Keysight D9040DDRC DDR4 Compliance Test Application

KEYSIGHT TECHNOLOGIES

Programmer's Reference

Notices

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In This Book

This book is your guide to programming the Agilent Technologies D9040DDRC DDR4 Compliance 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 77, Chapter 4, “Instruments,” starting on page 97, and Chapter 5, “Message IDs,” starting on page 99 provide information specific to programming the D9040DDRC DDR4 Compliance 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

1 Introduction to Programming

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

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

You can accomplish other tasks by combining these functions.

Remote Programming Toolkit

The majority of remote interface features are common across all the Keysight Technologies, Inc. family of compliance applications. Information on those features is provided in the N5452A Compliance Application Remote Programming Toolkit available for download from Keysight here: www.keysight.com/find/rpi. The D9040DDRC DDR4 Compliance Test Application uses Remote Interface Revision 6.00. The help files provided with the toolkit indicate which features are supported in this version.

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

2 Configuration Variables and Values

The following table contains a description of each of the D9040DDRC DDR4 Compliance 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	A12-BC Channel	A12BCDigChannel	NA, DIGital0, DIGital1, DIGital2, DIGital3, DIGital4, DIGital5, DIGital6, DIGital7, DIGital8, DIGital9, DIGital10, DIGital11, DIGital12, DIGital13, DIGital14, DIGital15	Identifies the channel source selection of the A12-BC digital signal to be analyzed for burst length detection.
Configure	ACT Channel	ACTDigChannel	DIGital0, DIGital1, DIGital2, DIGital3, DIGital4, DIGital5, DIGital6, DIGital7, DIGital8, DIGital9, DIGital10, DIGital11, DIGital12, DIGital13, DIGital14, DIGital15	Identifies the channel source selection of the ACT digital signal to be analyzed for MSOx Logic Triggering.
Configure	Associate Signal Source	OvrShtSeAssociateSignal_DDR4DataMask_Source	NA, 1, 2, 3, 4	Identifies the source channel of the associate signal to be display for Overshoot/Undershoot (Data Mask) tests.
Configure	Associate Signal Source	OvrShtSeAssociateSignal_DDR4Data_Source	NA, 1, 2, 3, 4	Identifies the source channel of the associate signal to be display for Overshoot/Undershoot (Data) tests.
Configure	Associate Signal Source	OvrShtSeAssociateSignal_DDR4StrobeMinus_Source	NA, 1, 2, 3, 4	Identifies the source channel of the associate signal to be display for Overshoot/Undershoot (Strobe Minus) tests.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Associate Signal Source	OvrShtSeAssociateSignal_DDR4StrobePlus_Source	NA, 1, 2, 3, 4	Identifies the source channel of the associate signal to be display for Overshoot/Undershoot (Strobe Plus) tests.
Configure	Associate Signal to be Display	OvrShtSeAssociateSignal	NA, DQDM, DQS	Associate Signal to be Display.
Configure	Associate Signal to be Display	OvrShtSeAssociateSignal_DDR4Data	NA, DQS	Associate Signal to be Display.
Configure	Associate Signal to be Display	OvrShtSeAssociateSignal_DDR4DataMask	NA, DQS	Associate Signal to be Display.
Configure	Associate Signal to be Display	OvrShtSeAssociateSignal_DDR4StrobePlus	NA, DQDM	Associate Signal to be Display.
Configure	Associate Signal to be Display	OvrShtSeAssociateSignal_StrobeMinusData	NA, DQDM	Associate Signal to be Display.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Auto Config Update	AutoConfigUpdate	0, 1, 2	The application will automatically update some affected configuration settings under the Configure Tab due to some dependency relationship with the value set for the DDR data rate, Test Mode or SDRAM Type option. By default, the application will prompt user when an auto config update is detected. However, user is able to allow the auto config to always occur or choose to disable the auto config update without a user prompt. Hint: Disabling the user prompt is useful when running under remoting scenarios.
Configure	Base Ratio	BurstTriggerBaseRatio_Chan1	(Accepts user-defined text), 0.20	Specify the value of the base ratio used when triggering for the READ/WRITE burst data. The value set here is applicable ONLY when the "Threshold Mode" option is set to "TopBaseRatio".
Configure	Base Ratio	BurstTriggerBaseRatio_Chan2	(Accepts user-defined text), 0.20	Specify the value of the base ratio used when triggering for the READ/WRITE burst data. The value set here is applicable ONLY when the "Threshold Mode" option is set to "TopBaseRatio".
Configure	Base Ratio	BurstTriggerBaseRatio_Chan3	(Accepts user-defined text), 0.20	Specify the value of the base ratio used when triggering for the READ/WRITE burst data. The value set here is applicable ONLY when the "Threshold Mode" option is set to "TopBaseRatio".

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Base Ratio	BurstTrigerBaseRatio_Chan4	(Accepts user-defined text), 0.20	Specify the value of the base ratio used when triggering for the READ/WRITE burst data. The value set here is applicable ONLY when the "Threshold Mode" option is set to "TopBaseRatio".
Configure	Burst Clock Minimum Transition	MinClock Cycles	(Accepts user-defined text), 202	This value is set when burst clock is selected. This value is used to set the number of clock transitions to test in a given burst - min is 202. This is to optimize both triggering capabilities (by setting a user expectation of consistant burst lengths) and maximize the number of measurements that can be made in a burst. This value can be typed to any value > 202.
Configure	Burst Envelope Threshold	BurstEnv Thres	(Accepts user-defined text), 0.5	This setting is used to determine the Data Strobe burst sensitivity level when performing the READ/WRITE burst separation process. Setting this option to a smaller value will increase the sensitivity of the algoritm. This option can be used to detect and identify the smallest valid READ/WRITE Data Strobe burst within a data acquisition if there are significant difference in amplitude between the Data Strobe bursts. However, setting this option too small may cause noise to be interpreted as valid burst data.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Burst Identification Threshold Mode [ISim]	ThreshSetMode_ISim	1, 0	The value set here is applicable ONLY when the "InfiniiSim" feature is enabled. This option determines the threshold used in the READ/WRITE burst identification task. By selecting "Auto", the system will automatically determine the threshold settings for a particular channel input based on the Pre-InfiniiSim measurement threshold settings used in either "TopBaseRatio" or "Custom Threshold" Threshold Mode cases. Setting "Manual" allows user to directly set the threshold settings using the options under the "Burst Identification Threshold [ISim]" configuration group for each channel of interest. For example, the manual threshold settings for Channel 1 can be found under the configuration path "Burst Trigger Threshold Settings -> CHANNEL1 -> Burst Identification Threshold [ISim]"
Configure	Burst Length Limit	MaxBurstLenLimit	(Accepts user-defined text), 4, 8, 10000	This value is used to limit the maximum number of bits used in a valid data burst found when generating an eye diagram(Read or Write). For example, when this value is set to '8', the maximum number of bits used in a data burst to generate an eye diagram is limit to the first 8 data bit. User can specify custom value for this option.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Burst Length Stimulus Mode	BurstLengthStimulusMode	FixedBurstLength, A12BCOnTheFly	This configuration for the selection of burst length stimulus mode. For "Fixed Burst Length" selection, application will assume all the burst occurance have the same length of sub-burst. For "A12-BC Signal(Support On-The-Fly)" selection, the burst length of a sub-burst is depend on the logic state of BC signal at the moment Read/Write command queried.
Configure	CAS Channel	CASDigChannel	DIGital0, DIGital1, DIGital2, DIGital3, DIGital4, DIGital5, DIGital6, DIGital7, DIGital8, DIGital9, DIGital10, DIGital11, DIGital12, DIGital13, DIGital14, DIGital15	Identifies the channel source selection of the CAS digital signal to be analyzed for MSOx Logic Triggering.
Configure	CKE Channel	CKEDigChannel	Ignore, DIGital0, DIGital1, DIGital2, DIGital3, DIGital4, DIGital5, DIGital6, DIGital7, DIGital8, DIGital9, DIGital10, DIGital11, DIGital12, DIGital13, DIGital14, DIGital15	Identifies the channel source selection of the CKE digital signal to be analyzed for MSOx Logic Triggering.
Configure	CS Channel	CSDigChannel	DIGital0, DIGital1, DIGital2, DIGital3, DIGital4, DIGital5, DIGital6, DIGital7, DIGital8, DIGital9, DIGital10, DIGital11, DIGital12, DIGital13, DIGital14, DIGital15	Identifies the channel source selection of the CS digital signal to be analyzed for MSOx Logic Triggering.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Channel 1	MyCH1	NA_, Clock_DCK0, Clock_DCK1, Clock_DCK2, Clock_SCK0, Clock_SCK1, Clock_SCK2, Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, Control_NCS0, Control_NCS1, Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, Strobe_SDQS0, Strobe_SDQS1, Strobe_SDQS2, Strobe_SDQS3, Strobe_SDQS4, Strobe_SDQS5, Strobe_SDQS6, Strobe_SDQS7, Strobe_SDQS8, DM_DM0, DM_DM1, DM_DM2, DM_DM3, DM_DM4, DM_DM5, DM_DM6, DM_DM7, CommandAddress_CA1, CommandAddress_CA2, CommandAddress_CS, LP_NA_, LP_Clock_DCK, LP_Clock_SCK, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31, LP_Control_NCS, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3, LP_Strobe_SDQS0, LP_Strobe_SDQS1, LP_Strobe_SDQS2, LP_Strobe_SDQS3, LP_DM_DM0, LP_DM_DM1, LP_DM_DM2, LP_DM_DM3	Please select the signal parameter connected to Channel 1

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Channel 1	MyCH1_ DQ	NA_, Clock_DCK0, Clock_DCK1, Clock_DCK2, Clock_SCK0, Clock_SCK1, Clock_SCK2, Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, Control_NCS0, Control_NCS1, Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, Strobe_SDQS0, Strobe_SDQS1, Strobe_SDQS2, Strobe_SDQS3, Strobe_SDQS4, Strobe_SDQS5, Strobe_SDQS6, Strobe_SDQS7, Strobe_SDQS8, DM_DM0, DM_DM1, DM_DM2, DM_DM3, DM_DM4, DM_DM5, DM_DM6, DM_DM7, CommandAddress_CA1, CommandAddress_CA2, CommandAddress_CS, LP_NA_, LP_Clock_DCK, LP_Clock_SCK, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31, LP_Control_NCS, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3, LP_Strobe_SDQS0, LP_Strobe_SDQS1, LP_Strobe_SDQS2, LP_Strobe_SDQS3, LP_DM_DM0, LP_DM_DM1, LP_DM_DM2, LP_DM_DM3	Please select the signal parameter connected to Channel 1

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Channel 2	MyCH2	NA_, Clock_DCK0, Clock_DCK1, Clock_DCK2, Clock_SCK0, Clock_SCK1, Clock_SCK2, Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, Control_NCS0, Control_NCS1, Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, Strobe_SDQS0, Strobe_SDQS1, Strobe_SDQS2, Strobe_SDQS3, Strobe_SDQS4, Strobe_SDQS5, Strobe_SDQS6, Strobe_SDQS7, Strobe_SDQS8, DM_DM0, DM_DM1, DM_DM2, DM_DM3, DM_DM4, DM_DM5, DM_DM6, DM_DM7, CommandAddress_CA1, CommandAddress_CA2, CommandAddress_CS, LP_NA_, LP_Clock_DCK, LP_Clock_SCK, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31, LP_Control_NCS, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3, LP_Strobe_SDQS0, LP_Strobe_SDQS1, LP_Strobe_SDQS2, LP_Strobe_SDQS3, LP_DM_DM0, LP_DM_DM1, LP_DM_DM2, LP_DM_DM3	Please select the signal parameter connected to Channel 2

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Channel 2	MyCH2_ DQ	NA_, Clock_DCK0, Clock_DCK1, Clock_DCK2, Clock_SCK0, Clock_SCK1, Clock_SCK2, Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, Control_NCS0, Control_NCS1, Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, Strobe_SDQS0, Strobe_SDQS1, Strobe_SDQS2, Strobe_SDQS3, Strobe_SDQS4, Strobe_SDQS5, Strobe_SDQS6, Strobe_SDQS7, Strobe_SDQS8, DM_DM0, DM_DM1, DM_DM2, DM_DM3, DM_DM4, DM_DM5, DM_DM6, DM_DM7, CommandAddress_CA1, CommandAddress_CA2, CommandAddress_CS, LP_NA_, LP_Clock_DCK, LP_Clock_SCK, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31, LP_Control_NCS, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3, LP_Strobe_SDQS0, LP_Strobe_SDQS1, LP_Strobe_SDQS2, LP_Strobe_SDQS3, LP_DM_DM0, LP_DM_DM1, LP_DM_DM2, LP_DM_DM3	Please select the signal parameter connected to Channel 2

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Channel 3	MyCH3	NA_, Clock_DCK0, Clock_DCK1, Clock_DCK2, Clock_SCK0, Clock_SCK1, Clock_SCK2, Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, Control_NCS0, Control_NCS1, Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, Strobe_SDQS0, Strobe_SDQS1, Strobe_SDQS2, Strobe_SDQS3, Strobe_SDQS4, Strobe_SDQS5, Strobe_SDQS6, Strobe_SDQS7, Strobe_SDQS8, DM_DM0, DM_DM1, DM_DM2, DM_DM3, DM_DM4, DM_DM5, DM_DM6, DM_DM7, CommandAddress_CA1, CommandAddress_CA2, CommandAddress_CS, LP_NA_, LP_Clock_DCK, LP_Clock_SCK, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31, LP_Control_NCS, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3, LP_Strobe_SDQS0, LP_Strobe_SDQS1, LP_Strobe_SDQS2, LP_Strobe_SDQS3, LP_DM_DM0, LP_DM_DM1, LP_DM_DM2, LP_DM_DM3	Please select the signal parameter connected to Channel 3

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Channel 3	MyCH3_ DQ	NA_, Clock_DCK0, Clock_DCK1, Clock_DCK2, Clock_SCK0, Clock_SCK1, Clock_SCK2, Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, Control_NCS0, Control_NCS1, Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, Strobe_SDQS0, Strobe_SDQS1, Strobe_SDQS2, Strobe_SDQS3, Strobe_SDQS4, Strobe_SDQS5, Strobe_SDQS6, Strobe_SDQS7, Strobe_SDQS8, DM_DM0, DM_DM1, DM_DM2, DM_DM3, DM_DM4, DM_DM5, DM_DM6, DM_DM7, CommandAddress_CA1, CommandAddress_CA2, CommandAddress_CS, LP_NA_, LP_Clock_DCK, LP_Clock_SCK, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31, LP_Control_NCS, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3, LP_Strobe_SDQS0, LP_Strobe_SDQS1, LP_Strobe_SDQS2, LP_Strobe_SDQS3, LP_DM_DM0, LP_DM_DM1, LP_DM_DM2, LP_DM_DM3	Please select the signal parameter connected to Channel 3

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Channel 4	MyCH4	NA_, Clock_DCK0, Clock_DCK1, Clock_DCK2, Clock_SCK0, Clock_SCK1, Clock_SCK2, Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, Control_NCS0, Control_NCS1, Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, Strobe_SDQS0, Strobe_SDQS1, Strobe_SDQS2, Strobe_SDQS3, Strobe_SDQS4, Strobe_SDQS5, Strobe_SDQS6, Strobe_SDQS7, Strobe_SDQS8, DM_DM0, DM_DM1, DM_DM2, DM_DM3, DM_DM4, DM_DM5, DM_DM6, DM_DM7, CommandAddress_CA1, CommandAddress_CA2, CommandAddress_CS, LP_NA_, LP_Clock_DCK, LP_Clock_SCK, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31, LP_Control_NCS, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3, LP_Strobe_SDQS0, LP_Strobe_SDQS1, LP_Strobe_SDQS2, LP_Strobe_SDQS3, LP_DM_DM0, LP_DM_DM1, LP_DM_DM2, LP_DM_DM3	Please select the signal parameter connected to Channel 4

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Channel 4	MyCH4_ DQ	NA_, Clock_DCK0, Clock_DCK1, Clock_DCK2, Clock_SCK0, Clock_SCK1, Clock_SCK2, Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, Control_NCS0, Control_NCS1, Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, Strobe_SDQS0, Strobe_SDQS1, Strobe_SDQS2, Strobe_SDQS3, Strobe_SDQS4, Strobe_SDQS5, Strobe_SDQS6, Strobe_SDQS7, Strobe_SDQS8, DM_DM0, DM_DM1, DM_DM2, DM_DM3, DM_DM4, DM_DM5, DM_DM6, DM_DM7, CommandAddress_CA1, CommandAddress_CA2, CommandAddress_CS, LP_NA_, LP_Clock_DCK, LP_Clock_SCK, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31, LP_Control_NCS, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3, LP_Strobe_SDQS0, LP_Strobe_SDQS1, LP_Strobe_SDQS2, LP_Strobe_SDQS3, LP_DM_DM0, LP_DM_DM1, LP_DM_DM2, LP_DM_DM3	Please select the signal parameter connected to Channel 4

