# Keysight U7232D DisplayPort Compliance Application

KEYSIGHT TECHNOLOGIES

Programmer's Reference

# Notices



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**CAUTION**

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

**WARNING**

**A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.**

# In This Book

This book is your guide to programming the Keysight Technologies U7232D DisplayPort Compliance Application.

- Chapter 1, “Introduction to Programming,” starting on page 7, describes compliance application programming basics.
- Chapter 2, “Configuration Variables and Values,” starting on page 9, Chapter 3, “Test Names and IDs,” starting on page 55, and Chapter 4, “Instruments,” starting on page 117, provide information specific to programming the U7232D DisplayPort Compliance Application.

**How to Use This Book**

Programmers who are new to compliance application programming should read all of the chapters in order. Programmers who are already familiar with this may review chapters 2, 3, and 4 for changes.

# Contents

# 1 Introduction to Programming

Remote Programming Toolkit / 8

This chapter introduces the basics for remote programming a compliance application. The programming commands provide the means of remote control. Basic operations that you can do remotely with a computer and a compliance app running on an oscilloscope include:

- Launching and closing the application.
- Configuring the options.
- Running tests.
- Getting results.
- Controlling when and were dialogs get displayed
- Saving and loading projects.

You can accomplish other tasks by combining these functions.

# Remote Programming Toolkit

The majority of remote interface features are common across all the Keysight Technologies, Inc. family of compliance applications. Information on those features is provided in the N5452A Compliance Application Remote Programming Toolkit available for download from Keysight here: www.keysight.com/find/rpi. The U7232D DisplayPort Compliance Application uses Remote Interface Revision 3.50. The help files provided with the toolkit indicate which features are supported in this version.

In the toolkit, various documents refer to "application-specific configuration variables, test information, and instrument information". These are provided in Chapters 2, 3, and 4 of this document, and are also available directly from the application's user interface when the remote interface is enabled (View>Preferences::Remote tab::Show remote interface hints). See the toolkit for more information.

# 2 Configuration Variables and Values

The following table contains a description of each of the U7232D DisplayPort Compliance Application options that you may query or set remotely using the appropriate remote interface method. The columns contain this information:

- GUI Location – Describes which graphical user interface tab contains the control used to change the value.
- Label – Describes which graphical user interface control is used to change the value.
- Variable – The name to use with the SetConfig method.
- Values – The values to use with the SetConfig method.
- Description – The purpose or function of the variable.

For example, if the graphical user interface contains this control on the **Set Up** tab:

- Enable Advanced Features

then you would expect to see something like this in the table below:

**Table 1** Example Configuration Variables and Values

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Set Up | Enable Advanced Features | EnableAdvanced | True, False | Enables a set of optional features. |

and you would set the variable remotely using:

```
ARSL syntax
-----------
arsl -a ipaddress -c "SetConfig 'EnableAdvanced' 'True'"

C# syntax
```

```
---------
remoteAte.SetConfig("EnableAdvanced", "True");
```

Here are the actual configuration variables and values used by this application:

**NOTE** Some of the values presented in the table below may not be available in certain configurations. Always perform a "test run" of your remote script using the application's graphical user interface to ensure the combinations of values in your program are valid.

**NOTE** The file, "ConfigInfo.txt", which may be found in the same directory as this help file, contains all of the information found in the table below in a format suitable for parsing.

