
Keysight N1091DJPA IEEE 802.3 dj Tx Validation Test Application

Notices

© Keysight Technologies, Inc. 2005-2026

No part of this manual may be reproduced in any form or by any means (including electronic storage and retrieval or translation into a foreign language) without prior agreement and written consent from Keysight Technologies, Inc. as governed by United States and international copyright laws.

Revision

Version 1.0.0.0

Edition

February 24, 2026

Available in electronic format only

Published by:

Keysight Technologies, Inc.
1900 Garden of the Gods Road
Colorado Springs, CO 80907 USA

Warranty

The material contained in this document is provided "as is," and is subject to being changed, without notice, in future editions. Further, to the maximum extent permitted by applicable law, Keysight disclaims all warranties, either express or implied, with regard to this manual and any information contained herein, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. Keysight shall not be liable for errors or for incidental or consequential damages in connection with the furnishing, use, or performance of this document or of any information contained herein. Should Keysight and the user have a separate written agreement with warranty terms covering the material in this document that conflict with these terms, the warranty terms in the separate agreement shall control.

Technology License

The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license.

U.S. Government Rights

The Software is "commercial computer software," as defined by Federal Acquisition Regulation ("FAR") 2.101. Pursuant to FAR 12.212 and 27.405-3 and Department of Defense FAR Supplement ("DFARS") 227.7202, the U.S. government acquires commercial computer software under the same terms by which the software is customarily provided to the public. Accordingly, Keysight provides the Software to U.S. government customers under its standard commercial license, which is embodied in its End User License Agreement (EULA), a copy of which can be found at www.keysight.com/find/sweula. The license set forth in the EULA represents the exclusive authority by which the U.S. government may use, modify, distribute, or disclose the Software. The EULA and the license set forth therein, does not require or permit, among other things, that Keysight: (1) Furnish technical information related to commercial computer software or commercial computer software documentation that is not customarily provided to the public; or (2) Relinquish to, or otherwise provide, the government rights in excess of these rights customarily provided to the public to use, modify, reproduce, release, perform, display, or disclose commercial computer software or commercial computer software documentation. No additional government requirements beyond those set forth in the EULA shall apply, except to the extent that those terms, rights, or licenses are explicitly required from all providers of commercial computer software pursuant to the FAR and the DFARS and are set forth specifically in writing elsewhere in the EULA. Keysight shall be under no obligation to update, revise or otherwise modify the Software. With respect to any technical data as defined by FAR 2.101, pursuant to FAR 12.211 and 27.404.2 and DFARS 227.7102, the U.S. government acquires no greater than Limited Rights as defined in FAR 27.401 or DFAR 227.7103-5 (c), as applicable in any technical data.

Safety Notices

CAUTION

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

WARNING

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

In This Book

This book is your guide to programming the Keysight Technologies N1091DJPA IEEE 802.3 dj Tx Validation Test Application.

- **Chapter 1**, “Introduction to Programming,” starting on page 7, describes compliance application programming basics.
- **Chapter 2**, “Configuration Variables and Values,” starting on page 9, **Chapter 3**, “Test Names and IDs,” starting on page 29, **Chapter 4**, “Instruments,” starting on page 53, and **Chapter 5**, “Message IDs,” starting on page 55 provide information specific to programming the N1091DJPA IEEE 802.3 dj Tx Validation Test 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, 4, and 5 for changes.

Contents

In This Book / 3

1 Introduction to Programming

Remote Programming Toolkit / 8

2 Configuration Variables and Values

3 Test Names and IDs

4 Instruments

5 Message IDs

Index

1 Introduction to Programming

Remote Programming Toolkit / 8

This chapter introduces the basics for remote programming a compliance/test application. The programming commands provide the means of remote control. Basic operations that you can do remotely with a computer and a compliance/test 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 Keysight Technologies, Inc. family of compliance/test applications. Information on those features is provided in the N5452A Compliance Application Remote Programming Toolkit available for download from Keysight here: www.keysight.com/find/rpi. The N1091DJPA IEEE 802.3 dj Tx Validation Test Application uses Remote Interface Revision 7.30. The help files provided with the toolkit indicate which features are supported in this version.

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

2 Configuration Variables and Values

The following table contains a description of each of the N1091DJPA IEEE 802.3 dj Tx Validation Test Application options that you may query or set remotely using the appropriate remote interface method. The columns contain this information:

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

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

- Enable Advanced Features

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

Table 1 Example Configuration Variables and Values

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

and you would set the variable remotely using:

ARSL syntax

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

C# syntax

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

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

NOTE

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

NOTE

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

Table 2 Configuration Variables and Values

GUI Location	Label	Variable	Values	Description
Configure	Aliased Noise Processing	PNoise	SPECTrum, PRMS	Choose an aliased noise processing for Reference Receiver.
Configure	CDR Equalization Level	EQLevel	(Accepts user-defined text), 0	Select the equalization level on the PLL loop characteristics for Clock Recovery.
Configure	CDR Input Source	CDRInputSource	DIFF, ELEC, EINV	Select the module's data input connector for clock recovery
Configure	CDR Source	CKSource	N107, User	Select the source used for clock recovery. By selecting "N107x", N1076B/77B/78A external clock recovery will be used as CDR source. By selection "User", a user supplied clock must be supplied for trigger.
Configure	CTLE Pole 1 Frequency	CtlePole1Frequency	(Accepts user-defined text), 42.50e9	Defines the continuous time filter, pole 1 frequency.
Configure	CTLE Pole 2 Frequency	CtlePole2Frequency	(Accepts user-defined text), 106.25e9	Defines the continuous time filter, pole 2 frequency. The value will change if the signaling rate changes. The formula is signaling rate/80.
Configure	CTLE Pole 3 Frequency	CtlePole3Frequency	(Accepts user-defined text), 1.328125e9	Defines the continuous time filter, pole 2 frequency. The value will change if the signaling rate changes. The formula is signaling rate/80.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	CTLE Zero 2 Frequency	CtleZeroTwoFrequency	(Accepts user-defined text), 1.328125e9	Defines the continuous time filter, zero 2 frequency.
Configure	CTLE Zero Frequency	CtleZeroFrequency	(Accepts user-defined text), 42.50e9	Defines the continuous time filter, zero frequency.
Configure	Clock Pattern Distortion State	PDCState	Enable, Disable	Select "Enable" to turn on the clock pattern distortion to enable the compensation and "Disable" to turn off.
Configure	Clock Rate	ClkRate	(Accepts user-defined text), 26.5625e9	Set the clock rate for fractional clock ratio. Enter value in the format 26.5625e9.
Configure	Complement Channel Attenuation	CompChnAtten	(Accepts user-defined text), 0, 3	Value of path attenuation from device to measurement receiver. This will adjust the measured amplitude values for the path loss. The choice of 3dB is for the Keysight pick-off which has flat attenuation in the frequency range of interest. The range of allowable values is 0 to 30 dB
Configure	Disable Linear Fit Prerequisites	DisablePRBS	Enable, Disable	Select "Disable" to disable the pre-requisites for the tests using Linear Fit. All Linear Fit and equalization tests require RLM to be measured. When the eye is closed, then the measurements cannot be made. By disabling the pre tests, ES1 and ES2 will default to 0.33. Select "Enable" to run the pre-reqs first.
Configure	Display c(coef_sel) only	MainCoef	Yes, No	Select No to view the results of other coefficients. Select Yes to view the result of the currently selected coefficient only.
Configure	Dp	DpVal	(Accepts user-defined text), 2, 3, 4	Set the Dp value used for steady state, linear fit pulse peak, and error calculations.
Configure	Eye Height/Width Probability	EyeProb	1e-3, 1e-4, 1e-5, 1e-6	Select the eye probability to test to for Eye Height and Width tests.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Gaussian Standard Deviation	GaussStdDev	(Accepts user-defined text), 2	Select the standard deviation for Gaussian window. Unit in %.
Configure	Host Designation	HostDesign	HostLow, HostNominal, HostHigh	Choose a host designation. Host-Low, Host-Nominal, and Host-High correspond to low, moderate, and high levels of insertion loss, respectively.
Configure	Interpolate for Coefficient Tests	Interp	ON, OFF	By turning interpolation on, the test will run faster. You can turn it off for true M points per bit accumulation.
Configure	J4u	J4uforCom	(Accepts user-defined text), 0.115	Select the J3u value for auto-tune with COM method.
Configure	JSA State	JSASState	ON, OFF	Controls state of Jitter Spectrum Analysis functionality, which is an available option on N1060A or N107x modules. You may enable or add JSA feature to improve jitter results. If JSA is On, the Jitter Optimization will be turned On automatically. The Jitter Optimization is not available if N1060A is used as CDR for N104x modules.
Configure	Jitter Eye Center Definition	JitEyeCenterDefinition	Pulse Response (ts), Maximum Eye Height, Maximum Eye Width	This option allows the user to configure the Jitter Eye Center Definition. Note: This option is only valid to Eye Center's Jitter Sampling Level.
Configure	Jitter Sampling Level	JitSamp	Eye Center, Percent	This option allows the user to change from "Eye Center" to "Percent" for "Jitter Sampling Level". Note: Only change this selection from "Eye Center" (Default) to "Percent" when Jitter Mode fails to measure random noise (RN) and Level parameters due to a severely degraded PAM4 signal (e.g. closed eye). RN and Level measurements are common pre-requisites for other measurements.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Jrms	JrmsforCom	(Accepts user-defined text), 0.023	Select the Jrms value for auto-tune with COM method.
Configure	Loop Bandwidth	LoopBW	(Accepts user-defined text), 1e6, 4e6, 10e6	Select or enter the Loop BW to be used the clock recovery.
Configure	Loop Bandwidth Tuning	LoopBWTune	OFF, ON	Select "ON" to tune loopbandwidth on relock or "OFF" to remain.
Configure	Measure For COM Method	MeasureforCom	Yes, User	For auto-tune, select "Yes" to have the DCA measure Jrms and J4u using Jitter Mode. If you select "User Provided", enter the values that you would like to use for Jrms and J4u on the Configure tab.
Configure	Measure Tfx Delay Method (ERL)	MeasureTfxDelayMethod	COM, User	This is for test point TP0v only. Select "COM" to have the COM measure the fixture delay time (Tfx) and apply in ERL calculation. If you select "User Provided", enter the value that you would like to use.
Configure	Measure Tfx Delay Method (Reference ERL)	MeasureRefERLTfxDelayMethod	COM, User	This is for test point TP0v only. Select "COM" to have the COM measure the fixture delay time (Tfx) and apply in Ref ERL calculation. If you select "User Provided", enter the value that you would like to use.
Configure	Module Calibration	ModCal	Required, Not Required	Allows measurements to be completed if plug-in modules are not calibrated. Only available in Debug Mode.
Configure	N1055A Channels	N1055AChan	CHANAB, CHANCD	Select N1055A Channels. Only applicable when using N1055A for Return Loss tests
Configure	Nb For SNRISI	NbValSNRISI	(Accepts user-defined text), 20	Set the Nb value used for steady state to measure the SNRISI test.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Np	NpVal	(Accepts user-defined text), 8, 12, 13, 14, 16, 200, 400	Set the Np value used for steady state, linear fit pulse peak, and error calculations.
Configure	Number of acquisition	AcqNum	(Accepts user-defined text), 1, 5	Set the number of acquisition used for the Eye tests. Adjusting to a larger number of acquisitions will result in the overall test time being longer.
Configure	Number of averages for Coefficient Tests	StepLoop	(Accepts user-defined text), 5, 8, 10, 16, 20	Set the number of averages used for the Coefficient tests. If Interpolation is turned off, the min average value is 16.
Configure	Number of averages for Vcm-FB	NumAveragesVcmFB	(Accepts user-defined text), 16, 100	Set the number of averages used for the Vcm-FB test.
Configure	Number of averages for Vcm-LF	NumAveragesVcmLF	(Accepts user-defined text), 16, 180	Set the number of averages used for the Vcm-LF tests.
Configure	Nv	NvVal	(Accepts user-defined text), 8, 12, 13, 14, 16, 200, 400	Set the Nv value used for steady state, linear fit pulse peak, and error calculations.
Configure	PAM4 Pattern	PamPatt	PRBS9Q, PRBS11Q, PRBS13Q, PRBS15Q, SSPRQ	Select the pattern used for Jitter, Level, SNDR, Eye and also Steady State Voltage relevant measurements. This setting will apply to affected but not relevant tests as well. "PRBS9Q" is the specified PRBS9Q grey code signal. "PRBS11Q" is the specified PRBS11Q grey code signal. "PRBS13Q" is the specified PRBS13Q grey code signal. "PRBS15Q" is the specified PRBS15Q grey code signal. "SSPRQ" is the specified SSPRQ grey code signal.
Configure	PTB Reference Clock Frequency	PTBRefClkFreq	(Accepts user-defined text), 26.5625e9	Select the PTB Reference Clock Frequency if the AutoDetect is OFF.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	PTB Reference Clock Frequency AutoDetect state	PTBRefClkFreqState	ON, OFF	Select the PTB Reference Clock Frequency AutoDetect state.
Configure	Package Class	PkgClass	ClassA, ClassB	Choose the Package Model Class (Class A or Class B). This selection applies to both the transmitter and receiver. The chosen configuration will be utilized for the dVf, ERL, dERL and J4u03 measurements of TPOv.
Configure	Pattern Length	PatternLength	(Accepts user-defined text), 0, 127, 511, 8191	When Auto is set, FlexDCA will automatically determine the pattern length. If FlexDCA is having difficulty auto-detecting the correct pattern length, use this control to manually set the pattern length (i.e. 511).
Configure	Pattern Verification	DisablePattern	Enable, Disable	Select "Disable" to disable the pattern verification for square 8 pattern tests and suppress pattern error pop-ups. Select "Enable" to ensure that the correct pattern is being tested as per specification.
Configure	Percent of UI	UIPercent	(Accepts user-defined text), 5, 10	Select the percent of UI for Jitter Eye Center. The default is 5% for Maximum Eye Height/Width and 10% for Pulse Response(ts).
Configure	Percentage of Eye 0/1	PercentEye0	(Accepts user-defined text), 16.67	This option allows the user to configure the amplitude location for eye 0/1 to a percentage.
Configure	Percentage of Eye 1/2	PercentEye1	(Accepts user-defined text), 50.00	This option allows the user to configure the amplitude location for eye 1/2 to a percentage.
Configure	Percentage of Eye 2/3	PercentEye2	(Accepts user-defined text), 83.33	This option allows the user to configure the amplitude location for eye 2/3 to a percentage.
Configure	RLM	RLMforCom	(Accepts user-defined text), 0.95	Select the RLM value for auto-tune with COM method.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	RLM	RLMforCom	(Accepts user-defined text), 0.95	Select the RLM value for auto-tune with COM method.
Configure	RN Compensation State	RNCompensationState	ON, OFF	Select "ON" to remove scope noise for eye tests/Jitter tests and "OFF" to disable.
Configure	Reference SNDR File Path	PathSNDRref	defaultPathSNDRref, editablePathSNDRref	Specify the source of the reference SNDR values. If "Use Default File" is selected, the application will use the default CSV file located at "C:\Program Files\Keysight\FlexDCA\Apps\IEEEdj Test\app\dSNDR\SNDR_ref_evaluation_and_data.csv". Alternatively, selecting "Use Editable File" will point to a custom CSV file located at "C:\ProgramData\Keysight\FlexDCA\Apps\IEEEdj Test\dSNDR\SNDR_ref_evaluation_and_data.csv", which users can modify to define their own SNDR reference values for evaluation.
Configure	Run Simulation Signals	RunSim	No, Yes	Select Yes to run simulation signals. Set simulation signals to slot 5 (channels 5A and 5B).
Configure	SIRC Bandwidth	SIRCBW	(Accepts user-defined text), 33e9, 40e9, 60e9	Select or enter the SIRC BW. This will automatically be applied to any pattern lock waveform.
Configure	SIRC Bandwidth For Eye Tests	SIRCBWEye	(Accepts user-defined text), 33e9, 40e9, 60e9	Select or enter the SIRC BW for the Eye Tests. This will automatically be applied to any pattern lock waveform.
Configure	SIRC Response	SIRCResponse	BESSel, SINC, FLAT	Select the SIRC response. This will automatically be applied to any pattern lock waveform.
Configure	SIRC Response For Eye Tests	SIRCResponseEye	BESSel, BUTTerworth1, BUTTerworth2, BUTTerworth3, BUTTerworth4, SINC, FLAT	Select the SIRC response for the Eye Tests. This will automatically be applied to any pattern lock waveform.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	SNDR	SNDRforCom	(Accepts user-defined text), 33.5	Select the SNDR value for auto-tune with COM method.
Configure	Samples per UI	NumOfSamplesPerUI	(Accepts user-defined text), 8, 32	Set the number Samples/UI for Eye Tests when the "Manual" is selected for the record length. Adjusting to larger samples per UI will result in the overall test time being longer.
Configure	Samples per UI (M value) for Coefficient Tests	CoefMValue	32, 64, 128	This setting is to adjust the M value for better result repeatability in coefficient tests. Adjusting M value will also change the samples per UI which resulting the overall test time to be longer. By default, M value is 32 and can be adjusted to 64 or 128.
Configure	Samples per UI selection	SamplesPerUISelection	AUT, MAN	Select "Automatic" or "Manual" for the record length of Eye tests. Automatic is the default setting.
Configure	Save Tested Waveforms	SaveWFM	No, Yes	Select Yes to save the waveform files of the tested signals. Files will be saved to directory set in Select waveform directory.
Configure	Select Waveform Directory	DirWFM	(Accepts user-defined text), C:\Temp\KRwfm	Type in a directory path to save your measured waveforms.
Configure	Separation Method	SMethod	Auto, Spectral, TFit	This setting determines the method used to decompose RJ and RN. The default is Auto separation.
Configure	Signaling Rate	SignalingRate	(Accepts user-defined text), 106.25e9	Set the Signaling Rate to be tested. Enter value in the format 10.3125e9.
Configure	Specify Pattern Symbol Sequence	PattSymbolSeq	Auto, KPattern, PFile	This option provides the ability to specify the pattern for jitter tests and tests that use equalizers. The F-SKP license is required to use this feature.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Spectral Density Noise	SpectralDensity	(Accepts user-defined text), 1e-8	Set the value for Spectral Density. Format 1e-8
Configure	Spectral Density Noise State	InternalNoiseState	ON, OFF	Select "ON" to apply Spectral Density Noise for eye testes and "OFF" to disable.
Configure	Symbol Mapping	SymMapping	GCoded, Uncoded	This option provides the ability to select symbol mapping type - Gray Coded or Uncoded. The F-SKP license is required to use this feature.
Configure	TX Off Voltage Scale	TXOFFSCALE	(Accepts user-defined text), Auto, 10e-3	Auto will automatically set the voltage scale for tests with the transmitter off. To manually set the scale, enter in the scale per division number (i.e. 10e-3)
Configure	TX On Voltage Scale	TXONSCALE	(Accepts user-defined text), Auto, 200e-3	Auto will automatically set the voltage scale for tests with the transmitter on. To manually set the scale, enter in a scale per division number (i.e. 200e-3).
Configure	Tfx Delay for TP0v (ERL)	TfxTP0v	(Accepts user-defined text), 0	Select the value of fixture delay time for TP0v (C2C). This is for ERL measurement. The fixture delay time (Tfx) is twice the propagation delay in ns associated with the test fixture. Please enter value in the format 2e-9.
Configure	Tfx Delay for TP0v (ERL)	TfxTP0vKR	(Accepts user-defined text), 0	Select the value of fixture delay time for TP0v (KR). This is for ERL measurement. The fixture delay time (Tfx) is twice the propagation delay in ns associated with the test fixture. Please enter value in the format 2e-9.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Tfx Delay for TP0v (Reference ERL)	RefERLTfxTP0v	(Accepts user-defined text), 0	Select the value of fixture delay time for TP0v (C2C). This is for Ref ERL measurement. The fixture delay time (Tfx) is twice the propagation delay in ns associated with the test fixture. Please enter value in the format 2e-9.
Configure	Tfx Delay for TP0v (Reference ERL)	RefERLTfxTP0vKR	(Accepts user-defined text), 0	Select the value of fixture delay time for TP0v (KR). This is for Ref ERL measurement. The fixture delay time (Tfx) is twice the propagation delay in ns associated with the test fixture. Please enter value in the format 2e-9.
Configure	Tfx Delay for TP1a	TfxTP1a	(Accepts user-defined text), 0	Select the value of fixture delay time for TP1a. This is for ERL measurement. The fixture delay time (Tfx) is twice the propagation delay in ns associated with the test fixture. Please enter value in the format 2e-9.
Configure	Tfx Delay for TP2	TfxTP2	(Accepts user-defined text), 0	Select the value of fixture delay time for TP2. This is for ERL measurement. The fixture delay time (Tfx) is twice the propagation delay in ns associated with the test fixture. Please enter value in the format 2e-9.
Configure	Tfx Delay for TP4	TfxTP4	(Accepts user-defined text), 0	Select the value of fixture delay time for TP4. This is for ERL measurement. The fixture delay time (Tfx) is twice the propagation delay in ns associated with the test fixture. Please enter value in the format 2e-9.
Configure	Trigger Clock Ratio	TrigClkRatio	Integer, Fractional	Select either an Integer sub rate of the symbol rate or a Fractional sub rate for pattern lock.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	True Channel Attenuation	TruChnAtten	(Accepts user-defined text), 0, 3	Value of path attenuation from device to measurement receiver. This will adjust the measured amplitude values for the path loss. The choice of 3dB is for the Keysight pick-off which has flat attenuation in the frequency range of interest. The range of allowable values is 0 to 30 dB
Configure	Use Optimized CTLE gDC for Eye Opening.	CTLEgdcTP0v	0, -1, -2, -3, -4, -5, -6, -7, -8, -9, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -20	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.
Configure	Use Optimized CTLE gDC for Eye Opening.	CTLEgdcTP0vKR	0, -1, -2, -3, -4, -5, -6, -7, -8, -9, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -20	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Use Optimized CTLE gDC for Eye Opening.	CTLEgdcTP1a	0, -1, -2, -3, -4, -5, -6, -7, -8, -9, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -20	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.
Configure	Use Optimized CTLE gDC for Eye Opening.	CTLEgdcTP2	0, -1, -2, -3, -4, -5, -6, -7, -8, -9, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -20	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.
Configure	Use Optimized CTLE gDC for Eye Opening.	CTLEgdcTP4	0, -1, -2, -3, -4, -5, -6, -7, -8, -9, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -20	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Use Optimized CTLE gDC2 for Eye Opening.	CTLEgdc2TP0v	0, -1, -2, -3, -4, -5, -6	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.
Configure	Use Optimized CTLE gDC2 for Eye Opening.	CTLEgdc2TP0vKR	0, -1, -2, -3, -4, -5, -6	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.
Configure	Use Optimized CTLE gDC2 for Eye Opening.	CTLEgdc2TP1a	0, -1, -2, -3, -4, -5, -6	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Use Optimized CTLE gDC2 for Eye Opening.	CTLEgdc2TP2	0, -1, -2, -3, -4, -5, -6	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.
Configure	Use Optimized CTLE gDC2 for Eye Opening.	CTLEgdc2TP4	0, -1, -2, -3, -4, -5, -6	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.
Configure	Use Optimized Rx FFE for Eye Opening.	RxFFETP0v	(Accepts user-defined text), 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Use Optimized Rx FFE for Eye Opening.	RxFFETPOvKR	(Accepts user-defined text), 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.
Configure	Use Optimized Rx FFE for Eye Opening.	RxFFETP1a	(Accepts user-defined text), 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.
Configure	Use Optimized Rx FFE for Eye Opening.	RxFFETP2	(Accepts user-defined text), 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Use Optimized Rx FFE for Eye Opening.	RxFFETP4	(Accepts user-defined text), 0, 0, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0	Select the optimized setting to use. Default is off. Run "Auto-tune" Test under "Utilities" to find the optimal setting. When the utility is run, it will automatically set the optimal setting. This value will only be automatically set if utility is run any time after app load or if project is loaded with setting. All other instances, the setting will be the default of off and will need to be manually selected.
Configure	Use Pulse Response Optimization	PROptimize	OFF, ON	Availability of DFE to use pulse response optimization. Default is Off.
Configure	Using Switch or N1045A	SWITCH	Yes, No, Other	Only available in Debug Mode.
Configure	Window Shape	WinShape	Gauss, Boxcar	Select window shape for the Eye and Jitter measurement.
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 <= 99	Specify N using the 'Minimum required margin %' control.
Set Up	Automate the Connect PNA button	ConnectBtn	1	This button is to connect to the PNA. Connect the PNA
Set Up	Automate the OK button	Donebtn	1	This button is to perform deskewing of the channels Deskew Channel
Set Up	PNAAddressesConnection	PNAAddressesConnectionConfigVar	IP Address: , SICL Address:	Select the type of PNA address to use.
Set Up	Select the External Instrument.	ExtInstrumentConfigVar	N1055A, PNA	Select the External Instrument. External Instrument
Set Up	Select the channel pair of the module.	CHANPAIR	DIFF1A, DIFF1C, DIFF2A, DIFF2C, DIFF3A, DIFF3C, DIFF4A, DIFF4C	Select the channel pair of the module. Channel Pair