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Chip Select Source	AdvDbg_Source3	-1, 1, 2, 3, 4	Identifies the source of the Chip Select signal for eye diagram tests(Rank separation option ONLY).
Configure	Clock - Continuous or Burst	ContOBurst	Continuous, Burst	This option is to select if the Clock signal is continuous or Bursted.
Configure	Clock Lane	AdvDbgSupportClockMSOxLogicTrig	CK0, CK1, CK2	Identifies the Clock lane for the eye diagram tests using MSOX Logic input.
Configure	Clock Recovery Edge Direction	ClockRecoveryEdgeDirection	Both, Rising, Falling	Specify the clock recovery edge direction to be used when folding eye diagrams. Applicable to all LPDDR4 Data and Data Strobe eye diagram tests except for 'tDQS2DQ' test.
Configure	Clock Single Ended High Voltage (V)	InputThreshold_CLK_SE_High	(Accepts user-defined text), 0.700, 0.600	Identifies the High Voltage for Clock Single Ended.
Configure	Clock Single Ended Low Voltage (V)	InputThreshold_CLK_SE_Low	(Accepts user-defined text), 0.500, 0.400	Identifies the Low Voltage for Clock Single Ended.
Configure	Clock Source	AdvDbg_SourceClockMSOxLogicTrig	-1, 1, 2, 3, 4	Identifies the source of the Clock for eye diagram tests using MSOX Logic input.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Clocking Method	Clocking Method	1, 2	This option is used to select the clocking method used in the selected PUT(under the Command and Address Timing tests section). The clocking method is typically determined by the memory controller where it could use "1T Timing" or "2T Timing" method on the address and command buses. This clocking method option will ONLY affect tIS tests.
Configure	DQ to DQS phase shift for Read(%)	Read_Phase	(Accepts user-defined text), 20	This setting allow user to modify the expected phase shift of DQ-DQS for specific case. The number represent the % of phase shift expected for Read cycle.
Configure	DQ to DQS phase shift for Write(%)	Write_Phase	(Accepts user-defined text), 40	This setting allow user to modify the expected phase shift of DQ-DQS for specific case. The number represent the % of phase shift expected for Write cycle.
Configure	DQS Lower Threshold For Burst Trigger Method	DQSLowerThresForBurstTrig	(Accepts user-defined text), -0.2	Determine the lower threshold level of a Data Strobe burst (DQS) that can be identified as a valid READ/WRITE burst data by using Preamble method. If the actual amplitude of a burst data is not pass the value specified in this option, then that particular burst data will be ignored. When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	DQS Middle Threshold For Burst Trigger Method	DQSMiddleThresForBurstTrig	(Accepts user-defined text), 0.0	Determine the middle threshold level of a Data Strobe burst (DQS) that can be identified as a valid READ/WRITE burst data by using Preamble method. If the actual amplitude of a burst data is not pass the value specified in this option, then that particular burst data will be ignored. When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.
Configure	DQS Upper Threshold For Burst Trigger Method	DQSUpperThresForBurstTrig	(Accepts user-defined text), 0.2	Determine the upper threshold level of a Data Strobe burst (DQS) that can be identified as a valid READ/WRITE burst data by using Preamble method. If the actual amplitude of a burst data is not pass the value specified in this option, then that particular burst data will be ignored. When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Data Lane	AdvDbgInputDataMSOxLogicTrig	DQ0, DQ1, DQ2, DQ3, DQ4, DQ5, DQ6, DQ7, DQ8, DQ9, DQ10, DQ11, DQ12, DQ13, DQ14, DQ15, DQ16, DQ17, DQ18, DQ19, DQ20, DQ21, DQ22, DQ23, DQ24, DQ25, DQ26, DQ27, DQ28, DQ29, DQ30, DQ31, DQ32, DQ33, DQ34, DQ35, DQ36, DQ37, DQ38, DQ39, DQ40, DQ41, DQ42, DQ43, DQ44, DQ45, DQ46, DQ47, DQ48, DQ49, DQ50, DQ51, DQ52, DQ53, DQ54, DQ55, DQ56, DQ57, DQ58, DQ59, DQ60, DQ61, DQ62, DQ63, DQ64, DQ65, DQ66, DQ67, DQ68, DQ69, DQ70, DQ71	Identifies the Data lane for the eye diagram tests using MSOX Logic input.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Data Lane	AdvDbgInput_Eye	DQ0, DQ1, DQ2, DQ3, DQ4, DQ5, DQ6, DQ7, DQ8, DQ9, DQ10, DQ11, DQ12, DQ13, DQ14, DQ15, DQ16, DQ17, DQ18, DQ19, DQ20, DQ21, DQ22, DQ23, DQ24, DQ25, DQ26, DQ27, DQ28, DQ29, DQ30, DQ31, DQ32, DQ33, DQ34, DQ35, DQ36, DQ37, DQ38, DQ39, DQ40, DQ41, DQ42, DQ43, DQ44, DQ45, DQ46, DQ47, DQ48, DQ49, DQ50, DQ51, DQ52, DQ53, DQ54, DQ55, DQ56, DQ57, DQ58, DQ59, DQ60, DQ61, DQ62, DQ63, DQ64, DQ65, DQ66, DQ67, DQ68, DQ69, DQ70, DQ71	Identifies the data lane for the eye diagram tests.
Configure	Data Source	AdvDbg_Source1	1, 2, 3, 4	Identifies the source of the data to be analyzed for eye diagram tests.
Configure	Data Source	AdvDbg_SourceDataMSOxLogicTrig	1, 2, 3, 4	Identifies the source of the Data for eye diagram tests using MSOX Logic input.
Configure	Data Strobe Lane	AdvDbgSupport	DQS0, DQS1, DQS2, DQS3, DQS4, DQS5, DQS6, DQS7, DQS8	Identifies the data strobe lane for the eye diagram tests.
Configure	Data Strobe Lane	AdvDbgSupportStrobeMSOxLogicTrig	DQS0, DQS1, DQS2, DQS3, DQS4, DQS5, DQS6, DQS7, DQS8	Identifies the Data Strobe lane for the eye diagram tests using MSOX Logic input.
Configure	Data Strobe Source	AdvDbg_Source2	-1, 1, 2, 3, 4	Identifies the source of the data strobe for eye diagram tests.
Configure	Data Strobe Source	AdvDbg_SourceStrobeMSOxLogicTrig	-1, 1, 2, 3, 4	Identifies the source of the Data Strobe for eye diagram tests using MSOX Logic input.
Configure	Data Transfer Cycle	EyeDiagramOpt	R, W	Select Data Transfer Cycle For Eye Diagram Test
Configure	Debug Info Logging	EnableDebugLogging	0, 1	This option enables/disables additional debug information logging during test run. This option is ONLY used for internal debugging purposes and should not be enable during normal test run.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Edge Type for HoldTime measurements	CAEdgeOfInterest_HoldTime	0, 1, 2	This option is used to select the type of CA signal edge (Rising/Falling/Both) that will be processed when performing the hold time measurements for Command and Address Timing tests section. This option will ONLY affect tIH and tIH(derate) tests.
Configure	Edge Type for SetupTime measurements	CAEdgeOfInterest_SetupTime	0, 1, 2	This option is used to select the type of CA signal edge (Rising/Falling/Both) that will be processed when performing the setup time measurements for Command and Address Timing tests section. This option will ONLY affect tIS and tIS(derate) tests.
Configure	Eye Diagram Display Style	EyeDiagramDisplayStyleOpt	EyeDispWithoutDQS, EyeDispWithDQS	Select the Display Style For Eye Diagram Test
Configure	Eye Diagram Horizontal Position	EyeDiagHorizontalPos	(Accepts user-defined text), Auto, 0.0	Identifies the horizontal position of the Data(DQ) for the eye diagram tests.
Configure	Eye Diagram Vertical Base Level Scaling (V)	EyeDiagVerticalBaseLvlScal	(Accepts user-defined text), -0.10	Identifies the Vertical Base Level Scaling value of the Data(DQ) signal for the eye diagram tests.
Configure	Eye Diagram Vertical Top Level Scaling (V)	EyeDiagVerticalTopLvlScal	(Accepts user-defined text), 1.3	Identifies the Vertical Top Level Scaling value of the Data(DQ) signal for the eye diagram tests.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	First DQ Transition Search Range (ps)	FirstDQSearchRange	(Accepts user-defined text), 800	Specify the search range in picoseconds (ps) to look for the first DQ transition bit. This config ONLY affects tDQS2DQ test.
Configure	Fixed Burst Length	FixBurstLen_Timing	4, 8	This value is used ONLY when the "Rank Separation" option is enabled. The value is used in the process to identify and eliminate bubble states(if any) from a valid back-to-back data burst found when performing the Data Strobe Timing and Data Timing tests. For example, when this value is set to '8', all the data burst that has more than 8 data bit long will be scan for any bubble states within the data burst. It is assume that all the multiple data bursts will have the same fixed data length(in this example, 8 data bit). User can select from the available values for this option.
Configure	Fixed Burst Length	FixBurstLength	4, 8	This value is used ONLY when the "Rank Separation" option is enabled. The value is used in the process to identify and eliminate bubble states(if any) from a valid back-to-back data burst found when generating an eye diagram. For example, when this value is set to '8', all the data burst that has more than 8 data bit long will be scan for any bubble states within the data burst. It is assume that all the multiple data bursts will have the same fixed data length(in this example, 8 data bit). User can select from the available values for this option.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Fixed Burst Length	FixedBurstLength_LogicMSOx	NA, 4, 8	This value is to define the Fix Burst Length of sub-burst. The value is used to determine the continuity of the sub-burst to the next sub-burst according to the Logic Pattern.
Configure	Lower Threshold (V)	Chan1_Low_Thresh	(Accepts user-defined text), -0.30, -0.20	Specify the lower measurement threshold used for Channel 1. The value set here is applicable ONLY when the "Threshold Mode" option is set to "Custom Threshold". When the "InfiniiSim" feature is enabled, the Pre-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Lower Threshold (V)	Chan2_Low_Thresh	(Accepts user-defined text), -0.30, -0.20	Specify the lower measurement threshold used for Channel 2. The value set here is applicable ONLY when the "Threshold Mode" option is set to "Custom Threshold". When the "InfiniiSim" feature is enabled, the Pre-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Lower Threshold (V)	Chan3_Low_Thresh	(Accepts user-defined text), 0.70, 0.15	Specify the lower measurement threshold used for Channel 3. The value set here is applicable ONLY when the "Threshold Mode" option is set to "Custom Threshold". When the "InfiniiSim" feature is enabled, the Pre-InfiniiSim signal is used as the reference for the threshold specified.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Lower Threshold (V)	Chan4_Low_Thresh	(Accepts user-defined text), 0.50, 0.20	Specify the lower measurement threshold used for Channel 4. The value set here is applicable ONLY when the "Threshold Mode" option is set to "Custom Threshold". When the "InfiniiSim" feature is enabled, the Pre-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Lower Threshold [ISim] (V)	Chan1_Low_Thresh_ISim	(Accepts user-defined text), -0.30, -0.20	Specify the lower measurement threshold used for Channel 1. The value set here is applicable ONLY when the "Burst Identification Threshold Mode [ISim]" option is set to "Manual". When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Lower Threshold [ISim] (V)	Chan2_Low_Thresh_ISim	(Accepts user-defined text), -0.30, -0.20	Specify the lower measurement threshold used for Channel 2. The value set here is applicable ONLY when the "Burst Identification Threshold Mode [ISim]" option is set to "Manual". When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Lower Threshold [ISim] (V)	Chan3_Low_Thresh_ISim	(Accepts user-defined text), 0.70, 0.15	Specify the lower measurement threshold used for Channel 3. The value set here is applicable ONLY when the "Burst Identification Threshold Mode [ISim]" option is set to "Manual". When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Lower Threshold [ISim] (V)	Chan4_Low_Thresh_ISim	(Accepts user-defined text), 0.50, 0.20	Specify the lower measurement threshold used for Channel 4. The value set here is applicable ONLY when the "Burst Identification Threshold Mode [ISim]" option is set to "Manual". When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Manual Eye Opening at Time Potition (s)	EyeOpenTimePos	(Accepts user-defined text), AUTO, 200E-12, 300E-12	Manually specify the opening of the eye diagram at the center time position in seconds. Set to 'AUTO' for automatically positioning the the eye opening. Set to time location (seconds) of the desired eye opening to move the eye opening to the center of time position.
Configure	Mark Worst Case Cycles	MarkWorstCaseCycles	true, false	Places markers around the worst case cycles (test-dependent). Slows runtime performance.
Configure	Mask the starting of DQS (clock cycle)	Mask_DQS_Start	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	Mask the starting of DQS after preamble pattern. Skip the number of DQS in terms of clock cycles to be folded into the eye diagram. Applicable to 'Preamble-Pattern Separation Method' and available in debug mode only.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Max Acqusition Count	MaxAcqCount	(Accepts user-defined text), 5, 10, 20, 50	Determine the maximum number of acquisition that the app will used to try and achieved the required READ/WRITE measurement burst count(as specified in the "Multi Burst Count" option) when performing the tests. *Note: This option is applicable to all READ /WRITE burst related tests in the Electrical Tests group and Timing Tests group.
Configure	Max Measurement Count	MaxNumOfEdgeCount	(Accepts user-defined text), 1, 10, 100, 1000	Determine the maximum number of measurement edge count (including both rising and falling edges of the selected Command and Address signal) that the app will used when performing the Command and Address Timing Tests(tIS, tIH, etc)
Configure	Maximum Sampling Points (Pts) Clock Timing Tests Only	SamplingPointsClockTiming	(Accepts user-defined text), 20000000, 100000000, 200000000	Specifies the maximum sampling points to be captured in all the Clock Timing tests ONLY. Actual sampling points used in the Clock Timing Tests will automatically be calculated by the application based on the DDR data rate used, the maximum sampling rate available and the "Number of Clock Measurements" configuration setting. The maximum sampling points value is not recommended to be set above the default value of 20 Mpts as the application may not be able to handle the processing of data due to the overall memory constraint of the system. This setting is mainly used for evaluation purposes.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Middle Threshold (V)	Chan1_Mid_Thresh	(Accepts user-defined text), 0.00	Specify the middle measurement threshold used for Channel 1. The value set here is applicable ONLY when the "Threshold Mode" option is set to "Custom Threshold". When the "InfiniiSim" feature is enabled, the Pre-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Middle Threshold (V)	Chan2_Mid_Thresh	(Accepts user-defined text), 0.00	Specify the middle measurement threshold used for Channel 2. The value set here is applicable ONLY when the "Threshold Mode" option is set to "Custom Threshold". When the "InfiniiSim" feature is enabled, the Pre-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Middle Threshold (V)	Chan3_Mid_Thresh	(Accepts user-defined text), 0.80, 0.225	Specify the middle measurement threshold used for Channel 3. The value set here is applicable ONLY when the "Threshold Mode" option is set to "Custom Threshold". When the "InfiniiSim" feature is enabled, the Pre-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Middle Threshold (V)	Chan4_Mid_Thresh	(Accepts user-defined text), 0.60, 0.30	Specify the middle measurement threshold used for Channel 4. The value set here is applicable ONLY when the "Threshold Mode" option is set to "Custom Threshold". When the "InfiniiSim" feature is enabled, the Pre-InfiniiSim signal is used as the reference for the threshold specified.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Middle Threshold [ISim] (V)	Chan1_Mid_Thresh_ISim	(Accepts user-defined text), 0.00	Specify the middle measurement threshold used for Channel 1. The value set here is applicable ONLY when the "Burst Identification Threshold Mode [ISim]" option is set to "Manual". When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Middle Threshold [ISim] (V)	Chan2_Mid_Thresh_ISim	(Accepts user-defined text), 0.00	Specify the middle measurement threshold used for Channel 2. The value set here is applicable ONLY when the "Burst Identification Threshold Mode [ISim]" option is set to "Manual". When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Middle Threshold [ISim] (V)	Chan3_Mid_Thresh_ISim	(Accepts user-defined text), 0.80, 0.225	Specify the middle measurement threshold used for Channel 3. The value set here is applicable ONLY when the "Burst Identification Threshold Mode [ISim]" option is set to "Manual". When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Middle Threshold [ISim] (V)	Chan4_Mid_Thresh_ISim	(Accepts user-defined text), 0.60, 0.30	Specify the middle measurement threshold used for Channel 4. The value set here is applicable ONLY when the "Burst Identification Threshold Mode [ISim]" option is set to "Manual". When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Minimum Burst Gap Width	MinBurst GapWidth4EyeDiagram	(Accepts user-defined text), 2, 4	This configuration is only applicable when the 'Burst Triggering Method' is set to 'DQS-DQ Phase Difference' option. This setting is used to set the minimum gap width (in terms of UI) between 2 consecutive burst data in an acquired waveform data when generating an eye diagram(Read or Write). For example, when this value is set to '2', any gap width greater than 2 UI will be considered as a gap between 2 valid data burst. This information is used as part of the valid burst data identification process when recovering a clock for the Eye Diagram. In a typical DDR4 2TCK pre-amble mode, this value should be set to at least '4'. By setting this value to '4', the minimum burst gap width in the actual test signal must be greater than 4 UI wide.
Configure	Minimum Data Amplitude	DataVoltRange	(Accepts user-defined text), 0.5	Determine the minimum amplitude of a Data burst (DQ/DM) that can be identified as a valid READ/WRITE burst data. If the actual amplitude of a burst data is lower than the value specified in this option, then that particular burst data will be ignored.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Multi Burst Count	MultiBurstCount	(Accepts user-defined text), 1, 10, 100, 1000	Determine the number of READ/WRITE measurement burst(s) that is required when performing the tests. *Note: This option is applicable to all READ /WRITE burst related tests in the Electrical Tests group and Timing Tests group with the exception of VOH(AC), VOH(DC), VOL(AC), VOL(DC), VIHDiff(AC), VILDiff(AC), VOHDiff(AC) and VOLDiff(AC) tests.
Configure	Number of Clock Measurements	NumClockMeas	(Accepts user-defined text), 200	This value is used to set the number of total clock transitions to be measured - min 200. If Continuous clock is selected, the memory depth will be set accordingly to capture enough clock edges. For bursted clock, it will first measure the number of clocks set in Burst clock transitions and then repeat as many acquisitions needed to meet the value set.
Configure	OfflineCAFilePath(Must be hidden)	OfflineCAFilePath	(Accepts user-defined text), C:\	For supporting offline.
Configure	OfflineCSFilePath(Must be hidden)	OfflineCSFilePath	(Accepts user-defined text), C:\	For supporting offline.
Configure	OfflineClockFilePath(Must be hidden)	OfflineClockFilePath	(Accepts user-defined text), C:\	For supporting offline.
Configure	OfflineClockMinusFilePath(Must be hidden)	OfflineClockMinusFilePath	(Accepts user-defined text), C:\	For supporting offline.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	OfflineClockPlusFilePath(Must be hidden)	OfflineClockPlusFilePath	(Accepts user-defined text), C:\	For supporting offline.
Configure	OfflineDQFilePath(Must be hidden)	OfflineDQFilePath	(Accepts user-defined text), C:\	For supporting offline.
Configure	OfflineDQSFilePath(Must be hidden)	OfflineDQSFilePath	(Accepts user-defined text), C:\	For supporting offline.
Configure	OfflineDQSMinusFilePath(Must be hidden)	OfflineDQSMinusFilePath	(Accepts user-defined text), C:\	For supporting offline.
Configure	OfflineDQSPlusFilePath(Must be hidden)	OfflineDQSPlusFilePath	(Accepts user-defined text), C:\	For supporting offline.
Configure	OfflineDataFolder(Must be hidden)	OfflineDataFolder	(Accepts user-defined text), C:\	For supporting offline.
Configure	OfflineDataMode(Must be hidden)	OfflineDataMode	(Accepts user-defined text), 0.0, 1.0	For supporting offline
Configure	Option	TypeOfSignalCH1_CAT	NA, PUT, SP, LP_NA, LP_PUT, LP_SP	Identifies the signal to use for Chanel 1 Command and Address Timing Test.
Configure	Option	TypeOfSignalCH2_CAT	NA, PUT, SP, LP_NA, LP_PUT, LP_SP	Identifies the signal to use for Channel 2 Command and Address Timing Test.
Configure	Option	TypeOfSignalCH3_CAT	NA, PUT, SP, LP_NA, LP_PUT, LP_SP	Identifies the signal to use for Channel 3 Command and Address Timing Test.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Option	TypeOfSignalCH4_CAT	NA, PUT, SP, LP_NA, LP_PUT, LP_SP	Identifies the signal to use for Channel 4 Command and Address Timing Test.
Configure	PUT Source	ElecDiffCKVihVilPut_Source	1, 2, 3, 4	Identifies the source of the PUT for Differential VIHdiff.CK/ VILdiff.CK tests.
Configure	PUT Source	ElecDiffDQSVihVilPut_Source	1, 2, 3, 4	Identifies the source of the PUT for Differential VIHdiff.DQS/ VILdiff.DQS tests.
Configure	PUT Source	ElecDiffOutputPut_Source	1, 2, 3, 4	Identifies the source of the PUT for Differential AC Output Tests.
Configure	PUT Source	ElecSEVsehVselClockMinusPut_Source	1, 2, 3, 4	Identifies the source of the PUT for VSEH/VSEL Tests for Clock.
Configure	PUT Source	ElecSEVsehVselClockPlusPut_Source	1, 2, 3, 4	Identifies the source of the PUT for VSEH/VSEL Tests for Clock.
Configure	PUT Source	ElecSEVsehVselStrobeMinusPut_Source	1, 2, 3, 4	Identifies the source of the PUT for VSEH/VSEL Tests for Strobe.
Configure	PUT Source	ElecSEVsehVselStrobePlusPut_Source	1, 2, 3, 4	Identifies the source of the PUT for VSEH/VSEL Tests for Strobe.
Configure	PUT Source	ElecSE_Source1	1, 2, 3, 4	Identifies the source of the PUT for "VOH/VOL and Output Slew Rate tests" test group.
Configure	PUT Source	ElecSE_Source1_CA	1, 2, 3, 4	Identifies the source channel of the PUT for "VIH/VIL for Command and Address" test group.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	PUT Source	ElecSE_Source1_DQ	1, 2, 3, 4	Identifies the source channel of the PUT for "VIH/VIL for DQ and DM" test group.
Configure	PUT Source	OvrShtSeCA_LP_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Address, Control, Clock, Chip Select, Clock Enable) tests.
Configure	PUT Source	OvrShtSeDQ_LP_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Data, Strobe, Mask) tests.
Configure	PUT Source	OvrShtSeInput_DDR4ClockMinus_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Clock Minus) tests.
Configure	PUT Source	OvrShtSeInput_DDR4ClockPlus_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Clock Plus) tests.
Configure	PUT Source	OvrShtSeInput_DDR4DataMask_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Data Mask) tests.
Configure	PUT Source	OvrShtSeInput_DDR4Data_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Data) tests.
Configure	PUT Source	OvrShtSeInput_DDR4StrobeMinus_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Strobe Minus) tests.
Configure	PUT Source	OvrShtSeInput_DDR4StrobePlus_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Strobe Plus) tests.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	PUT Source	OvrShtSeInput_LPDDR4ClockMinus_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Clock Minus) tests.
Configure	PUT Source	OvrShtSeInput_LPDDR4ClockPlus_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Clock Plus) tests.
Configure	PUT Source	OvrShtSeInput_LPDDR4DataMask_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Data Mask) tests.
Configure	PUT Source	OvrShtSeInput_LPDDR4Data_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Data) tests.
Configure	PUT Source	OvrShtSeInput_LPDDR4StrobeMinus_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Strobe Minus) tests.
Configure	PUT Source	OvrShtSeInput_LPDDR4StrobePlus_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Strobe Plus) tests.
Configure	PUT Source	OvrShtSe_Source	1, 2, 3, 4	Identifies the source channel of the PUT for Overshoot/Undershoot (Address, Control) tests.
Configure	PUT(+) Source	ElecDIFF_Source1	1, 2, 3, 4	Identifies the source channel of the PUT(+) for Differential AC Input Tests.
Configure	PUT(+) Source	ElecDiffVixCaPutSourcePlus	1, 2, 3, 4	Identifies the source of the PUT(+) for VIXCK Test.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	PUT(+) Source	ElecDiffVixDqPutSourcePlus	1, 2, 3, 4	Identifies the source of the PUT(-) for VIXDQ Test.
Configure	PUT(-) Source	ElecDIFF_Source2	1, 2, 3, 4	Identifies the source channel of the PUT(-) for Differential AC Input Tests.
Configure	PUT(-) Source	ElecDiffVixCaPutSourceMinus	1, 2, 3, 4	Identifies the source of the PUT(-) for VIXCK Test.
Configure	PUT(-) Source	ElecDiffVixDqPutSourceMinus	1, 2, 3, 4	Identifies the source of the PUT(-) for VIXDQ Test.
Configure	Padding for First DQ Bit	DQPaddingBit	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	Specify the number of DQ bit(s) to pad/skip in a valid Write burst in order to identify the first valid DQ bit in a burst when performing the tDQS2DQ test. For example, if the Padding for First DQ Bit is set to 2, the app will skip 2 UI before performing the test. This config ONLY affects tDQS2DQ test.
Configure	Pin Under Test, PUT	ElecDiffCKVihVilPut	Clock_DCK0, Clock_DCK1, Clock_DCK2, LP_Clock_DCK	Identifies the Pin Under Test for Differential VIHdiff.CK/ VILdiff.CK tests.
Configure	Pin Under Test, PUT	ElecDiffDQSVihVilPut	Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3	Identifies the Pin Under Test for Differential VIHdiff.DQS/ VILdiff.DQS tests.
Configure	Pin Under Test, PUT	ElecDiffVixCaPut	Clock_D_CK, LP_Clock_D_CK_A, LP_Clock_D_CK_B	Identifies the Pin Under Test for VIXCK Test.
Configure	Pin Under Test, PUT	ElecDiffVixDqPut	Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3	Identifies the Pin Under Test for VIXDQ Test.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Pin Under Test, PUT	ElecParamDiInput	Clock_DCK0, Clock_DCK1, Clock_DCK2, Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8	Identifies the Pin Under Test for Differential AC Input Tests parameters.
Configure	Pin Under Test, PUT	ElecParamDiffOutput	Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3	Identifies the Pin Under Test for Differential AC output parameters.