**Table 2** Configuration Variables and Values

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | AC Common Edges | ACCommonEdge | (Accepts user-defined text), 100, 1000, 10000, 100000 | Set the number of edges measured for the AC common mode test. |
| Configure | AUX Clock Recovery Filter | AUXClockRecoveryFilter | true, false | Define if clock is recovered after applying a low pass filter. |
| Configure | AUX Decode Filter | AUXDecodeFilter | true, false | Define whether to apply filter before decoding traffic for AUX sensitivity tests. |
| Configure | AUX Eye Acquisition | AUXEyeAcquisition | (Accepts user-defined text), 1, 10, 5 | Specify number of acquisitions needed for AUX test measurement |
| Configure | AUX Eye Mask Center | AUXEyeMaskCenter | 0 V, AutoOffset | Define the vertical mask center position of eye mask. |
| Configure | AUX Eye Mask Width Reference | AUXEyeMaskWidthReference | Nominal, Average | Define the width of Mask width reference either based on nominal rate or measured data rate. |
| Configure | AUX Memory Depth | AUXMemDepth | (Accepts user-defined text), 200000, 500000, 1000000, 2000000, 4000000 | Specify the memory depth used for AUX test measurement. Note: 80k scope only supports up to 2M points only. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | AUX Min Failure Required | AUXMaxFailAcquisition | (Accepts user-defined text), 10, 100, 1000 | When failure in AUX sensitivity is detected, you might stop the AUX traffic decoding immediately to save test time. This config allows you to set the minimum number of acquisitions to analyze before exit test. |
| Configure | AUX Sampling Rate, GSa/s | AUXSamplingRate | (Accepts user-defined text), 1, 5, 10, 20, 40 | Specify the sampling rate used for AUX test measurement |
| Configure | AUX Sensitivity Calibration Acquisition | AUXSensitivityCalibrationAcquisition | (Accepts user-defined text), 1, 3, 5, 10 | Define the number of acqusition to measure for AUX sensitivity Calibration. |
| Configure | AUX Sensitivity Maximum VSwing (V) | AUXSensitivityMaxVSwing | (Accepts user-defined text), 0.28, 0.26 | Define the maximum Vswing limit for AUX Sensitivity tests. |
| Configure | AUX Sensitivity Memory Depth | AUXSensitivityMemDepth | (Accepts user-defined text), 2000000, 5000000, 10000000, 20000000 | Specify the memory depth used for AUX Sensitivity test. |
| Configure | AUX Sensitivity Minimum VSwing (V) | AUXSensitivityMinVSwing | (Accepts user-defined text), 0.28, 0.24 | Define the minimum Vswing limit for AUX Sensitivity tests. |
| Configure | AUX Sensitivity Sampling Rate, MSa/s | AUXSensitivitySamplingRate | (Accepts user-defined text), 5, 10 | Specify the sampling rate used for AUX Sensitivity test in MSa/s |
| Configure | AUX Sensitivity Test Level(mV) | AUXSensitivityTestLevel | (Accepts user-defined text), 240, 260, 270, 270 | Define the number of acqusition to measure for AUX sensitivity Calibration. |
| Configure | AUX Sensitivity Test Method | AUXSensitivityTestMethod | Scope Method, Reference Device Method | Define method to test AUX sensitivity either through Scope Decoding or with built in test from Reference device. If Reference Device does not have built in test, then Scope Decoding method is used. |
| Configure | AUX Traffic Decode Count | AUXTrafficDecodeCount | (Accepts user-defined text), 10, 100, 20, 1000 | Set the total amount of traffic required before the test completes. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Bandwidth Correction Mode | BandwidthCorrectionMode | True, False | Select whether to apply correction to the bandwidth of the second order PLL clock recovery. This configuration only applicable when the [Clock Recovery Order] configuration variable is set to second order PLL clock recovery. |
| Configure | Bandwidth Reduction | bwreduction | STAND, AUTO, MAX, 4E9, 6E9, 8E9, 13E9, 16E9, 20E9, 32E9 | Set the acquisition bandwidth reduction for the oscilloscope. This configuration is only available when either Enhance Bandwidth or Noise Reduction option is installed on the oscilloscope. For [Standard], 13GHz acquisition bandwidth reduction is set for RBR, HBR, HBR2 while 16GHz acquisition bandwidth reduction is set for HBR3. For [Automatic], no bandwidth reduction. |
| Configure | Cable Construction | CableConstruction | CAT1, CAT2, Hybrid | Select the Cable Construction used. |
| Configure | Cable Equalizer | CableEqualizater | Off, 2, 5, 10, Manual | Selects the Type of Equalizer of the cable test. |
| Configure | Cable Mask | CableMask | TP2, TP3 | Selects the type of mask to use for the eye test. (TP2 for Source; TP3 for Sink) |
| Configure | Cable Mask Movement | CableMaskMovement | Fixed, FindPass, FindMargin | This field contains 3 options. (1) Find Passing Mode will automatically search +/-0.5UI horizontally until no violation occurs, (2) Fixed Mask will not be moving, it only report Pass or Fail upon test, (3) Find Biggest Margin will search +/-0.5UI horizontally to find the maximum margin of non-violation mask. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Cable Model Embedding | CableEmbedding | True, False | Select whether to include cable model embedding when running tests at TP3_EQ test point. This configuration only applicable when the [Custom Transfer Function] configuration variable is set to [False]. |
| Configure | Cable Model Type | CableModelType | Auto, Standard DP/mDP, USB Type-C | Select the type of cable model to be embedded when running tests at TP3_EQ test point. This configuration is only applicable when the [Cable Model Embedding] configuration variable is set to [True] and the [Custom Transfer Function] configuration variable is set to [False]. For [Auto], the cable model will be selected based on the connector type. |
| Configure | Clock Recovery Damping Factor - HBR2 (Second Order PLL Only) | DampingFactorHBR2 | (Accepts user-defined text), 1.0, 1.43, 1.51, 1.6, N/A | Set the damping factor used in the second order PLL to recover the clock for HBR2. This configuration only applicable when the [Clock Recovery Order] configuration variable is set to second order PLL clock recovery. |
| Configure | Clock Recovery Damping Factor - HBR25 (Second Order PLL Only) | DampingFactorHBR25 | (Accepts user-defined text), 1.0, 1.43, 1.51, 1.6, N/A | Set the damping factor used in the second order PLL to recover the clock for HBR25. This configuration only applicable when the [Clock Recovery Order] configuration variable is set to second order PLL clock recovery. |
| Configure | Clock Recovery Damping Factor - HBR3 (Second Order PLL Only) | DampingFactor_HBR3 | (Accepts user-defined text), 1.0, 1.43, 1.51, 1.6, N/A | Set the damping factor used in the second order PLL to recover the clock for HBR3. This configuration only applicable when the [Clock Recovery Order] configuration variable is set to second order PLL clock recovery. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Clock Recovery Damping Factor - RBR/HBR (Second Order PLL Only) | DampingFactor | (Accepts user-defined text), 1.43, 1.51, 1.6, N/A | Set the damping factor used in the second order PLL to recover the clock for RBR and HBR. This configuration only applicable when the [Clock Recovery Order] configuration variable is set to second order PLL clock recovery. |
| Configure | Clock Recovery Loop Bandwidth (Arbitrary Pattern) - HBR2 | CRUBandWidthArbitraryPattern_HBR2 | (Accepts user-defined text), 20MHz, 10MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when Arbitrary Pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (Arbitrary Pattern) - HBR25 | CRUBandWidthArbitraryPattern_HBR25 | (Accepts user-defined text), 20MHz, 10MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when Arbitrary Pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (Arbitrary Pattern) - HBR3 | CRUBandWidthArbitraryPattern_HBR3 | (Accepts user-defined text), 30MHz, 15MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when Arbitrary Pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (Arbitrary Pattern)- HBR | CRUBandWidthArbitraryPattern_HBR | (Accepts user-defined text), 20MHz, 10MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when Arbitrary Pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (Arbitrary Pattern)- RBR | CRUBandWidthArbitraryPattern_RBR | (Accepts user-defined text), 10.8MHz, 5.4MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when Arbitrary Pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (D10.2) - HBR | CRUBandWidthHighBitRate | (Accepts user-defined text), 20MHz, 10MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when D10.2 pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Clock Recovery Loop Bandwidth (D10.2) - HBR2 | CRUBandWidthHBR2 | (Accepts user-defined text), 20MHz, 10MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when D10.2 pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (D10.2) - HBR25 | CRUBandWidthHBR25 | (Accepts user-defined text), 20MHz, 10MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when D10.2 pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (D10.2) - HBR3 | CRUBandWidth_HBR3 | (Accepts user-defined text), 30MHz, 15MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when D10.2 pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (D10.2) - RBR | CRUBandWidthLowBitRate | (Accepts user-defined text), 10.8MHz, 5.4MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when D10.2 pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (HBR2CPAT) - HBR2 | CRUBandWidthHBR2CPATHBR2 | (Accepts user-defined text), 20MHz, 10MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when HBR2CPAT pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (HBR2CPAT) - HBR25 | CRUBandWidthHBR2CPATHBR25 | (Accepts user-defined text), 20MHz, 10MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when HBR2CPAT pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (HBR2CPAT) - HBR3 | CRUBandWidthHBR2CPAT_HBR3 | (Accepts user-defined text), 30MHz, 15MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when HBR2CPAT pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Clock Recovery Loop Bandwidth (PRBS 7) - HBR | CRUBandWidthPRBS7High | (Accepts user-defined text), 20MHz, 10MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when PRBS 7 pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (PRBS 7) - HBR2 | CRUBandWidthPRBS7HBR2 | (Accepts user-defined text), 20MHz, 10MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when PRBS 7 pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (PRBS 7) - HBR25 | CRUBandWidthPRBS7HBR25 | (Accepts user-defined text), 20MHz, 10MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when PRBS 7 pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (PRBS 7) - HBR3 | CRUBandWidthPRBS7_HBR3 | (Accepts user-defined text), 30MHz, 15MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when PRBS 7 pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Loop Bandwidth (PRBS 7) - RBR | CRUBandWidthPRBS7LowBitRate | (Accepts user-defined text), 10.8MHz, 5.4MHz | Set the 3 dB bandwidth of the loop filter used by the PLL when PRBS 7 pattern is used. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | Clock Recovery Order | ClockRecoveryOrder | 1st, 2nd | Select the clock recovery order to either first order PLL clock recovery method or second order PLL clock rcovery method to recover the clock from the data. |
| Configure | Custom Eye Mask | CustomEyeMask | False, True | Select to enable or disable the use of custom eye mask for Eye Diagram Test and Eye Diagram Test (TP3_EQ). |
| Configure | Custom Transfer Function | CustomTransferFunction | True, False | Select whether to use custom transfer function for embedding and de-embedding when running tests at TP3_EQ test point. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Custom Transfer Function File Name | CustomTFFileName | (Accepts user-defined text), CustomEmbedded | Set the custom transfer function file name for embedding and de-embedding when running tests at TP3_EQ test point. This configuration only applicable when the [Custom Transfer Function] configuration variable is set to [True]. The custom transfer function file must located at the following directory: C:\Program Files (x86)\Keysight\Infiniium\Apps\DisplayPortTest\app\config\TransferFunction\RBR_HBR_HBR2\Custom\ and C:\Program Files (x86)\Keysight\Infiniium\Apps\DisplayPortTest\app\config\TransferFunction\HBR3\Custom\. |
| Configure | Cutoff Frequency | CutOffFrequency | (Accepts user-defined text), 1000MHz, 500MHz, 50MHz | Set the 3dB cutoff frequency of the filter used for AC Common Mode Tests. This configuration only applicable when the [Filter] configuration variable is set to either [High Pass Filter] or [Low Pass Filter]. Please specify the value in following format: "XMHz", "XkHz" or "XHz", where X is an integer. |
| Configure | DFE Setup | DFE_Setup_HBR2 | Auto, PartialAuto, Manual | Select whether to automatically setup or manually setup the DFE for HBR2 when running tests at TP3_EQ test point. For [Auto], the Infiniium will perform optimization based on the eye width, minimum and maximum tap value. For [Partial Auto], the Infiniium will perform optimization based on the eye width, minimum and maximum tap value. Then, override the gain and delay. For [Manual], the user need to specify the tap value, upper target voltage, lower target voltage, gain and delay. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | DFE Setup | DFE_Setup_HBR3 | Auto, PartialAuto, Manual | Select whether to automatically setup or manually setup the DFE for HBR3 when running tests at TP3_EQ test point. For [Auto], the Infiniium will perform optimization based on the eye width, minimum and maximum tap value. For [Partial Auto], the Infiniium will perform optimization based on the eye width, minimum and maximum tap value. Then, override the gain and delay. For [Manual], the user need to specify the tap value, upper target voltage, lower target voltage, gain and delay. |
| Configure | DFE State | DFE_State_HBR2 | true, false | Select whether to enable or disable the DFE for HBR2 when running tests at TP3_EQ test point. |
| Configure | DFE State | DFE_State_HBR3 | true, false | Select whether to enable or disable the DFE for HBR3 when running tests at TP3_EQ test point. |
| Configure | De-Embed with Delay | DeEmbedDelay | (Accepts user-defined text), True, False | Select whether to include or exclude delay for fixture de-embedding. |
| Configure | Delay | DFE_Delay_HBR2 | (Accepts user-defined text), Auto, InfiniiumAuto, 0 | Set the delay to be used to amplify the eye back to the original size in the DFE equalizer for HBR2 when running tests at TP3_EQ test point. For [Auto], the DisplayPort application will set the delay to center the eye based on the histogram. For [Infiniium Auto], the Infiniium application will set the delay to center the eye. Unit: ps. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Delay | DFE_Delay_HBR3 | (Accepts user-defined text), Auto, InfiniiumAuto, 0 | Set the delay to be used to amplify the eye back to the original size in the DFE equalizer for HBR3 when running tests at TP3_EQ test point. For [Auto], the DisplayPort application will set the delay to center the eye based on the histogram. For [Infiniium Auto], the Infiniium application will set the delay to center the eye. Unit: ps. |
| Configure | Dual Mode Clock Frequency Validation | DualModeClockFrequencyValidation | true, false | To enable or disable clock frequency validation. |
| Configure | Dual Mode Clock Jitter UI Count | DMClockJitterUICount | (Accepts user-defined text), 100000, 400000 | Specify number of UI required for Dual Mode Clock Jitter Test. |
| Configure | Dual Mode Clock Jitter Window Offset | DMClockJitterWindowOffset | (Accepts user-defined text), 0, 5, 10, 15, 20 | Specifies the Clock Jitter measuring offset in mV. The value must be in range from 0 to 20. |
| Configure | Dual Mode Duty Cycle Edges | DMDutyCycleEdges | (Accepts user-defined text), 1000, 10000 | Specify the memory depth used for Dual Mode TMDS Clock Duty Cycle Test. |
| Configure | Dual Mode Eye Height Window Start(%) | DualModeEyeHeightStart | 40, 30 | To specify the starting point of eye height measurement. |
| Configure | Dual Mode Mask File | DualModeMaskFile | Auto, Custom, Above 165 Mhz, Below 165 Mhz | To determine the mask file being used for Dual Mode Eye Diagram test. |
| Configure | Dual Mode Software Clock Recovery | DMClockRecovery | First, Second | To specify which order of Software Clock Recovery to use. |
| Configure | Dual Mode Threshold Mode | DMThresholdMode | Min Max, Top Base, Absolute Zero | Decide the threshold either by VMax/VMin, VTop/VBase or fixed at absolute zero |
| Configure | Edges Number | DMInterPairSkewEdgesNumber | (Accepts user-defined text), 1, 10, 100, 200 | Set the number of edges measured for the Dual Mode Inter Pair Skew Test. |
| Configure | Edges Number | DMIntraPairSkewEdgesNumber | (Accepts user-defined text), 100, 1000 | Set the number of edges measured for the Dual Mode Intra Pair Skew Test. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Exclude Random Jitter and Noise Derate (TP3_EQ) | ExcludeRandomNoise | False, True | Select to include or exclude random jitter and noise derate of the eye mask used in Eye Diagram Test (TP3_EQ). This configuration only applicable when the [Eye Mask Type (TP3_EQ)] configuration variable is set to "Dynamic". For [False], random jitter and noise derate will be included in the eye mask generation. For [True], random jitter and noise derate will be excluded in the eye mask generation. |
| Configure | Expert Mode | ExpertMode | Off, On | Turn on expert mode for looser prerequisite checkers. |
| Configure | External Scaling | ExternalScaling | Disable, Enable | Enable or disable probe external scaling. if "Disable", probe external scaling is defaulted to 0 for each run. This only applies when single-ended connection is used. |
| Configure | Eye Diagram (TP3_EQ) UI | TP3EQEyeDiagramUI | 10000, 50000, 100000, 256000, 500000, 1000000, 10000000 | Set the number of UI measured for Eye Diagram Test (TP3_EQ). |
| Configure | Eye Diagram UI | EyeDiagramEdge | (Accepts user-defined text), 10000, 50000, 100000, 256000, 500000, 1000000, 10000000 | Set the number of UI measured for Eye Diagram Test. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Eye Mask Movement | EyeDiagramMaskMovement | Fixed, FindPass, FindMargin, AlignAndFindPass, ManualAdjust | Select the eye mask movement type in Eye Diagram Test and Eye Diagram Test (TP3_EQ). For [Fixed] mask movement, the eye diagram mask will not be moved. The test only report Pass or Fail. For [Find Pass] mask movement, the test will search +/-0.5 UI horizontally until no mask violation occurs. For [Find Margin] mask movement, the test will search +/-0.5 UI horizontally to find the maximum margin of no mask violation. |
| Configure | Eye Mask Scale | MaskScale | Absolute, Normalized, Relative | Select the type of scale to be performed on the eye mask for Eye Diagram Test and Eye Diagram Test (TP3_EQ). Select [Absolute] if absolute voltage eye mask is used. Select [Normalized] if absolute voltage eye mask is used and the eye mask need to be normalized to the offset of the signal for RBR and HBR. Select [Relative] if relative voltage eye mask is used and the eye mask need to be normalized to the offset of the signal for RBR and HBR. |
| Configure | Eye Mask Type (TP3_EQ) | EyeMaskTypeTP3EQ | Dynamic, Fixed | Select the type of eye mask used for Eye Diagram Test (TP3_EQ). For [Dynamic], eye mask generated dynamically by placing the eye height at optimum location is used. For [Fixed], fixed eye mask is used. |
| Configure | Eye Width | DFE_EyeWidth_HBR2 | (Accepts user-defined text), 0 | Set the eye width to be used for the optimization of the DFE equalizer for HBR2 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Auto]. Unit: UI. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Eye Width | DFE_EyeWidth_HBR3 | (Accepts user-defined text), 0 | Set the eye width to be used for the optimization of the DFE equalizer for HBR3 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Auto]. Unit: UI. |
| Configure | Filter | Filter | None, HighPassFilter, LowPassFilter | Select the filter used for AC Common Mode Tests, either a high pass filter, low pass filter or no filter is applied on the signal before AC common mode measurement. Note: Interpolation will be turned off if either high pass filter or low pass filter is selected. |
| Configure | Gain | DFE_Gain_HBR2 | (Accepts user-defined text), 1 | Set the gain to be used to amplify the eye back to the original size in the DFE equalizer for HBR2 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Partial Auto] or [Manual]. |
| Configure | Gain | DFE_Gain_HBR3 | (Accepts user-defined text), 1 | Set the gain to be used to amplify the eye back to the original size in the DFE equalizer for HBR3 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Partial Auto] or [Manual]. |
| Configure | Gain - HBR | GainHBR | (Accepts user-defined text), 0.5, 1 | Set the Gain when applying CTLE equalizer for HBR tests with cable. |
| Configure | Gain - HBR No Cable | GainHBRNoCable | (Accepts user-defined text), 0.5, 1 | Set the Gain when applying CTLE equalizer for HBR tests without cable. |
| Configure | Gain - HBR2 | GainHBR2 | (Accepts user-defined text), 0.5, 1 | Set the Gain when applying CTLE equalizer for HBR2 tests with cable. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Gain - HBR2 No Cable | GainHBR2NoCable | (Accepts user-defined text), 0.5, 1 | Set the Gain when applying CTLE equalizer for HBR2 tests without cable. |
| Configure | Gain - HBR25 | GainHBR25 | (Accepts user-defined text), 0.5, 1 | Set the Gain when applying CTLE equalizer for HBR25 tests with cable. |
| Configure | Gain - HBR25 No Cable | GainHBR25NoCable | (Accepts user-defined text), 0.5, 1 | Set the Gain when applying CTLE equalizer for HBR25 tests without cable. |
| Configure | Gain - HBR3 | GainHBR3 | (Accepts user-defined text), 0.5, 1 | Set the Gain when applying CTLE equalizer for HBR3 tests with cable. |
| Configure | Gain - HBR3 No Cable | GainHBR3NoCable | (Accepts user-defined text), 0.5, 1 | Set the Gain when applying CTLE equalizer for HBR3 tests without cable. |
| Configure | Gain - RBR | GainRBR | (Accepts user-defined text), 0.5, 1 | Set the Gain when applying CTLE equalizer for RBR tests with cable. |
| Configure | Identical Vertical Scale Mode | IdenticalVerticalScaleMode | Off, On | Select to enable or disable identical vertical scale mode for better consistency in vertical scale setting. |
| Configure | Include Crosstalk Derate (TP3_EQ) | IncludeCrosstalkDerate | Auto, True, False | Select to include or exclude crosstalk derate of the eye mask used in Eye Diagram Test (TP3_EQ). This configuration only applicable when the [Eye Mask Type (TP3_EQ)] configuration variable is set to "Dynamic". For [Auto], crosstalk derate will be included in the eye mask generation only if more than one lane selected (2 Lanes or 4 Lanes). For [True], crosstalk derate will be included in the eye mask generation regardless the lane setting. For [False], crosstalk derate will be excluded in the eye mask generation regardless the lane setting. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Inrush Test Count | InrushTestCount | (Accepts user-defined text), 1, 10 | Specify the memory depth used for Inrush test measurement |
| Configure | Inrush Test Low Pass Filter(in MHz) | InrushTestLowPassFilter | (Accepts user-defined text), 10, 50 | Specify the low pass filter to apply before making measurement. |
| Configure | Inrush Test Memory Points | InrushTestMemoryPoints | (Accepts user-defined text), 200000, 500000, 1000000, 2000000, 4000000 | Specify the memory depth used for Inrush test measurement |
| Configure | Inrush Test Rm Resistance (Ohm) | InrushTestRmResistance | (Accepts user-defined text), 0.05, 0.1, 1.0 | Specify the value of Rm for Inrush. |
| Configure | Inrush Test SamplingRate, GSa/s | InrushTestSamplingRate | (Accepts user-defined text), 1, 5, 10, 20, 40 | Specify the sampling rate used for Inrush test measurement |
| Configure | Inrush Test Trigger Level | InrushTestTriggerLevel | (Accepts user-defined text), 0.1, 0.25, 0.5, 1, 2 | Specify the initial trigger level to trigger on inrush signal. |
| Configure | Inrush Test Vc Scale/Div (V) | InrushTestVcScale | (Accepts user-defined text), 0.1, 0.2, 0.5, 1, 2, 5 | Specify the the initial vertical scale for Inrush Test Vc signal.(Available for CTS 1.1a only) |
| Configure | Inrush Test Vd Scale/Div (V) | InrushTestVdScale | (Accepts user-defined text), 0.1, 0.2, 1, 1, 2, 5 | Specify the the initial vertical scale for Inrush Test Vd signal. |
| Configure | Inrush Test Vs Scale/Div (V) | InrushTestVsScale | (Accepts user-defined text), 0.1, 0.2, 0.5, 1, 2, 5 | Specify the the initial vertical scale for Inrush Test Vs signal.(Available for CTS 1.2 only) |
| Configure | Inter Pair Skew Edges | InterPairSkewEdges | (Accepts user-defined text), 1, 10, 100, 200 | Set the number of edges measured in Inter Pair Skew Test. |
| Configure | Interpolation | Interpolation | ON, OFF | Specify whether to turn on or off Sin(x)/x interpolation. Turning on interpolation may cause more peak-to-peak jitter. |