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Set Up	Setup External Instrument.		1	This is the connection button to setup external instrument. Setup External Instrument.
Set Up	automate the auto skew button	SkewChan1A1B	0.0, 1.0	automate the auto skew button
Set Up	automate the auto skew button	SkewChan1A2A	0.0, 1.0	automate the auto skew button
Set Up	automate the auto skew button	SkewChan1C1D	0.0, 1.0	automate the auto skew button
Set Up	automate the auto skew button	SkewChan2A2B	0.0, 1.0	automate the auto skew button
Set Up	automate the auto skew button	SkewChan2C2D	0.0, 1.0	automate the auto skew button
Set Up	automate the auto skew button	SkewChan3A3B	0.0, 1.0	automate the auto skew button
Set Up	automate the auto skew button	SkewChan3C3D	0.0, 1.0	automate the auto skew button
Set Up	automate the auto skew button	SkewChan4A4B	0.0, 1.0	automate the auto skew button
Set Up	automate the auto skew button	SkewChan4C4D	0.0, 1.0	automate the auto skew button
Set Up	automate the auto skew button	SkewChan5A5B	0.0, 1.0	automate the auto skew button
Set Up	automate the auto skew button	SkewChan7A7B	0.0, 1.0	automate the auto skew button
Set Up	automate the auto skew button	SkewChan7C7D	0.0, 1.0	automate the auto skew button
Set Up	automate the done button		1	Browse the path to load the required ERL file Setup the ERL file
Set Up	automate the done button		1	Browse the path to load the required reference fixture file Setup the Fixture Ref file

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Set Up	automate the pattern file browse button		1	Browse the path to load the required pattern file Setup the pattern file
Set Up	automate the pattern file clear button	ClearPattFilePath	1	Clear the entry of pattern file path Clear the pattern file entry

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. Listed at the end, you may also find:

- Deprecated IDs and their replacements.
- Macro IDs which may be used to select multiple related tests at the same time.