Configure	Pin Under Test, PUT	ElecParamSeInput	Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, Strobe_SDQS0, Strobe_SDQS1, Strobe_SDQS2, Strobe_SDQS3, Strobe_SDQS4, Strobe_SDQS5, Strobe_SDQS6, Strobe_SDQS7, Strobe_SDQS8, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31, LP_Strobe_SDQS0, LP_Strobe_SDQS1, LP_Strobe_SDQS2, LP_Strobe_SDQS3	Identifies the Pin Under Test for "VOH/VOL and Output Slew Rate tests" test group.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Pin Under Test, PUT	ElecParamSeInput_CA	Control_NRAS, Control_NWE, Control_NCAS, Control_NCS0, Control_NCS1, Control_CKE0, Control_CKE1, Control_ODT0, Control_ODT1, Address_A0, Address_A1, Address_A2, Address_A3, Address_A4, Address_A5, Address_A6, Address_A7, Address_A8, Address_A9, Address_A10, Address_A11, Address_A12, Address_A13, Address_A14, Address_A15, Control_BA0, Control_BA1, Control_BA2, LP_CommandAddress_CA0, LP_CommandAddress_CA1, LP_CommandAddress_CA2, LP_CommandAddress_CA3, LP_CommandAddress_CA4, LP_CommandAddress_CA5, LP_CommandAddress_CA6, LP_CommandAddress_CA7, LP_CommandAddress_CA8, LP_CommandAddress_CA9, LP_Control_NCS	Identifies the Pin Under Test for "VIH/VIL for Command and Address" test group.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Pin Under Test, PUT	ElecParamSeInput_DQ	Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, DM_DM0, DM_DM1, DM_DM2, DM_DM3, DM_DM4, DM_DM5, DM_DM6, DM_DM7, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31, LP_DM_DM0, LP_DM_DM1, LP_DM_DM2, LP_DM_DM3	Identifies the Pin Under Test for "VIH/VIL for DQ and DM" test group.
Configure	Pin Under Test, PUT	ElecSEVsehVselClockMinusPut	Clock_NCK0, Clock_NCK1, Clock_NCK2, LP_Clock_NCK	Identifies the Pin Under Test for VSEH/VSEL Tests for Clock.
Configure	Pin Under Test, PUT	ElecSEVsehVselClockPlusPut	Clock_SCK0, Clock_SCK1, Clock_SCK2, LP_Clock_SCK	Identifies the Pin Under Test for VSEH/VSEL Tests for Clock.
Configure	Pin Under Test, PUT	ElecSEVsehVselStrobeMinusPut	Strobe_NDQS0, Strobe_NDQS1, Strobe_NDQS2, Strobe_NDQS3, Strobe_NDQS4, Strobe_NDQS5, Strobe_NDQS6, Strobe_NDQS7, Strobe_NDQS8, LP_Strobe_NDQS0, LP_Strobe_NDQS1, LP_Strobe_NDQS2, LP_Strobe_NDQS3	Identifies the Pin Under Test for VSEH/VSEL Tests for Strobe.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Pin Under Test, PUT	ElecSEVsehVselStrobePlusPut	Strobe_SDQS0, Strobe_SDQS1, Strobe_SDQS2, Strobe_SDQS3, Strobe_SDQS4, Strobe_SDQS5, Strobe_SDQS6, Strobe_SDQS7, Strobe_SDQS8, LP_Strobe_SDQS0, LP_Strobe_SDQS1, LP_Strobe_SDQS2, LP_Strobe_SDQS3	Identifies the Pin Under Test for VSEH/VSEL Tests for Strobe.
Configure	Pin Under Test, PUT	OvrShtSeCA_LP_Input	CKE, CS_n, ODT, CA0, CA1, CA2, CA3, CA4, CA5, CA6, CA7, CA8, CA9, CK_t, CK_c	Identifies the Pin Under Test for Overshoot/Undershoot (Address, Control, Clock, Chip Select, Clock Enable) parameters.
Configure	Pin Under Test, PUT	OvrShtSeDQ_LP_Input	DQ0, DQ1, DQ2, DQ3, DQ4, DQ5, DQ6, DQ7, DQ8, DQ9, DQ10, DQ11, DQ12, DQ13, DQ14, DQ15, DQ16, DQ17, DQ18, DQ19, DQ20, DQ21, DQ22, DQ23, DQ24, DQ25, DQ26, DQ27, DQ28, DQ29, DQ30, DQ31, DQS0_t, DQS1_t, DQS2_t, DQS3_t, DQS0_c, DQS1_c, DQS2_c, DQS3_c, DM0, DM1, DM2, DM3	Identifies the Pin Under Test for Overshoot/Undershoot (Data, Strobe, Mask) parameters.
Configure	Pin Under Test, PUT	OvrShtSeInput	/RAS, /WE, /CAS, /CS0, /CS1, CKE0, CKE1, ODT0, ODT1, A0, A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A15, BA0, BA1, BA2	Identifies the Pin Under Test for Overshoot/Undershoot (Address, Control) parameters.
Configure	Pin Under Test, PUT	OvrShtSeInput_DDR4ClockMinus	/CK0, /CK1, /CK2	Identifies the Pin Under Test for Overshoot/Undershoot (Clock Minus) parameters.
Configure	Pin Under Test, PUT	OvrShtSeInput_DDR4ClockPlus	CK0, CK1, CK2	Identifies the Pin Under Test for Overshoot/Undershoot (Clock Plus) parameters.
Configure	Pin Under Test, PUT	OvrShtSeInput_DDR4Data	DQ0, DQ1, DQ2, DQ3, DQ4, DQ5, DQ6, DQ7, DQ8, DQ9, DQ10, DQ11, DQ12, DQ13, DQ14, DQ15, DQ16, DQ17, DQ18, DQ19, DQ20, DQ21, DQ22, DQ23, DQ24, DQ25, DQ26, DQ27, DQ28, DQ29, DQ30, DQ31, DQ32, DQ33, DQ34, DQ35, DQ36, DQ37, DQ38, DQ39, DQ40, DQ41, DQ42, DQ43, DQ44, DQ45, DQ46, DQ47, DQ48, DQ49, DQ50, DQ51, DQ52, DQ53, DQ54, DQ55, DQ56, DQ57, DQ58, DQ59, DQ60, DQ61, DQ62, DQ63, DQ64, DQ65, DQ66, DQ67, DQ68, DQ69, DQ70, DQ71	Identifies the Pin Under Test for Overshoot/Undershoot (Data) parameters.
Configure	Pin Under Test, PUT	OvrShtSeInput_DDR4DataMask	DM0, DM1, DM2, DM3, DM4, DM5, DM6, DM7	Identifies the Pin Under Test for Overshoot/Undershoot (Data Mask) parameters.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Pin Under Test, PUT	OvrShtSeInput_DDR4StrobeMinus	DQS0/, DQS1/, DQS2/, DQS3/, DQS4/, DQS5/, DQS6/, DQS7/, DQS8/	Identifies the Pin Under Test for Overshoot/Undershoot (Strobe Minus) parameters.
Configure	Pin Under Test, PUT	OvrShtSeInput_DDR4StrobePlus	DQS0, DQS1, DQS2, DQS3, DQS4, DQS5, DQS6, DQS7, DQS8	Identifies the Pin Under Test for Overshoot/Undershoot (Strobe Plus) parameters.
Configure	Pin Under Test, PUT	OvrShtSeInput_LPDDR4ClockMinus	/CK0, /CK1, /CK2	Identifies the Pin Under Test for Overshoot/Undershoot (Clock Minus) parameters.
Configure	Pin Under Test, PUT	OvrShtSeInput_LPDDR4ClockPlus	CK0, CK1, CK2	Identifies the Pin Under Test for Overshoot/Undershoot (Clock Plus) parameters.
Configure	Pin Under Test, PUT	OvrShtSeInput_LPDDR4Data	DQ0, DQ1, DQ2, DQ3, DQ4, DQ5, DQ6, DQ7, DQ8, DQ9, DQ10, DQ11, DQ12, DQ13, DQ14, DQ15, DQ16, DQ17, DQ18, DQ19, DQ20, DQ21, DQ22, DQ23, DQ24, DQ25, DQ26, DQ27, DQ28, DQ29, DQ30, DQ31, DQ32, DQ33, DQ34, DQ35, DQ36, DQ37, DQ38, DQ39, DQ40, DQ41, DQ42, DQ43, DQ44, DQ45, DQ46, DQ47, DQ48, DQ49, DQ50, DQ51, DQ52, DQ53, DQ54, DQ55, DQ56, DQ57, DQ58, DQ59, DQ60, DQ61, DQ62, DQ63, DQ64, DQ65, DQ66, DQ67, DQ68, DQ69, DQ70, DQ71	Identifies the Pin Under Test for Overshoot/Undershoot (Data) parameters.
Configure	Pin Under Test, PUT	OvrShtSeInput_LPDDR4DataMask	DM0, DM1, DM2, DM3, DM4, DM5, DM6, DM7	Identifies the Pin Under Test for Overshoot/Undershoot (Data Mask) parameters.
Configure	Pin Under Test, PUT	OvrShtSeInput_LPDDR4StrobeMinus	DQS0/, DQS1/, DQS2/, DQS3/, DQS4/, DQS5/, DQS6/, DQS7/, DQS8/	Identifies the Pin Under Test for Overshoot/Undershoot (Strobe Minus) parameters.
Configure	Pin Under Test, PUT	OvrShtSeInput_LPDDR4StrobePlus	DQS0, DQS1, DQS2, DQS3, DQS4, DQS5, DQS6, DQS7, DQS8	Identifies the Pin Under Test for Overshoot/Undershoot (Strobe Plus) parameters.
Configure	Pin Under Test, PUT	TypeOfSignalCH2	NA, Clock, Strobe, Data, DM, CommandAddress, Control, LP_NA, LP_Clock, LP_Strobe, LP_Data, LP_DM, LP_Control	Identifies the signal to use for Channel2 timing test.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Pin Under Test, PUT	TypeOfSignalCH2_DQ	NA, Clock, Strobe, Data, DM, CommandAddress, Control, LP_NA, LP_Clock, LP_Strobe, LP_Data, LP_DM, LP_Control	Identifies the signal to use for Channel2 timing test.
Configure	Pin Under Test, PUT	TypeOfSignalCH3	NA, Clock, Strobe, Data, DM, CommandAddress, Control, LP_NA, LP_Clock, LP_Strobe, LP_Data, LP_DM, LP_Control	Identifies the signal to use for Channel3 timing test.
Configure	Pin Under Test, PUT	TypeOfSignalCH3_DQ	NA, Clock, Strobe, Data, DM, CommandAddress, Control, LP_NA, LP_Clock, LP_Strobe, LP_Data, LP_DM, LP_Control	Identifies the signal to use for Channel3 timing test.
Configure	Pin Under Test, PUT	TypeOfSignalCH4	NA, Clock, Strobe, Data, DM, CommandAddress, Control, LP_NA, LP_Clock, LP_Strobe, LP_Data, LP_DM, LP_Control	Identifies the signal to use for Channel4 timing test.
Configure	Pin Under Test, PUT	TypeOfSignalCH4_DQ	NA, Clock, Strobe, Data, DM, CommandAddress, Control, LP_NA, LP_Clock, LP_Strobe, LP_Data, LP_DM, LP_Control	Identifies the signal to use for Channel4 timing test.
Configure	Pin Under Test, PUT Parameters for Channel 1	TypeOfSignalCH1	NA, Clock, Strobe, Data, DM, CommandAddress, Control, LP_NA, LP_Clock, LP_Strobe, LP_Data, LP_DM, LP_Control	Identifies the signal to use for Channel 1 timing tests.
Configure	Pin Under Test, PUT Parameters for Channel 1	TypeOfSignalCH1_DQ	NA, Clock, Strobe, Data, DM, CommandAddress, Control, LP_NA, LP_Clock, LP_Strobe, LP_Data, LP_DM, LP_Control	Identifies the signal to use for Channel 1 timing tests.
Configure	RAS Channel	RASDigChannel	DIGital0, DIGital1, DIGital2, DIGital3, DIGital4, DIGital5, DIGital6, DIGital7, DIGital8, DIGital9, DIGital10, DIGital11, DIGital12, DIGital13, DIGital14, DIGital15	Identifies the channel source selection of the RAS digital signal to be analyzed for MSOx Logic Triggering.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	READ Latency	ReadLatency	1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0, 30.0, 31.0, 32.0, 33.0, 34.0, 35.0, 36.0, 37.0, 38.0, 39.0, 40.0, 41.0, 42.0, 43.0, 44.0, 45.0, 46.0, 47.0, 48.0, 49.0, 50.0, 51.0, 52.0, 53.0, 54.0, 55.0, 56.0, 57.0, 58.0, 59.0, 60.0, 61.0, 62.0, 63.0, 64.0, 65.0, 66.0, 67.0, 68.0, 69.0, 70.0, 71.0, 72.0, 73.0, 74.0, 75.0, 76.0, 77.0, 78.0, 79.0, 80.0, 81.0, 82.0, 83.0, 84.0, 85.0, 86.0, 87.0, 88.0, 89.0, 90.0, 91.0, 92.0, 93.0, 94.0, 95.0, 96.0, 97.0, 98.0, 99.0, 100.0	This value is used ONLY when the "Rank Separation" option is enabled. This allow user to specify the overall Read latency(RL) value to be used in performing the Data Strobe Timing and Data Timing tests when the "Rank Separation" option is enabled. By definition, the Read Latency (RL) = Additive Latency (AL) + CAS Latency (CL); RL = AL + CL.
Configure	READ Latency Value	RLValue	1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0, 30.0, 31.0, 32.0, 33.0, 34.0, 35.0, 36.0, 37.0, 38.0, 39.0, 40.0, 41.0, 42.0, 43.0, 44.0, 45.0, 46.0, 47.0, 48.0, 49.0, 50.0, 51.0, 52.0, 53.0, 54.0, 55.0, 56.0, 57.0, 58.0, 59.0, 60.0, 61.0, 62.0, 63.0, 64.0, 65.0, 66.0, 67.0, 68.0, 69.0, 70.0, 71.0, 72.0, 73.0, 74.0, 75.0, 76.0, 77.0, 78.0, 79.0, 80.0, 81.0, 82.0, 83.0, 84.0, 85.0, 86.0, 87.0, 88.0, 89.0, 90.0, 91.0, 92.0, 93.0, 94.0, 95.0, 96.0, 97.0, 98.0, 99.0, 100.0	This value is used ONLY when the "Rank Separation" option is enabled. This allow user to specify the overall Read latency(RL) value to be used in generating the READ eye diagram when the "Rank Separation" option is enabled. By definition, the Read Latency (RL) = Additive Latency (AL) + CAS Latency (CL); RL = AL + CL.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Rank Separation	CSDQSCYC	0.0, 1.0	Enable/disable the rank separation option when running the Data Strobe Timing and Data Timing tests. When this option is enabled, an additional channel for Chip Select(CS) signal will be required. Measurements will only be done on selected Rank based on the Chip Select signal connected to the oscilloscope. This Rank Separation mode is also used to handle a valid back-to-back data burst found when running the selected Data Strobe Timing and Data Timing tests. The bubble states(if any) that exist during a valid back-to-back data burst will be identified and ignored based on the Chip Select signal with reference to the "READ/WRITE Latency" and "Fix Burst Length" settings.
Configure	Rank Separation	RankEye Diagram Opt	0, 1	Enable/disable the rank separation option for generating the READ/WRITE eye diagram. When this option is enabled, the eye diagram generated will be qualified based on an additional Chip Select input signal besides the DQS and DQ signals. When this option is disabled, the eye diagram will be generated based on DQS and DQ signal ONLY (Chip Select input will be ignored).
Configure	Re-scale Test Mask	ReScale Mask	true, false	Enable/disable horizontal re-scaling of selected test mask to be loaded in the eye diagram tests.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Read Postambl e Pattern	ReadPost amblePat tern	Standard, Extended	This option is used to indicate the expected Read Postamble pattern so that the correct last edge of a burst can be identified. Standard Read postamble mode - 0.5 tCk. Extended Read Postamble mode - 1.5 tCK.
Configure	Read Preamble Pattern	ReadPrea mblePatt ern	Static, Toggle	This option is used to indicate the expected Read Preamble pattern so that the correct first edge of a burst can be identified.
Configure	Sampling Points (Pts) Electrical and Timing Tests Only	Sampling Points	(Accepts user-defined text), 2000000, 1000000, 500000	Specifies the sampling points to be captured in all the tests except Clock Timing tests and Eye Digram tests. Reduce the sampling points if the read/write bursts are occuring very frequently.
Configure	Sampling Points (Pts) For Eye Diagram Tests Only	Sampling PointsNo rmalEyeD iagram	(Accepts user-defined text), 2000000, 1000000, 500000, 250000, 100000	Specifies the sampling points to be captured in Eye Digram tests. Reduce the sampling points if the read/write bursts are occuring very frequently. The 100000 sample points is recomended for the oscilloscope having Sampling rate between 20G/Sa to 40G/Sa because the slowness peformance will happen in setting higher sample points. For the oscilloscope have higher sampling rate like 80G/Sa or above, user require to set the sample points to a higher value.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Sampling Rate (GSa/s)	Sampling Rate	MAX, 80, 40, 20, 10, 128, 64, 32, 16, 8	Specifies the sampling rate for the signal acquisition of all tests except Vref Signal Tests(VREF(DC) Measurement and VREF(AC) Measurement). If the selected sampling rate is higher than oscilloscope capability, application will set maximum sampling rate during runtime.
Configure	Screenshot Mode	ScreenshotMode	1, 0	Used to enable or disable screenshot capture for applicable measurement in the test report. Setting it to "Off" may improve the overall test execution time. However, the related measurement screenshot information will not be available for that particular test trial run.
Configure	Signal selected	MyCH1_CAT	NA_, Clock_DCK0, Clock_DCK1, Clock_DCK2, Clock_SCK0, Clock_SCK1, Clock_SCK2, Control_NCS0, Control_NCS1, Control_BA0, Control_BA1, Control_BA2, Control_NRAS, Control_NWE, Control_NCAS, Control_CKE0, Control_CKE1, Control_ODT0, Control_ODT1, Address_A0, Address_A1, Address_A2, Address_A3, Address_A4, Address_A5, Address_A6, Address_A7, Address_A8, Address_A9, Address_A10, Address_A11, Address_A12, Address_A13, Address_A14, Address_A15, LP_Clock_DCK, LP_Clock_SCK, LP_Control_NCS, LP_Control_CKE, LP_CommandAddress_CA0, LP_CommandAddress_CA1, LP_CommandAddress_CA2, LP_CommandAddress_CA3, LP_CommandAddress_CA4, LP_CommandAddress_CA5, LP_CommandAddress_CA6, LP_CommandAddress_CA7, LP_CommandAddress_CA8, LP_CommandAddress_CA9	Please select the signal parameter connected to Channel 1 for Command and Address Timing tests.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Signal selected	MyCH2_CAT	NA_, Clock_DCK0, Clock_DCK1, Clock_DCK2, Clock_SCK0, Clock_SCK1, Clock_SCK2, Control_NCS0, Control_NCS1, Control_BA0, Control_BA1, Control_BA2, Control_NRAS, Control_NWE, Control_NCAS, Control_CKE0, Control_CKE1, Control_ODT0, Control_ODT1, Address_A0, Address_A1, Address_A2, Address_A3, Address_A4, Address_A5, Address_A6, Address_A7, Address_A8, Address_A9, Address_A10, Address_A11, Address_A12, Address_A13, Address_A14, Address_A15, LP_Clock_DCK, LP_Clock_SCK, LP_Control_NCS, LP_Control_CKE, LP_CommandAddress_CA0, LP_CommandAddress_CA1, LP_CommandAddress_CA2, LP_CommandAddress_CA3, LP_CommandAddress_CA4, LP_CommandAddress_CA5, LP_CommandAddress_CA6, LP_CommandAddress_CA7, LP_CommandAddress_CA8, LP_CommandAddress_CA9	Please select the signal parameter connected to Channel 2 for Command and Address Timing tests.
Configure	Signal selected	MyCH3_CAT	NA_, Clock_DCK0, Clock_DCK1, Clock_DCK2, Clock_SCK0, Clock_SCK1, Clock_SCK2, Control_NCS0, Control_NCS1, Control_BA0, Control_BA1, Control_BA2, Control_NRAS, Control_NWE, Control_NCAS, Control_CKE0, Control_CKE1, Control_ODT0, Control_ODT1, Address_A0, Address_A1, Address_A2, Address_A3, Address_A4, Address_A5, Address_A6, Address_A7, Address_A8, Address_A9, Address_A10, Address_A11, Address_A12, Address_A13, Address_A14, Address_A15, LP_Clock_DCK, LP_Clock_SCK, LP_Control_NCS, LP_Control_CKE, LP_CommandAddress_CA0, LP_CommandAddress_CA1, LP_CommandAddress_CA2, LP_CommandAddress_CA3, LP_CommandAddress_CA4, LP_CommandAddress_CA5, LP_CommandAddress_CA6, LP_CommandAddress_CA7, LP_CommandAddress_CA8, LP_CommandAddress_CA9	Please select the signal parameter connected to Channel 3 for Command and Address Timing tests.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Signal selected	MyCH4_CAT	NA_, Clock_DCK0, Clock_DCK1, Clock_DCK2, Clock_SCK0, Clock_SCK1, Clock_SCK2, Control_NCS0, Control_NCS1, Control_BA0, Control_BA1, Control_BA2, Control_NRAS, Control_NWE, Control_NCAS, Control_CKE0, Control_CKE1, Control_ODT0, Control_ODT1, Address_A0, Address_A1, Address_A2, Address_A3, Address_A4, Address_A5, Address_A6, Address_A7, Address_A8, Address_A9, Address_A10, Address_A11, Address_A12, Address_A13, Address_A14, Address_A15, LP_Clock_DCK, LP_Clock_SCK, LP_Control_NCS, LP_Control_CKE, LP_CommandAddress_CA0, LP_CommandAddress_CA1, LP_CommandAddress_CA2, LP_CommandAddress_CA3, LP_CommandAddress_CA4, LP_CommandAddress_CA5, LP_CommandAddress_CA6, LP_CommandAddress_CA7, LP_CommandAddress_CA8, LP_CommandAddress_CA9	Please select the signal parameter connected to Channel 4 for Command and Address Timing tests.
Configure	Skip Connection Diagram Prompt	EnableConnection Prompt	1, 0	By selecting "No", system will prompt for required connection diagram change when running selected tests. By selecting "Yes", system will NOT prompt for any connection diagram change when running the selected tests. This option is used to enable continuous running of tests from different test groups (that may require different scope connections) without having to respond to a pop-up connection diagram change. However, user are expected to be responsible of ensuring the correct scope connections that will be used for running all selected tests.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Skip Error Message	ErrorMsg Off	1, 0	By selecting "No", system will prompt error message. By selecting "Yes", system will bypass all error message that occur and continue to next test. The test result for those tests that encounter errors will be set to a default invalid value that would cause a failure. Hint: This is useful when the user wants to run multiple trials overnight.
Configure	Strobe Single Ended High Voltage (V)	InputThreshold_DQS_SE_High	(Accepts user-defined text), 0.700, 0.600	Identifies the High Voltage for Strobe Single Ended.
Configure	Strobe Single Ended Low Voltage (V)	InputThreshold_DQS_SE_Low	(Accepts user-defined text), 0.500, 0.400	Identifies the Low Voltage for Strobe Single Ended.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Supporting Pin	ElecDiffDQSVihVilSupport	Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31	Identifies the required supporting pin for Differential VIHdiff.DQS/ VILdiff.DQS tests.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Supporting Pin	ElecDiffVixDqSupportPin	Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31	Identifies the supporting pin for VIXDQ Test.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Supporting Pin	ElecParamDiSupport	N/A, Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71	Identifies the supporting pin for Differential AC Input Tests parameters.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Supporting Pin	ElecParamDiffOutputSupport	Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31	Identifies the required supporting pin for Differential AC output parameters.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Supporting Pin	ElecParamSeSupport	Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, Strobe_SDQS0, Strobe_SDQS1, Strobe_SDQS2, Strobe_SDQS3, Strobe_SDQS4, Strobe_SDQS5, Strobe_SDQS6, Strobe_SDQS7, Strobe_SDQS8, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3, LP_Strobe_SDQS0, LP_Strobe_SDQS1, LP_Strobe_SDQS2, LP_Strobe_SDQS3	Identifies the required supporting pin for "VOH/VOL and Output Slew Rate tests" test group.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Supporting Pin	ElecParamSeSupport_DQ	Strobe_DDQS0, Strobe_DDQS1, Strobe_DDQS2, Strobe_DDQS3, Strobe_DDQS4, Strobe_DDQS5, Strobe_DDQS6, Strobe_DDQS7, Strobe_DDQS8, Strobe_SDQS0, Strobe_SDQS1, Strobe_SDQS2, Strobe_SDQS3, Strobe_SDQS4, Strobe_SDQS5, Strobe_SDQS6, Strobe_SDQS7, Strobe_SDQS8, LP_Strobe_DDQS0, LP_Strobe_DDQS1, LP_Strobe_DDQS2, LP_Strobe_DDQS3, LP_Strobe_SDQS0, LP_Strobe_SDQS1, LP_Strobe_SDQS2, LP_Strobe_SDQS3	Identifies the required supporting pin for "VIH/VIL for DQ and DM" test group.
Configure	Supporting Pin	ElecSEVsehVselStrobeMinusSupport	Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31	Identifies the supporting pin for VSEH/VSEL Tests for Strobe.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Supporting Pin	ElecSEVsehVselStrobePlusSupport	Data_DQ0, Data_DQ1, Data_DQ2, Data_DQ3, Data_DQ4, Data_DQ5, Data_DQ6, Data_DQ7, Data_DQ8, Data_DQ9, Data_DQ10, Data_DQ11, Data_DQ12, Data_DQ13, Data_DQ14, Data_DQ15, Data_DQ16, Data_DQ17, Data_DQ18, Data_DQ19, Data_DQ20, Data_DQ21, Data_DQ22, Data_DQ23, Data_DQ24, Data_DQ25, Data_DQ26, Data_DQ27, Data_DQ28, Data_DQ29, Data_DQ30, Data_DQ31, Data_DQ32, Data_DQ33, Data_DQ34, Data_DQ35, Data_DQ36, Data_DQ37, Data_DQ38, Data_DQ39, Data_DQ40, Data_DQ41, Data_DQ42, Data_DQ43, Data_DQ44, Data_DQ45, Data_DQ46, Data_DQ47, Data_DQ48, Data_DQ49, Data_DQ50, Data_DQ51, Data_DQ52, Data_DQ53, Data_DQ54, Data_DQ55, Data_DQ56, Data_DQ57, Data_DQ58, Data_DQ59, Data_DQ60, Data_DQ61, Data_DQ62, Data_DQ63, Data_DQ64, Data_DQ65, Data_DQ66, Data_DQ67, Data_DQ68, Data_DQ69, Data_DQ70, Data_DQ71, LP_Data_DQ0, LP_Data_DQ1, LP_Data_DQ2, LP_Data_DQ3, LP_Data_DQ4, LP_Data_DQ5, LP_Data_DQ6, LP_Data_DQ7, LP_Data_DQ8, LP_Data_DQ9, LP_Data_DQ10, LP_Data_DQ11, LP_Data_DQ12, LP_Data_DQ13, LP_Data_DQ14, LP_Data_DQ15, LP_Data_DQ16, LP_Data_DQ17, LP_Data_DQ18, LP_Data_DQ19, LP_Data_DQ20, LP_Data_DQ21, LP_Data_DQ22, LP_Data_DQ23, LP_Data_DQ24, LP_Data_DQ25, LP_Data_DQ26, LP_Data_DQ27, LP_Data_DQ28, LP_Data_DQ29, LP_Data_DQ30, LP_Data_DQ31	Identifies the supporting pin for VSEH/VSEL Tests for Strobe.
Configure	Supporting Pin Source	ElecDIFF_Source3	-1, 1, 2, 3, 4	Identifies the source channel of the supporting pin for Differential AC Input Tests.
Configure	Supporting Pin Source	ElecDiffDQSVihVilSupprt_Source	1, 2, 3, 4	Identifies the source of the supporting pin for Differential VIHdiff.DQS/ VILdiff.DQS tests.
Configure	Supporting Pin Source	ElecDiffOutputSupprt_Source	1, 2, 3, 4	Identifies the source of the supporting pin for Differential AC Output Tests.
Configure	Supporting Pin Source	ElecDiffVixDqSupportPinSource	1, 2, 3, 4	Identifies the source of the supporting pin for VIXDQ Test.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Supporting Pin Source	ElecSEVsehVselStrobeMinusSupport_Source	1, 2, 3, 4	Identifies the source of the supporting pin(DQ) for VSEH/VSEL Tests for Strobe.
Configure	Supporting Pin Source	ElecSEVsehVselStrobePlusSupport_Source	1, 2, 3, 4	Identifies the source of the supporting pin(DQ) for VSEH/VSEL Tests for Strobe.
Configure	Supporting Pin Source	ElecSE_Source2	1, 2, 3, 4	Identifies the source of the supporting pin for "VOH/VOL and Output Slew Rate tests" test group.
Configure	Supporting Pin Source	ElecSE_Source2_DQ	-1, 1, 2, 3, 4	Identifies the source channel of the supporting pin for "VIH/VIL for DQ and DM" test group.
Configure	Supporting Pin Source DQSx_c,Gnd	ElecSEVsehVselStrobePlusSupport_StrobeMinusPair_Source	NA, 1, 2, 3, 4	Identifies the source of the supporting pin(DQSx_c,Gnd) for VSEH/VSEL Tests for Strobe. Only applied when "Burst Triggering Method" is "Pre-Amble Pattern".
Configure	Supporting Pin Source DQSx_t,Gnd	ElecSEVsehVselStrobeMinusSupport_StrobePlusPair_Source	NA, 1, 2, 3, 4	Identifies the source of the supporting pin(DQSx_t,Gnd) for VSEH/VSEL Tests for Strobe.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Threshold Mode	ThreshSetMode	1, 0	This option determines the threshold used in the test signal triggering and READ/WRITE burst identification tasks. By selecting value to "TopBaseRatio", the system will automatically determine the threshold settings using the TopRatio and BaseRatio specified for a particular channel input. For example, the TopBaseRatio settings for Channel 1 can be found under the configuration path "Burst Trigger Threshold Settings -> CHANNEL1 -> TopBaseRatio" Setting the value to "Custom Threshold" allows user to directly set the threshold settings used instead by using the option settings under the "Custom Threshold" configuration group for each channel of interest. For example, the manual threshold settings for Channel 1 can be found under the configuration path "Burst Trigger Threshold Settings -> CHANNEL1 -> Custom Threshold"
Configure	Time range(UI) of Zoom Out Screenshot	TimeRangeUIZoomOutScreenshot_OverUndershoot_DDR4Data	(Accepts user-defined text), 5, 10, 20, 30, 40, 50, 100, 200	The time range in unit interval(UI) for the second screenshot that show zoom out of overshoot/undershoot location.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Time range(UI) of Zoom Out Screenshot	TimeRangeUIZoomOutScreenshot_OverUndershoot_DDR4DataMask	(Accepts user-defined text), 5, 10, 20, 30, 40, 50, 100, 200	The time range in unit interval(UI) for the second screenshot that show zoom out of overshoot/undershoot location.
Configure	Time range(UI) of Zoom Out Screenshot	TimeRangeUIZoomOutScreenshot_OverUndershoot_DDR4StrobeMinus	(Accepts user-defined text), 5, 10, 20, 30, 40, 50, 100, 200	The time range in unit interval(UI) for the second screenshot that show zoom out of overshoot/undershoot location.
Configure	Time range(UI) of Zoom Out Screenshot	TimeRangeUIZoomOutScreenshot_OverUndershoot_DDR4StrobePlus	(Accepts user-defined text), 5, 10, 20, 30, 40, 50, 100, 200	The time range in unit interval(UI) for the second screenshot that show zoom out of overshoot/undershoot location.
Configure	Top Ratio	BurstTriggerTopRatio_Chan1	(Accepts user-defined text), 0.80	Specify the value of the top ratio used when triggering for the READ/WRITE burst data. The value set here is applicable ONLY when the "Threshold Mode" option is set to "TopBaseRatio".
Configure	Top Ratio	BurstTriggerTopRatio_Chan2	(Accepts user-defined text), 0.80	Specify the value of the top ratio used when triggering for the READ/WRITE burst data. The value set here is applicable ONLY when the "Threshold Mode" option is set to "TopBaseRatio".

