program using \*OPC, see page 4-8.
- The COMMunicate:OPSE command is used to specify the overlap command.
- If \*OPC? is not the last command of the message, the operation is not guaranteed.

**\*OPT? (OPTION)**

**Description** Queries the installed options.

**Syntax** \*OPT?

**Example** \*OPT? -> CH6.25MW, PRINTER, ETHER, HDD, USE RDEFINE, PANALYZE, PROBEPOWER4

**Description**

- Returns the memory model as well as the presence/absence of the built-in printer, Ethernet, internal hard disk, user-defined computation, power supply analysis function, and rear panel probe power.
- The "\*OPT?" query must be the last query of the program message. An error occurs if there is a query after this query.

**\*PSC (Power-on Status Clear)**

**Function** Sets whether or not to clear the registers below at power on or queries the current setting. The register is cleared when the value rounded to an integer is a non-zero value.

- Standard event enable register
- Extended event enable register
- Transition filter

**Syntax** \*PSC {<NRf>}  
\*PSC?

<NRf> = 0 (not clear), non-zero (clear)

**Example** \*PSC 1

\*PSC? -> 1

**Description** For details on the registers, see chapter 6.

**\*RST (ReSeT)**

**Function** Initializes the settings.

**Syntax** \*RST

**Example** \*RST

**Description** Also clears \*OPC and \*OPC? commands that have been sent earlier.

**\*SRE (Service Request Enable register)**

**Function** Sets the service request enable register or queries the current setting.

**Syntax** \*SRE <NRf>

\*SRE?

<NRf> = 0 to 255

**Example** \*SRE 239

\*SRE? -> 239

**Description**

- Specify the value as a sum of decimal values of each bit.
- For example, specifying "\*SRE 239" will cause the service request enable register to be set to "11101111." In this case, bit 4 of the service request enable register is disabled which means that bit 4 (MAV) of the status byte register is not set to 1, even if "the output queue is not empty."
- Bit 6 (MSS) of the status byte register is the MSS bit itself, and therefore, is ignored.
- The default value is "\*SRE 0" (all bits disabled).
- A query using \*SRE? will not clear the contents of the service request enable register.
- For details on the service request enable register, see page 6-1.

**\*STB? (STatus Byte)**

**Function** Queries the status byte register.

**Syntax** \*STB?

**Example** \*STB? -> 4

**Description**

- The sum of the bits is returned as a decimal value.
- Since the register is read without executing serial polling, bit 6 is a MSS bit not RQS.
- For example, if a value of 4 is returned, this indicates that the status byte register is set to "00000100." In this case, you can see that "the error queue is not empty" (an error occurred).
- A query using \*STB? will not clear the contents of the status byte register.
- For details on the status byte register, see page 6-2.

