



Agilent U7232C DisplayPort 1.2 Compliance Application

Programmer's Reference



Agilent Technologies

Notices

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In This Book

This book is your guide to programming the Agilent Technologies U7232C DisplayPort 1.2 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 11, [Chapter 3](#), “Test Names and IDs,” starting on page 41, and [Chapter 4](#), “Instruments,” starting on page 91, provide information specific to programming the U7232C DisplayPort 1.2 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.

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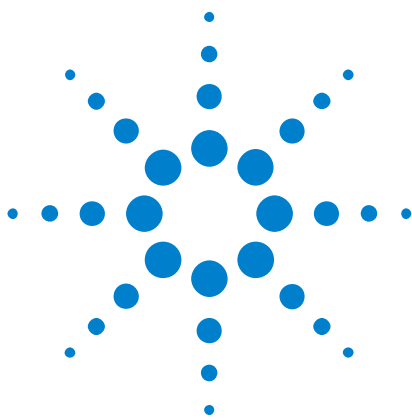
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1 Introduction to Programming

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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 where dialogs get displayed
- Saving and loading projects.

You can accomplish other tasks by combining these functions.



Remote Programming Toolkit

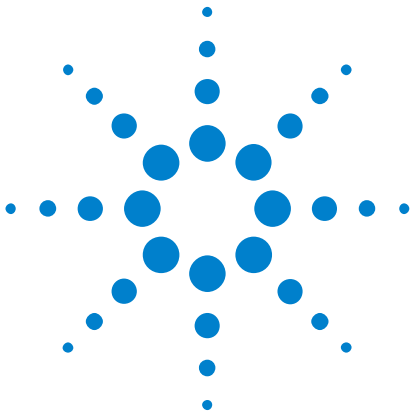
The majority of remote interface features are common across all the Agilent Technologies, Inc. family of compliance applications. Information on those features is provided in the N5452A Compliance Application Remote Programming Toolkit available for download from Agilent here: "www.agilent.com/find/scope-apps-sw". The U7232C DisplayPort 1.2 Compliance Application uses Remote Interface Revision 3.00. 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.

Licensing

To enable programming of compliance applications on your oscilloscope, please visit "www.agilent.com/find/scope-apps" to purchase an N5452A remote programming option license.