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Top Ratio	BurstTriggerTopRatio_Chan3	(Accepts user-defined text), 0.80	Specify the value of the top ratio used when triggering for the READ/WRITE burst data. The value set here is applicable ONLY when the "Threshold Mode" option is set to "TopBaseRatio".
Configure	Top Ratio	BurstTriggerTopRatio_Chan4	(Accepts user-defined text), 0.80	Specify the value of the top ratio used when triggering for the READ/WRITE burst data. The value set here is applicable ONLY when the "Threshold Mode" option is set to "TopBaseRatio".
Configure	TopBase Level Vertical Scaling Evaluation Mode	TopBaseLevelScalingEvalMode	0, 1	Select the method of TopBase Level Scaling evaluation mode for the eye diagram tests. If the "Auto Thresholds Scaling" option was chosen, the top level and the base level of the oscilloscope display value will be set Automatic. While, the option "User defined Vertical Level Scaling" was selected the top level and base level of the oscilloscope display will be set by the values input by user.
Configure	Total Bit Display(cycle)	myDisBit	(Accepts user-defined text), 2, 4, 10, 20, 50	This option allows the user to select how many data bits to be displayed by end of the test.More bits selected will enable user to have a clearer view of the whole burst of signals.
Configure	Total Bit Display(cycle)	myDisBitForElec	(Accepts user-defined text), 2, 4, 10, 20, 50	This option allows the user to select how many data bits to be displayed by end of the test.More bits selected will enable user to have a clearer view of the whole burst of signals.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Total CA Waveform	EyeDiagramCANumOfWave	(Accepts user-defined text), 500, 1000, 1500, 3000, 5000	Select or type the total number of waveforms required for CA eye diagram tests.
Configure	Total Waveform	EyeDiagramNumOfWave	(Accepts user-defined text), 500, 1000, 1500, 3000, 5000	Select or type the total number of waveforms required for eye diagram tests.
Configure	Trigger timeout (ms)	TimeOut_Compliance	(Accepts user-defined text), 5000, 10000, 15000, 20000, 30000	Identifies the trigger time out value. This represent the time taken to terminate the test when the scope unable to trigger any signal.
Configure	Triggering READ Latency	TriggeringReadLatency	1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0, 30.0, 31.0, 32.0, 33.0, 34.0, 35.0, 36.0, 37.0, 38.0, 39.0, 40.0, 41.0, 42.0, 43.0, 44.0, 45.0, 46.0, 47.0, 48.0, 49.0, 50.0, 51.0, 52.0, 53.0, 54.0, 55.0, 56.0, 57.0, 58.0, 59.0, 60.0, 61.0, 62.0, 63.0, 64.0, 65.0, 66.0, 67.0, 68.0, 69.0, 70.0, 71.0, 72.0, 73.0, 74.0, 75.0, 76.0, 77.0, 78.0, 79.0, 80.0, 81.0, 82.0, 83.0, 84.0, 85.0, 86.0, 87.0, 88.0, 89.0, 90.0, 91.0, 92.0, 93.0, 94.0, 95.0, 96.0, 97.0, 98.0, 99.0, 100.0	This value is used ONLY when the "Logic Triggering" option is enabled. This allow user to specify the overall Read latency(RL) value to be used to determine the burst location from event of Read Burst logic pattern.
Configure	Triggering WRITE Latency	TriggeringWriteLatency	1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0, 30.0, 31.0, 32.0, 33.0, 34.0, 35.0, 36.0, 37.0, 38.0, 39.0, 40.0, 41.0, 42.0, 43.0, 44.0, 45.0, 46.0, 47.0, 48.0, 49.0, 50.0, 51.0, 52.0, 53.0, 54.0, 55.0, 56.0, 57.0, 58.0, 59.0, 60.0, 61.0, 62.0, 63.0, 64.0, 65.0, 66.0, 67.0, 68.0, 69.0, 70.0, 71.0, 72.0, 73.0, 74.0, 75.0, 76.0, 77.0, 78.0, 79.0, 80.0, 81.0, 82.0, 83.0, 84.0, 85.0, 86.0, 87.0, 88.0, 89.0, 90.0, 91.0, 92.0, 93.0, 94.0, 95.0, 96.0, 97.0, 98.0, 99.0, 100.0	This value is used ONLY when the "Logic Triggering" option is enabled. This allow user to specify the overall Write latency(WL) value to be used to determine the burst location from event of Write Burst logic pattern.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Upper Threshold (V)	Chan1_Up_Thresh	(Accepts user-defined text), 0.30, 0.20	Specify the upper measurement threshold used for Channel 1. The value set here is applicable ONLY when the "Threshold Mode" option is set to "Custom Threshold". When the "InfiniiSim" feature is enabled, the Pre-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Upper Threshold (V)	Chan2_Up_Thresh	(Accepts user-defined text), 0.30, 0.20	Specify the upper measurement threshold used for Channel 2. The value set here is applicable ONLY when the "Threshold Mode" option is set to "Custom Threshold". When the "InfiniiSim" feature is enabled, the Pre-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Upper Threshold (V)	Chan3_Up_Thresh	(Accepts user-defined text), 0.90, 0.30	Specify the upper measurement threshold used for Channel 3. The value set here is applicable ONLY when the "Threshold Mode" option is set to "Custom Threshold". When the "InfiniiSim" feature is enabled, the Pre-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Upper Threshold (V)	Chan4_Up_Thresh	(Accepts user-defined text), 0.70, 0.40	Specify the upper measurement threshold used for Channel 4. The value set here is applicable ONLY when the "Threshold Mode" option is set to "Custom Threshold". When the "InfiniiSim" feature is enabled, the Pre-InfiniiSim signal is used as the reference for the threshold specified.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Upper Threshold [ISim] (V)	Chan1_Up_Thresh_ISim	(Accepts user-defined text), 0.30, 0.20	Specify the upper measurement threshold used for Channel 1. The value set here is applicable ONLY when the "Burst Identification Threshold Mode [ISim]" option is set to "Manual". When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Upper Threshold [ISim] (V)	Chan2_Up_Thresh_ISim	(Accepts user-defined text), 0.30, 0.20	Specify the upper measurement threshold used for Channel 2. The value set here is applicable ONLY when the "Burst Identification Threshold Mode [ISim]" option is set to "Manual". When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Upper Threshold [ISim] (V)	Chan3_Up_Thresh_ISim	(Accepts user-defined text), 0.90, 0.30	Specify the upper measurement threshold used for Channel 3. The value set here is applicable ONLY when the "Burst Identification Threshold Mode [ISim]" option is set to "Manual". When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.
Configure	Upper Threshold [ISim] (V)	Chan4_Up_Thresh_ISim	(Accepts user-defined text), 0.70, 0.40	Specify the upper measurement threshold used for Channel 4. The value set here is applicable ONLY when the "Burst Identification Threshold Mode [ISim]" option is set to "Manual". When the "InfiniiSim" feature is enabled, the Post-InfiniiSim signal is used as the reference for the threshold specified.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	User Defined Vcent	UserDefinedVcent	(Accepts user-defined text), 0.800	Identifies the user defined Vcent level for shifting of the tDIVW/vDIVW mask. The value set here is applicable ONLY when the "Vcent Evaluation Mode" option is set to "User defined Vcent".
Configure	User Defined Vcent (CA)	UserDefinedVcent_CA	(Accepts user-defined text), 0.800	Identifies the user defined Vcent level for shifting of the tCIVW/vCIVW mask. The value set here is applicable ONLY when the "Vcent Evaluation Mode (CA)" option is set to "User defined Vcent".
Configure	VDD (V)	InputVDD	(Accepts user-defined text), 1.275, 1.200, 1.125	Identifies the input supply voltage.
Configure	VDD1 (V)	InputVDD1	(Accepts user-defined text), 1.950, 1.100, 1.700	Identifies the input supply voltage.
Configure	VDD2 (V)	InputVDD2	(Accepts user-defined text), 1.275, 1.100, 1.125	Identifies the input supply voltage.
Configure	VDDQ (V)	InputVDDQ	(Accepts user-defined text), 1.275, 1.200, 1.125	Identifies the input supply voltage for data signal.
Configure	VIH.CA_AC (V)	InputThreshold_Vih_ac_CA	(Accepts user-defined text), 0.70, 0.40	Identifies the ac input logic HIGH voltage for Address and Command inputs.
Configure	VIH.CA_DC (V)	InputThreshold_Vih_dc_CA	(Accepts user-defined text), 0.675, 0.40	Identifies the dc input logic HIGH voltage for Address and Command inputs.
Configure	VIH.DQ_AC (V)	InputThreshold_Vih_ac_DQ	(Accepts user-defined text), 0.90, 0.30	Identifies the ac input logic HIGH voltage for DQ and DM inputs.
Configure	VIH.DQ_DC (V)	InputThreshold_Vih_dc_DQ	(Accepts user-defined text), 0.90, 0.30	Identifies the dc input logic HIGH voltage for DQ and DM inputs.
Configure	VIHdiff.CK_AC (V)	VIHdiff_ac_CK	(Accepts user-defined text), 0.300, 0.200	Differential input high. Affects only differential CK only.
Configure	VIHdiff.DQS_AC (V)	VIHdiff_ac_DQS	(Accepts user-defined text), 0.136, 0.300, 0.200	Differential input high. Affects only differential DQS only.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	VIHdiff_min/VIHdiff_DC (V)	VIHdiff_min	(Accepts user-defined text), 0.300	Minimum differential input high. This value is used solely to define a differential signal slew rate. Affects only differential DQS and CK.
Configure	VIL.CA_AC (V)	InputThreshold_Vil_ac_CA	(Accepts user-defined text), 0.50, 0.20	Identifies the ac input logic LOW voltage for Address and Command inputs.
Configure	VIL.CA_DC (V)	InputThreshold_Vil_dc_CA	(Accepts user-defined text), 0.525, 0.20	Identifies the dc input logic LOW voltage for Address and Command inputs.
Configure	VIL.DQ_AC (V)	InputThreshold_Vil_ac_DQ	(Accepts user-defined text), 0.700, 0.150	Identifies the ac input logic LOW voltage for DQ and DM inputs.
Configure	VIL.DQ_DC (V)	InputThreshold_Vil_dc_DQ	(Accepts user-defined text), 0.700, 0.150	Identifies the dc input logic LOW voltage for DQ and DM inputs.
Configure	VILdiff.CK_AC (V)	VILdiff_ac_CK	(Accepts user-defined text), -0.300, -0.200	Differential input high. Affects only differential CK only.
Configure	VILdiff.DQS_AC (V)	VILdiff_ac_DQS	(Accepts user-defined text), -0.136, -0.300, -0.200	Differential input high. Affects only differential DQS only.
Configure	VILdiff_max/VILdiff_DC (V)	VILdiff_max	(Accepts user-defined text), -0.300	Maximum differential input low. This value is used solely to define a differential signal slew rate. Affects only differential DQS and CK.
Configure	VOH_AC (V)	InputThreshold_Voh_ac	(Accepts user-defined text), 0.90, 0.30	Identifies the ac output logic HIGH voltage.
Configure	VOH_DC (V)	InputThreshold_Voh_dc	(Accepts user-defined text), 0.90, 0.30	Identifies the dc output logic HIGH voltage.
Configure	VOHdiff_AC (V)	VOHdiff_ac	(Accepts user-defined text), 0.300, 0.200	Differential output high. Affects only differential DQS only.
Configure	VOL_AC (V)	InputThreshold_Vol_ac	(Accepts user-defined text), 0.700, 0.150	Identifies the ac output logic LOW voltage.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	VOL_DC (V)	InputThreshold_Vol_dc	(Accepts user-defined text), 0.700, 0.150	Identifies the dc output logic LOW voltage.
Configure	VOLdiff_AC (V)	VOLdiff_ac	(Accepts user-defined text), -0.300, -0.200	Differential output high. Affects only differential DQS only.
Configure	VQW (V)	InputThreshold_VQW	(Accepts user-defined text), 0.0, 0.140	Identifies the voltage data input valid window for DQ Read.
Configure	VRef A12-BC Signal(V)	InputRefV_VrefA12BCLogic	(Accepts user-defined text), NA, 0.735, 0.750, 0.765	Identifies the A12-BC reference voltage for MSOx Logic Triggering.
Configure	VRef ACT Signal(V)	InputRefV_VrefACTLogic	(Accepts user-defined text), 0.735, 0.750, 0.765	Identifies the ACT reference voltage for MSOx Logic Triggering.
Configure	VRef CAS Signal(V)	InputRefV_VrefCASLogic	(Accepts user-defined text), 0.735, 0.750, 0.765	Identifies the CAS reference voltage for MSOx Logic Triggering.
Configure	VRef CKE Signal(V)	InputRefV_VrefCKELogic	(Accepts user-defined text), NA, 0.735, 0.750, 0.765	Identifies the CKE reference voltage for MSOx Logic Triggering.
Configure	VRef CS Signal(V)	InputRefV_VrefCSLogic	(Accepts user-defined text), 0.735, 0.750, 0.765	Identifies the CS reference voltage for MSOx Logic Triggering.
Configure	VRef RAS Signal(V)	InputRefV_VrefRASLogic	(Accepts user-defined text), 0.735, 0.750, 0.765	Identifies the RAS reference voltage for MSOx Logic Triggering.
Configure	VRef WE Signal(V)	InputRefV_VrefWELogic	(Accepts user-defined text), 0.735, 0.750, 0.765	Identifies the WE reference voltage for MSOx Logic Triggering.
Configure	VRefCA (V)	InputRefV_VrefCA	(Accepts user-defined text), 0.300, 0.600, 0.450	Identifies the input reference voltage for Address and Command inputs.
Configure	VRefDQ (V)	InputRefV_VrefDQ	(Accepts user-defined text), 0.225, 0.600, 0.650	Identifies the input reference voltage for DQ and DM inputs.
Configure	VTT (V)	InputRefV_VTT	(Accepts user-defined text), 0.950, 0.600, 0.650	Identifies the output reference voltage for data outputs.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	Vcent Evaluation Mode	VcentEvalMode	0, 1	Select the method of Vcent level evaluation for shifting of the tDIVW/vDIVW mask.
Configure	Vcent Evaluation Mode (CA)	VcentEvalMode_CA	0, 1	Select the method of Vcent level evaluation for shifting of the tCIVW/vCIVW mask.
Configure	VciVW (V)	InputThreshold_VciVW	(Accepts user-defined text), 0.175, 0.155	Identifies the voltage CA input valid window.
Configure	VdiVW (V)	InputThreshold_VdiVW	(Accepts user-defined text), 0.120, 0.140	Identifies the voltage data input valid window for DQ.
Configure	Vref Source	Vref_Meas_Source	1, 2, 3, 4	Identifies the source channel of the Vref Signal for Vref Measurement..
Configure	WE Channel	WEDigChannel	DIGital0, DIGital1, DIGital2, DIGital3, DIGital4, DIGital5, DIGital6, DIGital7, DIGital8, DIGital9, DIGital10, DIGital11, DIGital12, DIGital13, DIGital14, DIGital15	Identifies the channel source selection of the WE digital signal to be analyzed for MSOx Logic Triggering.
Configure	WRITE Latency	WriteLatency	1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0, 30.0, 31.0, 32.0, 33.0, 34.0, 35.0, 36.0, 37.0, 38.0, 39.0, 40.0, 41.0, 42.0, 43.0, 44.0, 45.0, 46.0, 47.0, 48.0, 49.0, 50.0, 51.0, 52.0, 53.0, 54.0, 55.0, 56.0, 57.0, 58.0, 59.0, 60.0, 61.0, 62.0, 63.0, 64.0, 65.0, 66.0, 67.0, 68.0, 69.0, 70.0, 71.0, 72.0, 73.0, 74.0, 75.0, 76.0, 77.0, 78.0, 79.0, 80.0, 81.0, 82.0, 83.0, 84.0, 85.0, 86.0, 87.0, 88.0, 89.0, 90.0, 91.0, 92.0, 93.0, 94.0, 95.0, 96.0, 97.0, 98.0, 99.0, 100.0	This value is used ONLY when the "Rank Separation" option is enabled. This allow user to specify the overall Write latency(WL) value to be used in performing the Data Strobe Timing and Data Timing tests when the "Rank Separation" option is enabled. By definition, the Write Latency (WL) = Additive Latency (AL) + CAS Write Latency (CWL); WL = AL + CWL.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	WRITE Latency Value	WLValue	1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0, 23.0, 24.0, 25.0, 26.0, 27.0, 28.0, 29.0, 30.0, 31.0, 32.0, 33.0, 34.0, 35.0, 36.0, 37.0, 38.0, 39.0, 40.0, 41.0, 42.0, 43.0, 44.0, 45.0, 46.0, 47.0, 48.0, 49.0, 50.0, 51.0, 52.0, 53.0, 54.0, 55.0, 56.0, 57.0, 58.0, 59.0, 60.0, 61.0, 62.0, 63.0, 64.0, 65.0, 66.0, 67.0, 68.0, 69.0, 70.0, 71.0, 72.0, 73.0, 74.0, 75.0, 76.0, 77.0, 78.0, 79.0, 80.0, 81.0, 82.0, 83.0, 84.0, 85.0, 86.0, 87.0, 88.0, 89.0, 90.0, 91.0, 92.0, 93.0, 94.0, 95.0, 96.0, 97.0, 98.0, 99.0, 100.0	This value is used ONLY when the "Rank Separation" option is enabled. This allow user to specify the overall Write latency(WL) value to be used in generating the WRITE eye diagram when the "Rank Separation" option is enabled. By definition, the Write Latency (WL) = Additive Latency (AL) + CAS Write Latency (CWL); WL = AL + CWL.
Configure	Waveform File Type	WfmFileType	.wfm, .h5	By selecting ".wfm", the application will save the waveform in wfm format for measurement. While selecting ".h5", the application will save the waveform in h5 format for measurement.
Configure	Waveform Source	Source	1, 2, 3, 4	Identifies the source Channel of the clock data to be analyzed.
Configure	Waveform Source Name	Source_Name	Clock_DCK0, Clock_DCK1, Clock_DCK2, LP_Clock_DCK	Identifies the source Name of the clock data to be analyzed.
Configure	Window Width	WindowSize	(Accepts user-defined text), 200	Identifies the number of periods in the main sliding window.
Configure	Write Postamble Pattern	WritePostamblePattern	Standard, Extended	This option is used to indicate the expected Write Postamble pattern so that the correct last edge of a burst can be identified. Standard Write postamble mode - 0.5 tCk. Extended Write Postamble mode - 1.5 tCK.
Configure	Write Preamble Pattern	WritePreamblePattern	LPDDR4, DDR3, DDR2	This option is used to indicate the expected Write Preamble pattern so that the correct first edge of a burst can be identified.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Configure	tCIVW	Window Width_tCIVW	(Accepts user-defined text), 0.300	This value multiplied with the Clock Rate is the width of the mask to measure tCIVW.
Configure	tDIVW	Window Width_tDIVW	(Accepts user-defined text), 0.220, 0.250	This value multiplied with the UI is the width of the mask to measure tDIVW.
Configure	tDQSCK Delay (cycle)	tDQSCKDelay	(Accepts user-defined text), 1, 2, 3, 4, 5, 6	The distance from first rising strobe to Read Latency(RL) clock edge.
Configure	tQW	Window Width_tQW	(Accepts user-defined text), 0.700, 0.730, 0.750	This value multiplied with the UI is the width of the mask to measure tQW.
Configure	terr(nper) Maximum N Width Value	nper_max	(Accepts user-defined text), 50	Sets the upper bound (inclusive) of the inner sliding window for the terr(nper) series.
Configure	terr(nper) Minimum N Width Value	nper_min	(Accepts user-defined text), 13	Sets the lower bound (inclusive) of the inner sliding window for the terr(nper) series.
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	AC Level (DQ)	AcLevels_CA	100	This option allow user to select AC level (CA).
Set Up	AC Level (DQ)	AcLevels_DQ	100	This option allow user to select AC level (DQ).
Set Up	Burst Triggering Method	BurstTrig Method	DQS-DQ Phase Difference, Rd or Wrt ONLY	This option allow user to select burst triggering method.
Set Up	Custom Data Rate	pcboCustomSG	(Accepts user-defined text), 533, 1066, 1333, 1600, 1866, 2133, 2400, 2666, 2667, 2933, 3200, 3733, 4266	This option allow user to key in specific data rate.