### 5.34 Common Command Group

---

#### **\*TST?**

**Function** Performs a self-test and queries the result. The self test involves internal memory tests.

**Syntax** \*TST?

**Example** \*TST? -> 0

**Description** If the self-test is successful, 0 is returned. If there is an error, 1 is returned.

#### **\*WAI (WAI t)**

**Function** Holds the subsequent command until the completion of the specified overlap operation.

**Syntax** \*WAI

**Example** \*WAI

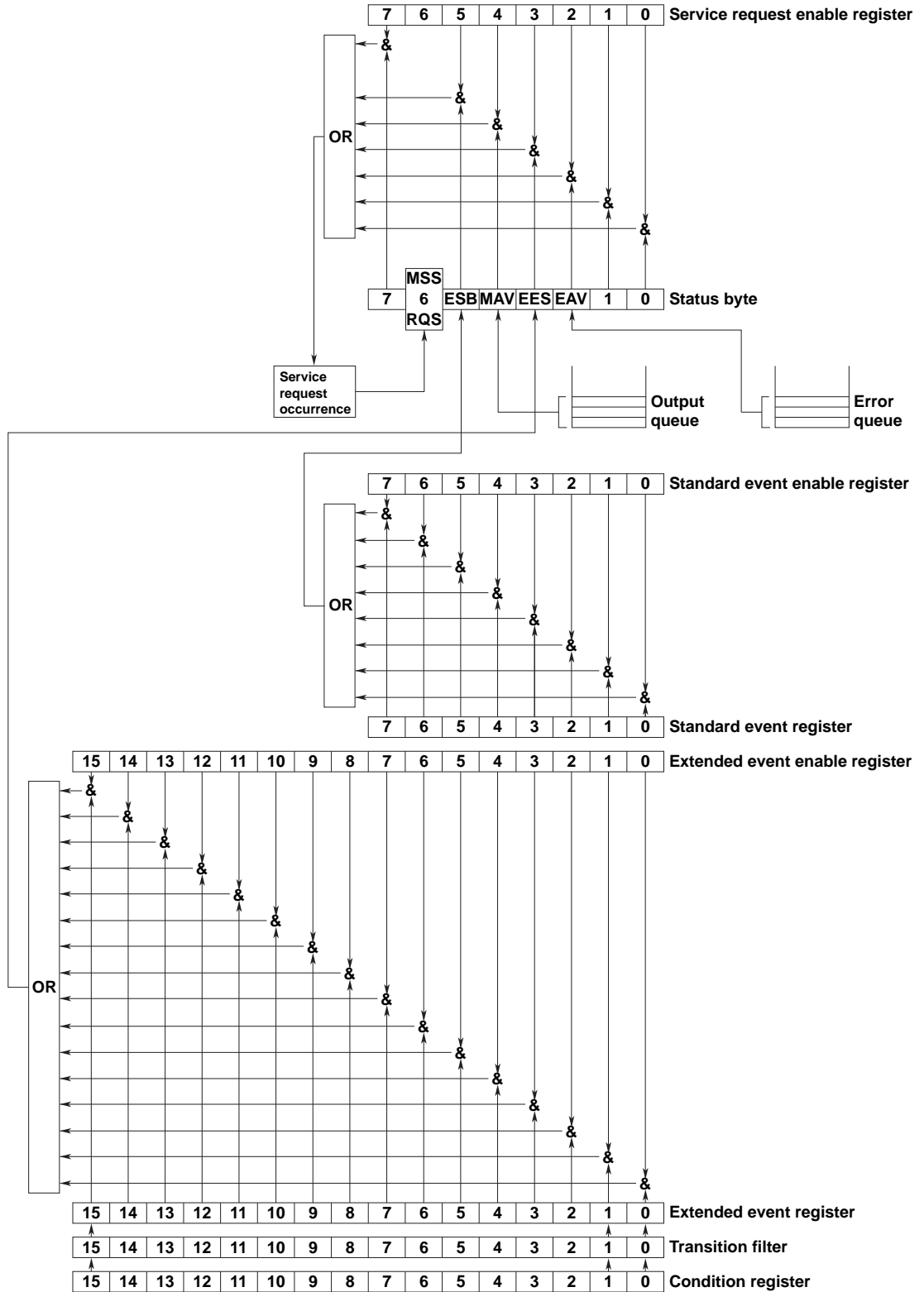
**Description**

- For the description regarding how to synchronize the program using \*WAI, see page 4-7.
- The :COMMunicate:OPSE command is used to specify the overlap command.

# 6.1 Overview of the Status Report

## Status Reports

The figure below shows the status report that is read by serial polling. This status report is an extended version of the status report defined in IEEE 488.2-1992



## 6.1 Overview of the Status Report

---

### Overview of the Registers and Queues

Name	Functions	Writing	Reading
Status byte		–	Serial polling (RQS), *STB?(MSS)
Service request enable register	Masks status byte	*SRE	*SRE?
Standard event register	Changes in device status	–	*ESR?
Standard event enable register	Masks standard event register	*ESE	*ESE?
Extended event register	Changes in device status	–	STATus: EESR?
Extended event enable register	Masks extended event register	STATus: EESE	STATus: EESR?
Condition register	Current instrument status	–	STATus: CONDition?
Transition filter	Conditions that change the extended event register	STATus: FILTER<x>	STATus: FILTER<x>?
Output queue	Stores a response message to a query All query commands		
Error queue	Stores the error No. and message	–	STATus: ERRor?

#### Registers and Queues That Affect the Status Byte

Registers that affect the bits of the status byte are shown below.

- Standard event register: Sets bit 5 (ESB) of the status byte to 1 or 0.
- Output queue: Sets bit 4 (MAV) of the status byte to 1 or 0.
- Extended event register: Sets bit 3 (EES) of the status byte to 1 or 0.
- Error queue: Sets bit 2 (EAV) of the status byte to 1 or 0.

#### Enable Registers

Registers that are used to mask a bit so that the bit will not affect the status byte even when it is set to 1, are shown below.