| Configure | Intra Pair Skew Edges | IntraPairEdge | (Accepts user-defined text), 100, 1000 | Set the number of edges measured for Intra Pair Skew Test. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Intra Pair Skew Test Pattern | TransmitPattern | D10.2, PRBS 7 | Select the test pattern used for Intra Pair Skew Test. |
| Configure | Intra Pair Skew Trigger Pattern - Arbitrary Pattern | SkewTriggerPattern_ArbitraryPattern | (Accepts user-defined text), 10101 | Set the trigger pattern for intra pair skew measurement in Intra Pair Skew Test. |
| Configure | Intra Pair Skew Trigger Pattern - PRBS 7 | SkewTriggerPattern | 0000001, 000111, 0011, 01, 0101010, 10101, 010 | Set the trigger pattern for intra pair skew measurement in Intra Pair Skew Test. This configuration only applicable when the [Intra Pair Skew Test Pattern] configuration variable is set to PRBS 7. |
| Configure | Jitter Bit Error Rate Level | BER | E9, E10, E11, E12, E13, E14 | Set the Bit Error Rate (BER) level used for jitter separation measurements. |
| Configure | Jitter ISI Filter Lag | JitterISIFilterLag | (Accepts user-defined text), 2, 3, 4, 5, 6, 7, 8, 9, 10 | Set the ISI filter lag used for jitter separation measurements. This configuration only applicable when the [Jitter Pattern Length] configuration variable is set to [Arbitrary]. |
| Configure | Jitter ISI Filter Lead | JitterISIFilterLead | (Accepts user-defined text), -2, -3, -4, -5, -6, -7, -8, -9, -10 | Set the ISI filter lead used for jitter separation measurements. This configuration only applicable when the [Jitter Pattern Length] configuration variable is set to [Arbitrary]. |
| Configure | Jitter Pattern Pattern | JitterWaveformPattern | Auto, Periodic, Arbitrary | Select the waveform pattern length used for jitter separation measurements. For [Auto], [Periodic] pattern length will be used for non arbitrary pattern (PRBS 7, D10.2, HBR2CPAT and other repeating pattern) and [Arbitrary] pattern length will be used for Arbitrary Pattern. [Periodic] pattern length should be used on waveforms with repeating data patterns. [Arbitrary] pattern length should be used on waveforms with non-repeating patterns. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Jitter RJ (ps) | JitterRJ | (Accepts user-defined text), 0.2 | Set the RJ rms for jitter separation measurements when the [Jitter RJ Mode] config variable is set to [Specify RJ]. Unit: ps. |
| Configure | Jitter RJ Mode | JitterRJMode | Off, Remove Scope RJ (Auto), Remove Scope RJ, Specify RJ | Set the RJ mode used for jitter separation measurements to either [Off], [Remove Scope RJ (Auto)], [Remove Scope RJ] or [Specify RJ]. For [Remove Scope RJ (Auto)] mode, the calculated oscilloscope random jitter is removed from the reported RJ. This option cannot be selected until the scope jitter calibration has been run. |
| Configure | Jitter Scope RJ (ps) | JitterScopeRJ | (Accepts user-defined text), 0.2 | Set the scope RJ rms to be removed for jitter separation measurements when the [Jitter RJ Mode] configuration variable is set to [Remove Scope RJ]. Unit: ps. |
| Configure | Jitter Separation Edges | JitterSeparationEdge | (Accepts user-defined text), 10000, 50000, 1000000 | Set the number of edges measured for jitter separation measurement. |
| Configure | Level Threshold | LevelThreshold | Standard: 10%, 50%, 90%, Percent: 20%, 50%, 80%, Hysteresis: 0.10, Hysteresis: 0.05 | Select the threshold level used for serial pattern eye folding in voltage level measurements and pre-emphasis level measurement. |
| Configure | Lower Target | DFE_LowerTarget_HBR2 | (Accepts user-defined text), -1.00 | Set the low value to be used in the DFE equalizer for HBR2 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Manual]. Unit: V. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Lower Target | DFE_LowerTarget_HBR3 | (Accepts user-defined text), -1.00 | Set the low value to be used in the DFE equalizer for HBR3 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Manual]. Unit: V. |
| Configure | Mask Type | MaskType | TP2, TP3 | Select the type of mask to use for the Eye Diagram Test. (TP2 for Source; TP3 for Sink) |
| Configure | Max Tap Value | DFE_MaxTapValue_HBR2 | (Accepts user-defined text), 1.000 | Set the maximum tap value to be used for the optimization of the DFE equalizer for HBR2 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Auto]. |
| Configure | Max Tap Value | DFE_MaxTapValue_HBR3 | (Accepts user-defined text), 1.000 | Set the maximum tap value to be used for the optimization of the DFE equalizer for HBR3 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Auto]. |
| Configure | Maximum Memory Depth (M Points) | MaximumMemoryDepth | (Accepts user-defined text), 2.05, 8, 20, 30 | Set the maximum acquisition memory depth for the oscilloscope. Unit: M Points. |
| Configure | Maximum Retries | DMInterPairSkewMaxRetries | 20, 50, 100 | Set the number of re-tries for the Dual Mode Inter Pair Skew Test. |
| Configure | Maximum Retries | MaxRetries | 20, 50, 100 | Set the number of retries allowed in Inter Pair Skew Test. |
| Configure | Maximum Sampling Rate (GSa/s) | MaximumSRate | (Accepts user-defined text), 20, 40, 80 | Set the maximum acquisition sampling rate for the oscilloscope. Unit: GSa/s. |
| Configure | Memory Depth (Points) | MemoryDepth | 2050000, 5000000, 8000000 | Set the acquisition memory depth for the oscilloscope. Unit: Points. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Min Tap Value | DFE_MinTapValue_HBR2 | (Accepts user-defined text), 0 | Set the minimum tap value to be used for the optimization of the DFE equalizer for HBR2 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Auto]. |
| Configure | Min Tap Value | DFE_MinTapValue_HBR3 | (Accepts user-defined text), 0 | Set the minimum tap value to be used for the optimization of the DFE equalizer for HBR3 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Auto]. |
| Configure | Noise Bit Error Rate Level | Noise_BER | E9, E10, E11, E12, E13, E14 | Select the Bit Error Rate (BER) level used for noise separation measurements. |
| Configure | Noise ISI Filter Lag | Noise_ISIFilterLag | (Accepts user-defined text), 2, 3, 4, 5, 6, 7, 8, 9, 10 | Set the ISI filter lag used for noise separation measurements. This configuration only applicable when the [Noise Pattern Length] configuration variable is set to [Arbitrary]. |
| Configure | Noise ISI Filter Lead | Noise_ISIFilterLead | (Accepts user-defined text), -2, -3, -4, -5, -6, -7, -8, -9, -10 | Set the ISI filter lead used for noise separation measurements. This configuration only applicable when the [Noise Pattern Length] configuration variable is set to [Arbitrary]. |
| Configure | Noise Pattern Length | Noise_PatternLength | AUTO, ARBitrary | Select the waveform pattern length used for noise separation measurements. [Periodic] should be used on waveforms with repeating data patterns. [Arbitrary] should be used on waveforms with non-repeating patterns. |
| Configure | Non-PreEmphasis Level Edges | LevelEdge | (Accepts user-defined text), 100, 500, 1000 | Set the number of edges used for the Non-PreEmphasis Level Test. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Number of Taps | DFE_TapNumber_HBR2 | 1 | Set the number of taps to be used in the DFE equalizer for HBR2 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE State] configuration variable is set to [Enable]. |
| Configure | Number of Taps | DFE_TapNumber_HBR3 | 1 | Set the number of taps to be used in the DFE equalizer for HBR3 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE State] configuration variable is set to [Enable]. |
| Configure | PRBS Pattern Checker Rules | PRBSChecker | Strict, Loose | Select the rules applied for PRBS 7 pattern checker. For [Strict], test can only be proceed with correct PRBS 7 pattern. For [Loose], test can be proceed even without correct PRBS 7 pattern. |
| Configure | Pattern Decode Method | PattrenDecodeMethod | 1, 2 | Set the number of edges required when making the VTop and VBase measurements. |
| Configure | Pattern Search Method | DMInterPairSkewSearchMethod | 1, 2 | Define pattern search method for the Dual Mode Inter Pair Skew Test. For [1], the application will use Edge trigger. For [2], the application will use InfiniiScan Serial trigger. |
| Configure | Pattern Search Method | InterPairSkewSearchMethod | 1, 2 | Select the pattern search method used in Inter Pair Skew Test. For [Method 1], InfiniiScan Generic Serial Trigger and waveform data is used to decode for serial data pattern. For [Method 2], waveform data is used to decode for serial data pattern. |
| Configure | Pole 1 Frequency - HBR (MHz) | Pole1HBR | (Accepts user-defined text), 1350 | Set the Pole 1 Frequency when applying CTLE equalizer for HBR tests with cable. |
| Configure | Pole 1 Frequency - HBR No Cable (MHz) | Pole1HBRNoCable | (Accepts user-defined text), 1350 | Set the Pole 1 Frequency when applying CTLE equalizer for HBR tests without cable. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Pole 1 Frequency - HBR2 (MHz) | Pole1HBR2 | (Accepts user-defined text), 2700 | Set the Pole 1 Frequency when applying CTLE equalizer for HBR2 tests with cable. |
| Configure | Pole 1 Frequency - HBR2 No Cable (MHz) | Pole1HBR2NoCable | (Accepts user-defined text), 2700 | Set the Pole 1 Frequency when applying CTLE equalizer for HBR2 tests without cable. |
| Configure | Pole 1 Frequency - HBR25 (MHz) | Pole1HBR25 | (Accepts user-defined text), 2700, 3750, 5625 | Set the Pole 1 Frequency when applying CTLE equalizer for HBR25 tests with cable. |
| Configure | Pole 1 Frequency - HBR25 No Cable (MHz) | Pole1HBR25NoCable | (Accepts user-defined text), 2700, 3375, 3750, 5625 | Set the Pole 1 Frequency when applying CTLE equalizer for HBR25 tests without cable. |
| Configure | Pole 1 Frequency - HBR3 (MHz) | Pole1HBR3 | (Accepts user-defined text), 2700, 3033, 3750, 5625 | Set the Pole 1 Frequency when applying CTLE equalizer for HBR3 tests with cable. |
| Configure | Pole 1 Frequency - HBR3 No Cable (MHz) | Pole1HBR3NoCable | (Accepts user-defined text), 2700, 3033, 3750, 5625 | Set the Pole 1 Frequency when applying CTLE equalizer for HBR3 tests without cable. |
| Configure | Pole 1 Frequency - RBR (MHz) | Pole1RBR | (Accepts user-defined text), 700 | Set the Pole 1 Frequency when applying CTLE equalizer for RBR tests with cable. |
| Configure | Pole 2 Frequency - HBR (MHz) | Pole2HBR | (Accepts user-defined text), 2500 | Set the Pole 2 Frequency when applying CTLE equalizer for HBR tests with cable. |
| Configure | Pole 2 Frequency - HBR No Cable (MHz) | Pole2HBRNoCable | (Accepts user-defined text), 2500 | Set the Pole 2 Frequency when applying CTLE equalizer for HBR tests without cable. |
| Configure | Pole 2 Frequency - HBR2 (MHz) | Pole2HBR2 | (Accepts user-defined text), 3000, 4500 | Set the Pole 2 Frequency when applying CTLE equalizer for HBR2 tests with cable. |
| Configure | Pole 2 Frequency - HBR2 No Cable (MHz) | Pole2HBR2NoCable | (Accepts user-defined text), 3000, 4500 | Set the Pole 2 Frequency when applying CTLE equalizer for HBR2 tests without cable. |
| Configure | Pole 2 Frequency - HBR25 (MHz) | Pole2HBR25 | (Accepts user-defined text), 3000, 4500, 13500 | Set the Pole 2 Frequency when applying CTLE equalizer for HBR25 tests with cable. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Pole 2 Frequency - HBR25 No Cable (MHz) | Pole2HBR25NoCable | (Accepts user-defined text), 3000, 4500, 5625, 13500 | Set the Pole 2 Frequency when applying CTLE equalizer for HBR25 tests without cable. |
| Configure | Pole 2 Frequency - HBR3 (MHz) | Pole2HBR3 | (Accepts user-defined text), 3000, 4500, 6000, 13500 | Set the Pole 2 Frequency when applying CTLE equalizer for HBR3 tests with cable. |
| Configure | Pole 2 Frequency - HBR3 No Cable (MHz) | Pole2HBR3NoCable | (Accepts user-defined text), 3000, 4500, 6000, 13500 | Set the Pole 2 Frequency when applying CTLE equalizer for HBR3 tests without cable. |
| Configure | Pole 2 Frequency - RBR (MHz) | Pole2RBR | (Accepts user-defined text), 20000 | Set the Pole 2 Frequency when applying CTLE equalizer for RBR tests with cable. |
| Configure | Pole 3 Frequency - HBR2 (MHz) | Pole3HBR2 | (Accepts user-defined text), 5000, 13500 | Set the Pole 3 Frequency when applying CTLE equalizer for HBR2 tests with cable. |
| Configure | Pole 3 Frequency - HBR2 No Cable (MHz) | Pole3HBR2NoCable | (Accepts user-defined text), 5000, 13500 | Set the Pole 3 Frequency when applying CTLE equalizer for HBR2 tests without cable. |
| Configure | Pole 3 Frequency - HBR25 (MHz) | Pole3HBR25 | (Accepts user-defined text), 5000, 13500 | Set the Pole 3 Frequency when applying CTLE equalizer for HBR25 tests with cable. |
| Configure | Pole 3 Frequency - HBR25 No Cable (MHz) | Pole3HBR25NoCable | (Accepts user-defined text), 5000, 13500, 16875 | Set the Pole 3 Frequency when applying CTLE equalizer for HBR25 tests without cable. |
| Configure | PostCursor2 Edges | PostCursor2Edge | (Accepts user-defined text), 100, 500, 1000 | Set the number of edges measured for the PostCursor2 verification test. |
| Configure | Pre-Emphasis Level Edges | PreEmphasisEdge | (Accepts user-defined text), 100, 500, 1000 | Set the number of edges used for the Pre-Emphasis Level Test. |
| Configure | Probe Check (AUX Channel Tests) | AUXProbeCheck | Enable, Disable | Select to enable or disable probe check for AUX Channel Tests. |
| Configure | Probe Check (Dual Mode Tests) | DualModeProbeCheck | true, false | Select to enable or disable probe check for Dual Mode Tests. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Probe Check (Physical Layer Tests) | PhysicalLayerTestsProbeCheck | Enable, Disable | Select to enable or disable probe check for Physical Layer Tests. |
| Configure | Prompt For AUX Traffic | PromptForAUXTraffic | true, false | Enable/Disable pop up to initiate traffic. |
| Configure | Random Noise End Location (EZJIT Complete) | RandomNoise_EndLocation | (Accepts user-defined text), 0.5, 0.6, 0.7, 0.8, 0.9 | Set the end location for the random noise measurement in Eye Diagram Test (TP3_EQ). This configuration only applicable when the [Random Noise Measurement Method (TP3_EQ)] configuration variable is set to [EZJIT Complete]. Unit: UI. |
| Configure | Random Noise Measurement Method (TP3_EQ) | RandomNoiseMeasMethod | Histogram, EZJITComplete, SpecifyRN | Select the random noise measurement method in Eye Diagram Test (TP3_EQ). This configuration only applicable if the random jitter and noise derate included in the eye mask generation. For [Histogram] method, histogram is used to perform random noise measurement. For [EZJIT Complete], EZJIT Complete is used to perform random noise measurement. For [Specify RN], specified [Random Noise High] and [Random Noise Low] are used for random noise. |
| Configure | Random Noise Measurement Number (EZJIT Complete) | RandomNoise_MeasNumber | (Accepts user-defined text), 1, 5, 10, 15, 20 | Set the measurement number for the random noise measurement in Eye Diagram Test (TP3_EQ). If measurement number set to one, the random noise measurement will be performed at [Random Noise Start Location]. This configuration only applicable when the [Random Noise Measurement Method (TP3_EQ)] configuration variable is set to [EZJIT Complete]. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Random Noise NBit Start (VHigh) - Arbitrary Pattern | NBitStartRNoiseVHighArbitraryPattern | (Accepts user-defined text), 7, 10 | Set the bit location of the serial pattern search where the Arbitrary Pattern's High Level (VHigh) random noise measurement start performed in Eye Diagram Test (TP3_EQ). The start location must be within the serial pattern search specified in [Random Noise Serial Pattern (VHigh) - Arbitrary Pattern] configuration variable. |
| Configure | Random Noise NBit Start (VHigh) - HBR2CPAT | TP3_EQ_NBit_Start_Top | (Accepts user-defined text), 7, 10 | Set the bit location of the serial pattern search where the HBR2CPAT's High Level (VHigh) random noise measurement start performed in Eye Diagram Test (TP3_EQ). The start location must be within the serial pattern search specified in [Random Noise Serial Pattern (VHigh) - HBR2CPAT] configuration variable. |
| Configure | Random Noise NBit Start (VLow) - Arbitrary Pattern | NBitStartRNoiseVLowArbitraryPattern | (Accepts user-defined text), 4, 6, 7 | Set the bit location of the serial pattern search where the Arbitrary Pattern's Low Level (VLow) random noise measurement start performed in Eye Diagram Test (TP3_EQ). The start location must be within the serial pattern search specified in [Random Noise Serial Pattern (VLow) - Arbitrary Pattern] configuration variable. |
| Configure | Random Noise NBit Start (VLow) - HBR2CPAT | TP3_EQ_NBit_Start_Bottom | (Accepts user-defined text), 4, 6 | Set the bit location of the serial pattern search where the HBR2CPAT's Low Level (VLow) random noise measurement start performed in Eye Diagram Test (TP3_EQ). The start location must be within the serial pattern search specified in [Random Noise Serial Pattern (VLow) - HBR2CPAT] configuration variable. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Random Noise Serial Pattern (VHigh) - Arbitrary Pattern | SerialPatternRNoiseVHighArbitraryPattern | (Accepts user-defined text), 010001111, 010001111001, 1010110001110 | Set the serial pattern search for Arbitrary Pattern's High Level (VHigh) random noise measurement in Eye Diagram Test (TP3_EQ). This configuration support only 8 bits maximum when the [Random Noise Serial Pattern Eye Method] configuration variable is set to method [SDA Pattern Qualify]. If more than 8 bits is set by user, the first 8 bits will be used for serial pattern search. |
| Configure | Random Noise Serial Pattern (VHigh) - HBR2CPAT | TP3_EQ_SerialPatternTop | (Accepts user-defined text), 010001111001, 1010110001110 | Set the serial pattern search for HBR2CPAT's High Level (VHigh) random noise measurement in Eye Diagram Test (TP3_EQ). This configuration support only 8 bits maximum when the [Random Noise Serial Pattern Eye Method] configuration variable is set to method [SDA Pattern Qualify]. If more than 8 bits is set by user, the first 8 bits will be used for serial pattern search. |
| Configure | Random Noise Serial Pattern (VLow) - Arbitrary Pattern | SerialPatternRNoiseVLowArbitraryPattern | (Accepts user-defined text), 101110000, 0100001110101, 10001000101 | Set the serial pattern search for Arbitrary Pattern's Low Level (VLow) random noise measurement in Eye Diagram Test (TP3_EQ). This configuration support only 8 bits maximum when the [Random Noise Serial Pattern Eye Method] configuration variable is set to method [SDA Pattern Qualify]. If more than 8 bits is set by user, the first 8 bits will be used for serial pattern search. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Random Noise Serial Pattern (VLow) - HBR2CPAT | TP3_EQ_SerialPatternBottom | (Accepts user-defined text), 0100001110101, 10001000101 | Set the serial pattern search for HBR2CPAT's Low Level (VLow) random noise measurement in Eye Diagram Test (TP3_EQ). This configuration support only 8 bits maximum when the [Random Noise Serial Pattern Eye Method] configuration variable is set to method [SDA Pattern Qualify]. If more than 8 bits is set by user, the first 8 bits will be used for serial pattern search. |
| Configure | Random Noise Serial Pattern Eye Method | SerialPatternMethodRandomNoise | UDF Serial Eye, InfiniiScan Generic Serial, SDA Pattern Qualify | Select the serial pattern search method for High Level (VHigh) and Low Level (VLow) random noise measurement in Eye Diagram Test (TP3_EQ). |
| Configure | Random Noise Start Location (EZJIT Complete) | RandomNoise_StartLocation | (Accepts user-defined text), 0.1, 0.2, 0.3, 0.4, 0.5 | Set the start location for the random noise measurement in Eye Diagram Test (TP3_EQ). This configuration only applicable when the [Random Noise Measurement Method (TP3_EQ)] configuration variable is set to [EZJIT Complete]. Unit: UI. |
| Configure | Random Noise VHigh (mV) (Specify RN) | RandomNoise_High | (Accepts user-defined text), 0.2 | Set the High Level (VHigh) random noise (RN) rms in Eye Diagram Test (TP3_EQ). This configuration only applicable when the [Random Noise Measurement Method (TP3_EQ)] configuration variable is set to [Specify RN]. Unit: mV. |
| Configure | Random Noise VLow (mV) (Specify RN) | RandomNoise_Low | (Accepts user-defined text), 0.2 | Set the High Level (VLow) random noise (RN) rms in Eye Diagram Test (TP3_EQ). This configuration only applicable when the [Random Noise Measurement Method (TP3_EQ)] configuration variable is set to [Specify RN]. Unit: mV. |
| Configure | Rise-Fall MisMatch Edges | RiseFallMisMatchEdge | (Accepts user-defined text), 100, 1000 | Set the number of edges measured for the rise-fall mismatch test. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | SCPI Command Timeout | SCPITimeout | (Accepts user-defined text), 80000, 160000 | Define the timeout period for scpi command sent to scope in miliseconds. |
| Configure | SSC Acquisitions | SSCCount | (Accepts user-defined text), 10, 20 | Number of SSC cycle captured for SSC related tests. Max number is 25. |
| Configure | SSC Filter Frequency (MHz) | SSCFilterFrequency | (Accepts user-defined text), 1.98, 1.70 | Set the cutoff fequency of the low pass filter used for SSC related tests. Unit: MHz. This configuration only applicable when the [SSC Filter Type] config variable is set to [Second Order Butterwoth Filter]. |
| Configure | SSC Filter Type | SSCFilterType | Butterworth2, SmoothingFilter | Select the type of the low pass filter used for SSC related tests. |
| Configure | SSC Smoothing Points - HBR | SSCSmoothPointsHigh | (Accepts user-defined text), 61, 603, 701 | Set the number of smoothing points of the low pass filter used for SSC related tests for HBR. This configuration only applicable when the [SSC Filter Type] config variable is set to [Smoothing Filter]. |
| Configure | SSC Smoothing Points - HBR2 | SSCSmoothPointsHBR2 | (Accepts user-defined text), 120, 1206, 1402 | Set the number of smoothing points of the low pass filter used for SSC related tests for HBR2. This configuration only applicable when the [SSC Filter Type] config variable is set to [Smoothing Filter]. |
| Configure | SSC Smoothing Points - HBR25 | SSCSmoothPointsHBR25 | (Accepts user-defined text), 120, 1206, 1402 | Set the number of smoothing points of the low pass filter used for SSC related tests for HBR25. This configuration only applicable when the [SSC Filter Type] config variable is set to [Smoothing Filter]. |
| Configure | SSC Smoothing Points - HBR3 | SSCSmoothPointsHBR3 | (Accepts user-defined text), 120, 1206, 1402, 1810 | Set the number of smoothing points of the low pass filter used for SSC related tests for HBR3. This configuration only applicable when the [SSC Filter Type] config variable is set to [Smoothing Filter]. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | SSC Smoothing Points - RBR | SSCSmoothPointsLow | (Accepts user-defined text), 37, 361, 401 | Set the number of smoothing points of the low pass filter used for SSC related tests for RBR. This configuration only applicable when the [SSC Filter Type] config variable is set to [Smoothing Filter]. |
| Configure | Search Pattern | DMInterPairSkewSearchPattern | (Accepts user-defined text) | Define the search pattern for the Dual Mode Inter Pair Skew Test. For [Auto], the application will search for "00101010110010101011", "0010101010010101010", "11010101001101010100" or "11010101011101010101" pattern. |
| Configure | Serial Pattern Eye Method (Voltage Level) | SerialPatternEyeMethod | 1, 2 | Set the search method for serial pattern in High Level (VHigh) and Low Level (VLow) measurements. |
| Configure | Sink AUX Timeout(in us) | SinkAUXTimeout | (Accepts user-defined text), 300, 400 | Set the time out period sink need to reply. |
| Configure | Sink Data Rate Measurement | SinkDataRateMeasurement | (Accepts user-defined text), Data, Clock | Specify the method to measure data rate on waveform. User can specifically enter the Data rate by themselves. |
| Configure | Sink Equalizer | SinkEqualizer | 2, 5, 10, Manual, Off | Select the equalization to be use for the Sink Tests. For [User Defined File], user need to provide custom user defined Equalization Coefficient file. |
| Configure | Sink Mask | SinkMask | TP2, TP3 | Selects the type of mask to use for the eye test. (TP2 for Source; TP3 for Sink) |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Sink Mask Movement | SinkMaskMovement | Fixed, FindPass, FindMargin | This field contains 3 options. (1) Find Passing Mode will automatically search +/-0.5UI horizontally until no violation occurs, (2) Fixed Mask will not be moving, it only report Pass or Fail upon test, (3) Find Biggest Margin will search +/-0.5UI horizontally to find the maximum margin of non-violation mask. |
| Configure | Source AUX Timeout(in us) | SourceAUXTimeout | (Accepts user-defined text), 300, 400 | Set the time out period source need to wait for sink reply before transmitting the next AUX command. |
| Configure | Source Test Offline Mode | SourceTestOfflineMode | True, False | Enable offline mode for Source tests. |
| Configure | Tap 1 Value | DFE_Tap1Value_HBR2 | (Accepts user-defined text), 0.005 | Set the tap 1 value to be used in the DFE equalizer for HBR2 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Manual]. |