Table 2 Configuration Variables and Values (continued)

GUI Location	Label	Variable	Values	Description
Set Up	DQS Signal Type	DQSSignalType	Burst, Continuous	This option allow user to select the type of DQS signal (Burst/Continuous).
Set Up	Device ID	pcboOverallDeviceID	(Accepts user-defined text)	This option allow user to key in related test details.
Set Up	LPDDR4	chkLPDDR4	0.0, 1.0	This option allow user to select LPDDR4 SDRAM Type.
Set Up	LPDDR4X	chkLPDDR4X	0.0, 1.0	This option allow user to select LPDDR4X SDRAM Type.
Set Up	Speed Grade	DeviceType	DDR4-1600, DDR4-1866, DDR4-2133, DDR4-2400, DDR4-2666, DDR4-2933, DDR4-3200	This option allow user to select specific speed grade.
Set Up	Speed Grade	DeviceTypeLPDDR4	LPDDR4-533, LPDDR4-1066, LPDDR4-1333, LPDDR4-1600, LPDDR4-1866, LPDDR4-2133, LPDDR4-2400, LPDDR4-2667, LPDDR4-3200, LPDDR4-3733, LPDDR4-4266	This option allow user to select specific speed grade.
Set Up	Speed Grade	DeviceTypeLPDDR4X	LPDDR4X-533, LPDDR4X-1066, LPDDR4X-1333, LPDDR4X-1600, LPDDR4X-1866, LPDDR4X-2133, LPDDR4X-2400, LPDDR4X-2667, LPDDR4X-3200, LPDDR4X-3733, LPDDR4X-4266	This option allow user to select specific speed grade.
Set Up	Test Mode	TestMode	Compliance, Custom	This option allow user to select test mode.
Set Up	User Comment	txtOverallUserComment	(Accepts user-defined text)	This option allow user to key in related test detail.
Set Up	User Description	pcboOverallDeviceDescription	(Accepts user-defined text)	This option allow user to key in test detail.