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
Auto-tune CTLE,FFE,DFE Eye Opening TP0v	106000	Measures the eye height VEC with CTLE,FFE, and DFE settings in TP0v and reports the optimal settings to use in Eye measurements.
Auto-tune CTLE,FFE,DFE Eye Opening TP0v	306000	Measures the eye height VEC with CTLE,FFE, and DFE settings in TP0v and reports the optimal settings to use in Eye measurements.
Auto-tune CTLE,FFE,DFE Eye Opening TP1a	116000	Measures the eye height VEC with CTLE,FFE, and DFE settings in TP1a and reports the optimal settings to use in Eye measurements.
Auto-tune CTLE,FFE,DFE Eye Opening TP2	206000	Measures the eye height VEC with CTLE,FFE, and DFE settings in TP2 and reports the optimal settings to use in Eye measurements.
Auto-tune CTLE,FFE,DFE Eye Opening TP4	126000	Measures the eye height VEC with CTLE,FFE, and DFE settings in TP4 and reports the optimal settings to use in Eye measurements.
Coefficient Initialization Preset 1	101200	Measures the coefficients for Preset 1. This is an Information-Only test, and the result "1.0" indicates the test is completed.
Coefficient Initialization Preset 1	111200	Measures the coefficients for Preset 1. This is an Information-Only test, and the result "1.0" indicates the test is completed.
Coefficient Initialization Preset 1	121200	Measures the coefficients for Preset 1. This is an Information-Only test, and the result "1.0" indicates the test is completed.
Coefficient Initialization Preset 1	201200	Measures the coefficients for Preset 1. This is an Information-Only test, and the result "1.0" indicates the test is completed.
Coefficient Initialization Preset 1	301200	Measures the coefficients for Preset 1. This is an Information-Only test, and the result "1.0" indicates the test is completed.
Coefficient Initialization Preset 2 c(-1)	101203	Measures the coefficients for Preset 2 c(-1)
Coefficient Initialization Preset 2 c(-1)	111203	Measures the coefficients for Preset 2 c(-1)
Coefficient Initialization Preset 2 c(-1)	121203	Measures the coefficients for Preset 2 c(-1)
Coefficient Initialization Preset 2 c(-1)	201203	Measures the coefficients for Preset 2 c(-1)
Coefficient Initialization Preset 2 c(-1)	301203	Measures the coefficients for Preset 2 c(-1)
Coefficient Initialization Preset 2 c(-2)	101202	Measures the coefficients for Preset 2 c(-2)
Coefficient Initialization Preset 2 c(-2)	111202	Measures the coefficients for Preset 2 c(-2)

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Coefficient Initialization Preset 2 c(-2)	121202	Measures the coefficients for Preset 2 c(-2)
Coefficient Initialization Preset 2 c(-2)	201202	Measures the coefficients for Preset 2 c(-2)
Coefficient Initialization Preset 2 c(-2)	301202	Measures the coefficients for Preset 2 c(-2)
Coefficient Initialization Preset 2 c(-3)	101201	Measures the coefficients for Preset 2 c(-3)
Coefficient Initialization Preset 2 c(-3)	111201	Measures the coefficients for Preset 2 c(-3)
Coefficient Initialization Preset 2 c(-3)	121201	Measures the coefficients for Preset 2 c(-3)
Coefficient Initialization Preset 2 c(-3)	201201	Measures the coefficients for Preset 2 c(-3)
Coefficient Initialization Preset 2 c(-3)	301201	Measures the coefficients for Preset 2 c(-3)
Coefficient Initialization Preset 2 c(0)	101204	Measures the coefficients for Preset 2 c(0)
Coefficient Initialization Preset 2 c(0)	111204	Measures the coefficients for Preset 2 c(0)
Coefficient Initialization Preset 2 c(0)	121204	Measures the coefficients for Preset 2 c(0)
Coefficient Initialization Preset 2 c(0)	201204	Measures the coefficients for Preset 2 c(0)
Coefficient Initialization Preset 2 c(0)	301204	Measures the coefficients for Preset 2 c(0)
Coefficient Initialization Preset 2 c(1)	101205	Measures the coefficients for Preset 2 c(1)
Coefficient Initialization Preset 2 c(1)	111205	Measures the coefficients for Preset 2 c(1)
Coefficient Initialization Preset 2 c(1)	121205	Measures the coefficients for Preset 2 c(1)
Coefficient Initialization Preset 2 c(1)	201205	Measures the coefficients for Preset 2 c(1)
Coefficient Initialization Preset 2 c(1)	301205	Measures the coefficients for Preset 2 c(1)
Coefficient Initialization Preset 3 c(-1)	101208	Measures the coefficients for Preset 3 c(-1)
Coefficient Initialization Preset 3 c(-1)	111208	Measures the coefficients for Preset 3 c(-1)
Coefficient Initialization Preset 3 c(-1)	121208	Measures the coefficients for Preset 3 c(-1)
Coefficient Initialization Preset 3 c(-1)	201208	Measures the coefficients for Preset 3 c(-1)
Coefficient Initialization Preset 3 c(-1)	301208	Measures the coefficients for Preset 3 c(-1)
Coefficient Initialization Preset 3 c(-2)	101207	Measures the coefficients for Preset 3 c(-2)
Coefficient Initialization Preset 3 c(-2)	111207	Measures the coefficients for Preset 3 c(-2)
Coefficient Initialization Preset 3 c(-2)	121207	Measures the coefficients for Preset 3 c(-2)
Coefficient Initialization Preset 3 c(-2)	201207	Measures the coefficients for Preset 3 c(-2)
Coefficient Initialization Preset 3 c(-2)	301207	Measures the coefficients for Preset 3 c(-2)
Coefficient Initialization Preset 3 c(-3)	101206	Measures the coefficients for Preset 3 c(-3)
Coefficient Initialization Preset 3 c(-3)	111206	Measures the coefficients for Preset 3 c(-3)
Coefficient Initialization Preset 3 c(-3)	121206	Measures the coefficients for Preset 3 c(-3)

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Coefficient Initialization Preset 3 c(-3)	201206	Measures the coefficients for Preset 3 c(-3)
Coefficient Initialization Preset 3 c(-3)	301206	Measures the coefficients for Preset 3 c(-3)
Coefficient Initialization Preset 3 c(0)	101209	Measures the coefficients for Preset 3 c(0)
Coefficient Initialization Preset 3 c(0)	111209	Measures the coefficients for Preset 3 c(0)
Coefficient Initialization Preset 3 c(0)	121209	Measures the coefficients for Preset 3 c(0)
Coefficient Initialization Preset 3 c(0)	201209	Measures the coefficients for Preset 3 c(0)
Coefficient Initialization Preset 3 c(0)	301209	Measures the coefficients for Preset 3 c(0)
Coefficient Initialization Preset 3 c(1)	101210	Measures the coefficients for Preset 3 c(1)
Coefficient Initialization Preset 3 c(1)	111210	Measures the coefficients for Preset 3 c(1)
Coefficient Initialization Preset 3 c(1)	121210	Measures the coefficients for Preset 3 c(1)
Coefficient Initialization Preset 3 c(1)	201210	Measures the coefficients for Preset 3 c(1)
Coefficient Initialization Preset 3 c(1)	301210	Measures the coefficients for Preset 3 c(1)
Coefficient Initialization Preset 4 c(-1)	101213	Measures the coefficients for Preset 4 c(-1)
Coefficient Initialization Preset 4 c(-1)	111213	Measures the coefficients for Preset 4 c(-1)
Coefficient Initialization Preset 4 c(-1)	121213	Measures the coefficients for Preset 4 c(-1)
Coefficient Initialization Preset 4 c(-1)	201213	Measures the coefficients for Preset 4 c(-1)
Coefficient Initialization Preset 4 c(-1)	301213	Measures the coefficients for Preset 4 c(-1)
Coefficient Initialization Preset 4 c(-2)	101212	Measures the coefficients for Preset 4 c(-2)
Coefficient Initialization Preset 4 c(-2)	111212	Measures the coefficients for Preset 4 c(-2)
Coefficient Initialization Preset 4 c(-2)	121212	Measures the coefficients for Preset 4 c(-2)
Coefficient Initialization Preset 4 c(-2)	201212	Measures the coefficients for Preset 4 c(-2)
Coefficient Initialization Preset 4 c(-2)	301212	Measures the coefficients for Preset 4 c(-2)
Coefficient Initialization Preset 4 c(-3)	101211	Measures the coefficients for Preset 4 c(-3)
Coefficient Initialization Preset 4 c(-3)	111211	Measures the coefficients for Preset 4 c(-3)
Coefficient Initialization Preset 4 c(-3)	121211	Measures the coefficients for Preset 4 c(-3)
Coefficient Initialization Preset 4 c(-3)	201211	Measures the coefficients for Preset 4 c(-3)
Coefficient Initialization Preset 4 c(-3)	301211	Measures the coefficients for Preset 4 c(-3)
Coefficient Initialization Preset 4 c(0)	101214	Measures the coefficients for Preset 4 c(0)
Coefficient Initialization Preset 4 c(0)	111214	Measures the coefficients for Preset 4 c(0)
Coefficient Initialization Preset 4 c(0)	121214	Measures the coefficients for Preset 4 c(0)
Coefficient Initialization Preset 4 c(0)	201214	Measures the coefficients for Preset 4 c(0)