| Configure | Tap 1 Value | DFE_Tap1Value_HBR3 | (Accepts user-defined text), 0.005 | Set the tap 1 value to be used in the DFE equalizer for HBR3 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Manual]. |
| Configure | Test Pattern | InterPairSkewTestPattern | PRBS 7, Arbitrary Pattern | Select the test pattern used in Inter Pair Skew Test. |
| Configure | Test Plan Check Mode | TestPlanCheckerMode | Off, On | Select to turn on or off test plan check mode to simulate actual test plan run flow without actual tests being run. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Test Plan Check Mode Option | TestPlanCheckModeOption | TurnOnAutomation, ManualInspection, GenerateReport | Select the option for the test plan check mode. This configuration only applicable when the [Test Plan Check Mode] configuration variable is turned on. [Turn on Automation] allows you to verify signal changed through automation by visual inspection for each test plan permutation (if automation is enabled). [Manual Inspection] allows you to run through test plans with DUT settings message being popped up. [Generate Report] allows you to run through test plans without message being popped up and generate report that shows all test states at the end. |
| Configure | Threshold | MisMatchThreshold | 90/10, 85/15, 80/20, 75/25, 70/30 | Set the threshold used to make a rise time or fall time mismatch test measurement. |
| Configure | Threshold | Threshold | 90/10, 85/15, 80/20, 75/25, 70/30 | Specify the threshold for transition time test in percentage. |
| Configure | Threshold Mode | ThresholdMode | Auto, Min Max, Top Base, Absolute Zero | Select the threshold mode to either by VMax/VMin, VTop/VBase or threshold at absolute 0. For [Auto], [Min Max] threshold mode is used for RBR and HBR while [Absolute Zero] threshold mode is used for HBR2 and HBR3. |
| Configure | Transition Edges | TransitionEdge | (Accepts user-defined text), 100, 500, 1000 | Set the number of edges measured for the transition tests. |
| Configure | Transition VH Pattern | TransitionVHPattern | 01111, 0111, 011, 0011 | Set the pattern for rise time measurement to either 01111, 0111 or 011. The default setting is 0111. |
| Configure | Transition VL Pattern | TransitionVLPattern | 10000, 1000, 100, 1100 | Set the pattern for fall time measurement to either 10000, 1000 or 100. The default setting is 1000. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Trigger Pattern | DMIntraPairSkewTriggerPattern | 0000001, 000111, 0011, 01, 0101010, 10101, 010 | Define the trigger pattern for the Dual Mode Intra Pair Skew Test. |
| Configure | Trigger Pattern - Arbitrary Pattern | InterPairSkewTriggerPattern_ArbitraryPattern | (Accepts user-defined text), 0000001, 0000111 | Set the serial pattern trigger for Arbitrary Pattern used in Inter Pair Skew Test. |
| Configure | Trigger Pattern - PRBS 7 | AdditionalTriggerPattern | (Accepts user-defined text), 0000001, 0000111 | Set the serial pattern trigger for PRBS 7 used in Inter Pair Skew Test. |
| Configure | Turn Off CTLE | TurnOffCTLE | True, False | Select whether to turn off the CTLE when running tests at TP3_EQ test point. |
| Configure | Upper Target | DFE_UpperTarget_HBR2 | (Accepts user-defined text), 1.00 | Set the upper value to be used in the DFE equalizer for HBR2 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Manual]. Unit: V. |
| Configure | Upper Target | DFE_UpperTarget_HBR3 | (Accepts user-defined text), 1.00 | Set the upper value to be used in the DFE equalizer for HBR3 when running tests at TP3_EQ test point. This configuration only applicable when the [DFE Setup] configuration variable is set to [Manual]. Unit: V. |
| Configure | VH Non Transition Bit Location - Arbitrary Pattern | VHNonTransBitLocation_ArbitraryPattern | (Accepts user-defined text), 2.5, 5.5 | Set the pattern bit location used for High Level (VHigh) non transition measurement in Non-PreEmphasis Level Test and Pre-Emphasis Level Test. Use comma separated location value, such as [x,y]. Where x is the start location, y is the end location. |
| Configure | VH Pattern | VHPattern | 10111111, 1011111, 101111 | Set the pattern for VH measurement to either 1111110, 11110, 1110 or 110. The default setting is 1111110. Maximum 8 bits only. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | VH Pattern - Arbitrary Pattern | VHPattern_ArbitraryPattern | (Accepts user-defined text), 011111 | Set the serial pattern search for High Level (VHigh) measurement in Non-PreEmphasis Level Test and Pre-Emphasis Level Test. |
| Configure | VH Transition Bit Location - Arbitrary Pattern | VHTransBitLocation_ArbitraryPattern | (Accepts user-defined text), 1.4, 1.7 | Set the pattern bit location used for High Level (VHigh) transition measurement in Non-PreEmphasis Level Test and Pre-Emphasis Level Test. Use comma separated location value, such as [x,y]. Where x is the start location, y is the end location. |
| Configure | VL Non Transition Bit Location - Arbitrary Pattern | VLNonTransBitLocation_ArbitraryPattern | (Accepts user-defined text), 2.5, 5.5 | Set the pattern bit location used for Low Level (VLow) non transition measurement in Non-PreEmphasis Level Test and Pre-Emphasis Level Test. Use comma separated location value, such as [x,y]. Where x is the start location, y is the end location. |
| Configure | VL Pattern | VLPattern | 1010000, 101000 | Set the pattern for VL measurement to either 0000001, 00001, 0001 or 001. The default setting is 0000001. Maximum 8 bits only. |
| Configure | VL Pattern - Arbitrary Pattern | VLPattern_ArbitraryPattern | (Accepts user-defined text), 100000 | Set the serial pattern search for Low Level (VLow) measurement in Non-PreEmphasis Level Test and Pre-Emphasis Level Test. |
| Configure | VL Transition Bit Location - Arbitrary Pattern | VLTransBitLocation_ArbitraryPattern | (Accepts user-defined text), 1.4, 1.7 | Set the pattern bit location used for Low Level (VLow) transition measurement in Non-PreEmphasis Level Test and Pre-Emphasis Level Test. Use comma separated location value, such as [x,y]. Where x is the start location, y is the end location. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | VSwing Edges | VSwingCount | (Accepts user-defined text), 20, 50, 100 | Set the number of Edges used when performing the Vswing measurement. The Vswing value is used to ensure that the waveform is displayed as large as possible in the waveform viewing area. Increasing this value increases the test run time but improves the repeatability of the measurement. |
| Configure | VTop & VBase Edges | VTopVBaseEdge | (Accepts user-defined text), 10, 50, 100, 500, 1000 | Set the number of edges required when making the VTop and VBase measurements. |
| Configure | Zero Frequency - HBR (MHz) | ZeroFrequencyHBR | (Accepts user-defined text), 450, 540, 650, 700, 725 | Set the Zero Frequency when applying CTLE equalizer for HBR tests with cable. |
| Configure | Zero Frequency - HBR No Cable (MHz) | ZeroFrequencyHBRNoCable | (Accepts user-defined text), 450, 540, 650, 700, 725 | Set the Zero Frequency when applying CTLE equalizer for HBR tests without cable. |
| Configure | Zero Frequency - HBR2 MHz | ZeroFrequencyHBR2 | (Accepts user-defined text), 450, 540, 640 | Set the Zero Frequency when applying CTLE equalizer for HBR2 tests with cable. |
| Configure | Zero Frequency - HBR2 No Cable (MHz) | ZeroFrequencyHBR2NoCable | (Accepts user-defined text), 450, 540, 640 | Set the Zero Frequency when applying CTLE equalizer for HBR2 tests without cable. |
| Configure | Zero Frequency - HBR25 (MHz) | ZeroFrequencyHBR25 | (Accepts user-defined text), 450, 540, 640, 1000 | Set the Zero Frequency when applying CTLE equalizer for HBR25 tests with cable. |
| Configure | Zero Frequency - HBR25 No Cable (MHz) | ZeroFrequencyHBR25NoCable | (Accepts user-defined text), 450, 540, 640, 1000, 2000 | Set the Zero Frequency when applying CTLE equalizer for HBR25 tests without cable. |
| Configure | Zero Frequency - HBR3 (MHz) | ZeroFrequencyHBR3 | (Accepts user-defined text), 450, 505, 540, 640, 1000 | Set the Zero Frequency when applying CTLE equalizer for HBR3 tests with cable. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Configure | Zero Frequency - HBR3 No Cable (MHz) | ZeroFrequencyHBR3NoCable | (Accepts user-defined text), 450, 505, 540, 640, 1000 | Set the Zero Frequency when applying CTLE equalizer for HBR3 tests without cable. |
| Configure | Zero Frequency - RBR (MHz) | ZeroFrequencyRBR | (Accepts user-defined text), 450, 540, 650, 700, 725 | Set the Zero Frequency when applying CTLE equalizer for RBR tests with cable. |
| Configure | eDP TP3_EQ Test Pattern Override | eDPTP3_EQ_TestPattern | (Accepts user-defined text), PRBS 7, D10.2, HBR2CPAT | Set the test pattern used for TP3_EQ tests for eDP tests. |
| Run Tests | Event | RunEvent | (None), Fail, Margin < N, Pass | Names of events that can be used with the StoreMode=Event or RunUntil RunEventAction options |
| Run Tests | RunEvent=Margin < N: Minimum required margin % | RunEvent_Margin < N_MinPercent | Any integer in range: 0 <= value <= 100 | Specify N using the 'Minimum required margin %' control. |
| Set Up | 1.62 Gbps | 1.62 Gbps | 0.0, 1.0 | Enable/Disable bit rate 1.62 Gbps support. |
| Set Up | 2.7 Gbps | 2.7 Gbps | 0.0, 1.0 | Enable/Disable bit rate 2.7 Gbps support. |
| Set Up | 25Mhz < Dual Mode Clock < 165Mhz | DMPixelClockV100 | 0.0, 1.0 | Set when Dual Mode Clock Frequency is within 25Mhz and 165Mhz |
| Set Up | 3.24 Gbps | 3.24 Gbps | 0.0, 1.0 | Enable/Disable bit rate 3.24 Gbps support. |
| Set Up | 5.4 Gbps | 5.4 Gbps | 0.0, 1.0 | Enable/Disable bit rate 5.4 Gbps support. |
| Set Up | 6.75 Gbps | 6.75 Gbps | 0.0, 1.0 | Enable/Disable bit rate 6.75 Gbps support. |
| Set Up | 8.1 Gbps | 8.1 Gbps | 0.0, 1.0 | Enable/Disable bit rate 8.1 Gbps support. |
| Set Up | AUX Reference DUT | ReferenceDUTConnectivity | Yes, No | Define if a reference Source/DUT is attached during testing. |
| Set Up | AUX Waveform Type | AUXWaveformType | AUX Channel Tests, AUX Calibration Tests, AUX Sensitivity Tests | Define whether the waveform captured is for AUX Channel Tests or AUX Sensitivity Tests. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Set Up | Automation Configuration | AutomationConfig | (Accepts user-defined text) | Configure the IP address and Port Number of Keysight W2642A if Keysight W2642A is chosen for DisplayPort Test Controller. Please set the configuration in following format: 'IP=XXX.XXX.XXX.XXX / Port=XXXXX'. |
| Set Up | Automation Driver | AutomatedType | TCPIP, UnigrafDPTC | Select the automation driver used for automation. |
| Set Up | Automation Script File | perTxtScript | (Accepts user-defined text) | Select the script file for automation. This script file only applicable if script mode is enabled. |
| Set Up | Aux Acqusition Number: | perTxtAcquisitionNo | (Accepts user-defined text) | Number of waveform saved for offline processing. |
| Set Up | Aux Connection Type | AUXConnectionType | Differential Probe, Single-Ended | Define the connection type of AUX tests. |
| Set Up | Aux DUT Type | AUXDUTType | Source, Sink | Define the type of device being tested for AUX test suites. |
| Set Up | Aux Hold Off Time | perTxtHoldOffTime | (Accepts user-defined text) | Set the hold off time for AUX test acquisition |
| Set Up | Aux Lane | AuxLane | Channel 1, Channel 2, Channel 3, Channel 4 | Set the channel used for differential Aux test signal. |
| Set Up | Aux Lower Threshold | perTxtAuxLowerThreshold | (Accepts user-defined text) | Define the lower threshold of AUX signals. |
| Set Up | Aux Offset | perTextOffset | (Accepts user-defined text) | Set the offset in mV for Aux Tests. |
| Set Up | Aux Single-Ended Channel Scale | AUXSEChannelScale | (Accepts user-defined text) | Set the channel scale for each single-ended AUX lane channel. AUX+ and AUX- share the same scale. |
| Set Up | Aux Test Offline Mode | pcbOfflineMode | 0.0, 1.0 | Enable offline processing for Aux tests. |
| Set Up | Aux Trigger Level | perTxtTriggerLevel | (Accepts user-defined text) | Set the trigger level for Aux tests. |
| Set Up | Aux Upper Threshold | perTxtAuxUpperThreshold | (Accepts user-defined text) | Define the upper threshold of AUX signals. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Set Up | Aux Vertical Scale | perTxtVerticalScale | (Accepts user-defined text) | Set the vertical scale in mV for Aux Tests. |
| Set Up | Comments | Comments | (Accepts user-defined text) | Enter additional comments. |
| Set Up | Connection Type | ConnectionType | Differential Probe, Single-Ended (A-B) | Select the connection type to either Differential Probe connection or Single-Ended (A-B) connection. |
| Set Up | DPTC Mode | DPTCMode | Standard DP Test Mode, Link Training Mode | DIsplayPort AUX Channel Controller mode. |
| Set Up | DUT Connectivity(Sensitivity Calibration) | DUTConnectivity | Yes, No | Define if a DUT is used to cause traffic when calibrating aux channel prior to Aux sensitivity test. |
| Set Up | Data Pattern | DataPattern | Standard DP Pattern, Arbitrary Pattern | Select the data pattern to either Standard DP Pattern or Arbitrary Pattern. |
| Set Up | De-Embed Fixture | DeEmbedFixture | 0.0, 1.0 | Enable fixture de-embedding. |
| Set Up | Device ID | DeviceID | (Accepts user-defined text) | Device Identifier. |
| Set Up | Device Type | DUTType | Source, Sink, Cable | Select the device type to either Source, Sink or Cable. |
| Set Up | Dual Mode Clk | DMClk | Channel 1, Channel 2, Channel 3, Channel 4 | Set the channel used for Dual Mode Clk when using differential Probes |
| Set Up | Dual Mode Clock >= 165Mhz | DMPixelClockV130 | 0.0, 1.0 | Set when Dual Mode Clock Frequency is above 165Mhz |
| Set Up | Dual Mode Connection Type | DMConnectionType | (Accepts user-defined text), Single-Ended, Differential Probe | Define the connection type in Dual Mode Displayport. |
| Set Up | Dual Mode D0 | DMD0 | Channel 1, Channel 2, Channel 3, Channel 4 | Set the channel used for Dual Mode D0 when using differential Probes |
| Set Up | Dual Mode D1 | DMD1 | Channel 1, Channel 2, Channel 4, Channel 3 | Set the channel used for Dual Mode D1 when using differential Probes |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Set Up | Dual Mode D2 | DMD2 | Channel 1, Channel 2, Channel 3, Channel 4 | Set the channel used for Dual Mode D2 when using differential Probes |
| Set Up | Dual Mode Lane A for Differential probe connection. | DMLaneADiff | Clk | Select the corresponding Dual Mode Lane No when lane setting is set to 2 connections. |
| Set Up | Dual Mode Lane B for Differential probe connection. | DMLaneBDiff | D0, D1, D2 | Select the corresponding Dual Mode Lane No when lane setting is set to 2 connections. |
| Set Up | Dual Mode No of Channels | DMConnectionChannels | 2 Connections, 4 Connections | Define the number of channel connections for Dual Mode Displayport. |
| Set Up | Dual Mode Single Ended Lane A | DMLaneASMA | (Accepts user-defined text), Clk | Select the corresponding Lane No Dual Mode connection type is Singled-Ended. |
| Set Up | Dual Mode Single Ended Lane B | DMLaneBSMA | (Accepts user-defined text), D0, D1, D2 | Select the corresponding Lane No Dual Mode connection type is Singled-Ended. |
| Set Up | Enable DPTC Automation. | pcbEnableAutomation | 0.0, 1.0 | Check this to enable DPTC automation. |
| Set Up | Fixture Type | FixtureType | (Accepts user-defined text), Wilder Tech DP-TPA-P/ BIT-DP-PTF-0003/ Tek TF-DP-TPA-P, Wilder Tech mDP-TPA-P/ BIT-mDP-PTF-000 1, Keysight W2641B, Luxshare ICT mDP Plug, Other | Choose the fixture type. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Set Up | HBR2 Preferred Level Setting with Cable | PreferredLevelPreEmphasis | Swing 2/ Pre-emphasis 0/ PC2 0, Swing 2/ Pre-emphasis 1/ PC2 0, Swing 1/ Pre-emphasis 0/ PC2 0, Swing 1/ Pre-emphasis 1/ PC2 0, Swing 1/ Pre-emphasis 2/ PC2 0, Swing 0/ Pre-emphasis 0/ PC2 0, Swing 0/ Pre-emphasis 1/ PC2 0, Swing 0/ Pre-emphasis 2/ PC2 0 | Select the preferred voltage level, pre-emphasis level and post-cursor 2 level for HBR2 tests with cable. |
| Set Up | HBR2 Preferred Level Setting with No Cable | PreferredNoCableLevelPreEmphasis | Swing 2/ Pre-emphasis 0/ PC2 0, Swing 2/ Pre-emphasis 1/ PC2 0, Swing 1/ Pre-emphasis 0/ PC2 0, Swing 1/ Pre-emphasis 1/ PC2 0, Swing 1/ Pre-emphasis 2/ PC2 0, Swing 0/ Pre-emphasis 0/ PC2 0, Swing 0/ Pre-emphasis 1/ PC2 0, Swing 0/ Pre-emphasis 2/ PC2 0 | Select the preferred voltage level, pre-emphasis level and post-cursor 2 level for HBR2 tests with no cable. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Set Up | HBR3 Preferred Level Setting with Cable | HBR3PreferredLevelPreEmphasis | Swing 2/ Pre-emphasis 0/ PC2 0, Swing 2/ Pre-emphasis 1/ PC2 0, Swing 1/ Pre-emphasis 0/ PC2 0, Swing 1/ Pre-emphasis 1/ PC2 0, Swing 1/ Pre-emphasis 2/ PC2 0, Swing 0/ Pre-emphasis 0/ PC2 0, Swing 0/ Pre-emphasis 1/ PC2 0, Swing 0/ Pre-emphasis 2/ PC2 0 | Select the preferred voltage level, pre-emphasis level and post-cursor 2 level for HBR3 tests with cable. |
| Set Up | HBR3 Preferred Level Setting with No Cable | HBR3PreferredNoCableLevel PreEmphasis | Swing 2/ Pre-emphasis 0/ PC2 0, Swing 2/ Pre-emphasis 1/ PC2 0, Swing 1/ Pre-emphasis 0/ PC2 0, Swing 1/ Pre-emphasis 1/ PC2 0, Swing 1/ Pre-emphasis 2/ PC2 0, Swing 0/ Pre-emphasis 0/ PC2 0, Swing 0/ Pre-emphasis 1/ PC2 0, Swing 0/ Pre-emphasis 2/ PC2 0 | Select the preferred voltage level, pre-emphasis level and post-cursor 2 level for HBR3 tests with no cable. |
| Set Up | Lane | Lane | 1 Lane, 2 Lanes, 4 Lanes | Select the number of lane(s) supported by the DUT. |
| Set Up | Lane 0 | Lane0 | (Accepts user-defined text), Channel 1, Channel 2, Channel 3, Channel 4 | Select the channel used for Lane 0 when using Differential Probe Connection. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Set Up | Lane 1 | Lane1 | (Accepts user-defined text), Channel 1, Channel 2, Channel 3, Channel 4 | Select the channel used for Lane 1 when using Differential Probe Connection. |
| Set Up | Lane 2 | Lane2 | (Accepts user-defined text), Channel 1, Channel 2, Channel 3, Channel 4 | Select the channel used for Lane 2 when using Differential Probe Connection. |
| Set Up | Lane 3 | Lane3 | (Accepts user-defined text), Channel 1, Channel 2, Channel 3, Channel 4 | Select the channel used for Lane 3 when using Differential Probe Connection. |
| Set Up | Lane A (2 Lanes) | LaneA_4 | (Accepts user-defined text), Lane 0, Lane 1 | Select the corresponding Lane No when lane setting is set to 2 Lanes. |
| Set Up | Lane A (4 Lanes) | LaneA | (Accepts user-defined text), Lane 0, Lane 1, Lane 2, Lane 3 | Select the corresponding lane number when Lane Setting is set to 4 Lanes. |
| Set Up | Lane B (4 Lanes) | LaneB | (Accepts user-defined text), Lane 0, Lane 1, Lane 2, Lane 3 | Select the corresponding lane number when Lane Setting is set to 4 Lanes. |
| Set Up | Lane0Minus Skew | Lane0MinusSkew | (Accepts user-defined text) | Set the fixture skew value for Lane0 Minus. |
| Set Up | Lane0Plus Skew | Lane0PlusSkew | (Accepts user-defined text) | Set the fixture skew value for Lane0 Plus. |
| Set Up | Lane1Minus Skew | Lane1MinusSkew | (Accepts user-defined text) | Set the fixture skew value for Lane0 Minus. |
| Set Up | Lane1Plus Skew | Lane1PlusSkew | (Accepts user-defined text) | Set the fixture skew value for Lane1 Plus. |
| Set Up | Lane2Minus Skew | Lane2MinusSkew | (Accepts user-defined text) | Set the fixture skew value for Lane2 Minus. |
| Set Up | Lane2Plus Skew | Lane2PlusSkew | (Accepts user-defined text) | Set the fixture skew value for Lane2 Plus. |
| Set Up | Lane3Minus Skew | Lane3MinusSkew | (Accepts user-defined text) | Set the fixture skew value for Lane3 Minus. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Set Up | Lane3Plus Skew | Lane3PlusSkew | (Accepts user-defined text) | Set the fixture skew value for Lane3 Plus. |
| Set Up | Last Test ID | LastTestIDRun | (Accepts user-defined text) | Retrieve Test ID of last test run. |
| Set Up | Level Swing 0 | Swing 0 | 0.0, 1.0 | Enable/Disable Voltage Level Swing 0 support. |
| Set Up | Level Swing 1 | Swing 1 | 0.0, 1.0 | Enable/Disable Voltage Level Swing 1 support. |
| Set Up | Level Swing 2 | Swing 2 | 0.0, 1.0 | Enable/Disable Voltage Level Swing 2 support. |
| Set Up | Level Swing 3 | Swing 3 | 0.0, 1.0 | Enable/Disable Voltage Level Swing 3 support. |
| Set Up | N7015A Cable | N7015ACable | Without Cable, With Cable | Select whether the N7015A fixture include additioanl cable. |
| Set Up | No of Channels | comboChannels | 1 Channel | Select the number of channels to be used. |
| Set Up | No of Channels(Differential Probe Connections) | ConnectionSetting | (Accepts user-defined text), 1 Channel, 2 Channels, 4 Channels | Set the number of channels to be used.(Differential probe connection) Set the number of channels to be used.(Differential probe connection) |
| Set Up | No of Channels(Single-Ended Connections) | ConnectionSettingSING | (Accepts user-defined text), 2 Channels, 4 Channels | Set the number of channels to be used(Single-Ended Connection). |
| Set Up | Offline Mode Enable | pcbPhysicalLayerOfflineMode | 0.0, 1.0 | Enable or disable offline mode for Physical Layer Tests. |
| Set Up | Offline Step | OfflineStep | Acquire, Run | Set the offlien step to either "Acquire" or "Run". |
| Set Up | Operator ID | OperatorID | (Accepts user-defined text) | Operator Identifier. |
| Set Up | Post Cursor2 Level 0 | Level 0 | 0.0, 1.0 | Enable/Disable Post Cursor 2 Level 0 support. |
| Set Up | Post Cursor2 Level 1 | Level 1 | 0.0, 1.0 | Enable/Disable Post Cursor 2 Level 1 support. |
| Set Up | Post Cursor2 Level 2 | Level 2 | 0.0, 1.0 | Enable/Disable Post Cursor 2 Level 2 support. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Set Up | Post Cursor2 Level 3 | Level 3 | 0.0, 1.0 | Enable/Disable Post Cursor 2 Level 3 support. |
| Set Up | Pre-emphasis 0 | Pre-emphasis 0 | 0.0, 1.0 | Enable/Disable Pre-emphasis Level 0 support. |
| Set Up | Pre-emphasis 1 | Pre-emphasis 1 | 0.0, 1.0 | Enable/Disable Pre-emphasis Level 1 support. |
| Set Up | Pre-emphasis 2 | Pre-emphasis 2 | 0.0, 1.0 | Enable/Disable Pre-emphasis Level 2 support. |
| Set Up | Pre-emphasis 3 | Pre-emphasis 3 | 0.0, 1.0 | Enable/Disable Pre-emphasis Level 3 support. |
| Set Up | Probe+ Offset | ProbePlusOffset | (Accepts user-defined text) | Set the probe offset for AUX+ channel |
| Set Up | Probe- Offset | ProbeMinusOffset | (Accepts user-defined text) | Set the probe offset for AUX- channel. |
| Set Up | Project ID | ProjectID | (Accepts user-defined text) | Project Identifier. |
| Set Up | SSC | SSCOption | Disabled, Enabled | Select the SSC capability supported by the DUT. |
| Set Up | Show Normative Tests Only | HideInformative | 0.0, 1.0 | Show Normative Tests Only |
| Set Up | Single Ended Lane A(2 Lanes) | LaneASMA_4 | (Accepts user-defined text), Lane 0, Lane 1 | Select the corresponding Lane No when lane setting is set to 2 Lanes and connection type is Singled-Ended. |
| Set Up | Single Ended Lane A(4 Lanes) | LaneASMA | (Accepts user-defined text), Lane 0, Lane 1, Lane 2, Lane 3 | Select the corresponding Lane No when lane setting is set to 4 Lanes and connection type is Singled-Ended |
| Set Up | Single Ended Lane B(4 Lanes) | LaneBSMA | (Accepts user-defined text), Lane 0, Lane 1, Lane 2, Lane 3 | Select the corresponding Lane No when lane setting is set to 4 Lanes and connection type is Singled-Ended. |
| Set Up | Single Ended Lane0Minus | DMD0Minus | Channel 4, Channel 3 | Set the channel used for Lane 0- when using Single-Ended Connection. |
| Set Up | Single Ended Lane0Minus | Lane0Minus | (Accepts user-defined text), Channel 3, Channel 4 | Set the channel used for Lane 0- when using Single-Ended Connection. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Set Up | Single Ended Lane0Plus | DMD0Plus | Channel 1, Channel 2 | Set the channel used for Lane 0+ when using Single-Ended Connection. |
| Set Up | Single Ended Lane0Plus | Lane0Plus | (Accepts user-defined text), Channel 1, Channel 2 | Set the channel used for Lane 0+ when using Single-Ended Connection. |
| Set Up | Single Ended Lane1Minus | DMD1Minus | Channel 4, Channel 3 | Set the channel used for Lane 1- when using Single-Ended Connection. |
| Set Up | Single Ended Lane1Minus | Lane1Minus | (Accepts user-defined text), Channel 3, Channel 4 | Set the channel used for Lane 1- when using Single-Ended Connection. |
| Set Up | Single Ended Lane1Plus | DMD1Plus | Channel 2, Channel 1 | Set the channel used for Lane 1+ when using Single-Ended Connection. |
| Set Up | Single Ended Lane1Plus | Lane1Plus | (Accepts user-defined text), Channel 1, Channel 2 | Set the channel used for Lane 1+ when using Single-Ended Connection. |
| Set Up | Single Ended Lane2Minus | DMD2Minus | Channel 4, Channel 3 | Set the channel used for Lane 2- when using Single-Ended Connection. |
| Set Up | Single Ended Lane2Minus | Lane2Minus | (Accepts user-defined text), Channel 3, Channel 4 | Set the channel used for Lane 2- when using Single-Ended Connection. |
| Set Up | Single Ended Lane2Plus | DMD2Plus | Channel 2, Channel 1 | Set the channel used for Lane 2+ when using Single-Ended Connection. |
| Set Up | Single Ended Lane2Plus | Lane2Plus | (Accepts user-defined text), Channel 1, Channel 2 | Set the channel used for Lane 2+ when using Single-Ended Connection. |
| Set Up | Single Ended Lane3Minus | DMClkMinus | Channel 3, Channel 4 | Set the channel used for Lane 3- when using Single-Ended Connection. |