1 Introduction to Programming



2 Configuration Variables and Values

The following table contains a description of each of the U7232C DisplayPort 1.2 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");
```

2 Configuration Variables and Values

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 Probe Check	AUXProbeCheck	Enable, Disable	Enable or disable probe check while running AUXtests.
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 acquisition 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 acquisition 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.

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
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.
Configure	Bandwidth Correction Mode	BandwidthCorrectionMode	True, False	Apply bandwidth correction.
Configure	Bandwidth Reduction	bwreduction	AUTO, 4E9, 6E9, 8E9, 13E9, 20E9, 32E9, MAX	Set the acquisition bandwidth frequency for the oscilloscope. This configuration is only available when either Enhance Bandwidth or Noise Reduction option is installed on the oscilloscope. For [Standard], no bandwidth reduction.
Configure	Cable Construction	CableConstruction	CAT1, CAT2, Hybrid	Select the Cable Construction used.
Configure	Cable Embedding	CableEmbedding	True, False	Enable or disable cable embedding for TP3_EQ tests.
Configure	Cable Equalization	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.
Configure	Clock Recovery Damping Factor -HBR2(Second Order Only)	DampingFactorHBR2	(Accepts user-defined text), 1.0, 1.43, 1.51, 1.6, N/A	Set the damping factor that is used in designing the second order PLL to recover the clock.(appy when user select Second Order PLL Clock Recovery)

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Clock Recovery Damping Factor -HBR25(Second Order Only)	DampingFactorHBR25	(Accepts user-defined text), 1.0, 1.43, 1.51, 1.6, N/A	Set the damping factor that is used in designing the second order PLL to recover the clock.(appy when user select Second Order PLL Clock Recovery)
Configure	Clock Recovery Damping Factor -RBR/HBR (Second Order Only)	DampingFactor	(Accepts user-defined text), 1.43, 1.51, 1.6, N/A	Set the damping factor that is used in designing the second order PLL to recover the clock.(appy when user select Second Order PLL Clock Recovery)
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 in correct format; xMHz, xkHz or xHz.
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 in correct format; xMHz, xkHz or xHz.
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 in correct format; xMHz, xkHz or xHz.
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 in correct format; xMHz, xkHz or xHz.
Configure	Clock Recovery Loop Bandwidth(HBR2C PAT)- HBR2	CRUBandWidthHBR2CPAT HBR2	(Accepts user-defined text), 10MHz, 5MHz	Set the 3 dB bandwidth of the loop filter used by the PLL when HBR2CPAT pattern is used. Please specify in correct format; xMHz, xkHz or xHz.
Configure	Clock Recovery Loop Bandwidth(HBR2C PAT)- HBR25	CRUBandWidthHBR2CPAT HBR25	(Accepts user-defined text), 10MHz, 5MHz	Set the 3 dB bandwidth of the loop filter used by the PLL when HBR2CPAT pattern is used. Please specify in correct format; xMHz, xkHz or xHz.

2 Configuration Variables and Values

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), 10MHz, 5MHz	Set the 3 dB bandwidth of the loop filter used by the PLL when PRBS 7 pattern is used. Please specify in correct format; xMHz, xkHz or xHz.
Configure	Clock Recovery Loop Bandwidth(PRBS 7)- HBR2	CRUBandWidthPRBS7HBR2	(Accepts user-defined text), 10MHz, 5MHz	Set the 3 dB bandwidth of the loop filter used by the PLL when PRBS 7 pattern is used. Please specify in correct format; xMHz, xkHz or xHz.
Configure	Clock Recovery Loop Bandwidth(PRBS 7)- HBR25	CRUBandWidthPRBS7HBR25	(Accepts user-defined text), 10MHz, 5MHz	Set the 3 dB bandwidth of the loop filter used by the PLL when PRBS 7 pattern is used. Please specify in correct format; xMHz, xkHz or xHz.
Configure	Clock Recovery Loop Bandwidth(PRBS 7)- RBR	CRUBandWidthPRBS7Low BitRate	(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 in correct format; xMHz, xkHz or xHz.
Configure	Clock Recovery Order	ClockRecoveryOrder	1st, 2nd	Set the clock recovery order to either a second order PLL or a first order PLL method to recover the clock.
Configure	Custom Eye Mask	CustomEyeMask	False, True	Define if custom eye mask is to be used.
Configure	Custom Transfer Function File Name	CustomTFFileName	(Accepts user-defined text), CustomEmbedded	Define custom transfer function file name.
Configure	Cut Off Frequency	CutOffFrequency	(Accepts user-defined text), 1000MHz, 500MHz, 50MHz	Set the Cut Off Frequency if a Filter is applied for AC Common mode test.Specify in correct format; xMHz, xkHz or xHz.
Configure	De-Embed with Delay	DeEmbedDelay	(Accepts user-defined text), True, False	To include or exclude delay during de-embedding.
Configure	Dual Mode Clock Frequency Validation	DualModeClockFrequencyValidation	true, false	To enable or disable clock frequency validation.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
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 Probe Check	DualModeProbeCheck	true, false	To enable or disable probe validation.
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.
Configure	Exclude Random Noise	ExcludeRandomNoise	False, True	Select to include or exclude random noise measurement in Eye Diagram Test. For [False], random noise measurement is included in Eye Diagram Test. For [True], random noise measurement is excluded in Eye Diagram Test.