- Status byte: Mask the bits using the service request enable register.
- Standard event register: Mask the bits using the standard event enable register.
- Extended event register: Mask the bits using the extended event enable register.

#### Writing/Reading from Registers

The \*ESE command is used to set the bits in the standard event register to 1's or 0's. The \*ESE? command is used to query whether the bits in the standard event register are 1's or 0's. For details regarding these commands, see chapter 5.

## 6.2 Status Byte

### Status Byte



- **Bits 0, 1, and 7**  
Not used (always 0)
- **Bit 2 EAV (Error Available)**  
Set to 1 when the error queue is not empty. In other words, this bit is set to 1 when an error occurs. See the page 6-5.
- **Bit 3 EES (Extend Event Summary Bit)**  
Set to 0 when the logical product of the extended event register and the corresponding enable register is 1. In other words, this bit is set to 1 when an event takes place inside the instrument. See the page 6-4.
- **Bit 4 MAV (Message Available)**  
Set to "1" when the output queue is not empty. In other words, this bit is set to 1 when there are data to be transmitted. See the page 6-5.
- **Bit 5 ESB (Event Summary Bit)**  
Set to 0 when the logical product of the standard event register and the corresponding enable register is 1. In other words, this bit is set to 1 when an event takes place inside the instrument. See the page 6-3.
- **Bit 6 RQS(Request Service)/MSS(Master Status Summary)**  
Set to 1 when the logical AND of the status byte excluding Bit 6 and the service request enable register is not 0. In other words, this bit is set to 1 when the instrument is requesting service from the controller.  
RQS is set to 1 when the MSS bit changes from 0 to 1, and cleared when serial polling is carried out or when the MSS bit changes to 0.

### Bit Masking

To mask a bit in the status byte so that it does not cause an SRQ, set the corresponding bit of the service request enable register to 0.

For example, to mask bit 2 (EAV) so that service is not requested when an error occurs, set bit 2 of the service request enable register to 0. This can be done using the \*SRE command. To query whether each bit of the service request enable register is 1 or 0, use \*SRE?. For details on the \*SRE command, see chapter 5.

### Operation of the Status Byte

A service request is issued when bit 6 of the status byte becomes 1. Bit 6 is set to 1 when any of the other bits becomes a 1 (when the corresponding bit of the service request enable register is also set to 1). For example, if an event occurs and the logical AND of the standard event register and the corresponding enable register becomes a 1, then bit 5 (ESB) is set to 1. In this case, if bit 5 of the service request enable register is 1, bit 6 (MSS) will be set to 1, thus requesting service from the controller. In addition, you can also check what type of event occurred by reading the contents of the status byte.

### Reading from the Status Byte

The following two methods are provided for reading the status byte.

- **Inquiry using the \*STB? query**  
Making an inquiry using the \*STB? query sets bit 6 to MSS. This causes the MSS to be read. After completion of the read-out, none of the bits in the status byte will be cleared.
- **Serial polling**  
Execution of a serial polling changes bit 6 to RQS. This causes RQS to be read. After completion of the read-out, only RQS is cleared. It is not possible to read MSS using serial polling.

### Clearing the Status Byte

No method is provided for forcibly clearing all the bits in the status byte. The bits that are cleared for each operation are shown below.

- **When a query is made using the \*STB? command**  
No bits are cleared.
- **When serial polling is executed**  
Only the RQS bit is cleared.
- **When a \*CLS command is received.**  
When the \*CLS command is received, the status byte itself is not cleared, but the contents of the standard event register (which affects the bits in the status byte) are cleared. As a result, the corresponding bits in the status byte are cleared, except bit 4 (MAV), since the output queue cannot be emptied by the \*CLS command. However, the output queue will also be cleared if the \*CLS command is received just after a program message terminator.



