

# Keysight U7246A/U7246B SD Card UHS-I Application

# Notices

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## Safety Notices

### CAUTION

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

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## In This Book

This book is your guide to programming the Keysight Technologies U7246A/U7246B SD Card UHS-I Application.

- **Chapter 1**, “Introduction to Programming,” starting on page 7, describes compliance application programming basics.
- **Chapter 2**, “Configuration Variables and Values,” starting on page 9, **Chapter 3**, “Test Names and IDs,” starting on page 29, and **Chapter 4**, “Instruments,” starting on page 45, provide information specific to programming the U7246A/U7246B SD Card UHS-I Application.

### How to Use This Book

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



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# 1 Introduction to Programming

Remote Programming Toolkit / 8

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

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

You can accomplish other tasks by combining these functions.

## Remote Programming Toolkit

The majority of remote interface features are common across all the Keysight Technologies, Inc. family of compliance 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](http://www.keysight.com/find/rpi). The U7246A/U7246B SD Card UHS-I Application uses Remote Interface Revision 3.40. 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 U7246A/U7246B SD Card UHS-I 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	Acquisition Points	vcAcquisitionPoints	(Accepts user-defined text), 100000, 200000, 500000, 1000000	Acquisition Points (Under the menu Setup->Acquisition)
Configure	Acquisition Points - Current Consumption	vcAcquisitionPointsCC	500000, 1000000, 2000000, 4000000	Acquisition Points (Under the menu Setup->Acquisition)
Configure	Acquisition Points - Threshold Levels	vcAcquisitionPointsTHL	(Accepts user-defined text), 1000000	Acquisition Points (Under the menu Setup->Acquisition)
Configure	Band width Reduction	vcBandwidthReduction	AUTO, 13E+9, 12.5E+9, 12E+9, 10E+9, 8E+9, 6E+9, 4E+9, 3E+9, 2.5E+9, 2E+9, 1E+9	This setting is valid when scope has Enhanced Band width/Noise Reduction options.
Configure	CLK Channel	vcCLKChannel	Channel1, Channel2, Channel3, Channel4	Clock Channel
Configure	CMD Channel	vcCMDChannel	Channel1, Channel2, Channel3, Channel4	Command Channel
Configure	Card Read/Write Block Size for B.O.T.(PM mode)	vcRWBlock SizeBOTPM	00001000, 00002000, 00004000, 00008000, 00010000, 00018000, 00020000	Card Read/Write Block Size of TED Host Emulator for Bus Output Timing Tests(PM mode).

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

GUI Location	Label	Variable	Values	Description
Configure	Card Read/Write Block Size for B.O.T.(RC mode)	vcRWBlock SizeBOTRC	00001000, 00002000, 00004000, 00008000, 00010000, 00018000, 00020000	Card Read/Write Block Size of TED Host Emulator for Bus Output Timing Tests(RC mode).
Configure	Card Read/Write Block Size for C.C.	vcRWBlock SizeCC	00002000, 00020000, 00040000, 00080000, 00100000	Card Read/Write Block Size of TED Host Emulator for Current Consumption Tests.
Configure	Card Read/Write Block Size for Threshold Levels Tests	vcRWBlock SizeTHL	00001000, 00002000, 00004000, 00008000, 00010000, 00018000, 00020000	Card Read/Write Block Size of TED Host Emulator for Threshold Levels Tests.
Configure	Card Read/Write Iteration	vcRWIteration	(Accepts user-defined text), 1, A, 64, 6E, FFFFFFFF	Number of Read/Write Transaction Issued by TED Host Emulator.
Configure	Card Read/Write Start Sector for B.O.T.(PM mode)	vcRWStartSectorBOTPM	00000000, 00001000, 00002000, 00004000, 00008000, 00010000, 00018000, 00020000	Card Read/Write Start Sector of TED Host Emulator for But Output Timing Tests(PM mode).
Configure	Card Read/Write Start Sector for B.O.T.(RC Mode)	vcRWStartSectorBOTRC	00000000, 00001000, 00002000, 00004000, 00008000, 00010000, 00018000, 00020000	Card Read/Write Start Sector of TED Host Emulator for But Output Timing Tests(RC Mode).
Configure	Card Read/Write Start Sector for C.C.	vcRWStartSectorCC	00002000, 00020000, 00040000, 00080000, 00100000	Card Read/Write Start Sector of TED Host Emulator for Current Consumption Tests.
Configure	Card Read/Write Start Sector for Threshold Levels Tests	vcRWStartSectorTHL	00000000, 00001000, 00002000, 00004000, 00008000, 00010000, 00018000, 00020000	Card Read/Write Start Sector of TED Host Emulator for Threshold Levels Tests.

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

GUI Location	Label	Variable	Values	Description
Configure	Clock Delay(tdCK) - DDR50 - tODLAY	vcClockDelay_DDR50_tODLAY_BOTPM	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of DDR50 mode for output delay compensation - DAT.(PM mode)
Configure	Clock Delay(tdCK) - DDR50 - tODLAY - CMD	vcClockDelay_DDR50_tODLAY_CMD_BOTRC	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of DDR50 mode for output delay compensation - CMD.(Reduced Connection Mode)
Configure	Clock Delay(tdCK) - DDR50 - tODLAY - DAT	vcClockDelay_DDR50_tODLAY_DAT_BOTRC	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of DDR50 mode for output delay compensation - DAT.(Reduced Connection Mode)
Configure	Clock Delay(tdCK) - DDR50 - tOH	vcClockDelay_DDR50_tOH_BOTRC	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of DDR50 mode for output hold time compensation.(Reduced Connection Mode)
Configure	Clock Delay(tdCK) - Default mode	vcClockDelay_DS_BOTRC	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of default mode for output delay and output hold time compensation.(Reduced Connection Mode)
Configure	Clock Delay(tdCK) - High Speed mode - tODLAY	vcClockDelay_HS_tODLAY_BOTRC	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of high speed mode for output delay compensation.(Reduced Connection Mode)
Configure	Clock Delay(tdCK) - High Speed mode - tOH	vcClockDelay_HS_tOH_BOTRC	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of high speed mode for output hold time compensation.(Reduced Connection Mode)
Configure	Clock Delay(tdCK) - SDR12 - tODLAY	vcClockDelay_SDR12_tODLAY_BOTRC	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of SDR12 mode for output delay compensation.(Reduced Connection Mode)
Configure	Clock Delay(tdCK) - SDR12 - tOH	vcClockDelay_SDR12_tOH_BOTRC	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of SDR12 mode for output hold time compensation.(Reduced Connection Mode)