3 Test Names and IDs

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

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

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

- All Tests
  - Rise Time
  - Fall Time

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

Table 3 Example Test Names and IDs

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

and you would run these tests remotely using:

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

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

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

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

Table 4 Test IDs and Names

Name	TestID	Description
CA VIHL(ac)	30403	CA VIHL(ac) voltage must meet or exceed VIHL at any time in the UI (with not time requirement above VIHL)
CA VIHL(ac)	630403	CA VIHL(ac) voltage must meet or exceed VIHL at any time in the UI (with not time requirement above VIHL)
DQ VIHL(ac)	20408	DQ VIHL(ac) voltage must meet or exceed VIHL at any time in the UI (with not time requirement above VIHL)
DQ VIHL(ac)	60408	DQ VIHL(ac) voltage must meet or exceed VIHL at any time in the UI (with not time requirement above VIHL)
DummyTestToShowDDR4Config	6	DummyTestToShowDDR4Config
DummyTestToShowDQSDQPhaseConfig1	3	DummyTestToShowDQSDQPhaseConfig1
DummyTestToShowLPDDR4Config	7	DummyTestToShowLPDDR4Config
DummyTestToShowLPDDR4EyeDiagramConfig	10	DummyTestToShowLPDDR4EyeDiagramConfig
DummyTestToShowLPDDR4XConfig	9	DummyTestToShowLPDDR4XConfig
DummyTestToShowLPDDR4XEyeDiagramConfig	11	DummyTestToShowLPDDR4XEyeDiagramConfig
DummyTestToShowLogicTrigConfigDDR4	5	DummyTestToShowLogicTrigConfigDDR4
Eye Diagram Test For Read Cycle	20401	User Defined Real-Time Eye Diagram Test For Read Cycle
Eye Diagram Test For Read Cycle	20405	User Defined Real-Time Eye Diagram Test For Read Cycle (MSOX version)
Eye Diagram Test For Write Cycle	20402	User Defined Real-Time Eye Diagram Test For Write Cycle
Eye Diagram Test For Write Cycle	20406	User Defined Real-Time Eye Diagram Test For Write Cycle (MSOX version)
Overshoot amplitude (Address, Control)	10351	Peak amplitude of AC overshoot
Overshoot amplitude (Address, Control)	10393	Peak amplitude of AC overshoot
Overshoot amplitude (Address, Control)	50351	Peak amplitude of AC overshoot
Overshoot amplitude (Address, Control)	60351	Peak amplitude of AC overshoot
Overshoot amplitude (Address, Control, Clock, Chip Select, Clock Enable)	10355	Peak amplitude of AC overshoot

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Overshoot amplitude (Clock Minus)	103029	Peak amplitude of AC overshoot
Overshoot amplitude (Clock Minus)	503020	Peak amplitude of AC overshoot
Overshoot amplitude (Clock Minus)	603020	Peak amplitude of AC overshoot
Overshoot amplitude (Clock Plus)	103024	Peak amplitude of AC overshoot
Overshoot amplitude (Clock Plus)	503016	Peak amplitude of AC overshoot
Overshoot amplitude (Clock Plus)	603016	Peak amplitude of AC overshoot
Overshoot amplitude (Clock)	10359	Peak amplitude of AC overshoot
Overshoot amplitude (Clock)	10378	Peak amplitude of AC overshoot
Overshoot amplitude (Clock)	50359	Peak amplitude of AC overshoot
Overshoot amplitude (Clock)	60359	Peak amplitude of AC overshoot
Overshoot amplitude (Data Mask)	103018	Peak amplitude of AC overshoot
Overshoot amplitude (Data Mask)	503012	Peak amplitude of AC overshoot
Overshoot amplitude (Data Mask)	603012	Peak amplitude of AC overshoot
Overshoot amplitude (Data)	103000	Peak amplitude of AC overshoot
Overshoot amplitude (Data)	503000	Peak amplitude of AC overshoot
Overshoot amplitude (Data)	603000	Peak amplitude of AC overshoot
Overshoot amplitude (Data, Strobe, Mask)	10353	Peak amplitude of AC overshoot
Overshoot amplitude (Data, Strobe, Mask)	10372	Peak amplitude of AC overshoot
Overshoot amplitude (Data, Strobe, Mask)	10357	Peak amplitude of AC overshoot
Overshoot amplitude (Data, Strobe, Mask)	50353	Peak amplitude of AC overshoot
Overshoot amplitude (Data, Strobe, Mask)	60353	Peak amplitude of AC overshoot
Overshoot amplitude (Strobe Minus)	103012	Peak amplitude of AC overshoot
Overshoot amplitude (Strobe Minus)	503008	Peak amplitude of AC overshoot
Overshoot amplitude (Strobe Minus)	603008	Peak amplitude of AC overshoot
Overshoot amplitude (Strobe Plus)	103006	Peak amplitude of AC overshoot
Overshoot amplitude (Strobe Plus)	503004	Peak amplitude of AC overshoot
Overshoot amplitude (Strobe Plus)	603004	Peak amplitude of AC overshoot

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Overshoot area (Address, Control)	10352	OverShoot area above VDD
Overshoot area (Address, Control)	50352	OverShoot area above VDD
Overshoot area (Address, Control)	60352	OverShoot area above VDD
Overshoot area (Address, Control, Clock, Chip Select, Clock Enable)	10356	OverShoot area above VDDCA
Overshoot area (Clock Minus)	503021	OverShoot area above VDDQ
Overshoot area (Clock Minus)	603021	OverShoot area above VDDQ
Overshoot area (Clock Plus)	503017	OverShoot area above VDDQ
Overshoot area (Clock Plus)	603017	OverShoot area above VDDQ
Overshoot area (Clock)	10360	OverShoot area above VDDQ
Overshoot area (Clock)	50360	OverShoot area above VDDQ
Overshoot area (Clock)	60360	OverShoot area above VDDQ
Overshoot area (Data Mask)	503013	OverShoot area above VDDQ
Overshoot area (Data Mask)	603013	OverShoot area above VDDQ
Overshoot area (Data)	503001	OverShoot area above VDDQ
Overshoot area (Data)	603001	OverShoot area above VDDQ
Overshoot area (Data, Strobe, Mask)	10354	OverShoot area above VDDQ
Overshoot area (Data, Strobe, Mask)	10358	OverShoot area above VDDQ
Overshoot area (Data, Strobe, Mask)	50354	OverShoot area above VDDQ
Overshoot area (Data, Strobe, Mask)	60354	OverShoot area above VDDQ
Overshoot area (Strobe Minus)	503009	OverShoot area above VDDQ
Overshoot area (Strobe Minus)	603009	OverShoot area above VDDQ
Overshoot area (Strobe Plus)	503005	OverShoot area above VDDQ
Overshoot area (Strobe Plus)	603005	OverShoot area above VDDQ
Overshoot area above Max Abs Level(Data Mask)	103019	OverShoot area above Maximum Absolute Level of Vin,Vout
Overshoot area above Max Abs Level(Data)	103001	OverShoot area above Maximum Absolute Level of Vin,Vout
Overshoot area above Max Abs Level(Data, Strobe, Mask)	10373	OverShoot area above Maximum Absolute Level of Vin,Vout
Overshoot area above Max Abs Level(Strobe Minus)	103013	OverShoot area above Maximum Absolute Level of Vin,Vout