Configure	Expert Mode	ExpertMode	Off, On	Turn on expert mode for looser prerequisite checkers.

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
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 Edges	EyeDiagramEdge	(Accepts user-defined text), 10000, 50000, 100000, 256000, 500000, 1000000, 10000000	Set the number of edges measured for the eye test.
Configure	Eye Diagram Mask Movement	EyeDiagramMaskMovement	Fixed, FindPass, FindMargin, AlignAndFindPass, ManualAdjust	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 Margin will search +/-0.5UI horizontally to find the maximum margin of non-violation mask.
Configure	Filter	Filter	None, HighPassFilter, LowPassFilter	Specify whether a high pass filter, low pass filter or no filter is applied for AC common mode test before measurement. Interpolation is turned off if any filter is chosen.
Configure	Gain - HBR	GainHBR	(Accepts user-defined text), 1, 0.5	Set the gain when applying equalizer for HBR tests
Configure	Gain - HBR No Cable	GainHBRNoCable	(Accepts user-defined text), 1, 0.5	Set the gain when applying equalizer for HBR tests
Configure	Gain - HBR2	GainHBR2	(Accepts user-defined text), 1, 0.5	Set the gain when applying equalizer for HBR2 tests
Configure	Gain - HBR2 No Cable	GainHBR2NoCable	(Accepts user-defined text), 1, 0.5	Set the gain when applying equalizer for HBR2 tests

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Gain - HBR25	GainHBR25	(Accepts user-defined text), 1, 0.5	Set the gain when applying equalizer for HBR25 tests
Configure	Gain - HBR25 No Cable	GainHBR25NoCable	(Accepts user-defined text), 1, 0.5	Set the gain when applying equalizer for HBR25 tests
Configure	Gain - RBR	GainRBR	(Accepts user-defined text), 1, 0.5	Set the gain when applying equalizer for RBR tests
Configure	HBR SSC Smoothing Points	SSCSmoothPointsHigh	(Accepts user-defined text), 61, 603, 701	Set the number of smoothing points for SSC low pass filter when bit rate is 2.70 Gbps.
Configure	HBR2 SSC Smoothing Points	SSCSmoothPointsHBR2	(Accepts user-defined text), 120, 1206, 1402	Set the number of smoothing points for SSC low pass filter when bit rate is 5.40 Gbps.
Configure	HBR25 SSC Smoothing Points	SSCSmoothPointsHBR25	(Accepts user-defined text), 120, 1206, 1402	Set the number of smoothing points for SSC low pass filter when bit rate is 6.75 Gbps.
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	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

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
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 for the inter pair skew test.
Configure	Inter-Pair Skew Search Method	InterPairSkewSearchMethod	1, 2	Define pattern search method for inter-pair skew test.
Configure	Inter-Pair Skew Test Pattern	InterPairSkewTestPattern	PRBS 7, Arbitrary	Define the test pattern used for 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 the intra-pair skew test.
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] config variable is set to [Arbitrary].

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
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] config variable is set to [Arbitrary].
Configure	Jitter Pattern Pattern	JitterWaveformPattern	Periodic, Arbitrary	Select the waveform pattern length used for jitter separation measurements. [Periodic] should be used on waveforms with repeating data patterns. [Arbitrary] should be used on waveforms with non-repeating patterns.
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] config 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 Edges	LevelEdge	(Accepts user-defined text), 100, 500, 1000	Set the number of edges measured for the level test.

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Mask Scaling Option	MaskScale	Absolute, Normalized, Relative	Set the type of scaling performed on the mask for the eye test.
Configure	Mask Type	MaskType	TP2, TP3	Selects the type of mask to use for the eye test. (TP2 for Source; TP3 for Sink)
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.
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 re-tries for 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.
Configure	Memory Depth	MemoryDepth	2050000, 5000000, 8000000	Set the acquisition memory depth for the oscilloscope.
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] config 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] config 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.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	PRBS pattern checker rule	PRBSChecker	Strict, Loose	Determine the rules applied to PRBS-7 Pattern detector. By selecting Strict, test can only proceed with correct PRBS-7 pattern only.
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 InfiniScan Serial trigger.
Configure	Pole1 - HBR (Mhz)	Pole1HBR	(Accepts user-defined text), 1350	Set the Pole1 when applying equalizer for HBR tests
Configure	Pole1 - HBR (Mhz) No Cable	Pole1HBRNoCable	(Accepts user-defined text), 1350	Set the Pole1 when applying equalizer for HBR tests
Configure	Pole1 - HBR2 (Mhz)	Pole1HBR2	(Accepts user-defined text), 2700	Set the Pole1 when applying equalizer for HBR2 tests
Configure	Pole1 - HBR2 (Mhz) No Cable	Pole1HBR2NoCable	(Accepts user-defined text), 2700	Set the Pole1 when applying equalizer for HBR2 tests
Configure	Pole1 - HBR25 (Mhz)	Pole1HBR25	(Accepts user-defined text), 2700, 3750, 5625	Set the Pole1 when applying equalizer for HBR25 tests
Configure	Pole1 - HBR25 (Mhz) No Cable	Pole1HBR25NoCable	(Accepts user-defined text), 2700, 3375	Set the Pole1 when applying equalizer for HBR25 tests