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

GUI Location	Label	Variable	Values	Description
Configure	Clock Delay(tdCK) - SDR25 - tODLAY	vcClockDelay_SDR25_tODLAY_BOTRC	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of SDR25 mode for output delay compensation.(Reduced Connection Mode)
Configure	Clock Delay(tdCK) - SDR25 - tOH	vcClockDelay_SDR25_tOH_BOTRC	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of SDR25 mode for output hold time compensation.(Reduced Connection Mode)
Configure	Clock Delay(tdCK) - SDR50 - tODLAY	vcClockDelay_SDR50_tODLAY_BOTPM	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of SDR50 mode for output delay compensation.(PM mode)
Configure	Clock Delay(tdCK) - SDR50 - tODLAY	vcClockDelay_SDR50_tODLAY_BOTRC	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of SDR50 mode for output delay compensation.(Reduced Connection Mode)
Configure	Clock Delay(tdCK) - SDR50 - tOH	vcClockDelay_SDR50_tOH_BOTPM	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of SDR50 mode for output hold time compensation.(PM mode)
Configure	Clock Delay(tdCK) - SDR50 - tOH	vcClockDelay_SDR50_tOH_BOTRC	(Accepts user-defined text), 0, 1E-9	Clock Delay configuration of SDR50 mode for output hold time compensation.(Reduced Connection Mode)
Configure	Clock Frequency - SDR104 tOP	vcClockFrequencySDR104tOP	25MHZ, 50MHZ, 100MHZ, 208MHZ	Clock Frequency Setting of TED Host board for SDR104 tOP test.
Configure	Clock Frequency Validation	vcClockFrequencyValidation	Enable, Disable	Enable/Disable Clock Frequency Validation.
Configure	Constant - DAC_DEFAULT	ccDAC_DEFAULT	DAC_DEFAULT	Constant value of DAC_DEFAULT
Configure	Constant - DAC_NONE	ccDAC_NONE	DAC_NONE	Constant value of DAC_NONE
Configure	Constant - DDR50 Mode	ccMODE_DDR50	DDR50	Constant value of DDR50

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

GUI Location	Label	Variable	Values	Description
Configure	Constant - Default Mode	ccMODE_DS	DS	Constant value of Default Mode
Configure	Constant - Driver Strength TypeA	ccDriverStrengthTypeA	DRIVE_A	System use only.
Configure	Constant - Driver Strength TypeB	ccDriverStrengthTypeB	DRIVE_B	System use only.
Configure	Constant - Driver Strength TypeC	ccDriverStrengthTypeC	DRIVE_C	System use only.
Configure	Constant - Driver Strength TypeD	ccDriverStrengthTypeD	DRIVE_D	System use only.
Configure	Constant - High Speed Mode	ccMODE_HS	HS	Constant value of High Speed Mode
Configure	Constant - PLL_DEFAULT	ccPLL_DEFAULT	PLL_DEFAULT	Constant value of PLL_DEFAULT
Configure	Constant - PLL_NONE	ccPLL_NONE	PLL_NONE	Constant value of PLL_NONE
Configure	Constant - RW0B	ccRW0B	00000000	Memory Size of RW transaction TED Host board.
Configure	Constant - RW1B	ccRW1B	00000001	Memory Size of RW transaction TED Host board.
Configure	Constant - RW256KB	ccRW256KB	0003E800	Memory Size of RW transaction TED Host board.
Configure	Constant - RW4KB	ccRW4KB	00001000	Memory Size of RW transaction TED Host board.
Configure	Constant - RW64KB	ccRW64KB	0000FA00	Memory Size of RW transaction TED Host board.

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

GUI Location	Label	Variable	Values	Description
Configure	Constant - SDR104 Mode	ccMODE_SDR104	SDR104	Constant value of SDR104
Configure	Constant - SDR12 Mode	ccMODE_SDR12	SDR12	Constant value of SDR12
Configure	Constant - SDR25 Mode	ccMODE_SDR25	SDR25	Constant value of SDR25
Configure	Constant - SDR50 Mode	ccMODE_SDR50	SDR50	Constant value of SDR50
Configure	Constant - SMA_CH_CMD	ccSMA_CH_CMD	CMD	System use only.
Configure	Constant - SMA_CH_DAT	ccSMA_CH_DAT	DAT	System use only.
Configure	Constant - SMA_PORT_CARD	ccSMA_PORT_CARD	CARD	System use only.
Configure	Constant - SMA_PORT_HOST	ccSMA_PORT_HOST	HOST	System use only.
Configure	Constant - TESTPATTERN	ccTESTPATTERN	DDR	System use only.
Configure	Constant - VDD27V	ccVDD27V	5D	Memory Size of RW transaction TED Host board.
Configure	Constant - VDD33V	ccVDD33V	24	Memory Size of RW transaction TED Host board.
Configure	Constant - VDD36V	ccVDD36V	8	Memory Size of RW transaction TED Host board.
Configure	Current Attenuation	vcCurrAttenuation	(Accepts user-defined text), 1, 5, 10, 20	Current Attenuation Setting of Current Probe(Loop Count of Indactance)