**Table 2** Configuration Variables and Values (continued)

| GUI Location | Label | Variable | Values | Description |
|---|---|---|---|---|
| Set Up | Single Ended Lane3Minus | Lane3Minus | (Accepts user-defined text), Channel 3, Channel 4 | Set the channel used for Lane 3- when using Single-Ended Connection. |
| Set Up | Single Ended Lane3Plus | DMClkPlus | Channel 1, Channel 2 | Set the channel used for Lane 3+ when using Single-Ended Connection. |
| Set Up | Single Ended Lane3Plus | Lane3Plus | (Accepts user-defined text), Channel 1, Channel 2 | Set the channel used for Lane 3+ when using Single-Ended Connection. |
| Set Up | Switch Matrix Enable | SwitchMatrixEnable | 0.0, 1.0 | Enable or disable switch matrix. |
| Set Up | Test Layer | TestLayer | Physical Layer Tests, AUX PHY and Inrush Tests, Dual Mode Tests | |
| Set Up | Test Mode | TestMode | Compliance Conditions Only, User Defined Conditions, Targeted Characterization Testing | Three test modes are allowed for DisplayPort (Compliance Conditions Only, User Defined Conditions or Targeted Characterization Testing mode). |
| Set Up | Test Setup Complete | TestSetupComplete | 0.0, 1.0 | Test setup complete status. |
| Set Up | Test Specification | DPCTSVersion | 1.2b, 1.4, MyDP 1.0, MyDP HBR25 | Select the test specification. |
| Set Up | Test Type | TestType | Differential Tests, Single-Ended Tests, Both | Select the test type to either Differential Tests, Single-Ended Tests or Both if the device type is Source. |
| Set Up | Unhide Offline | pcbUnHideOffline | 0.0, 1.0 | Display offline GUI. |
| Set Up | Update Controls | UpdateList | 0.0, 1.0 | Set this to 1.0 to trigger an event to update all controls and settings. |

# 3 Test Names and IDs

The following table shows the mapping between each test's numeric ID and name. The numeric ID is required by various remote interface methods.

- Name – The name of the test as it appears on the user interface **Select Tests** tab.
- Test ID – The number to use with the RunTests method.
- Description – The description of the test as it appears on the user interface **Select Tests** tab.

For example, if the graphical user interface displays this tree in the **Select Tests** tab:

- All Tests
  - Rise Time
  - Fall Time

then you would expect to see something like this in the table below:

**Table 3** Example Test Names and IDs

| Name | Test ID | Description |
|---|---|---|
| Fall Time | 110 | Measures clock fall time. |
| Rise Time | 100 | Measures clock rise time. |

and you would run these tests remotely using:

```
ARSL syntax
-----------
arsl -a ipaddress -c "SelectedTests '100,110'"
arsl -a ipaddress -c "Run"

C# syntax
---------
remoteAte.SelectedTests = new int[]{100,110};
remoteAte.Run();
```

Here are the actual Test names and IDs used by this application:

**NOTE** The file, "TestInfo.txt", which may be found in the same directory as this help file, contains all of the information found in the table below in a format suitable for parsing.