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Coefficient Initialization Preset 4 c(0)	301214	Measures the coefficients for Preset 4 c(0)
Coefficient Initialization Preset 4 c(1)	101215	Measures the coefficients for Preset 4 c(1)
Coefficient Initialization Preset 4 c(1)	111215	Measures the coefficients for Preset 4 c(1)
Coefficient Initialization Preset 4 c(1)	121215	Measures the coefficients for Preset 4 c(1)
Coefficient Initialization Preset 4 c(1)	201215	Measures the coefficients for Preset 4 c(1)
Coefficient Initialization Preset 4 c(1)	301215	Measures the coefficients for Preset 4 c(1)
Coefficient Initialization Preset 5 c(-1)	101218	Measures the coefficients for Preset 5 c(-1)
Coefficient Initialization Preset 5 c(-1)	111218	Measures the coefficients for Preset 5 c(-1)
Coefficient Initialization Preset 5 c(-1)	121218	Measures the coefficients for Preset 5 c(-1)
Coefficient Initialization Preset 5 c(-1)	201218	Measures the coefficients for Preset 5 c(-1)
Coefficient Initialization Preset 5 c(-1)	301218	Measures the coefficients for Preset 5 c(-1)
Coefficient Initialization Preset 5 c(-2)	101217	Measures the coefficients for Preset 5 c(-2)
Coefficient Initialization Preset 5 c(-2)	111217	Measures the coefficients for Preset 5 c(-2)
Coefficient Initialization Preset 5 c(-2)	121217	Measures the coefficients for Preset 5 c(-2)
Coefficient Initialization Preset 5 c(-2)	201217	Measures the coefficients for Preset 5 c(-2)
Coefficient Initialization Preset 5 c(-2)	301217	Measures the coefficients for Preset 5 c(-2)
Coefficient Initialization Preset 5 c(-3)	101216	Measures the coefficients for Preset 5 c(-3)
Coefficient Initialization Preset 5 c(-3)	111216	Measures the coefficients for Preset 5 c(-3)
Coefficient Initialization Preset 5 c(-3)	121216	Measures the coefficients for Preset 5 c(-3)
Coefficient Initialization Preset 5 c(-3)	201216	Measures the coefficients for Preset 5 c(-3)
Coefficient Initialization Preset 5 c(-3)	301216	Measures the coefficients for Preset 5 c(-3)
Coefficient Initialization Preset 5 c(0)	101219	Measures the coefficients for Preset 5 c(0)
Coefficient Initialization Preset 5 c(0)	111219	Measures the coefficients for Preset 5 c(0)
Coefficient Initialization Preset 5 c(0)	121219	Measures the coefficients for Preset 5 c(0)
Coefficient Initialization Preset 5 c(0)	201219	Measures the coefficients for Preset 5 c(0)
Coefficient Initialization Preset 5 c(0)	301219	Measures the coefficients for Preset 5 c(0)
Coefficient Initialization Preset 5 c(1)	101220	Measures the coefficients for Preset 5 c(1)
Coefficient Initialization Preset 5 c(1)	111220	Measures the coefficients for Preset 5 c(1)
Coefficient Initialization Preset 5 c(1)	121220	Measures the coefficients for Preset 5 c(1)
Coefficient Initialization Preset 5 c(1)	201220	Measures the coefficients for Preset 5 c(1)
Coefficient Initialization Preset 5 c(1)	301220	Measures the coefficients for Preset 5 c(1)

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Coefficient Initialization Preset 6 c(-1)	101223	Measures the coefficients for Preset 6 c(-1)
Coefficient Initialization Preset 6 c(-1)	111223	Measures the coefficients for Preset 6 c(-1)
Coefficient Initialization Preset 6 c(-1)	121223	Measures the coefficients for Preset 6 c(-1)
Coefficient Initialization Preset 6 c(-1)	201223	Measures the coefficients for Preset 6 c(-1)
Coefficient Initialization Preset 6 c(-1)	301223	Measures the coefficients for Preset 6 c(-1)
Coefficient Initialization Preset 6 c(-2)	101222	Measures the coefficients for Preset 6 c(-2)
Coefficient Initialization Preset 6 c(-2)	111222	Measures the coefficients for Preset 6 c(-2)
Coefficient Initialization Preset 6 c(-2)	121222	Measures the coefficients for Preset 6 c(-2)
Coefficient Initialization Preset 6 c(-2)	201222	Measures the coefficients for Preset 6 c(-2)
Coefficient Initialization Preset 6 c(-2)	301222	Measures the coefficients for Preset 6 c(-2)
Coefficient Initialization Preset 6 c(-3)	101221	Measures the coefficients for Preset 6 c(-3)
Coefficient Initialization Preset 6 c(-3)	111221	Measures the coefficients for Preset 6 c(-3)
Coefficient Initialization Preset 6 c(-3)	121221	Measures the coefficients for Preset 6 c(-3)
Coefficient Initialization Preset 6 c(-3)	201221	Measures the coefficients for Preset 6 c(-3)
Coefficient Initialization Preset 6 c(-3)	301221	Measures the coefficients for Preset 6 c(-3)
Coefficient Initialization Preset 6 c(0)	101224	Measures the coefficients for Preset 6 c(0)
Coefficient Initialization Preset 6 c(0)	111224	Measures the coefficients for Preset 6 c(0)
Coefficient Initialization Preset 6 c(0)	121224	Measures the coefficients for Preset 6 c(0)
Coefficient Initialization Preset 6 c(0)	201224	Measures the coefficients for Preset 6 c(0)
Coefficient Initialization Preset 6 c(0)	301224	Measures the coefficients for Preset 6 c(0)
Coefficient Initialization Preset 6 c(1)	101225	Measures the coefficients for Preset 6 c(1)
Coefficient Initialization Preset 6 c(1)	111225	Measures the coefficients for Preset 6 c(1)
Coefficient Initialization Preset 6 c(1)	121225	Measures the coefficients for Preset 6 c(1)
Coefficient Initialization Preset 6 c(1)	201225	Measures the coefficients for Preset 6 c(1)
Coefficient Initialization Preset 6 c(1)	301225	Measures the coefficients for Preset 6 c(1)
Coefficient Initialization Preset Initialize c(-1)	101228	Measures the coefficients for Preset Initialize c(-1)
Coefficient Initialization Preset Initialize c(-1)	111228	Measures the coefficients for Preset Initialize c(-1)
Coefficient Initialization Preset Initialize c(-1)	121228	Measures the coefficients for Preset Initialize c(-1)

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Coefficient Initialization Preset Initialize c(-1)	201228	Measures the coefficients for Preset Initialize c(-1)
Coefficient Initialization Preset Initialize c(-1)	301228	Measures the coefficients for Preset Initialize c(-1)
Coefficient Initialization Preset Initialize c(-2)	101227	Measures the coefficients for Preset Initialize c(-2)
Coefficient Initialization Preset Initialize c(-2)	111227	Measures the coefficients for Preset Initialize c(-2)
Coefficient Initialization Preset Initialize c(-2)	121227	Measures the coefficients for Preset Initialize c(-2)
Coefficient Initialization Preset Initialize c(-2)	201227	Measures the coefficients for Preset Initialize c(-2)
Coefficient Initialization Preset Initialize c(-2)	301227	Measures the coefficients for Preset Initialize c(-2)
Coefficient Initialization Preset Initialize c(-3)	101226	Measures the coefficients for Preset Initialize c(-3)
Coefficient Initialization Preset Initialize c(-3)	111226	Measures the coefficients for Preset Initialize c(-3)
Coefficient Initialization Preset Initialize c(-3)	121226	Measures the coefficients for Preset Initialize c(-3)
Coefficient Initialization Preset Initialize c(-3)	201226	Measures the coefficients for Preset Initialize c(-3)
Coefficient Initialization Preset Initialize c(-3)	301226	Measures the coefficients for Preset Initialize c(-3)
Coefficient Initialization Preset Initialize c(0)	101229	Measures the coefficients for Preset Initialize c(0)
Coefficient Initialization Preset Initialize c(0)	111229	Measures the coefficients for Preset Initialize c(0)
Coefficient Initialization Preset Initialize c(0)	121229	Measures the coefficients for Preset Initialize c(0)
Coefficient Initialization Preset Initialize c(0)	201229	Measures the coefficients for Preset Initialize c(0)
Coefficient Initialization Preset Initialize c(0)	301229	Measures the coefficients for Preset Initialize c(0)
Coefficient Initialization Preset Initialize c(1)	101230	Measures the coefficients for Preset Initialize c(1)
Coefficient Initialization Preset Initialize c(1)	111230	Measures the coefficients for Preset Initialize c(1)