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

GUI Location	Label	Variable	Values	Description
Configure	Current Limit - Current Consumption	vcCurrLimitCC	200MA, 400MA, 600MA, 800MA	Selection of Current Limit for Current Consumption Test
Configure	Current Limit - DDR50	vcCurrLimitDDR50	200MA, 400MA, 600MA, 800MA	Selection of Current Limit for DDR50
Configure	Current Limit - SDR104	vcCurrLimitSDR104	200MA, 400MA, 600MA, 800MA	Selection of Current Limit for SDR104
Configure	Current Limit - SDR12	vcCurrLimitSDR12	200MA, 400MA, 600MA, 800MA	Selection of Current Limit for SDR12
Configure	Current Limit - SDR25	vcCurrLimitSDR25	200MA, 400MA, 600MA, 800MA	Selection of Current Limit for SDR25
Configure	Current Limit - SDR50	vcCurrLimitSDR50	200MA, 400MA, 600MA, 800MA	Selection of Current Limit for SDR50
Configure	Current Probe Channel	vcCurrProbeChannel	Channel1, Channel2, Channel3, Channel4	Current Probe Channel
Configure	DAT0 Channel	vcDAT0Channel	Channel1, Channel2, Channel3, Channel4	Data Channel
Configure	DAT1 Channel	vcDAT1Channel	Channel1, Channel2, Channel3, Channel4	Data Channel
Configure	DAT2 Channel	vcDAT2Channel	Channel1, Channel2, Channel3, Channel4	Data Channel
Configure	DAT3 Channel	vcDAT3Channel	Channel1, Channel2, Channel3, Channel4	Data Channel
Configure	Driver Type	vcDriverType	DRIVE_A, DRIVE_B, DRIVE_C, DRIVE_D	Selection of Driver Strength.
Configure	Lower Level(V)	LowerLevel	(Accepts user-defined text), 0.58	Specify the value of the lower threshold(V) used when the "MeasThreshold Mode" option is set to use "CustomLevel".

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

GUI Location	Label	Variable	Values	Description
Configure	Lower Percent(%)	LowerPercent	(Accepts user-defined text), 20, 10	Specify the value of the lower threshold(%) used when the "MeasThreshold Mode" option is set to use "TopBaseRatio".
Configure	Maximum Trial	vcMaxTrial	(Accepts user-defined text), 1, 3, 5	Maximum trial configuration for the current consumption test to resend the command
Configure	Measurement Threshold Mode	MeasThresholdMode	TopBaseRatio, CustomLevel	This option allows user to select the measurement threshold method used for real time eye function of CLK signal. When the "TopBaseRatio" method is selected, the "Upper Percent(%)", "Middle Percent(%)", and "Lower Percent(%)", options will be used as the setting values. When the "CustomLevel" method is selected, the "Upper Level(V)", "Middle Level(V)", and "Lower Level(V)", options will be used as the setting values. This option is only applicable for SDR/DDR tests.
Configure	Middle Level(V)	MiddleLevel	(Accepts user-defined text), 0.975	Specify the value of the middle threshold(V) used when the "MeasThreshold Mode" option is set to use "CustomLevel".
Configure	Middle Percent(%)	MiddlePercent	(Accepts user-defined text), 50	Specify the value of the middle threshold(%) used when the "MeasThreshold Mode" option is set to use "TopBaseRatio".
Configure	Number of Meas Cycle of CMD	vcMeasCycleCMD	(Accepts user-defined text), 100, 1000, 10000	Number of Measurement Cycle of CMD Tests(Default 10k Cycle)
Configure	Number of Meas Cycle of CMD	vcMeasCycleTHLCMD	(Accepts user-defined text), 100, 1000, 10000	Number of Measurement Cycle of CMD Tests(Default 1k Cycle)
Configure	Number of Meas Cycle of CMD for ODS	vcMeasCycleCMDODS	(Accepts user-defined text), 100, 1000, 10000	Number of Measurement Cycle of CMD Tests for Output Drivers Strength Tests as Rise Time, Fall Time, Rise/Fall Mismatch and Rise/Fall Relation.

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

GUI Location	Label	Variable	Values	Description
Configure	Number of Meas Cycle of DAT	vcMeasCycl eDAT	(Accepts user-defined text), 1000, 10000, 100000	Number of Measurement Cycle of DAT0,1,2,3 Tests(Default 10k Cycle)
Configure	Number of Meas Cycle of DAT	vcMeasCycl eTHLDAT	(Accepts user-defined text), 1000, 10000, 100000	Number of Measurement Cycle of DAT0,1,2,3 Tests(Default 10k Cycle)
Configure	Number of Meas Cycle of DAT for ODS	vcMeasCycl eDATODS	(Accepts user-defined text), 1000, 10000, 100000	Number of Measurement Cycle of DAT0,1,2,3 Tests for Output Drivers Strength Tests as Rise Time, Fall Time, Rise/Fall Mismatch and Rise/Fall Relation.
Configure	Reference Clock Edge Position	vcReference ClockEdgeP osition	Mode, MAX, MIN	This option allows user to select reference clock edge position for SDR/DDR tests. 'Mode' is mode position in distribution of Clock edges. Max (Worst) is Right-Most edge position and Min (Loose) is Left-Most edge position.
Configure	Registry 1 - System use only	vcSrc1	(Accepts user-defined text), Channel1, Channel2, Channel3, Channel4	System use only.
Configure	Registry 10 - System use only	vcDACSet	(Accepts user-defined text), DAC_DEFAULT, DAC_NONE	System use only.
Configure	Registry 11 - System use only	vcClockFreq Set	(Accepts user-defined text), 25MHZ, 50MHZ, 100MHZ, 208MHZ	System use only.
Configure	Registry 12 - System use only	vcRWIterati onSet	(Accepts user-defined text), 1, A, 5F, 7F	System use only.
Configure	Registry 13 - System use only	vcVddSet	(Accepts user-defined text), 1, A, 5C, 7F	System use only.
Configure	Registry 14 - System use only	vcTestPattS et	(Accepts user-defined text), INC, SHIFT0, SHIFT1, TOGGLE	System use only.
Configure	Registry 15 - System use only	vcRWBlock SizeSet	(Accepts user-defined text), 00001000	System use only.