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Overshoot area above Max Abs Level(Strobe Plus)	103007	OverShoot area above Maximum Absolute Level of Vin,Vout
Overshoot area above VDD Abs Max(Address, Control)	10394	OverShoot area above VDD Absolute Max
Overshoot area above VDD Abs Max(Clock Minus)	103030	OverShoot area above VDD Absolute Max
Overshoot area above VDD Abs Max(Clock Plus)	103025	OverShoot area above VDD Absolute Max
Overshoot area above VDD Abs Max(Clock)	10379	OverShoot area above VDD Absolute Max
Overshoot area between VDD and VDD Abs Max(Address, Control)	10395	OverShoot area between VDD and VDD Absolute Max
Overshoot area between VDD and VDD Abs Max(Clock Minus)	103031	OverShoot area between VDD and VDD Absolute Max
Overshoot area between VDD and VDD Abs Max(Clock Plus)	103026	OverShoot area between VDD and VDD Absolute Max
Overshoot area between VDD and VDD Abs Max(Clock)	10390	OverShoot area between VDD and VDD Absolute Max
Overshoot area between VDDQ and Max Abs Level(Data Mask)	103020	OverShoot area between VDDQ and Maximum Absolute Level of Vin,Vout
Overshoot area between VDDQ and Max Abs Level(Data)	103002	OverShoot area between VDDQ and Maximum Absolute Level of Vin,Vout
Overshoot area between VDDQ and Max Abs Level(Data, Strobe, Mask)	10374	OverShoot area between VDDQ and Maximum Absolute Level of Vin,Vout
Overshoot area between VDDQ and Max Abs Level(Strobe Minus)	103014	OverShoot area between VDDQ and Maximum Absolute Level of Vin,Vout
Overshoot area between VDDQ and Max Abs Level(Strobe Plus)	103008	OverShoot area between VDDQ and Maximum Absolute Level of Vin,Vout
Read Define	50001	This test is a setup test to define zone criteria for read/write separation - when config option set to DQS/DQ only.
Read Define	60001	This test is a setup test to define zone criteria for read/write separation - when config option set to DQS/DQ only.
SLEWf	10342	Input signal minimum falling slew rate
SLEWr	10341	Input signal minimum rising slew rate
SRIN_cIVW	130404	Measures rising and falling slew rates over vCIVW
SRIN_cIVW	630404	Measures rising and falling slew rates over vCIVW

Table 4 Test IDs and Names (continued)

Name	TestID	Description
SRIN_diVW	20411	Measures rising and falling slew rates over vDIVW
SRIN_diVW	20409	Measures rising and falling slew rates over vDIVW
SRIN_diVW	60409	Measures rising and falling slew rates over vDIVW
SRIdiffF	11416	Differential Input Falling Slew Rate
SRIdiffF for Clock	50423	Differential Input Slew Rate
SRIdiffF for Clock	60423	Differential Input Slew Rate
SRIdiffF for Strobe	50509	Differential Input Slew Rate
SRIdiffF for Strobe	650509	Differential Input Slew Rate
SRIdiffR	11415	Differential Input Rising Slew Rate
SRIdiffR for Clock	50422	Differential Input Slew Rate
SRIdiffR for Clock	60422	Differential Input Slew Rate
SRIdiffR for Strobe	50508	Differential Input Slew Rate
SRIdiffR for Strobe	650508	Differential Input Slew Rate
SRQdiffF	11414	Differential Output Falling Slew Rate
SRQdiffF	51414	Differential Output Falling Slew Rate
SRQdiffF	61414	Differential Output Falling Slew Rate
SRQdiffR	11413	Differential Output Rising Slew Rate
SRQdiffR	51413	Differential Output Rising Slew Rate
SRQdiffR	61413	Differential Output Rising Slew Rate
SRQseF	11342	Output signal minimum falling slew rate
SRQseF	51342	Output signal minimum falling slew rate
SRQseF	61342	Output signal minimum falling slew rate
SRQseR	11341	Output signal minimum rising slew rate
SRQseR	51341	Output signal minimum rising slew rate
SRQseR	61341	Output signal minimum rising slew rate
Undershoot amplitude (Address, Control)	10361	Peak amplitude of AC undershoot
Undershoot amplitude (Address, Control)	10396	Peak amplitude of AC undershoot
Undershoot amplitude (Address, Control)	50361	Peak amplitude of AC undershoot

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Undershoot amplitude (Address, Control)	60361	Peak amplitude of AC undershoot
Undershoot amplitude (Address, Control, Clock, Chip Select, Clock Enable)	10365	Peak amplitude of AC undershoot
Undershoot amplitude (Clock Minus)	103032	Peak amplitude of AC undershoot
Undershoot amplitude (Clock Minus)	503022	Peak amplitude of AC undershoot
Undershoot amplitude (Clock Minus)	603022	Peak amplitude of AC undershoot
Undershoot amplitude (Clock Plus)	103027	Peak amplitude of AC undershoot
Undershoot amplitude (Clock Plus)	503018	Peak amplitude of AC undershoot
Undershoot amplitude (Clock Plus)	603018	Peak amplitude of AC undershoot
Undershoot amplitude (Clock)	10369	Peak amplitude of AC undershoot
Undershoot amplitude (Clock)	10391	Peak amplitude of AC undershoot
Undershoot amplitude (Clock)	50369	Peak amplitude of AC undershoot
Undershoot amplitude (Clock)	60369	Peak amplitude of AC undershoot
Undershoot amplitude (Data Mask)	103021	Peak amplitude of AC undershoot
Undershoot amplitude (Data Mask)	503014	Peak amplitude of AC undershoot
Undershoot amplitude (Data Mask)	603014	Peak amplitude of AC undershoot
Undershoot amplitude (Data)	103003	Peak amplitude of AC undershoot
Undershoot amplitude (Data)	503002	Peak amplitude of AC undershoot
Undershoot amplitude (Data)	603002	Peak amplitude of AC undershoot
Undershoot amplitude (Data, Strobe, Mask)	10363	Peak amplitude of AC undershoot
Undershoot amplitude (Data, Strobe, Mask)	10375	Peak amplitude of AC undershoot
Undershoot amplitude (Data, Strobe, Mask)	10367	Peak amplitude of AC undershoot
Undershoot amplitude (Data, Strobe, Mask)	50363	Peak amplitude of AC undershoot
Undershoot amplitude (Data, Strobe, Mask)	60363	Peak amplitude of AC undershoot
Undershoot amplitude (Strobe Minus)	103015	Peak amplitude of AC undershoot
Undershoot amplitude (Strobe Minus)	503010	Peak amplitude of AC undershoot

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Undershoot amplitude (Strobe Minus)	603010	Peak amplitude of AC undershoot
Undershoot amplitude (Strobe Plus)	103009	Peak amplitude of AC undershoot
Undershoot amplitude (Strobe Plus)	503006	Peak amplitude of AC undershoot
Undershoot amplitude (Strobe Plus)	603006	Peak amplitude of AC undershoot
Undershoot area (Address, Control)	10362	UnderShoot area below VSS
Undershoot area (Address, Control)	50362	UnderShoot area below VSS
Undershoot area (Address, Control)	60362	UnderShoot area below VSS
Undershoot area (Address, Control, Clock, Chip Select, Clock Enable)	10366	UnderShoot area below VSS
Undershoot area (Clock Minus)	503023	UnderShoot area below VSSQ
Undershoot area (Clock Minus)	603023	UnderShoot area below VSSQ
Undershoot area (Clock Plus)	503019	UnderShoot area below VSSQ
Undershoot area (Clock Plus)	603019	UnderShoot area below VSSQ
Undershoot area (Clock)	10370	UnderShoot area below VSSQ
Undershoot area (Clock)	50370	UnderShoot area below VSSQ
Undershoot area (Clock)	60370	UnderShoot area below VSSQ
Undershoot area (Data Mask)	503015	UnderShoot area below VSSQ
Undershoot area (Data Mask)	603015	UnderShoot area below VSSQ
Undershoot area (Data)	503003	UnderShoot area below VSSQ
Undershoot area (Data)	603003	UnderShoot area below VSSQ
Undershoot area (Data, Strobe, Mask)	10368	UnderShoot area below VSS
Undershoot area (Data, Strobe, Mask)	10364	UnderShoot area below VSSQ
Undershoot area (Data, Strobe, Mask)	50364	UnderShoot area below VSSQ
Undershoot area (Data, Strobe, Mask)	60364	UnderShoot area below VSSQ
Undershoot area (Strobe Minus)	503011	UnderShoot area below VSSQ
Undershoot area (Strobe Minus)	603011	UnderShoot area below VSSQ
Undershoot area (Strobe Plus)	503007	UnderShoot area below VSSQ
Undershoot area (Strobe Plus)	603007	UnderShoot area below VSSQ
Undershoot area below Min Abs Level(Data Mask)	103022	UnderShoot area below Minimum Absolute Level of Vin,Vout
Undershoot area below Min Abs Level(Data)	103004	UnderShoot area below Minimum Absolute Level of Vin,Vout

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Undershoot area below Min Abs Level(Data, Strobe, Mask)	10376	UnderShoot area below Minimum Absolute Level of Vin,Vout
Undershoot area below Min Abs Level(Strobe Minus)	103016	UnderShoot area below Minimum Absolute Level of Vin,Vout
Undershoot area below Min Abs Level(Strobe Plus)	103010	UnderShoot area below Minimum Absolute Level of Vin,Vout
Undershoot area below VSS(Address, Control)	10397	UnderShoot area below VSS
Undershoot area below VSS(Clock Minus)	103033	UnderShoot area below VSS
Undershoot area below VSS(Clock Plus)	103028	UnderShoot area below VSS
Undershoot area below VSS(Clock)	10392	UnderShoot area below VSS
Undershoot area between VSSQ and Min Abs Level(Data Mask)	103023	UnderShoot area between VSSQ and Minimum Absolute Level of Vin,Vout
Undershoot area between VSSQ and Min Abs Level(Data)	103005	UnderShoot area between VSSQ and Minimum Absolute Level of Vin,Vout
Undershoot area between VSSQ and Min Abs Level(Data, Strobe, Mask)	10377	UnderShoot area between VSSQ and Minimum Absolute Level of Vin,Vout
Undershoot area between VSSQ and Min Abs Level(Strobe Minus)	103017	UnderShoot area between VSSQ and Minimum Absolute Level of Vin,Vout
Undershoot area between VSSQ and Min Abs Level(Strobe Plus)	103011	UnderShoot area between VSSQ and Minimum Absolute Level of Vin,Vout
VIH.CA(AC)	10311	AC Input Logic High
VIH.CA(DC)	10312	DC Input Logic High
VIH.DQ(AC)	10313	AC Input Logic High
VIH.DQ(DC)	10314	DC Input Logic High
VIHdiff.CK(AC)	10411	Differential AC Input Logic High Voltage
VIHdiff.CK(AC)	50411	Differential AC Input Logic High Voltage
VIHdiff.CK(AC)	60411	Differential AC Input Logic High Voltage
VIHdiff.CK(DC)	10415	Differential DC Input Logic High Voltage
VIHdiff.CK(DC)	50415	Differential DC Input Logic High Voltage
VIHdiff.CK(DC)	60415	Differential DC Input Logic High Voltage
VIHdiff.DQS(AC)	10413	Differential AC Input Logic High Voltage
VIHdiff.DQS(DC)	10417	Differential DC Input Logic High Voltage

Table 4 Test IDs and Names (continued)

Name	TestID	Description
VIHdiff_DQS	50501	Differential Input High
VIHdiff_DQS	650501	Differential Input High
VIL.CA(AC)	10321	AC Input Logic Low
VIL.CA(DC)	10322	DC Input Logic Low
VIL.DQ(AC)	10323	AC Input Logic Low
VIL.DQ(DC)	10324	DC Input Logic Low
VILdiff.CK(AC)	10412	Differential AC Input Logic Low Voltage
VILdiff.CK(AC)	50412	Differential AC Input Logic Low Voltage
VILdiff.CK(AC)	60412	Differential AC Input Logic Low Voltage
VILdiff.CK(DC)	10416	Differential DC Input Logic Low Voltage
VILdiff.CK(DC)	50416	Differential DC Input Logic Low Voltage
VILdiff.CK(DC)	60416	Differential DC Input Logic Low Voltage
VILdiff.DQS(AC)	10414	Differential AC Input Logic Low Voltage
VILdiff.DQS(DC)	10418	Differential DC Input Logic Low Voltage
VILdiff_DQS	50502	Differential Input Low
VILdiff_DQS	650502	Differential Input Low
VIX	10380	AC differential input cross point voltage
VIX(CK)	10381	Clock Cross Point Voltage Test
VIX(DQS)	10382	Strobe Cross Point Voltage Test
VOH(AC)	11311	AC Output Logic High
VOH(AC)	51311	AC Output Logic High
VOH(AC)	61311	AC Output Logic High
VOH(DC)	11312	DC Output Logic High
VOH(DC)	51312	DC Output Logic High
VOH(DC)	61312	DC Output Logic High
VOHdiff(AC)	11411	Differential AC Output Logic High Voltage
VOHdiff(AC)	51411	Differential AC Output Logic High Voltage
VOHdiff(AC)	61411	Differential AC Output Logic High Voltage
VOL(AC)	11321	AC Output Logic Low
VOL(AC)	51321	AC Output Logic Low
VOL(AC)	61321	AC Output Logic Low

Table 4 Test IDs and Names (continued)

Name	TestID	Description
VOL(DC)	11322	DC Output Logic Low
VOL(DC)	51322	DC Output Logic Low
VOL(DC)	61322	DC Output Logic Low
VOLdiff(AC)	11412	Differential AC Output Logic Low Voltage
VOLdiff(AC)	51412	Differential AC Output Logic Low Voltage
VOLdiff(AC)	61412	Differential AC Output Logic Low Voltage
VREF(AC) Measurement	10399	VREF(AC) Measurement
VREF(DC) Measurement	10398	VREF(DC) Measurement
VSEH(Clock Minus)	10337	Single-ended High Level Voltage
VSEH(Clock Minus)	50337	Single-ended High Level Voltage
VSEH(Clock Minus)	60337	Single-ended High Level Voltage
VSEH(Clock Plus)	10333	Single-ended High Level Voltage
VSEH(Clock Plus)	50333	Single-ended High Level Voltage
VSEH(Clock Plus)	60333	Single-ended High Level Voltage
VSEH(Strobe Minus)	10335	Single-ended High Level Voltage for Strobes Minus
VSEH(Strobe Minus)	50335	Single-ended High Level Voltage for Strobes Minus
VSEH(Strobe Minus)	60335	Single-ended High Level Voltage for Strobes Minus
VSEH(Strobe Plus)	10331	Single-ended High Level Voltage for Strobes Plus
VSEH(Strobe Plus)	50331	Single-ended High Level Voltage for Strobes Plus
VSEH(Strobe Plus)	60331	Single-ended High Level Voltage for Strobes Plus
VSEL(Clock Minus)	10338	Single-ended Low Level Voltage
VSEL(Clock Minus)	50338	Single-ended Low Level Voltage
VSEL(Clock Minus)	60338	Single-ended Low Level Voltage
VSEL(Clock Plus)	10334	Single-ended Low Level Voltage
VSEL(Clock Plus)	50334	Single-ended Low Level Voltage
VSEL(Clock Plus)	60334	Single-ended Low Level Voltage
VSEL(Strobe Minus)	10336	Single-ended Low Level Voltage for Strobes Minus
VSEL(Strobe Minus)	50336	Single-ended Low Level Voltage for Strobes Minus
VSEL(Strobe Minus)	60336	Single-ended Low Level Voltage for Strobes Minus
VSEL(Strobe Plus)	10332	Single-ended Low Level Voltage for Strobes Plus
VSEL(Strobe Plus)	50332	Single-ended Low Level Voltage for Strobes Plus

Table 4 Test IDs and Names (continued)