Configure	Pole1 - RBR (Mhz)	Pole1RBR	(Accepts user-defined text), 700	Set the Pole1 when applying equalizer for HBR tests
Configure	Pole2 - HBR (Mhz)	Pole2HBR	(Accepts user-defined text), 2500	Set the Pole2 when applying equalizer for HBR tests
Configure	Pole2 - HBR (Mhz) No Cable	Pole2HBRNoCable	(Accepts user-defined text), 2500	Set the Pole2 when applying equalizer for HBR tests

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Pole2 - HBR2 (Mhz)	Pole2HBR2	(Accepts user-defined text), 4500, 3000	Set the Pole2 when applying equalizer for HBR2 tests
Configure	Pole2 - HBR2 (Mhz) No Cable	Pole2HBR2NoCable	(Accepts user-defined text), 4500, 3000	Set the Pole2 when applying equalizer for HBR2 tests
Configure	Pole2 - HBR25 (Mhz)	Pole2HBR25	(Accepts user-defined text), 13500, 4500, 3000	Set the Pole2 when applying equalizer for HBR25 tests
Configure	Pole2 - HBR25 (Mhz) No Cable	Pole2HBR25NoCable	(Accepts user-defined text), 13500, 5625, 4500, 3000	Set the Pole2 when applying equalizer for HBR25 tests
Configure	Pole2 - RBR (Mhz)	Pole2RBR	(Accepts user-defined text), 20000	Set the Pole2 when applying equalizer for HBR tests
Configure	Pole3 - HBR2 (Mhz)	Pole3HBR2	(Accepts user-defined text), 13500, 5000	Set the Pole3 when applying equalizer for HBR2 tests
Configure	Pole3 - HBR2 (Mhz) No Cable	Pole3HBR2NoCable	(Accepts user-defined text), 13500, 5000	Set the Pole3 when applying equalizer for HBR2 tests
Configure	Pole3 - HBR25 (Mhz)	Pole3HBR25	(Accepts user-defined text), 13500, 5000	Set the Pole3 when applying equalizer for HBR25 tests
Configure	Pole3 - HBR25 (Mhz) No Cable	Pole3HBR25NoCable	(Accepts user-defined text), 16875, 13500, 5000	Set the Pole3 when applying equalizer for HBR25 tests
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 Edges	PreEmphasisEdge	(Accepts user-defined text), 100, 500, 1000	Set the number of edges measured for the Pre-Emphasis Level Test.
Configure	Prompt For AUX Traffic	PromptForAUXTraffic	true, false	Enable/Disable pop up to initiate traffic.
Configure	RBR SSC Smoothing Points	SSCSmoothPointsLow	(Accepts user-defined text), 37, 361, 401	Set the number of smoothing points for SSC low pass filter when bit rate is 1.62 Gbps.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Random Noise End Location	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. This configuration only applicable when the [Random Noise Measurement Method] config variable is set to [EZJIT Complete]. Unit: UI.
Configure	Random Noise High (mV)	RandomNoise_High	(Accepts user-defined text), 0.2	Set the high level random noise (RN) rms in Eye Diagram Test. This configuration only applicable when the [Random Noise Measurement Method] config variable is set to [Specify RN]. Unit: mV.
Configure	Random Noise Low (mV)	RandomNoise_Low	(Accepts user-defined text), 0.2	Set the low level random noise (RN) rms in Eye Diagram Test. This configuration only applicable when the [Random Noise Measurement Method] config variable is set to [Specify RN]. Unit: mV.
Configure	Random Noise Measurement Method	RandomNoiseMeasMethod	SpecifyRN, Histogram, EZJITComplete	Select the random noise measurement method in Eye Diagram Test. 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.

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Random Noise Measurement Number	RandomNoise_MeasNumber	(Accepts user-defined text), 1, 5, 10, 15, 20	Set the measurement number for the random noise measurement in Eye Diagram Test. If measurement number set to one, the random noise measurement will be performed at [RNoise Start Location]. This configuration only applicable when the [Random Noise Measurement Method] config variable is set to [EZJIT Complete].
Configure	Random Noise Start Location	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. This configuration only applicable when the [Random Noise Measurement Method] config variable is set to [EZJIT Complete]. Unit: UI.
Configure	Rise-Fall MisMatch Edges	RiseFallMisMatchEdge	(Accepts user-defined text), 100, 1000	Set the number of edges measured for the rise-fall mismatch test.
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	1.98, 1.7	Define the fequency of SSC low pass filter when second order butterworth filter is applied.
Configure	SSC Filter Type	SSCFilterType	SmoothingFilter, Butterworth2	Define the type of filter used for SSC tests.
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", "00101010100010101010", "11010101001101010100" or "11010101011101010101" pattern.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Serial Pattern Eye Method (RNoise)	SerialPatternMethodRandomNoise	1, 2	Select the search method for serial pattern in random noise measurement for High Level (VHigh) and Low Level (VLow).
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	Selects the type of Equalization to use for the Sink test. Select Manual if user would like to provide own 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)
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	Skew Trigger Patterns	SkewTriggerPattern	000001, 000111, 0011, 01, 0101010, 10101, 010	Define trigger pattern for Intra-Pair Skew Test.
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.

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	TP3_EQ Eye Diagram UI	TP3EQEyeDiagramUI	10000, 100000, 1000000, 10000000, 100000000, 1000000000	Set the number of edges measured for the eye test.
Configure	TP3_EQ NBit Start (RNoise High)	TP3_EQ_NBit_Start_Top	(Accepts user-defined text), 7, 10	Define the bit range