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

GUI Location	Label	Variable	Values	Description
Configure	Registry 16 - System use only	vcTEDWaitSet	(Accepts user-defined text), 1, 64, 3E8, 7D0	System use only
Configure	Registry 17 - System use only	vcSMACHSet	(Accepts user-defined text), CMD, DAT	System use only
Configure	Registry 18 - System use only	vcSMAPortSet	(Accepts user-defined text), CARD, HOST	System use only
Configure	Registry 19 - System use only	vcRWStartSectorSet	(Accepts user-defined text), 00001F40, 0001F400, 0003D090, 0007D000, 000FA000	System use only
Configure	Registry 2 - System use only	vcSrc2	(Accepts user-defined text), Channel1, Channel2, Channel3, Channel4	System use only.
Configure	Registry 20 - System use only	vcStatusDS Mode	(Accepts user-defined text), SUPPORTED, UNSUPPORT, UNDEFINED, SDINIFAIL	System use only
Configure	Registry 21 - System use only	vcStatusHS Mode	(Accepts user-defined text), SUPPORTED, UNSUPPORT, UNDEFINED, SDINIFAIL	System use only
Configure	Registry 22 - System use only	vcStatusSD R12Mode	(Accepts user-defined text), SUPPORTED, UNSUPPORT, UNDEFINED, SDINIFAIL	System use only
Configure	Registry 23 - System use only	vcStatusSD R25Mode	(Accepts user-defined text), SUPPORTED, UNSUPPORT, UNDEFINED, SDINIFAIL	System use only
Configure	Registry 24 - System use only	vcStatusSD R50Mode	(Accepts user-defined text), SUPPORTED, UNSUPPORT, UNDEFINED, SDINIFAIL	System use only
Configure	Registry 25 - System use only	vcStatusSD R104Mode	(Accepts user-defined text), SUPPORTED, UNSUPPORT, UNDEFINED, SDINIFAIL	System use only
Configure	Registry 26 - System use only	vcStatusDD R50Mode	(Accepts user-defined text), SUPPORTED, UNSUPPORT, UNDEFINED, SDINIFAIL	System use only
Configure	Registry 27 - System use only	vcStatusCardsIns	(Accepts user-defined text), NOINS	System use only

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

GUI Location	Label	Variable	Values	Description
Configure	Registry 28 - System use only	vcStatusPowerONDetect	(Accepts user-defined text), PASS, FAIL	System use only
Configure	Registry 29 - System use only	vcStatusSDTaskCheck	(Accepts user-defined text), text	System use only
Configure	Registry 3 - System use only	vcSrc3	(Accepts user-defined text), Channel1, Channel2, Channel3, Channel4	System use only.
Configure	Registry 30 - System use only	vcScopeModel	(Accepts user-defined text), text	System use only
Configure	Registry 31 - System use only	vcStatusTYPEA	(Accepts user-defined text), text	System use only
Configure	Registry 32 - System use only	vcStatusTYPEB	(Accepts user-defined text), text	System use only
Configure	Registry 33 - System use only	vcStatusTYPEC	(Accepts user-defined text), text	System use only
Configure	Registry 34 - System use only	vcStatusTYPED	(Accepts user-defined text), text	System use only
Configure	Registry 35 - System use only	vcOPTInstalled	(Accepts user-defined text), NRD	System use only
Configure	Registry 36 - System use only	vcTimeBasePosition	(Accepts user-defined text), 0, 1E-6, 2E-6, 5E-6, 10E-6	Time Base Position
Configure	Registry 37 - System use only	vcFirmwareRevision	(Accepts user-defined text), 00.00.0000	System use only
Configure	Registry 38 - System use only	vcNRDInstalled	(Accepts user-defined text), NONE	System use only
Configure	Registry 39 - System use only	vcVCTHysteresis	(Accepts user-defined text), 1E-3, 5E-3, 10E-3, 20E-3	Hysteresis Voltage Window of VCT on SDR tODLY Tests.

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

GUI Location	Label	Variable	Values	Description
Configure	Registry 4 - System use only	vcSrc4	(Accepts user-defined text), Channel1, Channel2, Channel3, Channel4	System use only.
Configure	Registry 40 - System use only	vcCardDummyReadWaitTime	00000001, 00000002, 00000003, 00000004, 00000005, 00000006, 00000007, 00000008, 00000009, 0000000A	Card Dummy Read Wait Time(Set in HEX as Seconds)
Configure	Registry 41 - System use only	vcCurrentProbeID	(Accepts user-defined text), E2697A	Current Probe ID
Configure	Registry 5 - System use only	vcSlotSet	(Accepts user-defined text), SLOT1, SLOT2	System use only.
Configure	Registry 6 - System use only	vcDriveSet	(Accepts user-defined text), DRIVE_A, DRIVE_B, DRIVE_C, DRIVE_D	System use only.
Configure	Registry 7 - System use only	vcCurrLimit	(Accepts user-defined text), 200MA, 400MA, 600MA, 800MA	System use only.
Configure	Registry 8 - System use only	vcSpeedModeSet	(Accepts user-defined text), DS, HS, SDR12, SDR25, SDR50, SDR104, DDR50	System use only.
Configure	Registry 9 - System use only	vcPLLSet	(Accepts user-defined text), PLL_DEFAULT, PLL_NONE	System use only.
Configure	Rise/Fall time Delay(tdRF) - DDR50 - tODLAY	vcRiseFallTimeDelay_DDR50_tODLAY_BOTPM	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of DDR50 mode for output delay compensation - DAT.(PM mode)
Configure	Rise/Fall time Delay(tdRF) - DDR50 - tODLAY - CMD	vcRiseFallTimeDelay_DDR50_tODLAY_CMD_OTRC	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of DDR50 mode for output delay compensation - CMD.(Reduced Connection Mode)
Configure	Rise/Fall time Delay(tdRF) - DDR50 - tODLAY - DAT	vcRiseFallTimeDelay_DDR50_tODLAY_DAT_OTRC	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of DDR50 mode for output delay compensation - DAT.(Reduced Connection Mode)