**Table 4** Test IDs and Names

| Name | TestID | Description |
|---|---|---|
| 8.1 Aux Channel Eye Test (Sink) | 125011 | To evaluate the AUX Channel waveform for sink device ensuring that timing variables and amplitude trajectories support DisplayPort system objectives of Bit Error Rate in data transmission. |
| 8.1 Aux Channel Eye Test (Sink) | 5011 | To evaluate the AUX Channel waveform for sink device ensuring that timing variables and amplitude trajectories support DisplayPort system objectives of Bit Error Rate in data transmission. |
| 8.1 Aux Channel Eye Test (Source) | 125001 | To evaluate the AUX Channel waveform for source device ensuring that timing variables and amplitude trajectories support DisplayPort system objectives of Bit Error Rate in data transmission. |
| 8.1 Aux Channel Eye Test (Source) | 5001 | To evaluate the AUX Channel waveform for source device ensuring that timing variables and amplitude trajectories support DisplayPort system objectives of Bit Error Rate in data transmission. |
| 8.1 Aux Channel Peak to Peak Voltage Test (Sink) | 125012 | To evaluate the peak to peak voltage AUX Channel waveform for sink. |
| 8.1 Aux Channel Peak to Peak Voltage Test (Sink) | 5012 | To evaluate the peak to peak voltage AUX Channel waveform for sink. |
| 8.1 Aux Channel Peak to Peak Voltage Test (Source) | 125002 | To evaluate the peak to peak voltage AUX Channel waveform for source. |
| 8.1 Aux Channel Peak to Peak Voltage Test (Source) | 5002 | To evaluate the peak to peak voltage AUX Channel waveform for source. |
| 8.1 eDP Aux Channel Eye Test (Sink) | 5111 | To evaluate the AUX Channel waveform for sink device ensuring that timing variables and amplitude trajectories support DisplayPort system objectives of Bit Error Rate in data transmission. |
| 8.1 eDP Aux Channel Eye Test (Source) | 5101 | To evaluate the AUX Channel waveform for source device ensuring that timing variables and amplitude trajectories support DisplayPort system objectives of Bit Error Rate in data transmission. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| 8.1 eDP Aux Channel Peak to Peak Voltage Test (Sink) | 5112 | To evaluate the peak to peak voltage AUX Channel waveform for sink. |
| 8.1 eDP Aux Channel Peak to Peak Voltage Test (Source) | 5102 | To evaluate the peak to peak voltage AUX Channel waveform for source. |
| 8.2 Aux Channel Eye Sensitivity Test (Sink) | 125051 | To evaluate the sensitivity to the AUX Channel eye opening of a Device Under Test. |
| 8.2 Aux Channel Eye Sensitivity Test (Sink) | 5051 | To evaluate the sensitivity to the AUX Channel eye opening of a Device Under Test. |
| 8.2 Aux Channel Eye Sensitivity Test (Source) | 125041 | To evaluate the sensitivity to the AUX Channel eye opening of a Device Under Test. |
| 8.2 Aux Channel Eye Sensitivity Test (Source) | 5041 | To evaluate the sensitivity to the AUX Channel eye opening of a Device Under Test. |
| 8.2 eDP Aux Channel Eye Sensitivity Test (Sink) | 5151 | To evaluate the sensitivity to the AUX Channel eye opening of a Device Under Test. |
| 8.2 eDP Aux Channel Eye Sensitivity Test (Source) | 5141 | To evaluate the sensitivity to the AUX Channel eye opening of a Device Under Test. |
| 8.3a Inrush Energy Power Test | 7000 | To evaluate the Inrush Energy at the power supply input of a Power consuming Device Under Test or to evaluate the inrush tolerance at the power supply output of a power providing Device Under Test. |
| 8.3b Inrush Peak Current Test | 7001 | To evaluate the Inrush Energy at the power supply input of a Power consuming Device Under Test or to evaluate the inrush tolerance at the power supply output of a power providing Device Under Test. |
| 8.5a Inrush Energy Power Test | 127000 | To evaluate the Inrush Energy at the power supply input of a Power consuming Device Under Test or to evaluate the inrush tolerance at the power supply output of a power providing Device Under Test. |
| 8.5b Inrush Peak Current Test | 127001 | To evaluate the Inrush Energy at the power supply input of a Power consuming Device Under Test or to evaluate the inrush tolerance at the power supply output of a power providing Device Under Test. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Aux Channel Eye Sensitivity Calibration (Reference Sink) | 125021 | The test is for calibration purpose to help adjusting AUX eye opening to suitable level. The test validates if voltage swing of a reference Sink AUX eye opening has meet the minimum level for futher AUX sensitivity testing. |
| Aux Channel Eye Sensitivity Calibration (Reference Sink) | 5021 | The test is for calibration purpose to help adjusting AUX eye opening to suitable level. The test validates if voltage swing of a reference Sink AUX eye opening has meet the minimum level for futher AUX sensitivity testing. |
| Aux Channel Eye Sensitivity Calibration (Reference Source) | 125031 | The test is for calibration purpose to help adjusting AUX eye opening to suitable level. The test validates if voltage swing of a reference Source AUX eye opening has meet the minimum level for futher AUX sensitivity testing. |
| Aux Channel Eye Sensitivity Calibration (Reference Source) | 5031 | The test is for calibration purpose to help adjusting AUX eye opening to suitable level. The test validates if voltage swing of a reference Source AUX eye opening has meet the minimum level for futher AUX sensitivity testing. |
| Aux Channel Unit Interval Test (Sink) | 125010 | To evaluate the unit interval of AUX channel. |
| Aux Channel Unit Interval Test (Sink) | 5010 | To evaluate the unit interval of AUX channel. |
| Aux Channel Unit Interval Test (Source) | 125000 | To evaluate the unit interval of AUX channel. |
| Aux Channel Unit Interval Test (Source) | 5000 | To evaluate the unit interval of AUX channel. |
| Clock Recovery Settings | 1200 | |
| Clock Recovery Settings | 1 | |
| Configurable Parameter Settings | 1201 | |
| Configurable Parameter Settings | 0 | |
| D0 - Dual Mode Data Jitter | 611 | To evaluate data jitter of a source operating in dual-mode. |
| D0 - Dual Mode Data Jitter | 911 | To evaluate data jitter of a source operating in dual-mode. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| D0 - Dual Mode Data Peak-Peak Differential Voltage (Max) | 821 | To evaluate data maximum peak to peak voltage of a source operating in dual-mode. |
| D0 - Dual Mode Data Peak-Peak Differential Voltage (Min) | 811 | To evaluate data minimum peak to peak voltage of a source operating in dual-mode. |
| D0 - Dual Mode Eye Diagram Testing | 601 | To evaluate the waveform ensuring that timing variables and amplitude trajectories meet the requirements for a dual-mode source device. |
| D0 - Dual Mode Intra Pair Skew Test | 701 | To evaluate the skew, or time delay, between respective sides of a differential data of a source operating in dual-mode. |
| D0/D1 - Dual Mode Inter Pair Skew Test | 711 | To evaluate the skew, or time delay, between respective differential data of a source operating in dual-mode. |
| D0/D2 - Dual Mode Inter Pair Skew Test | 712 | To evaluate the skew, or time delay, between respective differential data of a source operating in dual-mode. |
| D1 - Dual Mode Data Jitter | 612 | To evaluate data jitter of a source operating in dual-mode. |
| D1 - Dual Mode Data Jitter | 912 | To evaluate data jitter of a source operating in dual-mode. |
| D1 - Dual Mode Data Peak-Peak Differential Voltage (Max) | 822 | To evaluate data maximum peak to peak voltage of a source operating in dual-mode. |
| D1 - Dual Mode Data Peak-Peak Differential Voltage (Min) | 812 | To evaluate data minimum peak to peak voltage of a source operating in dual-mode. |
| D1 - Dual Mode Eye Diagram Testing | 602 | To evaluate the waveform ensuring that timing variables and amplitude trajectories meet the requirements for a dual-mode source device. |
| D1 - Dual Mode Intra Pair Skew Test | 702 | To evaluate the skew, or time delay, between respective sides of a differential data of a source operating in dual-mode. |
| D1/D2 - Dual Mode Inter Pair Skew Test | 713 | To evaluate the skew, or time delay, between respective differential data of a source operating in dual-mode. |
| D2 - Dual Mode Data Jitter | 613 | To evaluate data jitter of a source operating in dual-mode. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| D2 - Dual Mode Data Jitter | 913 | To evaluate data jitter of a source operating in dual-mode. |
| D2 - Dual Mode Data Peak-Peak Differential Voltage (Max) | 823 | To evaluate data maximum peak to peak voltage of a source operating in dual-mode. |
| D2 - Dual Mode Data Peak-Peak Differential Voltage (Min) | 813 | To evaluate data minimum peak to peak voltage of a source operating in dual-mode. |
| D2 - Dual Mode Eye Diagram Testing | 603 | To evaluate the waveform ensuring that timing variables and amplitude trajectories meet the requirements for a dual-mode source device. |
| D2 - Dual Mode Intra Pair Skew Test | 703 | To evaluate the skew, or time delay, between respective sides of a differential data of a source operating in dual-mode. |
| Dual Mode TMDS Clock Duty Cycle (Max) | 502 | To evaluate the maximum duty cycle of the TMDS clock signal of a source operating in dual-mode. |
| Dual Mode TMDS Clock Duty Cycle (Min) | 501 | To evaluate the minimum duty cycle of the TMDS clock signal of a source operating in dual-mode. |
| Dual Mode TMDS Clock Jitter | 503 | To evaluate the jitter of the TMDS clock signal of a source operating in dual-mode. |
| Dual Mode TMDS Clock Jitter | 803 | To evaluate the jitter of the TMDS clock signal of a source operating in dual-mode. |
| Equalizer Settings | 1208 | |
| Equalizer Settings (eDP) | 108 | |
| Eye Diagram Settings | 1205 | |
| Eye Diagram Settings (eDP) | 105 | |
| Jitter Separation Settings | 1202 | |
| Jitter Seperation Settings | 2 | |
| Lane 0 - AC Common Mode Test | 13110001 | To evaluate the AC common mode noise, or true and complement mismatch, of the differential data line of a DisplayPort interface. |
| Lane 0 - AC Common Mode Test | 12110001 | To evaluate the AC common mode noise, or true and complement mismatch, of the differential data line of a DisplayPort interface. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - AC Common Mode Test | 110001 | To evaluate the AC common mode noise, or true and complement mismatch, of the differential data line of a DisplayPort interface. |
| Lane 0 - Cable Eye Diagram Test | 12150001 | |
| Lane 0 - Cable Eye Diagram Test | 150001 | |
| Lane 0 - Cable Non ISI Jitter Test | 12240001 | |
| Lane 0 - Cable Non ISI Jitter Test | 240001 | |
| Lane 0 - Cable Total Jitter Test | 12230001 | |
| Lane 0 - Cable Total Jitter Test | 230001 | |
| Lane 0 - D10.2 Deterministic Jitter (TP3_EQ) | 1235001 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - D10.2 Deterministic Jitter with No Cable (TP3_EQ) | 1235011 | To evaluate the Deterministic Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - D10.2 Random Jitter (TP3_EQ) | 1238001 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - D10.2 Random Jitter with No Cable (TP3_EQ) | 1238011 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - D10.2 Total Jitter Test (TP3_EQ) | 1221001 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - D10.2 Total Jitter Test with No Cable Model (TP3_EQ) | 1221011 | To evaluate the Total Jitter with No Cable Model (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - D10.2 eDP Deterministic Jitter (TP3_EQ) | 35101 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - D10.2 eDP Random Jitter (TP3_EQ) | 38101 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - D10.2 eDP Total Jitter Test (TP3_EQ) | 21101 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - Deterministic Jitter Test (TP3_EQ) | 1336001 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - Deterministic Jitter Test with No Cable (TP3_EQ) | 1336011 | To evaluate the Deterministic Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - Eye Diagram Test | 1310001 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 0 - Eye Diagram Test | 1210001 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 0 - Eye Diagram Test | 10001 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 0 - Eye Diagram Test (TP3_EQ) | 1315001 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 0 - Eye Diagram Test with No Cable (TP3_EQ) | 1315011 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 0 - Fall Time Test (Informative) | 1250001 | To evaluate the lane transition (fall) of a differential data lane in a DisplayPort interface. |
| Lane 0 - Fall Time Test (Informative) | 50001 | To evaluate the lane transition (fall) of a differential data lane in a DisplayPort interface. |
| Lane 0 - Falling MisMatch Test (Informative) | 12130001 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 0 - Falling MisMatch Test (Informative) | 130001 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 0 - Frequency Accuracy Test | 1280001 | To evaluate that the clock distribution network of the source device conform to within an acceptable tolerance of the nominal operating frequency. |
| Lane 0 - Frequency Accuracy Test | 80001 | To evaluate that the clock distribution network of the source device conform to within an acceptable tolerance of the nominal operating frequency. |
| Lane 0 - HBR2CPAT Eye Diagram Test (TP3_EQ) | 1215001 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - HBR2CPAT Eye Diagram Test with No Cable (TP3_EQ) | 1215011 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 0 - HBR2CPAT Deterministic Jitter Test (TP3_EQ) | 1236001 | To evaluate the Deterministic Jitter No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - HBR2CPAT Deterministic Jitter Test with No Cable (TP3_EQ) | 1236011 | To evaluate the Deterministic Jitter No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - HBR2CPAT Total Jitter Test (TP3_EQ) | 1222001 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - HBR2CPAT Total Jitter Test with No Cable (TP3_EQ) | 1222011 | To evaluate the Total Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - HBR2CPAT eDP Deterministic Jitter Test (TP3_EQ) | 36101 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - HBR2CPAT eDP Total Jitter Test (TP3_EQ) | 20101 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - Intra Pair Skew Test | 13100001 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - Intra Pair Skew Test | 12100001 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 0 - Intra Pair Skew Test | 100001 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 0 - Main Link Frequency Compliance | 13193001 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 0 - Main Link Frequency Compliance | 12193001 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 0 - Main Link Frequency Compliance | 193001 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 0 - Main Link Frequency Compliance (SSC Frequency Max) | 12190001 | To evaluate the rate variation under all conditions does not exceed +300PPM as set by the DisplayPort standard. |
| Lane 0 - Main Link Frequency Compliance (SSC Frequency Max) | 190001 | To evaluate the rate variation under all conditions does not exceed +300PPM as set by the DisplayPort standard. |
| Lane 0 - Main Link Frequency Compliance (SSC Frequency Min) | 12191001 | To evaluate the rate variation under all conditions does not exceed -5300PPM as set by the DisplayPort standard. |
| Lane 0 - Main Link Frequency Compliance (SSC Frequency Min) | 191001 | To evaluate the rate variation under all conditions does not exceed -5300PPM as set by the DisplayPort standard. |
| Lane 0 - Non ISI Jitter Test | 1330001 | To evaluate the amount of Non ISI Jitter accompanying the data transmission. |
| Lane 0 - Non ISI Jitter Test | 1230001 | To evaluate the amount of Non ISI Jitter accompanying the data transmission. |
| Lane 0 - Non ISI Jitter Test | 30001 | To evaluate the amount of Non ISI Jitter accompanying the data transmission. |
| Lane 0 - Non ISI Jitter Test (TP3_EQ) - Arbitrary Pattern | 1331001 | To evaluate the Non ISI Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - Non ISI Jitter Test (TP3_EQ) - HBR2CPAT | 1231001 | To evaluate the Non ISI Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - Non ISI Jitter Test with No Cable (TP3_EQ) - Arbitrary Pattern | 1331011 | To evaluate the Non ISI Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - Non ISI Jitter Test with No Cable (TP3_EQ) - HBR2CPAT | 1231011 | To evaluate the Non ISI Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - Non-PreEmphasis Level Test | 1260001 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - Non-PreEmphasis Level Test | 60001 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - Non-PreEmphasis Level Test (Swing 1/ Swing 0) | 1261001 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - Non-PreEmphasis Level Test (Swing 1/ Swing 0) | 61001 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 1364101 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 1264001 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 64001 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 1362101 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 1262001 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 62001 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 1363101 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 1263001 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 63001 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - Non-Transition Voltage Range Measurement (Swing 0) | 1372101 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - Non-Transition Voltage Range Measurement (Swing 0) | 1272001 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - Non-Transition Voltage Range Measurement (Swing 0) | 72001 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - Non-Transition Voltage Range Measurement (Swing 1) | 1373101 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - Non-Transition Voltage Range Measurement (Swing 1) | 1273001 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - Non-Transition Voltage Range Measurement (Swing 1) | 73001 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - Non-Transition Voltage Range Measurement (Swing 2) | 1374101 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - Non-Transition Voltage Range Measurement (Swing 2) | 1274001 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - Non-Transition Voltage Range Measurement (Swing 2) | 74001 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - Overshoot Test | 1265001 | To evaluate the overshoot and undershoot of a differential data lane in a DisplayPort interface. |
| Lane 0 - Overshoot Test | 65001 | To evaluate the overshoot and undershoot of a differential data lane in a DisplayPort interface. |
| Lane 0 - PLTPAT - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 1264101 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - PLTPAT - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 1262101 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - PLTPAT - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 1263101 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 0 - PLTPAT - Non-Transition Voltage Range Measurement (Swing 0) | 1272101 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - PLTPAT - Non-Transition Voltage Range Measurement (Swing 1) | 1273101 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - PLTPAT - Non-Transition Voltage Range Measurement (Swing 2) | 1274101 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - PLTPAT - Pre-Emphasis Level Test | 1270501 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - PRBS 7 Eye Diagram Test (TP3_EQ) | 1211001 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 0 - PRBS 7 Eye Diagram Test with No Cable (TP3_EQ) | 1211011 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 0 - Peak to Peak Voltage Test (Arbitrary Pattern) | 1366101 | To evaluate the peak to peak voltage of the differential output signal. |
| Lane 0 - Peak to Peak Voltage Test (PLTPAT) | 1266101 | To evaluate the peak to peak voltage of the differential output signal. |
| Lane 0 - Peak to Peak Voltage Test (PRBS 7) | 1266001 | To evaluate the peak to peak voltage of the differential output signal. |
| Lane 0 - PostCursor2 Verification Test (Level 1/Level 0) | 1279001 | This test evaluates the effect of adding Post-Cursor2 in a Source waveform by measuring the peak differential amplitude to assure accuracy of the Post-Cursor2 setting. |
| Lane 0 - PostCursor2 Verification Test (Level 2/Level 1) | 1279101 | This test evaluates the effect of adding Post-Cursor2 in a Source waveform by measuring the peak differential amplitude to assure accuracy of the Post-Cursor2 setting. |
| Lane 0 - PostCursor2 Verification Test (Level 3/Level 2) | 1279201 | This test evaluates the effect of adding Post-Cursor2 in a Source waveform by measuring the peak differential amplitude to assure accuracy of the Post-Cursor2 setting. |
| Lane 0 - Pre-Emphasis Level Test | 1370501 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - Pre-Emphasis Level Test | 1270001 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - Pre-Emphasis Level Test | 70001 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - Pre-Emphasis Level Test [D10.2] | 1271001 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - Pre-Emphasis Level Test [D10.2] | 71001 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 0 - Random Jitter Test (TP3_EQ) | 1338001 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - Random Jitter Test with No Cable (TP3_EQ) | 1338011 | To evaluate the Random Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - Rise Time Test (Informative) | 1240001 | To evaluate the lane transition (rise) of a differential data lane in a DisplayPort interface. |
| Lane 0 - Rise Time Test (Informative) | 40001 | To evaluate the lane transition (rise) of a differential data lane in a DisplayPort interface. |
| Lane 0 - Rising MisMatch Test (Informative) | 12120001 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 0 - Rising MisMatch Test (Informative) | 120001 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 0 - SSC Deviation HF Variation Test (Informative) | 13200001 | Verify SSC profile does not include any frequency deviation which would exceed 1250 ppm/uSec. |
| Lane 0 - SSC Deviation HF Variation Test (Informative) | 12200001 | Verify SSC profile does not include any frequency excursions which would exceed 1250ppm/uSec |
| Lane 0 - SSC Deviation HF Variation Test (Informative) | 200001 | Verify SSC profile does not include any frequency excursions which would exceed 1250ppm/uSec |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - SSC Modulation Deviation Test | 13180001 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 0 - SSC Modulation Deviation Test | 12180001 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 0 - SSC Modulation Deviation Test | 180001 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 0 - SSC Modulation Frequency Test | 13170001 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 0 - SSC Modulation Frequency Test | 12170001 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 0 - SSC Modulation Frequency Test | 170001 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 0 - SSC Unit Interval Test | 12160001 | To evaluate the overall variation in the Unit Interval width over at least one full SSC cycle to ensure it stays within the spec limit of 300PPM |
| Lane 0 - SSC Unit Interval Test | 160001 | To evaluate the overall variation in the Unit Interval width over at least one full SSC cycle to ensure it stays within the spec limit of 300PPM |
| Lane 0 - Sink Eye Diagram Test | 12140001 | |
| Lane 0 - Sink Eye Diagram Test | 140001 | |
| Lane 0 - Sink Non ISI Jitter Test | 12220001 | |
| Lane 0 - Sink Non ISI Jitter Test | 220001 | |
| Lane 0 - Sink Total Jitter Test | 12210001 | |
| Lane 0 - Sink Total Jitter Test | 210001 | |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - Total Jitter Test | 1320001 | To evaluate the total jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - Total Jitter Test | 1220001 | To evaluate the total jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - Total Jitter Test | 20001 | To evaluate the total jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - Total Jitter Test (TP3_EQ) | 1322001 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - Total Jitter Test with No Cable (TP3_EQ) | 1322011 | To evaluate the Total Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0 - eDP Eye Diagram Test | 15101 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 0 - eDP Eye Diagram Test (TP3_EQ) | 10101 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 0 - eDP Intra Pair Skew Test | 100101 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 0 - eDP Main Link Frequency Compliance | 193101 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 0 - eDP Non ISI Jitter Test | 30101 | To evaluate the amount of eDP Non ISI Jitter accompanying the data transmission. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0 - eDP SSC Modulation Deviation Test | 180101 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 0 - eDP SSC Modulation Frequency Test | 170101 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 0 - eDP Total Jitter Test | 20111 | To evaluate the eDP Total Jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 0/ Lane 1 - Inter Pair Skew Test | 1390001 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 0/ Lane 1 - Inter Pair Skew Test | 1290001 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 0/ Lane 1 - Inter Pair Skew Test | 90001 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 0/ Lane 1 - eDP Inter Pair Skew Test | 90101 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 0/ Lane 2 - Inter Pair Skew Test | 1390002 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 0/ Lane 2 - Inter Pair Skew Test | 1290002 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 0/ Lane 2 - Inter Pair Skew Test | 90002 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 0/ Lane 2 - eDP Inter Pair Skew Test | 90102 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 0/ Lane 3 - Inter Pair Skew Test | 1390003 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 0/ Lane 3 - Inter Pair Skew Test | 1290003 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 0/ Lane 3 - Inter Pair Skew Test | 90003 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 0/ Lane 3 - eDP Inter Pair Skew Test | 90103 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 1 - AC Common Mode Test | 13110002 | To evaluate the AC common mode noise, or true and complement mismatch, of the differential data line of a DisplayPort interface. |
| Lane 1 - AC Common Mode Test | 12110002 | To evaluate the AC common mode noise, or true and complement mismatch, of the differential data line of a DisplayPort interface. |
| Lane 1 - AC Common Mode Test | 110002 | To evaluate the AC common mode noise, or true and complement mismatch, of the differential data line of a DisplayPort interface. |
| Lane 1 - Cable Eye Diagram Test | 12150002 | |
| Lane 1 - Cable Eye Diagram Test | 150002 | |
| Lane 1 - Cable Non ISI Jitter Test | 12240002 | |
| Lane 1 - Cable Non ISI Jitter Test | 240002 | |
| Lane 1 - Cable Total Jitter Test | 12230002 | |
| Lane 1 - Cable Total Jitter Test | 230002 | |
| Lane 1 - D10.2 Deterministic Jitter (TP3_EQ) | 1235002 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1 - D10.2 Deterministic Jitter with No Cable (TP3_EQ) | 1235012 | To evaluate the Deterministic Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - D10.2 Random Jitter (TP3_EQ) | 1238002 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - D10.2 Random Jitter with No Cable (TP3_EQ) | 1238012 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - D10.2 Total Jitter Test (TP3_EQ) | 1221002 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - D10.2 Total Jitter Test with No Cable Model (TP3_EQ) | 1221012 | To evaluate the Total Jitter with No Cable Model (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - D10.2 eDP Deterministic Jitter (TP3_EQ) | 35102 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - D10.2 eDP Random Jitter (TP3_EQ) | 38102 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1 - D10.2 eDP Total Jitter Test (TP3_EQ) | 21102 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Deterministic Jitter Test (TP3_EQ) | 1336002 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Deterministic Jitter Test with No Cable (TP3_EQ) | 1336012 | To evaluate the Deterministic Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Eye Diagram Test | 1310002 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 1 - Eye Diagram Test | 1210002 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 1 - Eye Diagram Test | 10002 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 1 - Eye Diagram Test (TP3_EQ) | 1315002 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 1 - Eye Diagram Test with No Cable (TP3_EQ) | 1315012 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 1 - Fall Time Test (Informative) | 1250002 | To evaluate the lane transition (fall) of a differential data lane in a DisplayPort interface. |
| Lane 1 - Fall Time Test (Informative) | 50002 | To evaluate the lane transition (fall) of a differential data lane in a DisplayPort interface. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1 - Falling MisMatch Test (Informative) | 12130002 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 1 - Falling MisMatch Test (Informative) | 130002 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 1 - Frequency Accuracy Test | 1280002 | To evaluate that the clock distribution network of the source device conform to within an acceptable tolerance of the nominal operating frequency. |
| Lane 1 - Frequency Accuracy Test | 80002 | To evaluate that the clock distribution network of the source device conform to within an acceptable tolerance of the nominal operating frequency. |
| Lane 1 - HBR2CPAT Eye Diagram Test (TP3_EQ) | 1215002 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 1 - HBR2CPAT Eye Diagram Test with No Cable (TP3_EQ) | 1215012 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 1 - HBR2CPAT Deterministic Jitter Test (TP3_EQ) | 1236002 | To evaluate the Deterministic Jitter No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - HBR2CPAT Deterministic Jitter Test with No Cable (TP3_EQ) | 1236012 | To evaluate the Deterministic Jitter No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - HBR2CPAT Total Jitter Test (TP3_EQ) | 1222002 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1 - HBR2CPAT Total Jitter Test with No Cable (TP3_EQ) | 1222012 | To evaluate the Total Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - HBR2CPAT eDP Deterministic Jitter Test (TP3_EQ) | 36102 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - HBR2CPAT eDP Total Jitter Test (TP3_EQ) | 20102 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Intra Pair Skew Test | 13100002 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 1 - Intra Pair Skew Test | 12100002 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 1 - Intra Pair Skew Test | 100002 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 1 - Main Link Frequency Compliance | 13193002 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 1 - Main Link Frequency Compliance | 12193002 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 1 - Main Link Frequency Compliance | 193002 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 1 - Main Link Frequency Compliance (SSC Frequency Max) | 12190002 | To evaluate the rate variation under all conditions does not exceed +300PPM as set by the DisplayPort standard. |
| Lane 1 - Main Link Frequency Compliance (SSC Frequency Max) | 190002 | To evaluate the rate variation under all conditions does not exceed +300PPM as set by the DisplayPort standard. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1 - Main Link Frequency Compliance (SSC Frequency Min) | 12191002 | To evaluate the rate variation under all conditions does not exceed -5300PPM as set by the DisplayPort standard. |
| Lane 1 - Main Link Frequency Compliance (SSC Frequency Min) | 191002 | To evaluate the rate variation under all conditions does not exceed -5300PPM as set by the DisplayPort standard. |
| Lane 1 - Non ISI Jitter Test | 1330002 | To evaluate the amount of Non ISI Jitter accompanying the data transmission. |
| Lane 1 - Non ISI Jitter Test | 1230002 | To evaluate the amount of Non ISI Jitter accompanying the data transmission. |
| Lane 1 - Non ISI Jitter Test | 30002 | To evaluate the amount of Non ISI Jitter accompanying the data transmission. |
| Lane 1 - Non ISI Jitter Test (TP3_EQ) - Arbitrary Pattern | 1331002 | To evaluate the Non ISI Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Non ISI Jitter Test (TP3_EQ) - HBR2CPAT | 1231002 | To evaluate the Non ISI Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Non ISI Jitter Test with No Cable (TP3_EQ) - Arbitrary Pattern | 1331012 | To evaluate the Non ISI Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Non ISI Jitter Test with No Cable (TP3_EQ) - HBR2CPAT | 1231012 | To evaluate the Non ISI Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Non-PreEmphasis Level Test | 1260002 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - Non-PreEmphasis Level Test | 60002 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1 - Non-PreEmphasis Level Test (Swing 1/ Swing 0) | 1261002 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - Non-PreEmphasis Level Test (Swing 1/ Swing 0) | 61002 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 1364102 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 1264002 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 64002 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 1362102 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 1262002 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 62002 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 1363102 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 1263002 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 63002 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - Non-Transition Voltage Range Measurement (Swing 0) | 1372102 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Non-Transition Voltage Range Measurement (Swing 0) | 1272002 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1 - Non-Transition Voltage Range Measurement (Swing 0) | 72002 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Non-Transition Voltage Range Measurement (Swing 1) | 1373102 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Non-Transition Voltage Range Measurement (Swing 1) | 1273002 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Non-Transition Voltage Range Measurement (Swing 1) | 73002 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Non-Transition Voltage Range Measurement (Swing 2) | 1374102 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Non-Transition Voltage Range Measurement (Swing 2) | 1274002 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Non-Transition Voltage Range Measurement (Swing 2) | 74002 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Overshoot Test | 1265002 | To evaluate the overshoot and undershoot of a differential data lane in a DisplayPort interface. |
| Lane 1 - Overshoot Test | 65002 | To evaluate the overshoot and undershoot of a differential data lane in a DisplayPort interface. |
| Lane 1 - PLTPAT - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 1264102 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - PLTPAT - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 1262102 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 1 - PLTPAT - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 1263102 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1 - PLTPAT - Non-Transition Voltage Range Measurement (Swing 0) | 1272102 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - PLTPAT - Non-Transition Voltage Range Measurement (Swing 1) | 1273102 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - PLTPAT - Non-Transition Voltage Range Measurement (Swing 2) | 1274102 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - PLTPAT - Pre-Emphasis Level Test | 1270502 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - PRBS 7 Eye Diagram Test (TP3_EQ) | 1211002 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 1 - PRBS 7 Eye Diagram Test with No Cable (TP3_EQ) | 1211012 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 1 - Peak to Peak Voltage Test (Arbitrary Pattern) | 1366102 | To evaluate the peak to peak voltage of the differential output signal. |
| Lane 1 - Peak to Peak Voltage Test (PLTPAT) | 1266102 | To evaluate the peak to peak voltage of the differential output signal. |
| Lane 1 - Peak to Peak Voltage Test (PRBS 7) | 1266002 | To evaluate the peak to peak voltage of the differential output signal. |
| Lane 1 - PostCursor2 Verification Test (Level 1/Level 0) | 1279002 | This test evaluates the effect of adding Post-Cursor2 in a Source waveform by measuring the peak differential amplitude to assure accuracy of the Post-Cursor2 setting. |
| Lane 1 - PostCursor2 Verification Test (Level 2/Level 1) | 1279102 | This test evaluates the effect of adding Post-Cursor2 in a Source waveform by measuring the peak differential amplitude to assure accuracy of the Post-Cursor2 setting. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1 - PostCursor2 Verification Test (Level 3/Level 2) | 1279202 | This test evaluates the effect of adding Post-Cursor2 in a Source waveform by measuring the peak differential amplitude to assure accuracy of the Post-Cursor2 setting. |
| Lane 1 - Pre-Emphasis Level Test | 1370502 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Pre-Emphasis Level Test | 1270002 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Pre-Emphasis Level Test | 70002 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Pre-Emphasis Level Test [D10.2] | 1271002 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Pre-Emphasis Level Test [D10.2] | 71002 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 1 - Random Jitter Test (TP3_EQ) | 1338002 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Random Jitter Test with No Cable (TP3_EQ) | 1338012 | To evaluate the Random Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Rise Time Test (Informative) | 1240002 | To evaluate the lane transition (rise) of a differential data lane in a DisplayPort interface. |
| Lane 1 - Rise Time Test (Informative) | 40002 | To evaluate the lane transition (rise) of a differential data lane in a DisplayPort interface. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1 - Rising MisMatch Test (Informative) | 12120002 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 1 - Rising MisMatch Test (Informative) | 120002 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 1 - SSC Deviation HF Variation Test (Informative) | 13200002 | Verify SSC profile does not include any frequency deviation which would exceed 1250 ppm/uSec. |
| Lane 1 - SSC Deviation HF Variation Test (Informative) | 12200002 | Verify SSC profile does not include any frequency excursions which would exceed 1250ppm/uSec |
| Lane 1 - SSC Deviation HF Variation Test (Informative) | 200002 | Verify SSC profile does not include any frequency excursions which would exceed 1250ppm/uSec |
| Lane 1 - SSC Modulation Deviation Test | 13180002 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 1 - SSC Modulation Deviation Test | 12180002 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 1 - SSC Modulation Deviation Test | 180002 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 1 - SSC Modulation Frequency Test | 13170002 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 1 - SSC Modulation Frequency Test | 12170002 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 1 - SSC Modulation Frequency Test | 170002 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 1 - SSC Unit Interval Test | 12160002 | To evaluate the overall variation in the Unit Interval width over at least one full SSC cycle to ensure it stays within the spec limit of 300PPM |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1 - SSC Unit Interval Test | 160002 | To evaluate the overall variation in the Unit Interval width over at least one full SSC cycle to ensure it stays within the spec limit of 300PPM |