Configure	TP3_EQ NBit Start (RNoise Low)	TP3_EQ_NBit_Start_Bottom	(Accepts user-defined text), 4, 6	Define the bit range
Configure	TP3_EQ Serial Pattern (RNoise High)	TP3_EQ_SerialPatternTop	(Accepts user-defined text), 010001111001, 1010110001110	Set the serial pattern search for High Level random noise measurement in Eye Diagram (TP3_EQ) tests. This configuration support only 8 bits maximum when the [Serial Pattern Eye Method (RNoise)] config variable is set to method [1]. If more than 8 bits is set by user, the first 8 bits will be used for serial pattern search.
Configure	TP3_EQ Serial Pattern (RNoise Low)	TP3_EQ_SerialPatternBottom	(Accepts user-defined text), 010000111010, 10001000101	Set the serial pattern search for Low Level random noise measurement in Eye Diagram (TP3_EQ) tests. This configuration support only 8 bits maximum when the [Serial Pattern Eye Method (RNoise)] config variable is set to method [1]. If more than 8 bits is set by user, the first 8 bits will be used for serial pattern search.
Configure	Test Plan Check Mode	TestPlanCheckerMode	Off, On	Turn on 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	Additional option in test plan check mode. "Turn on Automation" allows you to verify signal changed through automation by visual inspection for each test plan permutation.(if automation solution is enabled). "Manual Inspection" allows you to run through test plans with message of settings popped up. "Generate Report" bypasses message box 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	Decide the threshold either by VMax/VMin, VTop/VBase or threshold at absolute 0 for HBR and RBR
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.
Configure	Transmit Pattern	TransmitPattern	D10.2, PRBS 7	Define the transmit pattern for Intra-pair skew test.
Configure	Trigger Pattern	DMIntraPairSkewTriggerPattern	0000001, 000111, 0011, 01, 0101010, 10101, 010	Define the trigger pattern for the Dual Mode Intra Pair Skew Test.

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Trigger Patterns	AdditionalTriggerPattern	(Accepts user-defined text), 0000001, 0000111	Define trigger pattern other than default pattern.
Configure	Turn Off CTLE	TurnOffCTLE	True, False	Turn On/Off CTLE when doing TP3_EQ test.
Configure	Use Custom Transfer Function	CustomTransferFunction	True, False	Force DeEmbedding/Embedding using custom transfer function for TP3_EQ Test.
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.
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	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), 650, 540, 700, 450, 725	Set the Zero Frequency when applying equalizer for HBR tests
Configure	Zero Frequency - HBR No Cable (Mhz)	ZeroFrequencyHBRNoCable	(Accepts user-defined text), 650, 540, 700, 450, 725	Set the Zero Frequency when applying equalizer for HBR tests

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Zero Frequency - HBR2 (Mhz)	ZeroFrequencyHBR2	(Accepts user-defined text), 450, 540, 640	Set the Zero Frequency when applying equalizer for HBR2 tests
Configure	Zero Frequency - HBR2 No Cable (Mhz)	ZeroFrequencyHBR2NoCable	(Accepts user-defined text), 450, 540, 640	Set the Zero Frequency when applying equalizer for HBR2 tests
Configure	Zero Frequency - HBR25 (Mhz)	ZeroFrequencyHBR25	(Accepts user-defined text), 450, 540, 640, 1000	Set the Zero Frequency when applying equalizer for HBR25 tests
Configure	Zero Frequency - HBR25 No Cable (Mhz)	ZeroFrequencyHBR25NoCable	(Accepts user-defined text), 450, 540, 640, 1000, 2000	Set the Zero Frequency when applying equalizer for HBR25 tests
Configure	Zero Frequency - RBR (Mhz)	ZeroFrequencyRBR	(Accepts user-defined text), 650, 540, 700, 450	Set the Zero Frequency when applying equalizer for HBR tests
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	1.6 Gbps	1.62 Gbps	0.0, 1.0	Enable/Disable 1.62 Gbps support
Set Up	2.7 Gbps	2.7 Gbps	0.0, 1.0	Enable/Disable 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 3.24 Gbps support
Set Up	5.4 Gbps	5.4 Gbps	0.0, 1.0	Enable/Disable 5.4 Gbps support

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Set Up	6.75 Gbps	6.75 Gbps	0.0, 1.0	Enable/Disable 5.4 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.
Set Up	Automated Test script	perTxtScript	(Accepts user-defined text)	Select a script for Automated Test
Set Up	Automated Tests Configuration	AutomationConfig	(Accepts user-defined text)	Configure the IP address and Port Number if W2642 DPTC is chosen. To do this, pass a string of 'IP=XXX.XXX.XXX.XXX / Port=XXXXX'.
Set Up	Automation Driver	AutomatedType	AgilentW2642A, ADCPulsegen, AgilentDPTC, AUXAUX1, JBertBSim, JBertSim, NDUTControl, PulseGenSim, STMICRO, TCPIP, UnigrafDPTC	Select the automation driver used for automation.
Set Up	Aux Acquisition 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.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
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.
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 for device
Set Up	Connection Type	ConnectionType	Differential Probe, Single-Ended (A-B)	Set the connection type to either Differential Probe or Single-Ended(A-B) connection
Set Up	Connection Type	OfflineStep	Acquire, Run	Set the connection type to either Differential Probe or Single-Ended(A-B) connection
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	Device ID	persDeviceID	(Accepts user-defined text)	Device Identifier
Set Up	Device Type	DUTType	Source, Sink, Cable	Define the type of device whether a Source, Sink or Cable type.
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

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