## 6.3 Standard Event Register

### Standard Event Register

7	6	5	4	3	2	1	0
PON	URQ	CME	EXE	DDE	QYE	RQC	OPC

- **Bit 7 PON (Power ON)**  
Set to 1 when the power is turned ON.
- **Bit 6 URQ (User Request)**  
Not used (always 0)
- **Bit 5 CME (Command Error)**  
Set to 1 when the command syntax is incorrect.  
Example Incorrectly spelled command name; "9" used in octal data.
- **Bit 4 EXE (Execution Error)**  
Set to 1 when the command syntax is correct but the command cannot be executed in the current state.  
Example Received a command with a parameter outside the range or attempted to output a hard copy while waveform acquisition is in progress.
- **Bit 3 DDE (Device Dependent Error)**  
Set to 1 when execution of the command is not possible due to an internal problem in the instrument that is not a command error or an execution error.
- **Bit 2 QYE (Query Error)**  
Set to 1 if the output queue is empty or if the data is missing even after a query has been sent.  
Example No response data; data is lost due to an overflow in the output queue.
- **Bit 1 RQC (Request Control)**  
Not used (always 0)
- **Bit 0 OPC (Operation Complete)**  
Set to 1 when the operation designated by the \*OPC command (see chapter 5) has been completed.

### Bit Masking

To mask a bit in the standard event register so that it does not cause bit 5 (ESB) of the status byte to change, set the corresponding bit in the standard event enable register to 0. Refer to Chapter 4.

For example, to mask bit 2 (QYE) so that ESB will not be set to 1, even if a query error occurs, set bit 2 of the standard event enable register to 0. This can be done using the \*ESE command. To inquire whether each bit of the standard event enable register is 1 or 0, use the \*ESE?. For details on the \*ESE command, see chapter 5.

### Operation of the Standard Event Register

The standard event register is provided for eight different kinds of event which can occur inside the instrument. Bit 5 (ESB) of the status byte is set to 1 when any of the bits in this register becomes 1 (or when the corresponding bit of the standard event enable register becomes 1).

#### Example

1. A query error occurs.
2. Bit 2 (QYE) is set to 1.
3. Bit 5 (ESB) of the status byte is set to 1 if bit 2 of the standard event enable register is 1.

It is also possible to check what type of event has occurred inside the instrument by reading the contents of the standard event register.

### Reading from the Standard Event Register

The contents of the standard event register can be read by the \*ESR command. After the register is read, it is cleared.

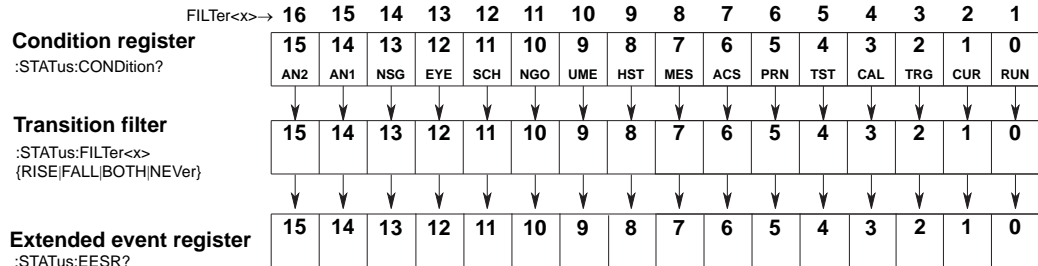
### Clearing the Standard Event Register

The standard event register is cleared in the following three cases.

- When the contents of the standard event register are read using the \*ESR command.
- When a \*CLS command is received.
- When the instrument is power cycled.

## 6.4 Extended Event Register

Reading the extended event register tells you whether changes in the condition register (reflecting internal conditions) have occurred. A filter can be applied which allows you to decide which events are reported to the extended event register.



The meaning of each bit of the condition register is as follows:

Bit 0	RUN (Running)	Set to 1 while waveform acquisition is in progress.
Bit 1	CUR (Cursor)	Set to 1 during cursor measurement.
Bit 2	TRG (Awaiting trigger)	Set to 1 when waiting for a trigger.
Bit 3	CAL (Calibration)	Set to 1 while calibration or serial auto setup is in progress.
Bit 4	TST (Testing)	Set to 1 while self-test is in progress.
Bit 5	PRN (Printing)	Set to 1 while the built-in printer is operating, while data is being output to an external printer (USB/network), or while screen image data is being saved.
Bit 6	ACS (Accessing)	Set to 1 while a storage drive is being accessed.
Bit 7	MES (Measuring)	Set to 1 when automated measurement of waveform parameters is in progress.
Bit 8	HST (History Search)	Set to 1 while history search is in progress.
Bit 9	UME (User Math Executing)	Set to 1 while the user-defined computation is in progress.
Bit 10	NGO (Go/No-go)	Set to 1 while GO/NO-GO search is in progress.
Bit 11	SCH (Search)	Set to 1 while search is in progress.
Bit 12	EYE(Eyediagram)	Set to 1 while Eyediagram is in progress.
Bit 13	NSG (N-Single)	Set to 1 while continuous acquisition is in progress when the trigger mode is set to single (N).
Bit 14	AN1 (Analysis1)	Set to 1 while Analysis 1 is in progress.
Bit 15	AN2 (Analysis2)	Set to 1 while Analysis 2 is in progress.