| Lane 1 - Sink Eye Diagram Test | 12140002 | |
| Lane 1 - Sink Eye Diagram Test | 140002 | |
| Lane 1 - Sink Non ISI Jitter Test | 12220002 | |
| Lane 1 - Sink Non ISI Jitter Test | 220002 | |
| Lane 1 - Sink Total Jitter Test | 12210002 | |
| Lane 1 - Sink Total Jitter Test | 210002 | |
| Lane 1 - Total Jitter Test | 1320002 | To evaluate the total jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Total Jitter Test | 1220002 | To evaluate the total jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Total Jitter Test | 20002 | To evaluate the total jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Total Jitter Test (TP3_EQ) | 1322002 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1 - Total Jitter Test with No Cable (TP3_EQ) | 1322012 | To evaluate the Total Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1 - eDP Eye Diagram Test | 15102 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 1 - eDP Eye Diagram Test (TP3_EQ) | 10102 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 1 - eDP Intra Pair Skew Test | 100102 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 1 - eDP Main Link Frequency Compliance | 193102 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 1 - eDP Non ISI Jitter Test | 30102 | To evaluate the amount of eDP Non ISI Jitter accompanying the data transmission. |
| Lane 1 - eDP SSC Modulation Deviation Test | 180102 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 1 - eDP SSC Modulation Frequency Test | 170102 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 1 - eDP Total Jitter Test | 20112 | To evaluate the eDP Total Jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 1/ Lane 2 - Inter Pair Skew Test | 1390004 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 1/ Lane 2 - Inter Pair Skew Test | 1290004 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 1/ Lane 2 - Inter Pair Skew Test | 90004 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 1/ Lane 2 - eDP Inter Pair Skew Test | 90104 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 1/ Lane 3 - Inter Pair Skew Test | 1390005 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 1/ Lane 3 - Inter Pair Skew Test | 1290005 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 1/ Lane 3 - Inter Pair Skew Test | 90005 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 1/ Lane 3 - eDP Inter Pair Skew Test | 90105 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 2 - AC Common Mode Test | 13110003 | To evaluate the AC common mode noise, or true and complement mismatch, of the differential data line of a DisplayPort interface. |
| Lane 2 - AC Common Mode Test | 12110003 | To evaluate the AC common mode noise, or true and complement mismatch, of the differential data line of a DisplayPort interface. |
| Lane 2 - AC Common Mode Test | 110003 | To evaluate the AC common mode noise, or true and complement mismatch, of the differential data line of a DisplayPort interface. |
| Lane 2 - Cable Eye Diagram Test | 12150003 | |
| Lane 2 - Cable Eye Diagram Test | 150003 | |
| Lane 2 - Cable Non ISI Jitter Test | 12240003 | |
| Lane 2 - Cable Non ISI Jitter Test | 240003 | |
| Lane 2 - Cable Total Jitter Test | 12230003 | |
| Lane 2 - Cable Total Jitter Test | 230003 | |
| Lane 2 - D10.2 Deterministic Jitter (TP3_EQ) | 1235003 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 2 - D10.2 Deterministic Jitter with No Cable (TP3_EQ) | 1235013 | To evaluate the Deterministic Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - D10.2 Random Jitter (TP3_EQ) | 1238003 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - D10.2 Random Jitter with No Cable (TP3_EQ) | 1238013 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - D10.2 Total Jitter Test (TP3_EQ) | 1221003 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - D10.2 Total Jitter Test with No Cable Model (TP3_EQ) | 1221013 | To evaluate the Total Jitter with No Cable Model (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - D10.2 eDP Deterministic Jitter (TP3_EQ) | 35103 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - D10.2 eDP Random Jitter (TP3_EQ) | 38103 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 2 - D10.2 eDP Total Jitter Test (TP3_EQ) | 21103 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Deterministic Jitter Test (TP3_EQ) | 1336003 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Deterministic Jitter Test with No Cable (TP3_EQ) | 1336013 | To evaluate the Deterministic Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Eye Diagram Test | 1310003 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 2 - Eye Diagram Test | 1210003 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 2 - Eye Diagram Test | 10003 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 2 - Eye Diagram Test (TP3_EQ) | 1315003 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 2 - Eye Diagram Test with No Cable (TP3_EQ) | 1315013 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 2 - Fall Time Test (Informative) | 1250003 | To evaluate the lane transition (fall) of a differential data lane in a DisplayPort interface. |
| Lane 2 - Fall Time Test (Informative) | 50003 | To evaluate the lane transition (fall) of a differential data lane in a DisplayPort interface. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 2 - Falling MisMatch Test (Informative) | 12130003 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 2 - Falling MisMatch Test (Informative) | 130003 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 2 - Frequency Accuracy Test | 1280003 | To evaluate that the clock distribution network of the source device conform to within an acceptable tolerance of the nominal operating frequency. |
| Lane 2 - Frequency Accuracy Test | 80003 | To evaluate that the clock distribution network of the source device conform to within an acceptable tolerance of the nominal operating frequency. |
| Lane 2 - HBR2CPAT Eye Diagram Test (TP3_EQ) | 1215003 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 2 - HBR2CPAT Eye Diagram Test with No Cable (TP3_EQ) | 1215013 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 2 - HBR2CPAT Deterministic Jitter Test (TP3_EQ) | 1236003 | To evaluate the Deterministic Jitter No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - HBR2CPAT Deterministic Jitter Test with No Cable (TP3_EQ) | 1236013 | To evaluate the Deterministic Jitter No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - HBR2CPAT Total Jitter Test (TP3_EQ) | 1222003 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 2 - HBR2CPAT Total Jitter Test with No Cable (TP3_EQ) | 1222013 | To evaluate the Total Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - HBR2CPAT eDP Deterministic Jitter Test (TP3_EQ) | 36103 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - HBR2CPAT eDP Total Jitter Test (TP3_EQ) | 20103 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Intra Pair Skew Test | 13100003 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 2 - Intra Pair Skew Test | 12100003 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 2 - Intra Pair Skew Test | 100003 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 2 - Main Link Frequency Compliance | 13193003 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 2 - Main Link Frequency Compliance | 12193003 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 2 - Main Link Frequency Compliance | 193003 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 2 - Main Link Frequency Compliance (SSC Frequency Max) | 12190003 | To evaluate the rate variation under all conditions does not exceed +300PPM as set by the DisplayPort standard. |
| Lane 2 - Main Link Frequency Compliance (SSC Frequency Max) | 190003 | To evaluate the rate variation under all conditions does not exceed +300PPM as set by the DisplayPort standard. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 2 - Main Link Frequency Compliance (SSC Frequency Min) | 12191003 | To evaluate the rate variation under all conditions does not exceed -5300PPM as set by the DisplayPort standard. |
| Lane 2 - Main Link Frequency Compliance (SSC Frequency Min) | 191003 | To evaluate the rate variation under all conditions does not exceed -5300PPM as set by the DisplayPort standard. |
| Lane 2 - Non ISI Jitter Test | 1330003 | To evaluate the amount of Non ISI Jitter accompanying the data transmission. |
| Lane 2 - Non ISI Jitter Test | 1230003 | To evaluate the amount of Non ISI Jitter accompanying the data transmission. |
| Lane 2 - Non ISI Jitter Test | 30003 | To evaluate the amount of Non ISI Jitter accompanying the data transmission. |
| Lane 2 - Non ISI Jitter Test (TP3_EQ) - Arbitrary Pattern | 1331003 | To evaluate the Non ISI Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Non ISI Jitter Test (TP3_EQ) - HBR2CPAT | 1231003 | To evaluate the Non ISI Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Non ISI Jitter Test with No Cable (TP3_EQ) - Arbitrary Pattern | 1331013 | To evaluate the Non ISI Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Non ISI Jitter Test with No Cable (TP3_EQ) - HBR2CPAT | 1231013 | To evaluate the Non ISI Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Non-PreEmphasis Level Test | 1260003 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - Non-PreEmphasis Level Test | 60003 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 2 - Non-PreEmphasis Level Test (Swing 1/ Swing 0) | 1261003 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - Non-PreEmphasis Level Test (Swing 1/ Swing 0) | 61003 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 1364103 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 1264003 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 64003 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 1362103 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 1262003 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 62003 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 1363103 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 1263003 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 63003 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - Non-Transition Voltage Range Measurement (Swing 0) | 1372103 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Non-Transition Voltage Range Measurement (Swing 0) | 1272003 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 2 - Non-Transition Voltage Range Measurement (Swing 0) | 72003 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Non-Transition Voltage Range Measurement (Swing 1) | 1373103 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Non-Transition Voltage Range Measurement (Swing 1) | 1273003 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Non-Transition Voltage Range Measurement (Swing 1) | 73003 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Non-Transition Voltage Range Measurement (Swing 2) | 1374103 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Non-Transition Voltage Range Measurement (Swing 2) | 1274003 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Non-Transition Voltage Range Measurement (Swing 2) | 74003 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Overshoot Test | 1265003 | To evaluate the overshoot and undershoot of a differential data lane in a DisplayPort interface. |
| Lane 2 - Overshoot Test | 65003 | To evaluate the overshoot and undershoot of a differential data lane in a DisplayPort interface. |
| Lane 2 - PLTPAT - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 1264103 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - PLTPAT - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 1262103 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 2 - PLTPAT - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 1263103 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 2 - PLTPAT - Non-Transition Voltage Range Measurement (Swing 0) | 1272103 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - PLTPAT - Non-Transition Voltage Range Measurement (Swing 1) | 1273103 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - PLTPAT - Non-Transition Voltage Range Measurement (Swing 2) | 1274103 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - PLTPAT - Pre-Emphasis Level Test | 1270503 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - PRBS 7 Eye Diagram Test (TP3_EQ) | 1211003 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 2 - PRBS 7 Eye Diagram Test with No Cable (TP3_EQ) | 1211013 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 2 - Peak to Peak Voltage Test (Arbitrary Pattern) | 1366103 | To evaluate the peak to peak voltage of the differential output signal. |
| Lane 2 - Peak to Peak Voltage Test (PLTPAT) | 1266103 | To evaluate the peak to peak voltage of the differential output signal. |
| Lane 2 - Peak to Peak Voltage Test (PRBS 7) | 1266003 | To evaluate the peak to peak voltage of the differential output signal. |
| Lane 2 - PostCursor2 Verification Test (Level 1/Level 0) | 1279003 | This test evaluates the effect of adding Post-Cursor2 in a Source waveform by measuring the peak differential amplitude to assure accuracy of the Post-Cursor2 setting. |
| Lane 2 - PostCursor2 Verification Test (Level 2/Level 1) | 1279103 | This test evaluates the effect of adding Post-Cursor2 in a Source waveform by measuring the peak differential amplitude to assure accuracy of the Post-Cursor2 setting. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 2 - PostCursor2 Verification Test (Level 3/Level 2) | 1279203 | This test evaluates the effect of adding Post-Cursor2 in a Source waveform by measuring the peak differential amplitude to assure accuracy of the Post-Cursor2 setting. |
| Lane 2 - Pre-Emphasis Level Test | 1370503 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Pre-Emphasis Level Test | 1270003 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Pre-Emphasis Level Test | 70003 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Pre-Emphasis Level Test [D10.2] | 1271003 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Pre-Emphasis Level Test [D10.2] | 71003 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 2 - Random Jitter Test (TP3_EQ) | 1338003 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Random Jitter Test with No Cable (TP3_EQ) | 1338013 | To evaluate the Random Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Rise Time Test (Informative) | 1240003 | To evaluate the lane transition (rise) of a differential data lane in a DisplayPort interface. |
| Lane 2 - Rise Time Test (Informative) | 40003 | To evaluate the lane transition (rise) of a differential data lane in a DisplayPort interface. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 2 - Rising MisMatch Test (Informative) | 12120003 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 2 - Rising MisMatch Test (Informative) | 120003 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 2 - SSC Deviation HF Variation Test (Informative) | 13200003 | Verify SSC profile does not include any frequency deviation which would exceed 1250 ppm/uSec. |
| Lane 2 - SSC Deviation HF Variation Test (Informative) | 12200003 | Verify SSC profile does not include any frequency excursions which would exceed 1250ppm/uSec |
| Lane 2 - SSC Deviation HF Variation Test (Informative) | 200003 | Verify SSC profile does not include any frequency excursions which would exceed 1250ppm/uSec |
| Lane 2 - SSC Modulation Deviation Test | 13180003 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 2 - SSC Modulation Deviation Test | 12180003 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 2 - SSC Modulation Deviation Test | 180003 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 2 - SSC Modulation Frequency Test | 13170003 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 2 - SSC Modulation Frequency Test | 12170003 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 2 - SSC Modulation Frequency Test | 170003 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 2 - SSC Unit Interval Test | 12160003 | To evaluate the overall variation in the Unit Interval width over at least one full SSC cycle to ensure it stays within the spec limit of 300PPM |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 2 - SSC Unit Interval Test | 160003 | To evaluate the overall variation in the Unit Interval width over at least one full SSC cycle to ensure it stays within the spec limit of 300PPM |
| Lane 2 - Sink Eye Diagram Test | 12140003 | |
| Lane 2 - Sink Eye Diagram Test | 140003 | |
| Lane 2 - Sink Non ISI Jitter Test | 12220003 | |
| Lane 2 - Sink Non ISI Jitter Test | 220003 | |
| Lane 2 - Sink Total Jitter Test | 12210003 | |
| Lane 2 - Sink Total Jitter Test | 210003 | |
| Lane 2 - Total Jitter Test | 1320003 | To evaluate the total jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Total Jitter Test | 1220003 | To evaluate the total jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Total Jitter Test | 20003 | To evaluate the total jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Total Jitter Test (TP3_EQ) | 1322003 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2 - Total Jitter Test with No Cable (TP3_EQ) | 1322013 | To evaluate the Total Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 2 - eDP Eye Diagram Test | 15103 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 2 - eDP Eye Diagram Test (TP3_EQ) | 10103 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 2 - eDP Intra Pair Skew Test | 100103 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 2 - eDP Main Link Frequency Compliance | 193103 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 2 - eDP Non ISI Jitter Test | 30103 | To evaluate the amount of eDP Non ISI Jitter accompanying the data transmission. |
| Lane 2 - eDP SSC Modulation Deviation Test | 180103 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 2 - eDP SSC Modulation Frequency Test | 170103 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 2 - eDP Total Jitter Test | 20113 | To evaluate the eDP Total Jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 2/ Lane 3 - Inter Pair Skew Test | 1390006 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 2/ Lane 3 - Inter Pair Skew Test | 1290006 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 2/ Lane 3 - Inter Pair Skew Test | 90006 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |
| Lane 2/ Lane 3 - eDP Inter Pair Skew Test | 90106 | To evaluate the skew, or time delay, between respective differential data lanes in the DisplayPort interface. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - AC Common Mode Test | 13110004 | To evaluate the AC common mode noise, or true and complement mismatch, of the differential data line of a DisplayPort interface. |
| Lane 3 - AC Common Mode Test | 12110004 | To evaluate the AC common mode noise, or true and complement mismatch, of the differential data line of a DisplayPort interface. |
| Lane 3 - AC Common Mode Test | 110004 | To evaluate the AC common mode noise, or true and complement mismatch, of the differential data line of a DisplayPort interface. |
| Lane 3 - Cable Eye Diagram Test | 12150004 | |
| Lane 3 - Cable Eye Diagram Test | 150004 | |
| Lane 3 - Cable Non ISI Jitter Test | 12240004 | |
| Lane 3 - Cable Non ISI Jitter Test | 240004 | |
| Lane 3 - Cable Total Jitter Test | 12230004 | |
| Lane 3 - Cable Total Jitter Test | 230004 | |
| Lane 3 - D10.2 Deterministic Jitter (TP3_EQ) | 1235004 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - D10.2 Deterministic Jitter with No Cable (TP3_EQ) | 1235014 | To evaluate the Deterministic Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - D10.2 Random Jitter (TP3_EQ) | 1238004 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - D10.2 Random Jitter with No Cable (TP3_EQ) | 1238014 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - D10.2 Total Jitter Test (TP3_EQ) | 1221004 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - D10.2 Total Jitter Test with No Cable Model (TP3_EQ) | 1221014 | To evaluate the Total Jitter with No Cable Model (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - D10.2 eDP Deterministic Jitter (TP3_EQ) | 35104 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - D10.2 eDP Random Jitter (TP3_EQ) | 38104 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - D10.2 eDP Total Jitter Test (TP3_EQ) | 21104 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Deterministic Jitter Test (TP3_EQ) | 1336004 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - Deterministic Jitter Test with No Cable (TP3_EQ) | 1336014 | To evaluate the Deterministic Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Eye Diagram Test | 1310004 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 3 - Eye Diagram Test | 1210004 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 3 - Eye Diagram Test | 10004 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 3 - Eye Diagram Test (TP3_EQ) | 1315004 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 3 - Eye Diagram Test with No Cable (TP3_EQ) | 1315014 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 3 - Fall Time Test (Informative) | 1250004 | To evaluate the lane transition (fall) of a differential data lane in a DisplayPort interface. |
| Lane 3 - Fall Time Test (Informative) | 50004 | To evaluate the lane transition (fall) of a differential data lane in a DisplayPort interface. |
| Lane 3 - Falling MisMatch Test (Informative) | 12130004 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 3 - Falling MisMatch Test (Informative) | 130004 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 3 - Frequency Accuracy Test | 1280004 | To evaluate that the clock distribution network of the source device conform to within an acceptable tolerance of the nominal operating frequency. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - Frequency Accuracy Test | 80004 | To evaluate that the clock distribution network of the source device conform to within an acceptable tolerance of the nominal operating frequency. |
| Lane 3 - HBR2CPAT Eye Diagram Test (TP3_EQ) | 1215004 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 3 - HBR2CPAT Eye Diagram Test with No Cable (TP3_EQ) | 1215014 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 3 - HBR2CPAT Deterministic Jitter Test (TP3_EQ) | 1236004 | To evaluate the Deterministic Jitter No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - HBR2CPAT Deterministic Jitter Test with No Cable (TP3_EQ) | 1236014 | To evaluate the Deterministic Jitter No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - HBR2CPAT Total Jitter Test (TP3_EQ) | 1222004 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - HBR2CPAT Total Jitter Test with No Cable (TP3_EQ) | 1222014 | To evaluate the Total Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - HBR2CPAT eDP Deterministic Jitter Test (TP3_EQ) | 36104 | To evaluate the Deterministic Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - HBR2CPAT eDP Total Jitter Test (TP3_EQ) | 20104 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Intra Pair Skew Test | 13100004 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 3 - Intra Pair Skew Test | 12100004 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 3 - Intra Pair Skew Test | 100004 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 3 - Main Link Frequency Compliance | 13193004 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 3 - Main Link Frequency Compliance | 12193004 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 3 - Main Link Frequency Compliance | 193004 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 3 - Main Link Frequency Compliance (SSC Frequency Max) | 12190004 | To evaluate the rate variation under all conditions does not exceed +300PPM as set by the DisplayPort standard. |
| Lane 3 - Main Link Frequency Compliance (SSC Frequency Max) | 190004 | To evaluate the rate variation under all conditions does not exceed +300PPM as set by the DisplayPort standard. |
| Lane 3 - Main Link Frequency Compliance (SSC Frequency Min) | 12191004 | To evaluate the rate variation under all conditions does not exceed -5300PPM as set by the DisplayPort standard. |
| Lane 3 - Main Link Frequency Compliance (SSC Frequency Min) | 191004 | To evaluate the rate variation under all conditions does not exceed -5300PPM as set by the DisplayPort standard. |
| Lane 3 - Non ISI Jitter Test | 1330004 | To evaluate the amount of Non ISI Jitter accompanying the data transmission. |
| Lane 3 - Non ISI Jitter Test | 1230004 | To evaluate the amount of Non ISI Jitter accompanying the data transmission. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - Non ISI Jitter Test | 30004 | To evaluate the amount of Non ISI Jitter accompanying the data transmission. |
| Lane 3 - Non ISI Jitter Test (TP3_EQ) - Arbitrary Pattern | 1331004 | To evaluate the Non ISI Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Non ISI Jitter Test (TP3_EQ) - HBR2CPAT | 1231004 | To evaluate the Non ISI Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Non ISI Jitter Test with No Cable (TP3_EQ) - Arbitrary Pattern | 1331014 | To evaluate the Non ISI Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Non ISI Jitter Test with No Cable (TP3_EQ) - HBR2CPAT | 1231014 | To evaluate the Non ISI Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Non-PreEmphasis Level Test | 1260004 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - Non-PreEmphasis Level Test | 60004 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - Non-PreEmphasis Level Test (Swing 1/ Swing 0) | 1261004 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - Non-PreEmphasis Level Test (Swing 1/ Swing 0) | 61004 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 1364104 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 1264004 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 64004 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 1362104 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 1262004 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 62004 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 1363104 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 1263004 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 63004 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - Non-Transition Voltage Range Measurement (Swing 0) | 1372104 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - Non-Transition Voltage Range Measurement (Swing 0) | 1272004 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - Non-Transition Voltage Range Measurement (Swing 0) | 72004 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - Non-Transition Voltage Range Measurement (Swing 1) | 1373104 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - Non-Transition Voltage Range Measurement (Swing 1) | 1273004 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - Non-Transition Voltage Range Measurement (Swing 1) | 73004 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - Non-Transition Voltage Range Measurement (Swing 2) | 1374104 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - Non-Transition Voltage Range Measurement (Swing 2) | 1274004 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - Non-Transition Voltage Range Measurement (Swing 2) | 74004 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - Overshoot Test | 1265004 | To evaluate the overshoot and undershoot of a differential data lane in a DisplayPort interface. |
| Lane 3 - Overshoot Test | 65004 | To evaluate the overshoot and undershoot of a differential data lane in a DisplayPort interface. |
| Lane 3 - PLTPAT - Non-PreEmphasis Level Test (Swing 2/ Swing 0) | 1264104 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - PLTPAT - Non-PreEmphasis Level Test (Swing 2/ Swing 1) | 1262104 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - PLTPAT - Non-PreEmphasis Level Test (Swing 3/ Swing 2) | 1263104 | To evaluate the waveform peak differential amplitude to ensure signal is neither over, nor under driven. |
| Lane 3 - PLTPAT - Non-Transition Voltage Range Measurement (Swing 0) | 1272104 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - PLTPAT - Non-Transition Voltage Range Measurement (Swing 1) | 1273104 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - PLTPAT - Non-Transition Voltage Range Measurement (Swing 2) | 1274104 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - PLTPAT - Pre-Emphasis Level Test | 1270504 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - PRBS 7 Eye Diagram Test (TP3_EQ) | 1211004 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 3 - PRBS 7 Eye Diagram Test with No Cable (TP3_EQ) | 1211014 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 3 - Peak to Peak Voltage Test (Arbitrary Pattern) | 1366104 | To evaluate the peak to peak voltage of the differential output signal. |
| Lane 3 - Peak to Peak Voltage Test (PLTPAT) | 1266104 | To evaluate the peak to peak voltage of the differential output signal. |
| Lane 3 - Peak to Peak Voltage Test (PRBS 7) | 1266004 | To evaluate the peak to peak voltage of the differential output signal. |
| Lane 3 - PostCursor2 Verification Test (Level 1/Level 0) | 1279004 | This test evaluates the effect of adding Post-Cursor2 in a Source waveform by measuring the peak differential amplitude to assure accuracy of the Post-Cursor2 setting. |
| Lane 3 - PostCursor2 Verification Test (Level 2/Level 1) | 1279104 | This test evaluates the effect of adding Post-Cursor2 in a Source waveform by measuring the peak differential amplitude to assure accuracy of the Post-Cursor2 setting. |
| Lane 3 - PostCursor2 Verification Test (Level 3/Level 2) | 1279204 | This test evaluates the effect of adding Post-Cursor2 in a Source waveform by measuring the peak differential amplitude to assure accuracy of the Post-Cursor2 setting. |
| Lane 3 - Pre-Emphasis Level Test | 1370504 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - Pre-Emphasis Level Test | 1270004 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - Pre-Emphasis Level Test | 70004 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - Pre-Emphasis Level Test [D10.2] | 1271004 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - Pre-Emphasis Level Test [D10.2] | 71004 | This test evaluates the effect of pre-emphasis of the source waveform measuring peak differential amplitude assuring accuracy of pre-emphasis setting. |
| Lane 3 - Random Jitter Test (TP3_EQ) | 1338004 | To evaluate the Random Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Random Jitter Test with No Cable (TP3_EQ) | 1338014 | To evaluate the Random Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Rise Time Test (Informative) | 1240004 | To evaluate the lane transition (rise) of a differential data lane in a DisplayPort interface. |
| Lane 3 - Rise Time Test (Informative) | 40004 | To evaluate the lane transition (rise) of a differential data lane in a DisplayPort interface. |
| Lane 3 - Rising MisMatch Test (Informative) | 12120004 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 3 - Rising MisMatch Test (Informative) | 120004 | To evaluate the difference in rise and fall times of the two single-ended signals in a given differential data lane in a DisplayPort interface. |
| Lane 3 - SSC Deviation HF Variation Test (Informative) | 13200004 | Verify SSC profile does not include any frequency deviation which would exceed 1250 ppm/uSec. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - SSC Deviation HF Variation Test (Informative) | 12200004 | Verify SSC profile does not include any frequency excursions which would exceed 1250ppm/uSec |
| Lane 3 - SSC Deviation HF Variation Test (Informative) | 200004 | Verify SSC profile does not include any frequency excursions which would exceed 1250ppm/uSec |
| Lane 3 - SSC Modulation Deviation Test | 13180004 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 3 - SSC Modulation Deviation Test | 12180004 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 3 - SSC Modulation Deviation Test | 180004 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 3 - SSC Modulation Frequency Test | 13170004 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 3 - SSC Modulation Frequency Test | 12170004 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 3 - SSC Modulation Frequency Test | 170004 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 3 - SSC Unit Interval Test | 12160004 | To evaluate the overall variation in the Unit Interval width over at least one full SSC cycle to ensure it stays within the spec limit of 300PPM |
| Lane 3 - SSC Unit Interval Test | 160004 | To evaluate the overall variation in the Unit Interval width over at least one full SSC cycle to ensure it stays within the spec limit of 300PPM |
| Lane 3 - Sink Eye Diagram Test | 12140004 | |
| Lane 3 - Sink Eye Diagram Test | 140004 | |
| Lane 3 - Sink Non ISI Jitter Test | 12220004 | |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - Sink Non ISI Jitter Test | 220004 | |
| Lane 3 - Sink Total Jitter Test | 12210004 | |
| Lane 3 - Sink Total Jitter Test | 210004 | |
| Lane 3 - Total Jitter Test | 1320004 | To evaluate the total jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Total Jitter Test | 1220004 | To evaluate the total jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Total Jitter Test | 20004 | To evaluate the total jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Total Jitter Test (TP3_EQ) | 1322004 | To evaluate the Total Jitter (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - Total Jitter Test with No Cable (TP3_EQ) | 1322014 | To evaluate the Total Jitter with No Cable (TP3_EQ) accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Lane 3 - eDP Eye Diagram Test | 15104 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |
| Lane 3 - eDP Eye Diagram Test (TP3_EQ) | 10104 | To evaluate the waveform to ensure that timing variabilities and amplitude trajectories are such to support the overall DisplayPort system objectives of Bit Error Rate in data transmission. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Lane 3 - eDP Intra Pair Skew Test | 100104 | To evaluate the skew, or time delay, between respective sides of a differential data lane in a DisplayPort interface. |
| Lane 3 - eDP Main Link Frequency Compliance | 193104 | To evaluate the rate variation under all conditions falls within -5300PPM and +300PPM as set by the DisplayPort standard. |
| Lane 3 - eDP Non ISI Jitter Test | 30104 | To evaluate the amount of eDP Non ISI Jitter accompanying the data transmission. |
| Lane 3 - eDP SSC Modulation Deviation Test | 180104 | To evaluate the range of SSC down-spreading of the transmitter signal in PPM. This requires the device [The device must] operate in the region of 0 to -5000PPM. |
| Lane 3 - eDP SSC Modulation Frequency Test | 170104 | To evaluate the frequency of the SSC modulation and to validate it falls with specification limits. |
| Lane 3 - eDP Total Jitter Test | 20114 | To evaluate the eDP Total Jitter accompanying the data transmission at either an explicit bit error rate of 1E-9 or through an approved estimation technique . This measurement is a data time interval error (Data-TIE) jitter measurement. |
| Link Layer Phy Change Test (Lane 0)- BitRate | 12320001 | Link layer bit rate test verifies if the bit rate of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 0)- BitRate | 320001 | Link layer bit rate test verifies if the bit rate of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 0)- Level | 12310001 | Link layer level test verifies if the amplitude level of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 0)- Level | 310001 | Link layer level test verifies if the amplitude level of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 0)- PreEmphasis | 12300001 | Link layer preEmphasis test verifies if the preEmphasis of the DUT can change accordingly from the lowest preEmphasis to the highest preEmphasis setting. |
| Link Layer Phy Change Test (Lane 0)- PreEmphasis | 300001 | Link layer preEmphasis test verifies if the preEmphasis of the DUT can change accordingly from the lowest preEmphasis to the highest preEmphasis setting. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Link Layer Phy Change Test (Lane 1) - PreEmphasis | 12300002 | Link layer preEmphasis test verifies if the preEmphasis of the DUT can change accordingly from the lowest preEmphasis to the highest preEmphasis setting. |
| Link Layer Phy Change Test (Lane 1) - PreEmphasis | 300002 | Link layer preEmphasis test verifies if the preEmphasis of the DUT can change accordingly from the lowest preEmphasis to the highest preEmphasis setting. |
| Link Layer Phy Change Test (Lane 1)- BitRate | 12320002 | Link layer bit rate test verifies if the bit rate of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 1)- BitRate | 320002 | Link layer bit rate test verifies if the bit rate of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 1)- Level | 12310002 | Link layer level test verifies if the amplitude level of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 1)- Level | 310002 | Link layer level test verifies if the amplitude level of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 2) - PreEmphasis | 12300003 | Link layer preEmphasis test verifies if the preEmphasis of the DUT can change accordingly from the lowest preEmphasis to the highest preEmphasis setting. |
| Link Layer Phy Change Test (Lane 2) - PreEmphasis | 300003 | Link layer preEmphasis test verifies if the preEmphasis of the DUT can change accordingly from the lowest preEmphasis to the highest preEmphasis setting. |
| Link Layer Phy Change Test (Lane 2)- BitRate | 12320003 | Link layer bit rate test verifies if the bit rate of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 2)- BitRate | 320003 | Link layer bit rate test verifies if the bit rate of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 2)- Level | 12310003 | Link layer level test verifies if the amplitude level of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 2)- Level | 310003 | Link layer level test verifies if the amplitude level of the DUT can change accordingly from the lowest to the highest setting. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| Link Layer Phy Change Test (Lane 3) - PreEmphasis | 12300004 | Link layer preEmphasis test verifies if the preEmphasis of the DUT can change accordingly from the lowest preEmphasis to the highest preEmphasis setting. |
| Link Layer Phy Change Test (Lane 3) - PreEmphasis | 300004 | Link layer preEmphasis test verifies if the preEmphasis of the DUT can change accordingly from the lowest preEmphasis to the highest preEmphasis setting. |
| Link Layer Phy Change Test (Lane 3)- BitRate | 12320004 | Link layer bit rate test verifies if the bit rate of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 3)- BitRate | 320004 | Link layer bit rate test verifies if the bit rate of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 3)- Level | 12310004 | Link layer level test verifies if the amplitude level of the DUT can change accordingly from the lowest to the highest setting. |
| Link Layer Phy Change Test (Lane 3)- Level | 310004 | Link layer level test verifies if the amplitude level of the DUT can change accordingly from the lowest to the highest setting. |
| Non-PreEmphasis Level Settings | 1206 | |
| Offline Capture Waveform | 101 | To capture all waveforms required for testing. |
| PRBS Validation Algorithm Settings | 1204 | |
| PRBS Validation Settings | 4 | |
| Pre-Emphasis Level Settings | 1207 | |
| eDP Aux Channel Eye Sensitivity Calibration (Reference Sink) | 5121 | The test is for calibration purpose to help adjusting AUX eye opening to suitable level. The test validates if voltage swing of a reference Sink AUX eye opening has meet the minimum level for futher AUX sensitivity testing. |
| eDP Aux Channel Eye Sensitivity Calibration (Reference Source) | 5131 | The test is for calibration purpose to help adjusting AUX eye opening to suitable level. The test validates if voltage swing of a reference Source AUX eye opening has meet the minimum level for futher AUX sensitivity testing. |