Name	TestID	Description
VSEL(Strobe Plus)	60332	Single-ended Low Level Voltage for Strobes Plus
Vindiff_CK	50421	CK differential input voltage
Vindiff_CK	60421	CK differential input voltage
Vindiff_CK/2 High Pulse	50417	Half CK differential input voltage for High Pulse
Vindiff_CK/2 High Pulse	60417	Half CK differential input voltage for High Pulse
Vindiff_CK/2 Low Pulse	50418	Half CK differential input voltage for Low Pulse
Vindiff_CK/2 Low Pulse	60418	Half CK differential input voltage for Low Pulse
Vindiff_DQS	50503	DQS differential input
Vindiff_DQS	650503	DQS differential input
Vindiff_DQS/2 High Pulse	50504	Half DQS differential input
Vindiff_DQS/2 High Pulse	650504	Half DQS differential input
Vindiff_DQS/2 Low Pulse	50505	Half DQS differential input
Vindiff_DQS/2 Low Pulse	650505	Half DQS differential input
Vinse_CK (Negative Pulse)	50420	Clock Single-Ended input voltage for Negative Pulse
Vinse_CK (Negative Pulse)	60420	Clock Single-Ended input voltage for Negative Pulse
Vinse_CK (Positive Pulse)	50419	Clock Single-Ended input voltage for Positive Pulse
Vinse_CK (Positive Pulse)	60419	Clock Single-Ended input voltage for Positive Pulse
Vinse_CK_High(Clock Minus)	50341	Clock Single-Ended input voltage High from VREFCA
Vinse_CK_High(Clock Minus)	60341	Clock Single-Ended input voltage High from VREFDQ
Vinse_CK_High(Clock Plus)	50339	Clock Single-Ended input voltage High from VREFCA
Vinse_CK_High(Clock Plus)	60339	Clock Single-Ended input voltage High from VREFDQ
Vinse_CK_Low(Clock Minus)	50342	Clock Single-Ended input voltage Low from VREFCA
Vinse_CK_Low(Clock Minus)	60342	Clock Single-Ended input voltage Low from VREFDQ
Vinse_CK_Low(Clock Plus)	50340	Clock Single-Ended input voltage Low from VREFCA
Vinse_CK_Low(Clock Plus)	60340	Clock Single-Ended input voltage Low from VREFDQ
Vinse_DQS (Negative Pulse)	50507	DQS Single-Ended input voltage
Vinse_DQS (Negative Pulse)	650507	DQS Single-Ended input voltage
Vinse_DQS (Positive Pulse)	50506	DQS Single-Ended input voltage
Vinse_DQS (Positive Pulse)	650506	DQS Single-Ended input voltage
Vinse_DQS_High(Strobe Minus)	50345	DQS Single-Ended input voltage High from VREFDQ
Vinse_DQS_High(Strobe Minus)	60345	DQS Single-Ended input voltage High from VREFDQ

Table 4 Test IDs and Names (continued)

Name	TestID	Description
Vinse_DQS_High(Strobe Plus)	50343	DQS Single-Ended input voltage High from VREFDQ
Vinse_DQS_High(Strobe Plus)	60343	DQS Single-Ended input voltage High from VREFDQ
Vinse_DQS_Low(Strobe Minus)	50346	DQS Single-Ended input voltage Low from VREFDQ
Vinse_DQS_Low(Strobe Minus)	60346	DQS Single-Ended input voltage Low from VREFDQ
Vinse_DQS_Low(Strobe Plus)	50344	DQS Single-Ended input voltage Low from VREFDQ
Vinse_DQS_Low(Strobe Plus)	60344	DQS Single-Ended input voltage Low from VREFDQ
Vix_CK_ratio	50381	Clock Cross Point Voltage Ratio Test
Vix_CK_ratio	60381	Clock Cross Point Voltage Ratio Test
Vix_DQS_ratio	50382	Strobe Cross Point Voltage Ratio Test
Vix_DQS_ratio	60382	Strobe Cross Point Voltage Ratio Test
Write Define	50000	This test is a setup test to define zone criteria for read/write separation - when config option set to DQS/DQ only.
Write Define	60000	This test is a setup test to define zone criteria for read/write separation - when config option set to DQS/DQ only.
tCH Average High Measurements	2000	tCH Average High Measurements
tCH Average High Measurements	52000	tCH Average High Measurements
tCH Average High Measurements	62000	tCH Average High Measurements
tCH(abs) Absolute clock HIGH pulse width	2200	tCH(abs) Absolute clock HIGH pulse width
tCH(abs) Absolute clock HIGH pulse width	52200	tCH(abs) Absolute clock HIGH pulse width
tCH(abs) Absolute clock HIGH pulse width	62200	tCH(abs) Absolute clock HIGH pulse width
tCIPW	30401	Command Address Input Pulse Width
tCIPW	60401	Command Address Input Pulse Width
tCIVW	130400	Command Address Valid Window
tCIVW	630400	Command Address Valid Window
tCIVW Margin	30400	Command Address Valid Window Margin
tCIVW Margin	630401	Command Address Valid Window Margin
tCK(abs) Period Rising Edge Measurements	1	tCK Period Rising Edge Measurements
tCK(abs) Rising Edge Measurements	2	tCK(abs) Rising Edge Measurements
tCK(abs) Rising Edge Measurements	50002	tCK(abs) Rising Edge Measurements

Table 4 Test IDs and Names (continued)

Name	TestID	Description
tCK(abs) Rising Edge Measurements	60002	tCK(abs) Rising Edge Measurements
tCK(avg) Rising Edge Measurements	200	tCK(avg) Rising Edge Measurements
tCK(avg) Rising Edge Measurements	50200	tCK(avg) Rising Edge Measurements
tCK(avg) Rising Edge Measurements	60200	tCK(avg) Rising Edge Measurements
tCKE	30206	CKE Minimum Pulse Width
tCL Average Low Measurements	2050	tCL Average LowMeasurements
tCL Average Low Measurements	52050	tCL Average LowMeasurements
tCL Average Low Measurements	62050	tCL Average LowMeasurements
tCL(abs) Absolute clock LOW pulse width	2250	tCL(abs) Absolute clock LOW pulse width
tCL(abs) Absolute clock LOW pulse width	52250	tCL(abs) Absolute clock LOW pulse width
tCL(abs) Absolute clock LOW pulse width	62250	tCL(abs) Absolute clock LOW pulse width
tDH(base)	30302	DQ and DM input hold time - Differential
tDH-Diff(derate)	30304	DQ and DM input hold time - Differential
tDIPW	30305	DQ input pulse width
tDIPW	20410	DQ input pulse width
tDIPW	60410	DQ input pulse width
tDIVW	120403	tDIVW
tDIVW	150403	tDIVW
tDIVW	650403	tDIVW
tDIVW Margin	20403	tDIVW Margin
tDIVW Margin	50403	tDIVW Margin
tDIVW Margin	60403	tDIVW Margin
tDQS2DQ	20407	tDQS2DQ
tDQS2DQ	60407	tDQS2DQ
tDQSCK	30021	DQS output access time from CK,/CK
tDQSCK	50021	DQS output access time from CK,/CK
tDQSCK	60021	DQS output access time from CK,/CK
tDQSH	30107	DQS input high pulse width
tDQSH	50107	DQS input high pulse width

Table 4 Test IDs and Names (continued)

Name	TestID	Description
tDQSH	60107	DQS input high pulse width
tDQSL	30108	DQS input low pulse width
tDQSL	50108	DQS input low pulse width
tDQSL	60108	DQS input low pulse width
tDQSQ	30104	DQS-DQ skew for DQS and associated DQ signals
tDQSQ	50104	DQS-DQ skew for DQS and associated DQ signals
tDQSQ	60104	DQS-DQ skew for DQS and associated DQ signals
tDQSQ_DBI	30119	DQS-DQ skew for DQS and associated DQ signals with DBI enabled
tDQSQ_DBI	30501	DQS-DQ skew for DQS and associated DQ signals with DBI enabled
tDQSQ_DBI	60501	DQS-DQ skew for DQS and associated DQ signals with DBI enabled
tDQSS	30106	DQS latching transition to associated clock edge
tDQSS	50106	DQS latching transition to associated clock edge
tDQSS	60106	DQS latching transition to associated clock edge
tDS(base)	30301	DQ and DM input setup time - Differential
tDS-Diff(derate)	30303	DQ and DM input setup time - Differential
tDSH	30110	DQS falling edge hold time from CK
tDSH	50110	DQS falling edge hold time from CK
tDSH	60110	DQS falling edge hold time from CK
tDSS	30109	DQS falling edge to CK setup time
tDSS	50109	DQS falling edge to CK setup time
tDSS	60109	DQS falling edge to CK setup time
tDVAC(Clock)	30022	tDVAC(Clock)
tDVAC(Strobe)	30117	tDVAC(Strobe)
tHZDQ	30101	DQ out high-impedance time from CK,/CK
tHZDQ	50101	DQ out high-impedance time from CK,/CK
tHZDQS	30118	DQS high-impedance time from CK,/CK
tHZDQS	50118	DQS high-impedance time from CK,/CK
tIH(base)	30202	Address and control input hold time
tIH(derate)	30204	Address and control input hold time
tIPW	30207	tIPW
tIS(base)	30201	Address and control input setup time

Table 4 Test IDs and Names (continued)

Name	TestID	Description
tIS(derate)	30203	Address and control input setup time
tLZDQ	30102	DQ low-impedance time from CK,/CK
tLZDQ	50102	DQ low-impedance time from CK,/CK
tLZDQS	30103	DQS low-impedance time from CK,/CK
tLZDQS	50103	DQS low-impedance time from CK,/CK
tQH	30105	DQ/DQS output hold time from DQS
tQH	50105	DQ/DQS output hold time from DQS
tQH	60105	DQ/DQS output hold time from DQS
tQH_DBI	30120	DQ/DQS output hold time from DQS with DBI enabled
tQH_DBI	30502	DQ/DQS output hold time from DQS with DBI enabled
tQH_DBI	60502	DQ/DQS output hold time from DQS with DBI enabled
tQSH	30115	DQS output high time
tQSH	50115	DQS output high time
tQSH	60115	DQS output high time
tQSH_DBI	30503	DQS output high time with DBI enabled
tQSH_DBI	60503	DQS output high time with DBI enabled
tQSL	30116	DQS output low time
tQSL	50116	DQS output low time
tQSL	60116	DQS output low time
tQSL_DBI	30504	DQS output low time with DBI enabled
tQSL_DBI	60504	DQS output low time with DBI enabled
tQW_total	30505	tQW_total
tQW_total	60505	tQW_total
tQW_total_DBI	30506	tQW_total with DBI
tQW_total_DBI	60506	tQW_total with DBI
tRPRE	30113	Read preamble
tRPRE	50113	Read preamble
tRPRE	60113	Read preamble
tRPST	30114	Read postamble
tRPST	50114	Read postamble
tRPST	60114	Read postamble

Table 4 Test IDs and Names (continued)

Name	TestID	Description
tVAC(CS,CA)	30205	tVAC(CS,CA)
tVAC(Data)	30306	tVAC(Data)
tWPRE	30111	Write preamble
tWPRE	50111	Write preamble
tWPRE	60111	Write preamble
tWPST	30112	Write postamble
tWPST	50112	Write postamble
tWPST	60112	Write postamble
terr(10per) Rising Edge Measurements	1200	terr(10per) Rising Edge Measurements
terr(10per) Rising Edge Measurements	51200	terr(10per) Rising Edge Measurements
terr(10per) Rising Edge Measurements	61200	terr(10per) Rising Edge Measurements
terr(11per) Rising Edge Measurements	1300	terr(11per) Rising Edge Measurements
terr(11per) Rising Edge Measurements	51300	terr(11per) Rising Edge Measurements
terr(11per) Rising Edge Measurements	61300	terr(11per) Rising Edge Measurements
terr(12per) Rising Edge Measurements	1400	terr(12per) Rising Edge Measurements
terr(12per) Rising Edge Measurements	51400	terr(12per) Rising Edge Measurements
terr(12per) Rising Edge Measurements	61400	terr(12per) Rising Edge Measurements
terr(2per) Rising Edge Measurements	400	terr(2per) Rising Edge Measurements
terr(2per) Rising Edge Measurements	50400	terr(2per) Rising Edge Measurements
terr(2per) Rising Edge Measurements	60400	terr(2per) Rising Edge Measurements
terr(3per) Rising Edge Measurements	500	terr(3per) Rising Edge Measurements
terr(3per) Rising Edge Measurements	50500	terr(3per) Rising Edge Measurements
terr(3per) Rising Edge Measurements	60500	terr(3per) Rising Edge Measurements
terr(4per) Rising Edge Measurements	600	terr(4per) Rising Edge Measurements
terr(4per) Rising Edge Measurements	50600	terr(4per) Rising Edge Measurements
terr(4per) Rising Edge Measurements	60600	terr(4per) Rising Edge Measurements
terr(5per) Rising Edge Measurements	700	terr(5per) Rising Edge Measurements
terr(5per) Rising Edge Measurements	50700	terr(5per) Rising Edge Measurements
terr(5per) Rising Edge Measurements	60700	terr(5per) Rising Edge Measurements
terr(6per) Rising Edge Measurements	800	terr(6per) Rising Edge Measurements
terr(6per) Rising Edge Measurements	50800	terr(6per) Rising Edge Measurements

Table 4 Test IDs and Names (continued)

Name	TestID	Description
terr(6per) Rising Edge Measurements	60800	terr(6per) Rising Edge Measurements
terr(7per) Rising Edge Measurements	900	terr(7per) Rising Edge Measurements
terr(7per) Rising Edge Measurements	50900	terr(7per) Rising Edge Measurements
terr(7per) Rising Edge Measurements	60900	terr(7per) Rising Edge Measurements
terr(8per) Rising Edge Measurements	1000	terr(8per) Rising Edge Measurements
terr(8per) Rising Edge Measurements	51000	terr(8per) Rising Edge Measurements
terr(8per) Rising Edge Measurements	61000	terr(8per) Rising Edge Measurements
terr(9per) Rising Edge Measurements	1100	terr(9per) Rising Edge Measurements
terr(9per) Rising Edge Measurements	51100	terr(9per) Rising Edge Measurements
terr(9per) Rising Edge Measurements	61100	terr(9per) Rising Edge Measurements
terr(nper) Rising Edge Measurements	3000	terr(nper) Rising Edge Measurements
terr(nper) Rising Edge Measurements	53000	terr(nper) Rising Edge Measurements
terr(nper) Rising Edge Measurements	63000	terr(nper) Rising Edge Measurements
tjit(CC) Rising Edge Measurements	100	tjit(CC) Rising Edge Measurements for 800MT/s
tjit(CC) Rising Edge Measurements	50100	tjit(CC) Rising Edge Measurements for 800MT/s
tjit(CC) Rising Edge Measurements	60100	tjit(CC) Rising Edge Measurements for 800MT/s
tjit(duty-high) Jitter Average High Measurements	2100	tjit(duty-high) Jitter Average High Measurements
tjit(duty-high) Jitter Average High Measurements	52100	tjit(duty-high) Jitter Average High Measurements
tjit(duty-high) Jitter Average High Measurements	62100	tjit(duty-high) Jitter Average High Measurements
tjit(duty-low) Jitter Average Low Measurements	2150	tjitduty-low Jitter Average LowMeasurements
tjit(duty-low) Jitter Average Low Measurements	52150	tjitduty-low Jitter Average LowMeasurements
tjit(duty-low) Jitter Average Low Measurements	62150	tjitduty-low Jitter Average LowMeasurements
tjit(per) Rising Edge Measurements	300	tjit(per) Rising Edge Measurements
tjit(per) Rising Edge Measurements	50300	tjit(per) Rising Edge Measurements
tjit(per) Rising Edge Measurements	60300	tjit(per) Rising Edge Measurements
vCIVW	130402	vCIVW
vCIVW	630402	vCIVW

Table 4 Test IDs and Names (continued)

Name	TestID	Description
vCIVW Margin	30402	vCIVW Margin
vCIVW Margin	60402	vCIVW Margin
vDIVW	120404	vDIVW
vDIVW	150404	vDIVW
vDIVW	650404	vDIVW
vDIVW Margin	20404	vDIVW Margin
vDIVW Margin	50404	vDIVW Margin
vDIVW Margin	60404	vDIVW Margin

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.

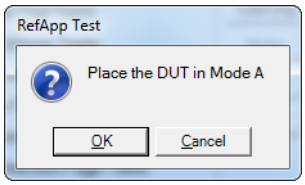
Table 6 Instrument Names

Instrument Name	Description
Infiniium	The primary oscilloscope

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
Acq Limit: Can't determine minimum bandwidth	25A86458-151E-413D-B890-FC30CFD5ECAA	OK	Instrument
Activating limit will conflict with existing resutls	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 chagned - continue run	Instrument
Debug pause (messages vary)	50B66A97-A6A9-413f-8329-76DFAC492FD6	OK=resume, Cancel=abort run	Instrument

Table 7 Message IDs (continued)

Message	ID	Responses	Usage
End of run summary	602F9866-F975-42b7-842C-D8447E5E3FCB	OK	Instrument
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: Not available because scope default prevented	B8461A2C-9F5F-4AF3-94C1-DF77080D517A	OK	Instrument
InfiniiSim: Scope doesn't support settings found in project	C9BC2205-8041-448b-AF31-CF602183E989	OK	Instrument
InfiniiSim: Unknown scope channel	4E5ECAF6-867C-47B3-982D-5F07E2090703	OK	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
PrecisionProbe/PrecisionCable: Not available because scope default prevented	6E60C9F8-8FBF-419C-B70A-B666FBDE3677	OK	Instrument
PrecisionProbe/PrecisionCable: Scope doesn't support settings found in project	2FC3B6FA-E28C-4700-9F46-4ABBA86A0D90	OK	Instrument
PrecisionProbe/PrecisionCable: Switch Controller is enabled	22F46DA8-89AE-4370-A57C-571DCF5BB87E	OK	Instrument
PrecisionProbe/PrecisionCable: Unknown scope channel	6788685B-9E88-47E6-BAE6-862F5BF3C9BA	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

Table 7 Message IDs (continued)

Message	ID	Responses	Usage
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
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

Table 7 Message IDs (continued)

Message	ID	Responses	Usage
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
Unknown EEyeLocation parameter	FCA1C61B-D2EA-4671-AD48-9C080A6C6039	OK	Instrument
Upgrade app to open project	794C6148-ADF4-4b24-895D-74D94B76F8AE	OK	Instrument

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