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Coefficient Initialization Preset Initialize c(1)	121230	Measures the coefficients for Preset Initialize c(1)
Coefficient Initialization Preset Initialize c(1)	201230	Measures the coefficients for Preset Initialize c(1)
Coefficient Initialization Preset Initialize c(1)	301230	Measures the coefficients for Preset Initialize c(1)
Common-mode to Common-mode Output Return Loss	104000	Common-mode to Common-mode Output Return Loss measurement
Common-mode to Common-mode Output Return Loss	114000	Common-mode to Common-mode Output Return Loss measurement
Common-mode to Common-mode Output Return Loss	124000	Common-mode to Common-mode Output Return Loss measurement
Common-mode to Common-mode Output Return Loss	204000	Common-mode to Common-mode Output Return Loss measurement
Common-mode to Common-mode Output Return Loss	304000	Common-mode to Common-mode Output Return Loss measurement
Common-mode to Differential Output Return Loss	114001	Common-mode to Differential Output Return Loss measurement
Common-mode to Differential Output Return Loss	124001	Common-mode to Differential Output Return Loss measurement
Common-mode to Differential Output Return Loss	204001	Common-mode to Differential Output Return Loss measurement
DC Common Mode Output Voltage Test	103003	Test the DC common mode voltage. This test can only be tested in dual single ended connection
DC Common Mode Output Voltage Test	113003	Test the DC common mode voltage. This test can only be tested in dual single ended connection
DC Common Mode Output Voltage Test	203003	Test the DC common mode voltage. This test can only be tested in dual single ended connection
DC Common Mode Output Voltage Test	303003	Test the DC common mode voltage. This test can only be tested in dual single ended connection
DC Common Mode Voltage Tolerance Test	123003	Test the DC common mode voltage. This test can only be tested in dual single ended connection
Difference Linear Fit Pulse Peak Ratio, dRpeak (Preset 1)	101006	Linear Fit Pulse Peak voltage measurement and reference ratio calculation
Difference Linear Fit Pulse Peak Ratio, dRpeak (Preset 1)	301006	Linear Fit Pulse Peak voltage measurement and reference ratio calculation

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 1)	101303	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 1)	111303	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 1)	121303	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 1)	201303	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 1)	301303	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 2)	101305	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 2)	111305	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 2)	121305	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 2)	201305	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 2)	301305	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 3)	101307	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 3)	111307	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 3)	121307	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 3)	201307	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 3)	301307	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 4)	101309	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 4)	111309	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 4)	121309	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 4)	201309	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 4)	301309	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 5)	101311	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 5)	111311	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 5)	121311	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 5)	201311	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 5)	301311	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 6)	101313	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 6)	111313	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 6)	121313	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 6)	201313	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset 6)	301313	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset Initialize)	101301	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset Initialize)	111301	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset Initialize)	121301	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset Initialize)	201301	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Signal-to-Noise-and-Distortion Ratio, dSNDR (Preset Initialize)	301301	Please provide the path to the CSV file containing the SNDR (reference) values for all presets. To use the default values, leave the CSV file path as default. To use a different set of values, provide the path to a custom CSV file. Another option is to edit the default CSV file directly to modify the SNDR values.
Difference Steady-State Voltage, dVf (Preset 1)	101005	Steady-State Voltage dVf measurement and reference calculation
Difference Steady-State Voltage, dVf (Preset 1)	301005	Steady-State Voltage dVf measurement and reference calculation
Differential Peak to Peak Output Voltage Test (pattern: SQ128 or Higher)	103004	Test the maximum voltage with the TX enabled
Differential Peak to Peak Output Voltage Test (pattern: SQ128 or Higher)	113004	Test the maximum voltage with the TX enabled
Differential Peak to Peak Output Voltage Test (pattern: SQ128 or Higher)	123004	Test the maximum voltage with the TX enabled
Differential Peak to Peak Output Voltage Test (pattern: SQ128 or Higher)	203004	Test the maximum voltage with the TX enabled
Differential Peak to Peak Output Voltage Test (pattern: SQ128 or Higher)	303004	Test the maximum voltage with the TX enabled
Differential Peak to Peak Output Voltage Test with TX disabled	103000	Test the maximum voltage with the TX disabled
Differential Peak to Peak Output Voltage Test with TX disabled	113000	Test the maximum voltage with the TX disabled
Differential Peak to Peak Output Voltage Test with TX disabled	123000	Test the maximum voltage with the TX disabled
Differential Peak to Peak Output Voltage Test with TX disabled	203000	Test the maximum voltage with the TX disabled
Differential Peak to Peak Output Voltage Test with TX disabled	303000	Test the maximum voltage with the TX disabled

Table 4 Test IDs and Names (continued)

Name	TestID	Description
ERL	101004	Calculates ERL.
ERL	111004	Calculates ERL.
ERL	121004	Calculates ERL.
ERL	201004	Calculates ERL.
ERL	301004	Calculates ERL.
Even-Odd Jitter 03 (PRBS13Q/PRBS9Q)	100101	Even-Odd Jitter 03 measurement
Even-Odd Jitter 03 (PRBS13Q/PRBS9Q)	110101	Even-Odd Jitter 03 measurement
Even-Odd Jitter 03 (PRBS13Q/PRBS9Q)	120101	Even-Odd Jitter 03 measurement
Even-Odd Jitter 03 (PRBS13Q/PRBS9Q)	200101	Even-Odd Jitter 03 measurement
Even-Odd Jitter 03 (PRBS13Q/PRBS9Q)	300101	Even-Odd Jitter 03 measurement
Eye Height	115000	Measures the height of each the eye
Eye Height	105000	Measures the height of each the eye
Eye Height	125000	Measures the height of each the eye
Eye Height	205000	Measures the height of each the eye
Eye Height	305000	Measures the height of each the eye
Full-band peak-to-peak AC common-mode voltage, VCM-FB	113002	Test the Peak-to-peak AC common-mode voltage measured with a Full band.
Full-band peak-to-peak AC common-mode voltage, VCM-FB	123002	Test the Peak-to-peak AC common-mode voltage measured with a Full band.
Full-band peak-to-peak AC common-mode voltage, VCM-FB	203002	Test the Peak-to-peak AC common-mode voltage measured with a Full band.
J4u03 (PRBS13Q/PRBS9Q)	100102	J4u03 Jitter measurement
J4u03 (PRBS13Q/PRBS9Q)	110102	J4u03 Jitter measurement
J4u03 (PRBS13Q/PRBS9Q)	120102	J4u03 Jitter measurement
J4u03 (PRBS13Q/PRBS9Q)	200102	J4u03 Jitter measurement
J4u03 (PRBS13Q/PRBS9Q)	300102	J4u03 Jitter measurement
JRMS (PRBS13Q/PRBS9Q)	100100	JRMS Jitter measurement
JRMS (PRBS13Q/PRBS9Q)	110100	JRMS Jitter measurement

Table 4 Test IDs and Names (continued)

Name	TestID	Description
JRMS (PRBS13Q/PRBS9Q)	120100	JRMS Jitter measurement
JRMS (PRBS13Q/PRBS9Q)	200100	JRMS Jitter measurement
JRMS (PRBS13Q/PRBS9Q)	300100	JRMS Jitter measurement
Level - PRBS pattern (Preset 1)	102003	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 1)	112003	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 1)	122003	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 1)	202003	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 1)	302003	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 2)	102006	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 2)	112006	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 2)	122006	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 2)	202006	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 2)	302006	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 3)	102009	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 3)	112009	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 3)	122009	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 3)	202009	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 3)	302009	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 4)	102012	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 4)	112012	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 4)	122012	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 4)	202012	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 4)	302012	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 5)	102015	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 5)	112015	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 5)	122015	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 5)	202015	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 5)	302015	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 6)	102018	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 6)	112018	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 6)	122018	Tests the level for each level in the PRBS pattern

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Level - PRBS pattern (Preset 6)	202018	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset 6)	302018	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset Initialize)	102000	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset Initialize)	112000	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset Initialize)	122000	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset Initialize)	202000	Tests the level for each level in the PRBS pattern
Level - PRBS pattern (Preset Initialize)	302000	Tests the level for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 1)	102004	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 1)	112004	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 1)	122004	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 1)	202004	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 1)	302004	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 2)	102007	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 2)	112007	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 2)	122007	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 2)	202007	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 2)	302007	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 3)	102010	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 3)	112010	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 3)	122010	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 3)	202010	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 3)	302010	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 4)	102013	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 4)	112013	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 4)	122013	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 4)	202013	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 4)	302013	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 5)	102016	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 5)	112016	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 5)	122016	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 5)	202016	Tests the level rms for each level in the PRBS pattern

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Level RMS - PRBS pattern (Preset 5)	302016	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 6)	102019	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 6)	112019	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 6)	122019	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 6)	202019	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset 6)	302019	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset Initialize)	102001	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset Initialize)	112001	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset Initialize)	122001	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset Initialize)	202001	Tests the level rms for each level in the PRBS pattern
Level RMS - PRBS pattern (Preset Initialize)	302001	Tests the level rms for each level in the PRBS pattern
Level Separation Mismatch Ratio - RLM (Preset 1)	102005	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 1)	112005	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 1)	122005	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 1)	202005	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 1)	302005	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 2)	102008	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 2)	112008	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 2)	122008	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 2)	202008	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 2)	302008	Tests the level mismatch ratio

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Level Separation Mismatch Ratio - RLM (Preset 3)	102011	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 3)	112011	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 3)	122011	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 3)	202011	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 3)	302011	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 4)	102014	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 4)	112014	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 4)	122014	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 4)	202014	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 4)	302014	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 5)	102017	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 5)	112017	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 5)	122017	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 5)	202017	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 5)	302017	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 6)	102020	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 6)	112020	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 6)	122020	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset 6)	202020	Tests the level mismatch ratio