The transition filter parameters detect changes in the specified bit (numerical suffix, 1 to 16) of the condition register in the following manner and overwrite the extended event register.

RISE	The specified bit of the extended event register is set to 1 when the bit of the condition register changes from 1 to 0.
FALL	The specified bit of the extended event register is set to 1 when the bit of the condition register changes from 0 to 1.
BOTH	The bit of the extended event register is set to 1 when the bit of the condition register changes from 0 to 1 or from 1 to 0.
NEVer	Always 0.

## 6.5 Output Queue and Error Queue

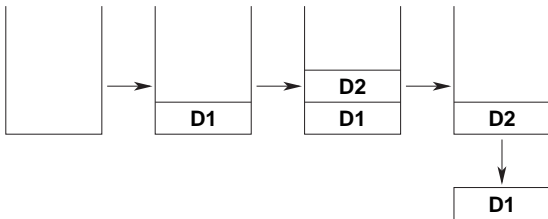
### Output Queue

The output queue is provided to store response messages to queries. For example, if you send the `WAVEform:SEND?` command, which requests the output of acquired data, the data is stored in the output queue until it is read.

As shown below, data are stored in order and read from the oldest ones first. The output queue is emptied in the following cases (in addition to when read-out is performed).

- When a new message is received from the controller.
- When a deadlock occurs (see page 4-2).
- When a device clear command (DCL or SDC) is received.
- When the instrument is power cycled.

The output queue cannot be emptied using the `*CLS` command. To see whether the output queue is empty or not, check bit 4 (MAV) of the status byte.



### Error Queue

The error queue stores the error No. and message when an error occurs. For example, if the controller sends an incorrect program message, the error number and message “113, “Undefined header”” are stored in the error queue when the error is displayed.

The `STATus:ERRor?` query can be used to read the contents of the error queue. As with the output queue, the messages are read from the oldest ones first.

When the error queue overflows, the last message is replaced by the message “350, “Queue overflow”.”

The error queue is also cleared for the following cases:

- When a `*CLS` command is received.
- When the instrument is power cycled.

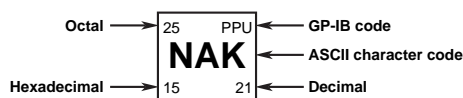
To see whether the error queue is empty or not, check bit 2 (EAV) of the status byte.

# Appendix 1 ASCII Character Codes

The following table shows the ASCII character codes.

	0	1	2	3	4	5	6	7
0	0 NUL	20 DEL	40 SP	60 0	100 @	120 P	140 '	160 p
1	1 SOH	21 DC1	41 !	61 1	101 A	121 Q	141 a	161 q
2	2 STX	22 DC2	42 "	62 2	102 B	122 R	142 b	162 r
3	3 ETX	23 DC3	43 #	63 3	103 C	123 S	143 c	163 s
4	4 EOT	24 DC4	44 \$	64 4	104 D	124 T	144 d	164 t
5	5 ENQ	25 NAK	45 %	65 5	105 E	125 U	145 e	165 u
6	6 ACK	26 SYN	46 &	66 6	106 F	126 V	146 f	166 v
7	7 BEL	27 ETB	47 ,	67 7	107 G	127 W	147 g	167 w
8	10 BS	30 CAN	50 (	70 8	110 H	130 X	150 h	170 x
9	11 HT	31 EM	51 )	71 9	111 I	131 Y	151 i	171 y
A	12 LF	32 SUB	52 *	72 :	112 J	132 Z	152 j	172 z
B	13 VT	33 ESC	53 +	73 ;	113 K	133 [	153 k	173 {
C	14 FF	34 FS	54 ,	74 <	114 L	134 \ I	154 l	174 
D	15 CR	35 GS	55 -	75 =	115 M	135 ] m	155 m	175 }
E	16 SO	36 RS	56 .	76 >	116 N	136 ^ n	156 n	176 ~
F	17 SI	37 US	57 /	77 ?	117 UNL O	137 UNT _	157 o	177 DEL (RUBOUT)
	Address commands	Universal commands	Listener address		Talker address		Secondary commands	

### Example



## Appendix 2 Error Messages

This section describes the error messages related to communications.