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
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	Enable Offline mode for Physical Layer Tests.	pcbPhysicalLayerOfflineMode	0.0, 1.0	Enable Offline mode for Physical Layer Tests.
Set Up	Enable Switch Matrix	SwitchMatrixEnable	0.0, 1.0	Check to enable switch matrix
Set Up	Enable fixture de-embedding.	DeEmbedFixture	0.0, 1.0	Enable fixture de-embedding.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Set Up	Fixture Type	FixtureType	(Accepts user-defined text), Agilent W2641A, Agilent W2641B, Wilder Tech mDP-TPA-P/ BIT-mDP-PTF-0001 , Wilder Tech DP-TPA-P/ BIT-DP-PTF-0003/ Tek TF-DP-TPA-P, ICT Lanto mDP Plug, Other	Choose the fixture type.
Set Up	Lane 0	Lane0	(Accepts user-defined text), Channel 1, Channel 2, Channel 3, Channel 4	Set the channel used for Lane 0 when using differential Probes
Set Up	Lane 1	Lane1	(Accepts user-defined text), Channel 1, Channel 2, Channel 3, Channel 4	Set the channel used for Lane 1 when using differential Probes
Set Up	Lane 2	Lane2	(Accepts user-defined text), Channel 1, Channel 2, Channel 3, Channel 4	Set the channel used for Lane 2 when using differential Probes
Set Up	Lane 3	Lane3	(Accepts user-defined text), Channel 1, Channel 2, Channel 3, Channel 4	Set the channel used for Lane 3 when using differential Probes
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 No when lane setting is set to 4 Lanes.

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Set Up	Lane B(4 Lanes)	LaneB	(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.
Set Up	Lane Setting	Lane	1 Lane, 2 Lanes, 4 Lanes	Sets the number of lanes supported by DUT
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.
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 Swing 0 support
Set Up	Level Swing 1	Swing 1	0.0, 1.0	Enable/Disable Swing 1 support
Set Up	Level Swing 2	Swing 2	0.0, 1.0	Enable/Disable Swing 2 support
Set Up	Level Swing 3	Swing 3	0.0, 1.0	Enable/Disable Swing 3 support
Set Up	No of Channels	comboChannels	1 Channel	Define 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)

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
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	Operator ID	persOperatorID	(Accepts user-defined text)	Operator Identifier
Set Up	Post Cursor2 Level 0	Level 0	0.0, 1.0	Enable/Disable PostCursor2 Level 0 support
Set Up	Post Cursor2 Level 1	Level 1	0.0, 1.0	Enable/Disable PostCursor2 Level 1 support
Set Up	Post Cursor2 Level 2	Level 2	0.0, 1.0	Enable/Disable PostCursor2 Level 2 support
Set Up	Post Cursor2 Level 3	Level 3	0.0, 1.0	Enable/Disable PostCursor2 Level 3 support
Set Up	Pre-emphasis 0	Pre-emphasis 0	0.0, 1.0	Enable/Disable Pre-emphasis 0 support
Set Up	Pre-emphasis 1	Pre-emphasis 1	0.0, 1.0	Enable/Disable Pre-emphasis 1 support
Set Up	Pre-emphasis 2	Pre-emphasis 2	0.0, 1.0	Enable/Disable Pre-emphasis 2 support
Set Up	Pre-emphasis 3	Pre-emphasis 3	0.0, 1.0	Enable/Disable Pre-emphasis 3 support
Set Up	Preferred Level PreEmphasis	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 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	To select the preferred preEmphasis level for HBR2 tests

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Set Up	Preferred Level PreEmphasis	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	To select the preferred preEmphasis level for HBR2 tests
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	persProjectID	(Accepts user-defined text)	Project Identifier
Set Up	SSC Option	SSCOption	Disabled, Enabled	Sets the SSC capability of 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.

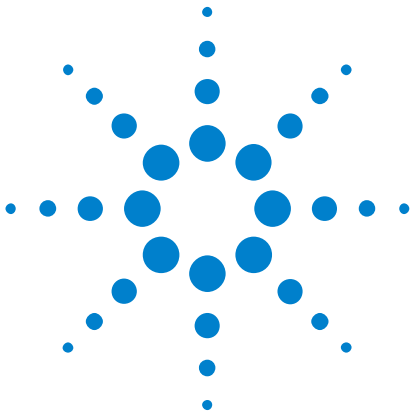
Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
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.
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.

2 Configuration Variables and Values

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Set Up	Single Ended Lane3Minus	DMClkMinus	Channel 3, Channel 4	Set the channel used for Lane 3- when using Single-Ended Connection.
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	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 display port(Compliance Conditions Only, User defined conditions and Targeted Characterization testing mode)
Set Up	Test Specification	DPCTSVersion	1.1, 1.1a, 1.2b, eDP 1.3, MyDP 1.0, MyDP HBR25	Select test specification.
Set Up	Test Type	TestType	Differential Tests, Single-Ended Tests, Both	Sets the test type to either single-ended or differential tests if device type is Source.
Set Up	Update Controls	UpdateList	0.0, 1.0	Set this to 1.0 to trigger an event to update all controls and settings.
Set Up	pcbUnHideOffline	pcbUnHideOffline	0.0, 1.0	Reveals Offline GUI



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	1201	
Clock Recovery Settings	1	
Configurable Parameter Settings	1200	
Configurable Parameter Settings	0	
D0 - Dual Mode Data Jitter	611	To evaluate data jitter a dual-mode source device.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
D0 - Dual Mode Data Jitter	911	To evaluate data jitter a dual-mode source device.
D0 - Dual Mode Data Peak-Peak Differential Voltage (Max)	821	To evaluate data peak to peak voltage.
D0 - Dual Mode Data Peak-Peak Differential Voltage (Min)	811	To evaluate data peak to peak voltage.
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 dual-mode source device.
D0/D1 - Dual Mode Inter Pair Skew Test	711	To evaluate the skew, or time delay, between respective differential data of a dual-mode source device.