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

GUI Location	Label	Variable	Values	Description
Configure	Rise/Fall time Delay(tdRF) - DDR50 - tOH	vcRiseFallTimeDelay_DDR50_tOH_BOTRC	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of DDR50 mode for output hold time compensation.(Reduced Connection Mode)
Configure	Rise/Fall time Delay(tdRF) - Default mode	vcRiseFallTimeDelay_DS_BOTRC	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of default mode for output delay and output hold time compensation.(Reduced Connection Mode)
Configure	Rise/Fall time Delay(tdRF) - High speed mode - tODLAY	vcRiseFallTimeDelay_HS_tODLAY_BOTRC	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of high speed mode for output delay compensation.(Reduced Connection Mode)
Configure	Rise/Fall time Delay(tdRF) - High speed mode - tOH	vcRiseFallTimeDelay_HS_tOH_BOTRC	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of high speed mode for output hold time compensation.(Reduced Connection Mode)
Configure	Rise/Fall time Delay(tdRF) - SDR12 - tODLAY	vcRiseFallTimeDelay_SDR12_tODLAY_BOTRC	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of SDR12 mode for output delay compensation.(Reduced Connection Mode)
Configure	Rise/Fall time Delay(tdRF) - SDR12 - tOH	vcRiseFallTimeDelay_SDR12_tOH_BOTRC	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of SDR12 mode for output hold time compensation.(Reduced Connection Mode)
Configure	Rise/Fall time Delay(tdRF) - SDR25 - tODLAY	vcRiseFallTimeDelay_SDR25_tODLAY_BOTRC	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of SDR25 mode for output delay compensation.(Reduced Connection Mode)
Configure	Rise/Fall time Delay(tdRF) - SDR25 - tOH	vcRiseFallTimeDelay_SDR25_tOH_BOTRC	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of SDR25 mode for output hold time compensation.(Reduced Connection Mode)

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

GUI Location	Label	Variable	Values	Description
Configure	Rise/Fall time Delay(tdRF) - SDR50 - tODLAY	vcRiseFallTimeDelay_SDR50_tODLAY_BOTPM	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of SDR50 mode for output delay compensation.(PM mode)
Configure	Rise/Fall time Delay(tdRF) - SDR50 - tODLAY	vcRiseFallTimeDelay_SDR50_tODLAY_BOTRC	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of SDR50 mode for output delay compensation.(Reduced Connection Mode)
Configure	Rise/Fall time Delay(tdRF) - SDR50 - tOH	vcRiseFallTimeDelay_SDR50_tOH_BOTPM	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of SDR50 mode for output hold time compensation.(PM mode)
Configure	Rise/Fall time Delay(tdRF) - SDR50 - tOH	vcRiseFallTimeDelay_SDR50_tOH_BOTRC	(Accepts user-defined text), 0, 1E-9	Rise/Fall time Delay configuration of SDR50 mode for output hold time compensation.(Reduced Connection Mode)
Configure	SD Slot	vcSDSlot	SLOT1, SLOT2	SD Card Slot under test in TED Host Emulator
Configure	SMA_OUT Channel	vcSMA_OUT Channel	Channel1, Channel2, Channel3, Channel4	Trigger input channel connected to SMA_OUT in TED Host Emulator
Configure	Sampling Rate	vcSampling Rate	AUTO, 40E+9, 20E+9, 10E+9	Sampling Rate (Under the menu Setup->Acquisition)
Configure	Sampling Rate - Current Consumption	vcSampling RateCC	250E+3, 500E+3, 1E+6	Sampling Rate (Under the menu Setup->Acquisition)
Configure	Sampling Rate - Threshold Levels	vcSampling RateTHL	40E+9, 20E+9, 10E+9	Sampling Rate (Under the menu Setup->Acquisition)
Configure	Scaling Method	vcCCScalingMethod	(Accepts user-defined text), AUTO, 0.8	Scaling method configuration for the current consumption test(Current waveform)

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

GUI Location	Label	Variable	Values	Description
Configure	Stop Before Card Initialization	vcStopBeforeCardInitialization	Enable, Disable	This option enables popup message appear then stop before starting Card initialization. You can use this option to avoid InfiniiMax probe loading effect which may cause by errors related to SD_INIT, SD_WRITE or SD_READ.
Configure	Stop Before Measurement	vcStopBeforeMeasurement	Enable, Disable	This option enables popup message appear then stop before measurement. You can use this option to clarify or modify acquired waveform meet expected condition.
Configure	Supply Voltage - Current Consumption	vcVDDConfigCC	(Accepts user-defined text), 2.7, 3.3, 3.6	Supply Voltage configuration for Current Consumption Test
Configure	Supply Voltage, VDD (VOH Test)	vcVDD_VOH	08, 5D	Selection of VDD Supply Voltage for Output High Voltage, VOH Test.
Configure	Supply Voltage, VDD (VOL Test)	vcVDD_VOL	08, 5D	Selection of VDD Supply Voltage for Output Low Voltage, VOL Test.
Configure	TED Board Control	vcTEDBoardControl	Enable, Disable	Turn on/off TED board control for manual operation.
Configure	Test Pattern - Bus Output Timing - CMD	vcTestPattBOTCMD	FILE random.bin, INC, SHIFT1, SHIFTO, TOGGLE, TOGGLE2, DDR	Test Pattern for Bus Output Timing - CMD
Configure	Test Pattern - Bus Output Timing - DAT	vcTestPattBOTDAT	FILE random.bin, INC, SHIFT1, SHIFTO, TOGGLE, TOGGLE2, DDR	Test Pattern for Bus Output Timing - DAT