- The messages can be displayed in English or Japanese on the SB5000. However, when the messages are read from a PC or other similar computers, the messages are displayed in English.
  - If servicing is required, contact your nearest YOKOGAWA dealer for repairs.
  - Only error messages related to communications are listed here. For other error messages, see *User's Manual IM 701361-01E*.
- |   |                        |
|---|------------------------|
| <ul style="list-style-type: none"> <li>• Communication syntax error            100~199</li> <li>• Communication execution error        200~299</li> <li>• Model specific (other)                 300~398</li> <li>• Communication query error            400~499</li> <li>• System error (communications)        399</li> </ul> | } Details given below. |
|---|------------------------|

### Error in Communication Command (100-199)

Code	Messages	Corrective Action	Page
102	A syntax error. Syntax error.	Invalid syntax.	
103	<DATA SEPARATOR> is missing. Invalid separator.	Use a comma to separate the data.	
104	The <DATA> type is incorrect. Data type error.	Write using the correct data form.	
105	Device trigger function cannot be used. GET not allowed.	GET is not supported for responses to interface messages.	
108	There are too many <DATA>. Parameter not allowed.	Check the number of data points.	
109	Required <DATA> is missing. Missing parameter.	Enter the required data.	
111	<HEADER SEPARATOR> is missing. Header separator error.	Use a space to separate the header and data.	
112	<mnemonic> is too long. Program mnemonic too long.	Check the mnemonic (alphanumeric character string).	
113	No such command. Undefined header.	Check the header.	
114	The value of <HEADER> is not correct. Header suffix out of range.	Check the header.	
120	The mantissa of the value is missing. Numeric data error.	A number is required in the <NRf> form.	
123	The exponent is too large. Exponent too large.	Use a smaller exponent for <NR3> format.	
124	There are too many significant digits. Too many digits.	The value must be less than equal to 255 digits.	
128	Numeric data cannot be used. Numeric data not allowed.	Enter in a format other than <NRf> format.	
131	The unit is not correct. Invalid suffix.	Check the unit of the <Voltage>, <Time>, <Frequency>, and <Current>.	
134	The spelling of the unit is too long. Suffix too long.	Check the unit of the <Voltage>, <Time>, <Frequency>, and <Current>.	

Code	Messages	Corrective Action	Page
138	Units cannot be used. Suffix not allowed.	No units are allowed other than <Voltage>, <Time> <Frequency>, and <Current>.	
141	No such selection available. Invalid character data.	Select character data from the selections available in {... ... ...}.	
144	The spelling of <CHARACTER DATA> is too long. Character data too long.	Check the spelling of the character strings in {... ... ...}.	
148	<CHARACTER DATA> cannot be used. Character data not allowed.	Write in a data form other than {... ... ...}.	
150	There is no delimiter to the right of <STRING DATA>. String data error.	Enclose <String> in double quotation or single quotation marks.	
151	The contents of <STRING DATA> Invalid string data.	<String> is too long or contains characters which cannot be used.	
158	<STRING DATA> cannot be used. are inappropriate. String data not allowed.	Enter in a data format other than <Character string>.	
161	The data length of <BLOCK DATA> does not match. Invalid block data.	<Block data> is not allowed.	
168	<BLOCK DATA> cannot be used. Block data not allowed.	<Block data> is not allowed.	
171	There is an invalid character in the <EXPRESSION DATA>. Invalid expression.	Equations cannot be used.	
178	<EXPRESSION DATA> cannot be used. Expression data not allowed.	Equations cannot be used.	

### Error in Communication Execution (200 to 299)

Code	Messages	Corrective Action	Page
221	There is a conflict in the setup information. Setting conflict.	Check the relevant settings.	
222	The data value is outside the range. Data out of range.	Check the range.	
223	The data byte length is too long. Too much data.	Check the length of the data.	
224	The data value is invalid. Illegal parameter value.	Check the range.	
241	The hardware is not implemented. Hardware missing.	Check the installed options.	
260	<EXPRESSION DATA> is not correct. Expression error.	Equations cannot be used.	