D0/D2 - Dual Mode Inter Pair Skew Test	712	To evaluate the skew, or time delay, between respective differential data of a dual-mode source device.
D1 - Dual Mode Data Jitter	612	To evaluate data jitter a dual-mode source device.
D1 - Dual Mode Data Jitter	912	To evaluate data jitter a dual-mode source device.
D1 - Dual Mode Data Peak-Peak Differential Voltage (Max)	822	To evaluate data peak to peak voltage.
D1 - Dual Mode Data Peak-Peak Differential Voltage (Min)	812	To evaluate data peak to peak voltage.
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 dual-mode source device.
D1/D2 - Dual Mode Inter Pair Skew Test	713	To evaluate the skew, or time delay, between respective differential data of a dual-mode source device.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
D2 - Dual Mode Data Jitter	613	To evaluate data jitter a dual-mode source device.
D2 - Dual Mode Data Jitter	913	To evaluate data jitter a dual-mode source device.
D2 - Dual Mode Data Peak-Peak Differential Voltage (Max)	823	To evaluate data peak to peak voltage.
D2 - Dual Mode Data Peak-Peak Differential Voltage (Min)	813	To evaluate data peak to peak voltage.
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 dual-mode source device.
Dual Mode TMDS Clock Duty Cycle(Max)	502	To evaluate Maximum Duty Cycle of Dual Mode TMDS Clock
Dual Mode TMDS Clock Duty Cycle(Min)	501	To evaluate Minimum Duty Cycle of Dual Mode TMDS Clock
Dual Mode TMDS Clock Jitter	503	To evaluate Jitter of Dual Mode TMDS Clock
Dual Mode TMDS Clock Jitter	803	To evaluate Jitter of Dual Mode TMDS Clock
EqualizerSettings	1208	
Eye Diagram Test	1205	
Jitter Separation Settings	1202	
Jitter Separation Settings	2	
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.
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	

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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 - 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 - 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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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	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	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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-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)	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)	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)	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)	1272001	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 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)	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.
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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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 - Peak to Peak Voltage Test	1266101	To evaluate the Peak to Peak Voltage.
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.
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	1266001	To evaluate the Peak to Peak Voltage.
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	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 - 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)	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
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	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

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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	
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 - 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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Lane 0 - eDP Non-ISI Jitter Test	30101	To evaluate the amount of eDP Non-ISI jitter accompanying the data transmission.
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	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	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	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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	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.
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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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 - 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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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 - 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.
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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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	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	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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	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-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.
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)	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)	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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)	1272002	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)	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)	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)	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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 - Peak to Peak Voltage Test	1266102	To evaluate the peak to peak voltage.
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	1266002	To evaluate the peak to peak voltage.