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Level Separation Mismatch Ratio - RLM (Preset 6)	302020	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset Initialize)	102002	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset Initialize)	112002	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset Initialize)	122002	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset Initialize)	202002	Tests the level mismatch ratio
Level Separation Mismatch Ratio - RLM (Preset Initialize)	302002	Tests the level mismatch ratio
Linear Fit Pulse Peak Ratio, Rpeak (Preset 1)	101001	Linear Fit Pulse Peak Ratio, Rpeak
Linear Fit Pulse Peak Ratio, Rpeak (Preset 1)	111001	Linear Fit Pulse Peak Ratio, Rpeak
Linear Fit Pulse Peak Ratio, Rpeak (Preset 1)	121001	Linear Fit Pulse Peak Ratio, Rpeak
Linear Fit Pulse Peak Ratio, Rpeak (Preset 1)	201001	Linear Fit Pulse Peak Ratio, Rpeak
Linear Fit Pulse Peak Ratio, Rpeak (Preset 1)	301001	Linear Fit Pulse Peak Ratio, Rpeak
Low-frequency peak-to-peak AC common-mode voltage, VCM-LF	103001	Test the Peak-to-peak AC common-mode voltage measured with a low-pass filter.
Low-frequency peak-to-peak AC common-mode voltage, VCM-LF	113001	Test the Peak-to-peak AC common-mode voltage measured with a low-pass filter.
Low-frequency peak-to-peak AC common-mode voltage, VCM-LF	123001	Test the Peak-to-peak AC common-mode voltage measured with a low-pass filter.
Low-frequency peak-to-peak AC common-mode voltage, VCM-LF	203001	Test the Peak-to-peak AC common-mode voltage measured with a low-pass filter.
Low-frequency peak-to-peak AC common-mode voltage, VCM-LF	303001	Test the Peak-to-peak AC common-mode voltage measured with a low-pass filter.
Signal to AC common-mode noise ratio, SCMR (Preset 1)	101008	Test the AC common mode voltage. This test can only be tested in dual single ended connection
Signal to AC common-mode noise ratio, SCMR (Preset 1)	301008	Test the AC common mode voltage. This test can only be tested in dual single ended connection
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 1)	101302	Measures the SNDR

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 1)	111302	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 1)	121302	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 1)	201302	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 1)	301302	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 2)	101304	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 2)	111304	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 2)	121304	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 2)	201304	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 2)	301304	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 3)	101306	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 3)	111306	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 3)	121306	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 3)	201306	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 3)	301306	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 4)	101308	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 4)	111308	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 4)	121308	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 4)	201308	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 4)	301308	Measures the SNDR

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 5)	101310	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 5)	111310	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 5)	121310	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 5)	201310	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 5)	301310	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 6)	101312	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 6)	111312	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 6)	121312	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 6)	201312	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset 6)	301312	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset Initialize)	101300	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset Initialize)	111300	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset Initialize)	121300	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset Initialize)	201300	Measures the SNDR
Signal-to-Noise-and-Distortion Ratio, SNDR (Preset Initialize)	301300	Measures the SNDR
Signal-to-residual-intersymbol-interference ratio, SNRISI	111003	Measures the transmitter residual ratio
Signal-to-residual-intersymbol-interference ratio, SNRISI	101003	Measures the transmitter residual ratio
Signal-to-residual-intersymbol-interference ratio, SNRISI	121003	Measures the transmitter residual ratio
Signal-to-residual-intersymbol-interference ratio, SNRISI	201003	Measures the transmitter residual ratio

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Signal-to-residual-intersymbol-interference ratio, SNRISI	301003	Measures the transmitter residual ratio
Signaling Rate	100000	Signaling rate of the signal
Signaling Rate	110000	Signaling rate of the signal
Signaling Rate	120000	Signaling rate of the signal
Signaling Rate	200000	Signaling rate of the signal
Signaling Rate	300000	Signaling rate of the signal
Steady-State Voltage, Vf (Preset 1)	101000	Steady-State Voltage Vf measurement
Steady-State Voltage, Vf (Preset 1)	111000	Steady-State Voltage Vf measurement
Steady-State Voltage, Vf (Preset 1)	121000	Steady-State Voltage Vf measurement
Steady-State Voltage, Vf (Preset 1)	201000	Steady-State Voltage Vf measurement
Steady-State Voltage, Vf (Preset 1)	301000	Steady-State Voltage Vf measurement
Vertical Eye Closure	105001	Measures the Vertical Eye Closure at TP0v
Vertical Eye Closure	305001	Measures the Vertical Eye Closure at TP0v
Vertical Eye Closure	115001	Measures the Vertical Eye Closure at TP1a
Vertical Eye Closure	205001	Measures the Vertical Eye Closure at TP2
Vertical Eye Closure	125001	Measures the Vertical Eye Closure at TP4
abs Step Size for c(-1)	101102	abs Coefficient Step Size measurement for Coefficient c(-1)
abs Step Size for c(-1)	111102	abs Coefficient Step Size measurement for Coefficient c(-1)
abs Step Size for c(-1)	121102	abs Coefficient Step Size measurement for Coefficient c(-1)
abs Step Size for c(-1)	201102	abs Coefficient Step Size measurement for Coefficient c(-1)
abs Step Size for c(-1)	301102	abs Coefficient Step Size measurement for Coefficient c(-1)
abs Step Size for c(-2)	101101	abs Coefficient Step Size measurement for Coefficient c(-2)
abs Step Size for c(-2)	111101	abs Coefficient Step Size measurement for Coefficient c(-2)
abs Step Size for c(-2)	121101	abs Coefficient Step Size measurement for Coefficient c(-2)
abs Step Size for c(-2)	201101	abs Coefficient Step Size measurement for Coefficient c(-2)
abs Step Size for c(-2)	301101	abs Coefficient Step Size measurement for Coefficient c(-2)
abs Step Size for c(-3)	101100	abs Coefficient Step Size measurement for Coefficient c(-3)
abs Step Size for c(-3)	111100	abs Coefficient Step Size measurement for Coefficient c(-3)
abs Step Size for c(-3)	121100	abs Coefficient Step Size measurement for Coefficient c(-3)
abs Step Size for c(-3)	201100	abs Coefficient Step Size measurement for Coefficient c(-3)

Table 4 Test IDs and Names (continued)

Name	TestID	Description
abs Step Size for c(-3)	301100	abs Coefficient Step Size measurement for Coefficient c(-3)
abs Step Size for c(0)	101103	abs Coefficient Step Size measurement for Coefficient c(0)
abs Step Size for c(0)	111103	abs Coefficient Step Size measurement for Coefficient c(0)
abs Step Size for c(0)	121103	abs Coefficient Step Size measurement for Coefficient c(0)
abs Step Size for c(0)	201103	abs Coefficient Step Size measurement for Coefficient c(0)
abs Step Size for c(0)	301103	abs Coefficient Step Size measurement for Coefficient c(0)
abs Step Size for c(1)	101104	abs Coefficient Step Size measurement for Coefficient c(1)
abs Step Size for c(1)	111104	abs Coefficient Step Size measurement for Coefficient c(1)
abs Step Size for c(1)	121104	abs Coefficient Step Size measurement for Coefficient c(1)
abs Step Size for c(1)	201104	abs Coefficient Step Size measurement for Coefficient c(1)
abs Step Size for c(1)	301104	abs Coefficient Step Size measurement for Coefficient c(1)
dERL	101009	Calculates ERL and fixture reference ERL.
dERL	301009	Calculates ERL and fixture reference ERL.
value at max. state for c(-1)	101110	Measures the value of c(-1) at max
value at max. state for c(-2)	101108	Measures the value of c(-2) at max
value at max. state for c(-2)	111106	Measures the value of c(-2) at max
value at max. state for c(-2)	121106	Measures the value of c(-2) at max
value at max. state for c(-2)	201106	Measures the value of c(-2) at max
value at max. state for c(-2)	301106	Measures the value of c(-2) at max
value at max. state for c(-3)	101106	Measures the value of c(-3) at max
value at max. state for c(1)	101113	Measures the value of c(1) at max
value at min. state for c(-1)	101109	Measures the value of c(-1) at min
value at min. state for c(-1)	111107	Measures the value of c(-1) at min
value at min. state for c(-1)	121107	Measures the value of c(-1) at min
value at min. state for c(-1)	201107	Measures the value of c(-1) at min
value at min. state for c(-1)	301107	Measures the value of c(-1) at min
value at min. state for c(-2)	101107	Measures the value of c(-2) at min
value at min. state for c(-3)	101105	Measures the value of c(-3) at min
value at min. state for c(-3)	111105	Measures the value of c(-3) at min
value at min. state for c(-3)	121105	Measures the value of c(-3) at min
value at min. state for c(-3)	201105	Measures the value of c(-3) at min

Table 4 Test IDs and Names (continued)

Name	TestID	Description
value at min. state for c(-3)	301105	Measures the value of c(-3) at min
value at min. state for c(0)	101111	Measures the value of c(0) at min
value at min. state for c(0)	111108	Measures the value of c(0) at min
value at min. state for c(0)	121108	Measures the value of c(0) at min
value at min. state for c(0)	201108	Measures the value of c(0) at min
value at min. state for c(0)	301108	Measures the value of c(0) at min
value at min. state for c(1)	101112	Measures the value of c(1) at min
value at min. state for c(1)	111109	Measures the value of c(1) at min
value at min. state for c(1)	121109	Measures the value of c(1) at min
value at min. state for c(1)	201109	Measures the value of c(1) at min
value at min. state for c(1)	301109	Measures the value of c(1) at min