### Error in Communication Query (400 to 499)

Code	Messages	Corrective Action	Page
410	Query transmission was aborted. Query INTERRUPTED.	Check transmission/reception order.	
420	There is no response that can be transmitted. Query UNTERMINATED.	Check transmission/reception order.	
430	Deadlock occurred. Aborting transmission. Query DEADLOCKED.	Limit the length of the program message including <PMT> to 1024 bytes or less.	
440	The order to request the response is not correct. Query UNTERMINATED after indefinite response.	Do not specify a query after the *IDN? or *OPT? command.	

## Appendix 2 Error Messages

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### Error in System Operation (399)

Code	Messages	Corrective Action	Page
399	Communication driver error. Fatal error in the communication driver.	Maintenance service is required.	

---

### Warning (50)

Code	Messages	Corrective Action	Page
50	*OPC/? is in the middle of the message. *OPC/? exists in message.	Place the *OPC or *OPC? command at the end of the program message.	

---

### Other Errors (350)

Code	Messages	Corrective Action	Page
350	Queue overflow.	Read the error queue.	

---

### **Note**

Code 350 indicates overflow of error queue. This code is returned as a response to the STATus:ERRor? query; it does not appear on the screen.

---

## Appendix 3 Correspondence Table of Measure Parameter Names

Name Displayed on Setup Screen	Name Used by Communication Commands	Name on Menu of the SB5000 Screen When Displaying Measured Results
Max	MAXimum	Max
Min	MINimum	Min
High	HIGH	High
Low	LOW	Low
P-P	PTOPeak	P-P
Hi-Low	HILOW	Hi-Low
+Over	POVershoot	+Over
-Over	NOVershoot	-Over
Rms	RMS	Rms
Mean	MEAN	Mean
Sdev	SDEViation	Sdev
IntegTY	TYINteg	ITY
C.Rms	CRMS	CRms
C.Mean	CMEan	CMean
C.Sdev	CSDeviation	CSdev
C.IntegTY	TYCInteg	CITY
Freq	FREQuency	Freq
1/Freq	PERFrequency	1/FR
Count	COUNT	Count
Burst	BURSt	Burst
+Width	PWIDth	+Width
-Width	NWIDth	-Width
Period	PERiod	Period
Duty	DUTYcycle	Duty
Rise	RISE	Rise
Fall	FALL	Fall
Delay	DELay	Dly



## Appendix 4 Eye Pattern Parameter Name Table

Name Displayed on the Setup Menu of the SB5000 Screen	Name Used by Communication Commands	Name on the SB5000 Screen When Displaying Measured Results
Crossing %	PCROSSing	Cross%
Eye Height	EHEight	EyeHi
Eye Width	EWIDth	EyeWid
Q Factor	QFACTOR	QFact
Jitter	JITTer	Jitter
Duty Cycle Distraction %	PDUTYcycle	DCDTime%
Vtop	VTOP	Vtop
Vbase	VBASE	Vbase
$\sigma$ top	SDTOP	$\sigma$ top
$\sigma$ base	SDBase	$\sigma$ base
Tcrossing1	T1CROSSing	Tcros1
Tcrossing2	T2CROSSing	Tcros2
Vcrossing	VCRossing	Vcros
Ext Rate dB	DBERate	ERdB
Rise	RISE	Rise
Fall	FALL	Fall

## Appendix 5 Flexray Parameter Name Table

Name Displayed on the Setup Menu of the SB5000 Screen	Name Used by Communication Commands	Name on the SB5000 Screen When Displaying Measured Results
BSS Interval	BSS	BSS
FBSS Interval	FBSS	FBSS
BSS-FES Interval	BSSFES	BSS-FES
dBDRxia	DBDRXAI	dBDRxia
dBDRxai	DBDRXIA	dBDRxai
dBDRx10	DBDRX10	dBDRx10
dBDRx01	DBDRX01	dBDRx01
dRxAsym	DRXASYM	dRxAsym
dBDTx10	DBDTX10	dBDTx10
dBDTx01	DBDTX01	dBDTx01
dTxAsym	DTXASYM	dTxAsym
dBusTx10	DBUSTX10	dBusTx10
dBusTx01	DBUSTX01	dBusTx01
uBDTx	UBDTX	uBDTx
dBDTxia	DBDTXAI	dBDTxia
dBDTxai	DBDTXIA	dBDTxai
dBusTxia	DBUSTXAI	dBusTxia
dBusTxai	DBUSTXIA	dBusTxai

# Index

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## A

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