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	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 - 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.
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)	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	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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	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
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	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.

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	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	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	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.
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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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 - 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.
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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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	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-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.
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)	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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)	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)	1272003	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)	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)	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)	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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 - Peak to Peak Voltage Test	1266103	To evaluate the peak to peak voltage.
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	1266003	To evaluate the peak to peak voltage.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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	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 - 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.
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)	12200003	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 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	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	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
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	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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 - 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	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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 - 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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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 - 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.
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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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	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	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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	1230004	To evaluate the amount of Non-ISI jitter accompanying the data transmission.
Lane 3 - Non-ISI Jitter Test	30004	To evaluate the amount of Non-ISI jitter accompanying the data transmission.
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)	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)	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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)	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)	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)	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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 - Peak to Peak Voltage Test	1266104	To evaluate the peak to peak voltage.
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	1266004	To evaluate the peak to peak voltage.
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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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	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 - 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)	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	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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	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	
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	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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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.

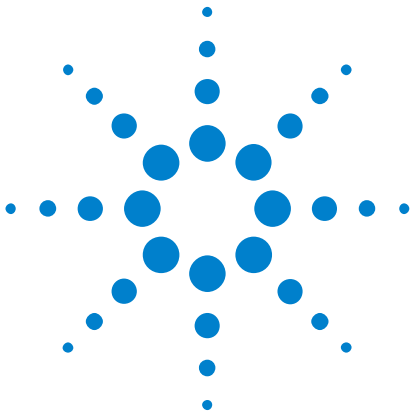
Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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 Pre-Emphasis Level Test	1206	
Offline Capture Waveform	101	To capture all waveforms required for compliance testing.
PRBS Validation Settings	1204	
PRBS Validation Settings	4	
Pre-Emphasis Level Test	1207	

Table 4 Test IDs and Names (continued)

Name	TestID	Description
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.
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.
eDPEqualizerSettings	108	
eDPEyeDiagramSettings	105	

3 Test Names and IDs



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);
```



4 Instruments

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

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