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

GUI Location	Label	Variable	Values	Description
Configure	Test Pattern - Current Consumption	vcTestPattCC	INC, SHIFT1, SHIFT0, TOGGLE, TOGGLE2, DDR	Test Pattern for Current Consumption tests except DDR50.
Configure	Test Pattern - Current Consumption - DDR50	vcTestPattCCDDR50	INC, SHIFT1, SHIFT0, TOGGLE, TOGGLE2, DDR	Test Pattern for Current Consumption test for DDR50.
Configure	Test Pattern - Threshold Levels - CMD	vcTestPattTHLCMD	FILE random.bin, INC, SHIFT1, SHIFT0, TOGGLE, TOGGLE2, DDR	Test Pattern for Threshold Levels - CMD
Configure	Test Pattern - Threshold Levels - DAT	vcTestPattTHLDAT	FILE random.bin, INC, SHIFT1, SHIFT0, TOGGLE, TOGGLE2, DDR	Test Pattern for Threshold Levels Tests - DAT
Configure	Trigger Delay	vcTriggerDelay	(Accepts user-defined text), 1, 5, 10, 15, 20	Number of bits to delay from TED Board trigger signal. This option might be useful to avoid getting anomaly waveform.
Configure	Trigger Delay for SDR104(PM Mode)	vcPMSDR104TriggerDelay	(Accepts user-defined text), 30, 50, 70, 90	Number of data edge to delay from TED Board trigger signal for SDR104 speed mode-tODW, tRtF tests. This config only applicable for MODE2 Trigger method. This option might be useful to avoid getting anomaly waveform.
Configure	Trigger Delay(PM Mode)	vcPMTriggerDelay	(Accepts user-defined text), 5, 25, 30, 35	Number of data edge to delay from TED Board trigger signal. This config only applicable for MODE2 Trigger method. This option might be useful to avoid getting anomaly waveform.

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

GUI Location	Label	Variable	Values	Description
Configure	Trigger Method	vcPMTriggerMethod	MODE1, MODE2	Trigger method configuration for the precision mode. MODE1: Identify the trigger by arming on DATA channel, counting a numbers of events and trigger on CLK channel. MODE2: Identify the trigger by arming on SMA1 channel, counting a numbers of events and trigger on CLK channel. MODE2 trigger method is useful to avoid getting anomaly waveform.
Configure	Trigger Method-Current Consumption	vcCCTriggerMethod	MODE1, MODE2	Trigger method configuration for the current consumption test. MODE1: DATA channel is set as trigger source. MODE2 : SMA1 channel is set as trigger source.
Configure	Trigger Threshold	vcTriggerThreshold	(Accepts user-defined text), 1	Trigger Threshold Voltage Level [V]
Configure	Trigger Timeout [s]	vcTriggerTimeout	(Accepts user-defined text), 0.5, 1, 3, 5	Trigger Timeout for Bus Output Timing Test
Configure	Upper Level(V)	UpperLevel	(Accepts user-defined text), 1.27	Specify the value of the upper threshold(V) used when the "MeasThreshold Mode" option is set to use "CustomLevel".
Configure	Upper Percent(%)	UpperPercent	(Accepts user-defined text), 80, 90	Specify the value of the upper threshold(%) used when the "MeasThreshold Mode" option is set to use "TopBaseRatio".
Configure	VDD	vcVDD	00, 08, 12, 1B, 24, 2E, 37, 41, 4A, 53, 5D, 66, 70, 79, 82, 8C, 95, 9F, A8, B1, BB, C4, CE, D7, E0, EA, F3, FD, FF	Selection of VDD supply voltage
Configure	VDD Channel	vcVDDChannel	Channel1, Channel2, Channel3, Channel4	VDD Channel
Configure	VDD Set Enable	vcVDDSetEnable	ON, OFF	Disable/Enable VDD configuration against the default configuration as VDD - 2.7V (Default configuration is used when select OFF.)
Configure	VIH - 1.8V	vcVIH18	00, 08, 12, 1B, 24, 2E, 37, 41, 4A, 53, 5D, 66, 70, 79, 82, 8C, 95, 9F, A8, B1, BB, C4, CE, D7, E0, EA, F3, FD, FF	VIH setting for Vdd=1.8V operation mode.