4 Instruments

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

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

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

Table 5 Example Instrument Information

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

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

ARSL syntax (replace [description] with actual parameter)

```
-----  
arsl -a ipaddress -c "SendScpiCommandCustom 'Command=[scpi  
command];Timeout=100;Instrument=pulsegen'"
```

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

C# syntax (replace [description] with actual parameter)

```
-----  
SendScpiCommandOptions commandOptions = new SendScpiCommandOptions();  
commandOptions.Command = "[scpi command]";  
commandOptions.Instrument = "[instrument name]";  
commandOptions.Timeout = [timeout];  
remoteAte.SendScpiCommand(commandOptions);
```

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

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

Here are the actual instrument names used by this application:

NOTE

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

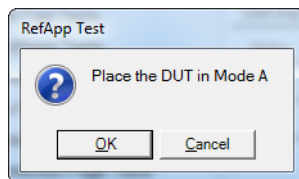
Table 6 Instrument Names

Instrument Name	Description
FlexDca	Primary oscilloscope
N4877A	Clock/Data recovery and Demultiplexer
Keysight PNA	Performance Network Analyzer
Keysight ENA	Economy Network Analyzer

5 Message IDs

During the normal course of operation, an application displays multiple message prompts. The application's remote interface exposes a callback capability which enables remote clients to receive the text found in the prompt and to programmatically select the desired response (OK, Cancel, etc.). In order to determine which message is being received, the remote program could parse the message and look for key words. However, because message text is subject to change, a more reliable approach is to use the "message ID" that is attached to the more frequently-seen messages. The following table shows the IDs of the messages that this application may prompt during nominal operation.

For example, if the application may display the following prompt:



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

Message	ID	Responses	Usage
DUT mode message	313AEE2F-9EF0-476f-A2EB-29A5C7DE686F	OK=action completed and proceed, Cancel = abort test	App

- Message – A summary of the message in the prompt.
- ID – A unique code that will never change for this prompt, even if the message text changes (assuming the underlying purpose is maintained).
- Responses – The buttons on the prompt and their actions.
- Usage – The scope of the message:
 - "Common" – This message/ID may be used by other apps.

- "App" – This message/ID is unique to this app.
- "<testID>" – This message/ID is unique to this test ID.

A remote client would then structure the code in its message callback handler as shown below to manage message identification:

```
private static void OnSimpleMessage(object sender, MessageEventArgs e)
{
    if (e.ID == "313AEE2F-9EF0-476f-A2EB-29A5C7DE686F")
    {
        // Add code here to set the DUT in Mode A

        e.Response = DialogResult.OK;
    }
}
```

Here are actual message IDs used by this application:

NOTE

The file, "MessageInfo.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 7 Message IDs

Message	ID	Responses	Usage
Activating limit will conflict with existing results	31A39751-6019-41de-89DF-59DB239DF978	OK=delete conflicting results, Cancel=cancel activation	Instrument
Already running tests	022467B0-6E08-40eb-B4D4-BBB018FBFBC7	OK	Instrument
App startup aborted	C2B67F67-E5D5-4845-8B63-443781223010	OK	Instrument
Can't set memory depth	FFFF1129-BD83-4318-993E-64C94033CEC4	OK=skip step and continue, Cancel=abort test	Instrument
Compliance/Debug mode change	9C72A970-8D7D-4b37-9787-48AEEA5DC3F1	OK=change mode, Cancel=abort action	Instrument
Confirmation Required	37437505-160C-4cc8-BA06-093C12994C1E	OK=continue, Cancel=abort test	Instrument
Connection change	879629E6-78FA-4a87-B247-A9DB4F0D7330	Abort=abort run, Retry=connection changed - continue run, Ignore=connection not changed - continue run	Instrument
Debug pause (messages vary)	50B66A97-A6A9-413f-8329-76DFAC492FD6	OK=resume, Cancel=abort run	Instrument
End of run summary	602F9866-F975-42b7-842C-D8447E5E3FCB	OK	Instrument

Table 7 Message IDs (continued)

Message	ID	Responses	Usage
End of run summary (test aborted)	124580E4-4486-42d4-B908-C6D0FB2AEE93	OK	Instrument
Error during CSV file generation	C88B1C64-8334-4b15-8727-81F5E2BA2ED4	OK	Instrument
Error during app exit	81112706-F720-4787-81D3-B22A9B692B41	OK	Instrument
Expected signal not found	86C74779-322E-4585-A07A-26A2C8FAAC84	Abort=abort test, Retry=retry failed action, Ignore=skip failed step	Instrument
Expected signal not found	7957D5B8-E62D-4224-A7DD-70361E816A43	Retry=retry failed action, Cancel=abort test	Instrument
InfiniiSim: Unknown scope channel	4E5ECAF6-867C-47B3-982D-5F07E2090703	OK	Instrument
Measurement Server no Measure Workers declared	54A8428D-8E22-4286-AC88-7495821ABA77	OK=retry, Cancel=abort run	Instrument
No test selected	B5D233AD-9EB4-4ac2-A443-A30A13643978	OK	Instrument
PrecisionProbe and InfiniiSim controllers turned off after config change	B4477006-D6D1-4375-9FF7-D8177FFC1BF9	OK	Instrument
Project loaded as read-only (reason)	98C785F8-D24F-4758-A18D-1CCE61F25371	OK	Instrument
Project loaded with errors	58AD7A02-1E63-4d77-BC6C-6EF3E37AAD5B	OK	Instrument
Project not loaded	B2615E9C-5ED7-4db7-AEAF-2BC25C62B656	OK	Instrument
Project save failed (unauthorized access)	89DCC194-6254-4902-AE63-B7CCD12C8B2A	OK	Instrument
Run paused	FE2CF871-6D4A-4080-8FF9-770075590D9F	OK=resume, Cancel=abort run	Instrument
Setting change requires result deletion	8732A3AB-142C-47e5-86EA-DB737F415DDE	OK=delete results; Cancel=abort change	Instrument
Store mode change requires result deletion	884CDFDE-605E-4d04-B8FD-9B181E7FA468	OK=delete results, Cancel=abort change	Instrument
Switch Matrix controller turned off after config change	FC95EBAA-F33F-4eae-90BB-6A6A8F16E2DF	OK	Instrument
Switch Matrix: Auto mode unavailable after config change	6E5589DC-E073-4818-9E8A-782A75898475	OK	Instrument
Switch Matrix: Auto mode unavailable for model, all settings will be reset	F78BD2E2-BF29-42e0-98F8-23B6CE565B08	OK=go auto do reset, Cancel=abort action	Instrument

Table 7 Message IDs (continued)

Message	ID	Responses	Usage
Switch Matrix: Confirm Auto mode	D5E1A12E-6218-4416-8451-5F9415D924BF	OK=go auto, Cancel=stay manual	Instrument
Switch Matrix: Obsolete items in settings discarded	0C45BD20-E0C2-481e-A3B6-9C1A26C2103A	OK	Instrument
Switch Matrix: Reconnect drivers	047FE44F-B251-49fa-B3C7-5590317230CD	Yes=use saved addresses, No=prompt for new addresses, Cancel=reset all settings	Instrument
Switch Matrix: Remove all InfiniiSim settings	C5560182-73BE-4901-941E-3DAEC9F07B33	OK=remove, Cancel=abort action	Instrument
Switch Matrix: User cancelled settings load	50F3FB70-AA6B-488e-8CFA-62CDA756F746	OK	Instrument
SwitchMatrix: Correction reset due to application route change	95FEA629-3BE1-4288-BA34-426516018B07	OK=Accept new routing, Cancel=Reset switch matrix settings	Instrument
SwitchMatrix: Instrument already connected to another driver	08556148-4D63-4edd-B894-22916F39849A	OK	Instrument
SwitchMatrix: Max num drivers exceeded	7D8994AB-FCC2-4294-87B3-19B972BB6510	OK	Instrument
SwitchMatrix: Reset after drive reconnect fail	CF3E93B6-77FA-4FD7-B656-D286BE1C7C75	OK	Instrument
SwitchMatrix: Reset after drive reconnect fail	D298A4B8-F077-49BE-9CB2-AE6C14FB4705	OK	Instrument
SwitchMatrix: Unexpected multi-SPDT module	2723591D-55A9-44F3-9318-B732995D9427	OK	Instrument
SwitchMatrix: Unknown current switch state	ECE6535B-5C1A-4688-9E45-FB255435CC92	OK	Instrument
SwitchMatrix: Will reset due to requested change	420FCEA9-0FF4-4088-B47A-3189413EA0AD	OK=Allow the reset, Cancel=Abort the original requested change	Instrument
Unknown EEyeLocation parameter	FCA1C61B-D2EA-4671-AD48-9C080A6C6039	OK	Instrument
Upgrade app to open project	794C6148-ADF4-4b24-895D-74D94B76F8AE	OK	Instrument

Index

C

configuration variables and values, [9](#)
copyright, [2](#)

I

IDs and names of tests, [29](#)
IDs, message, [55](#)
instrument names, [53](#)

M

message IDs, [55](#)

N

names and IDs of tests, [29](#)
names of instruments, [53](#)
notices, [2](#)

P

programming, introduction to, [7](#)

R

Remote Programming Toolkit, [8](#)

T

test names and IDs, [29](#)

V

variables and values, configuration, [9](#)

W

warranty, [2](#)