**Table 4** Test IDs and Names (continued)

| Name | TestID | Description |
|---|---|---|
| eDP Aux Channel Unit Interval Test (Sink) | 5110 | To evaluate the unit interval of AUX channel. |
| eDP Aux Channel Unit Interval Test (Source) | 5100 | To evaluate the unit interval of AUX channel. |

# 4 Instruments

The following table shows the instruments used by this application. The name is required by various remote interface methods.

- Instrument Name — The name to use as a parameter in remote interface commands.
- Description — The description of the instrument.

For example, if an application uses an oscilloscope and a pulse generator, then you would expect to see something like this in the table below:

**Table 5** Example Instrument Information

| Name | Description |
|---|---|
| scope | The primary oscilloscope. |
| Pulse | The pulse generator used for Gen 2 tests. |

and you would be able to remotely control an instrument using:

```
ARSL syntax (replace [description] with actual parameter)
------------------------------------------------------------------------
arsl -a ipaddress -c "SendScpiCommandCustom 'Command=[scpi
command];Timeout=100;Instrument=pulsegen'"

arsl -a ipaddress -c "SendScpiQueryCustom 'Command=[scpi
query];Timeout=100;Instrument=pulsegen'"


C# syntax (replace [description] with actual parameter)
------------------------------------------------------------------------
SendScpiCommandOptions commandOptions = new SendScpiCommandOptions();
commandOptions.Command = "[scpi command]";
commandOptions.Instrument = "[instrument name]";
commandOptions.Timeout = [timeout];
remoteAte.SendScpiCommand(commandOptions);

SendScpiQueryOptions queryOptions = new SendScpiQueryOptions();
queryOptions.Query = "[scpi query]";
queryOptions.Instrument = "[instrument name]";
```

```
queryOptions.Timeout = [timeout];
remoteAte.SendScpiQuery(queryOptions);
```

Here are the actual instrument names used by this application:

**NOTE** The file, "InstrumentInfo.txt", which may be found in the same directory as this help file, contains all of the information found in the table below in a format suitable for parsing.

**Table 6** Instrument Names

| Instrument Name | Description |
|---|---|
| scope | The primary oscilloscope |

# Index