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

GUI Location	Label	Variable	Values	Description
Configure	VIH - 3.3V	vcVIH33	00, 08, 12, 1B, 24, 2E, 37, 41, 4A, 53, 5D, 66, 70, 79, 82, 8C, 95, 9F, A8, B1, BB, C4, CE, D7, E0, EA, F3, FD, FF	VIH setting for Vdd=3.3V operation mode.
Configure	VIH Set Enable	vcVIHSetEnable	ON, OFF	Disable/Enable VIH configuration against the default configuration as VIH - 3.3V and VIH - 1.8V (Default configuration is used when select OFF.)
Configure	Vertical Autoscale Ratio	vcVerticalAutoscaleRatio	0.9, 0.8, 0.7	This option allows user to set vertical autoscale ratio against Vp-p.
Configure	Wait Time - Current Consumption [s]	vcWaitTimeCC	(Accepts user-defined text), 0, 1, 2, 5, 10	Wait Time after issuing Card Read/Write Transaction on Current Consumption Tests.
Configure	Wait Time - Bus Output Timing [s]	vcWaitTimeBOT	0, 1000, 2000, 5000, 10000	Wait Time after issuing Card Read/Write Transaction on Bus Output Timing Tests.
Run Tests	Event	RunEvent	(None), Fail, Margin < N, Pass	Names of events that can be used with the StoreMode=Event or RunUntil RunEventAction options
Run Tests	RunEvent=Margin < N: Minimum required margin %	RunEvent_Margin < N_MinPercentage	Any integer in range: 0 <= value <= 100	Specify N using the 'Minimum required margin %' control.
Set Up	CMD	LaneCMD	0.0, 1.0	Check if CMD is supported. Check if CMD is supported.
Set Up	Connection Type	Connection Type	Single-Ended Connection, Differential Connection	Define the connection type for tests. Define the connection type for tests.
Set Up	DAT0	LaneDAT0	0.0, 1.0	Check if DAT0 is supported. Check if DAT0 is supported.
Set Up	DAT1	LaneDAT1	0.0, 1.0	Check if DAT1 is supported. Check if DAT1 is supported.
Set Up	DAT2	LaneDAT2	0.0, 1.0	Check if DAT2 is supported. Check if DAT2 is supported.
Set Up	DAT3	LaneDAT3	0.0, 1.0	Check if DAT3 is supported. Check if DAT3 is supported.

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

GUI Location	Label	Variable	Values	Description
Set Up	DDR50 Speed Mode	DDR50SpeedMode	0.0, 1.0	Check to allow DDR50 speed mode. Check to allow DDR50 speed mode
Set Up	Default Speed Mode	DefaultSpeedMode	0.0, 1.0	Check to allow default speed mode. Check to allow default speed mode
Set Up	High Speed Mode	HighSpeedMode	0.0, 1.0	Check to allow high speed mode. Check to allow high speed mode
Set Up	SDR104 Speed Mode	SDR104SpeedMode	0.0, 1.0	Check to allow SDR104 speed mode. Check to allow SDR104 speed mode
Set Up	SDR12 Speed Mode	SDR12SpeedMode	0.0, 1.0	Check to allow SDR12 speed mode. Check to allow SDR12 speed mode
Set Up	SDR25 Speed Mode	SDR25SpeedMode	0.0, 1.0	Check to allow SDR25 speed mode. Check to allow SDR25 speed mode
Set Up	SDR50 Speed Mode	SDR50SpeedMode	0.0, 1.0	Check to allow SDR50 speed mode. Check to allow SDR50 speed mode

## 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
Current Consumption Read - DDR50	1814	TestID 6-2-5 (Physical Test Specification for Card Version 3.00)
Current Consumption Read - Default	1802	TestID 6-1-4 (Physical Test Specification for Card Version 3.00)
Current Consumption Read - High-Speed Mode	1804	TestID 6-1-4 (Physical Test Specification for Card Version 3.00)
Current Consumption Read - SDR104	1812	TestID 6-2-5 (Physical Test Specification for Card Version 3.00)
Current Consumption Read - SDR12	1806	TestID 6-2-5 (Physical Test Specification for Card Version 3.00)
Current Consumption Read - SDR25	1808	TestID 6-2-5 (Physical Test Specification for Card Version 3.00)
Current Consumption Read - SDR50	1810	TestID 6-2-5 (Physical Test Specification for Card Version 3.00)
Current Consumption Write - DDR50	1813	TestID 6-2-5 (Physical Test Specification for Card Version 3.00)
Current Consumption Write - Default	1801	TestID 6-1-4 (Physical Test Specification for Card Version 3.00)
Current Consumption Write - High-Speed Mode	1803	TestID 6-1-4 (Physical Test Specification for Card Version 3.00)
Current Consumption Write - SDR104	1811	TestID 6-2-5 (Physical Test Specification for Card Version 3.00)
Current Consumption Write - SDR12	1805	TestID 6-2-5 (Physical Test Specification for Card Version 3.00)
Current Consumption Write - SDR25	1807	TestID 6-2-5 (Physical Test Specification for Card Version 3.00)
Current Consumption Write - SDR50	1809	TestID 6-2-5 (Physical Test Specification for Card Version 3.00)
DDR50 - Output High Voltage, VOH - CMD	2413	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
DDR50 - Output High Voltage, VOH - DAT0	2013	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
DDR50 - Output High Voltage, VOH - DAT1	2113	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
DDR50 - Output High Voltage, VOH - DAT2	2213	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
DDR50 - Output High Voltage, VOH - DAT3	2313	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
DDR50 - Output Low Voltage, VOL - CMD	2414	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
DDR50 - Output Low Voltage, VOL - DAT0	2014	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
DDR50 - Output Low Voltage, VOL - DAT1	2114	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
DDR50 - Output Low Voltage, VOL - DAT2	2214	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
DDR50 - Output Low Voltage, VOL - DAT3	2314	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY - CMD	1421	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MAX - DAT0	1021	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MAX - DAT0 (Precision Mode)	1701	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MAX - DAT1	1121	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MAX - DAT1 (Precision Mode)	1711	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MAX - DAT2	1221	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MAX - DAT2 (Precision Mode)	1721	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MAX - DAT3	1321	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MAX - DAT3 (Precision Mode)	1731	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MIN - DAT0	1022	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MIN - DAT0 (Precision Mode)	1702	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MIN - DAT1	1122	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
DDR50 - tODLAY2x MIN - DAT1 (Precision Mode)	1712	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MIN - DAT2	1222	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MIN - DAT2 (Precision Mode)	1722	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MIN - DAT3	1322	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tODLAY2x MIN - DAT3 (Precision Mode)	1732	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
DDR50 - tOH - CMD	1422	TestID 6-2-14 (Physical Test Specification for Card Version 3.00)
Default - Output High Voltage, VOH - CMD	2401	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
Default - Output High Voltage, VOH - DAT0	2001	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
Default - Output High Voltage, VOH - DAT1	2101	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
Default - Output High Voltage, VOH - DAT2	2201	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
Default - Output High Voltage, VOH - DAT3	2301	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
Default - Output Low Voltage, VOL - CMD	2402	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
Default - Output Low Voltage, VOL - DAT0	2002	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
Default - Output Low Voltage, VOL - DAT1	2102	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
Default - Output Low Voltage, VOL - DAT2	2202	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
Default - Output Low Voltage, VOL - DAT3	2302	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
Default - tODLAY MAX - CMD	1401	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
Default - tODLAY MAX - DAT0	1001	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
Default - tODLAY MAX - DAT1	1101	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
Default - tODLAY MAX - DAT2	1201	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
Default - tODLAY MAX - DAT3	1301	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
Default - tODLAY MIN - CMD	1402	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
Default - tODLAY MIN - DAT0	1002	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
Default - tODLAY MIN - DAT1	1102	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
Default - tODLAY MIN - DAT2	1202	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
Default - tODLAY MIN - DAT3	1302	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - Output High Voltage, VOH - CMD	2403	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - Output High Voltage, VOH - DAT0	2003	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - Output High Voltage, VOH - DAT1	2103	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - Output High Voltage, VOH - DAT2	2203	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - Output High Voltage, VOH - DAT3	2303	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - Output Low Voltage, VOL - CMD	2404	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - Output Low Voltage, VOL - DAT0	2004	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - Output Low Voltage, VOL - DAT1	2104	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - Output Low Voltage, VOL - DAT2	2204	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - Output Low Voltage, VOL - DAT3	2304	TestID 6-1-1 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - tODLAY - CMD	1403	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - tODLAY - DAT0	1003	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
High-Speed Mode - tODLAY - DAT1	1103	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - tODLAY - DAT2	1203	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - tODLAY - DAT3	1303	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - tOH - CMD	1404	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - tOH - DAT0	1004	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - tOH - DAT1	1104	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - tOH - DAT2	1204	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
High-Speed Mode - tOH - DAT3	1304	TestID 6-1-6 (Physical Test Specification for Card Version 3.00)
SDR104 - Fall Time - CMD	1418	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Fall Time - DAT0	1018	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Fall Time - DAT0 (Precision Mode)	1604	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Fall Time - DAT1	1118	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Fall Time - DAT1 (Precision Mode)	1614	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Fall Time - DAT2	1218	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Fall Time - DAT2 (Precision Mode)	1624	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Fall Time - DAT3	1318	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Fall Time - DAT3 (Precision Mode)	1634	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Output High Voltage, VOH - CMD	2411	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR104 - Output High Voltage, VOH - DAT0	2011	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
SDR104 - Output High Voltage, VOH - DAT1	2111	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR104 - Output High Voltage, VOH - DAT2	2211	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR104 - Output High Voltage, VOH - DAT3	2311	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR104 - Output Low Voltage, VOL - CMD	2412	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR104 - Output Low Voltage, VOL - DAT0	2012	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR104 - Output Low Voltage, VOL - DAT1	2112	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR104 - Output Low Voltage, VOL - DAT2	2212	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR104 - Output Low Voltage, VOL - DAT3	2312	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise Time - CMD	1417	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise Time - DAT0	1017	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise Time - DAT0 (Precision Mode)	1603	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise Time - DAT1	1117	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise Time - DAT1 (Precision Mode)	1613	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise Time - DAT2	1217	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise Time - DAT2 (Precision Mode)	1623	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise Time - DAT3	1317	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise Time - DAT3 (Precision Mode)	1633	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Mismatch - CMD	1419	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Mismatch - DAT0	1019	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
SDR104 - Rise/Fall Time Mismatch - DAT0 (Precision Mode)	1605	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Mismatch - DAT1	1119	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Mismatch - DAT1 (Precision Mode)	1615	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Mismatch - DAT2	1219	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Mismatch - DAT2 (Precision Mode)	1625	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Mismatch - DAT3	1319	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Mismatch - DAT3 (Precision Mode)	1635	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Relation - CMD	1420	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Relation - DAT0	1020	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Relation - DAT0 (Precision Mode)	1606	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Relation - DAT1	1120	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Relation - DAT1 (Precision Mode)	1616	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Relation - DAT2	1220	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Relation - DAT2 (Precision Mode)	1626	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - Rise/Fall Time Relation - DAT3	1320	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
SDR104 - Rise/Fall Time Relation - DAT3 (Precision Mode)	1636	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR104 - tODW - CMD	1416	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tODW - DAT0	1016	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tODW - DAT0 (Precision Mode)	1601	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tODW - DAT1	1116	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tODW - DAT1 (Precision Mode)	1611	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tODW - DAT2	1216	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tODW - DAT2 (Precision Mode)	1621	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tODW - DAT3	1316	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tODW - DAT3 (Precision Mode)	1631	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tOP - CMD	1415	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tOP - DAT0	1015	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tOP - DAT0 (Precision Mode)	1602	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tOP - DAT1	1115	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tOP - DAT1 (Precision Mode)	1612	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tOP - DAT2	1215	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tOP - DAT2 (Precision Mode)	1622	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR104 - tOP - DAT3	1315	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
SDR104 - tOP - DAT3 (Precision Mode)	1632	TestID 6-2-12 (Physical Test Specification for Card Version 3.00)
SDR12 - Output High Voltage, VOH - CMD	2405	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR12 - Output High Voltage, VOH - DAT0	2005	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR12 - Output High Voltage, VOH - DAT1	2105	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR12 - Output High Voltage, VOH - DAT2	2205	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR12 - Output High Voltage, VOH - DAT3	2305	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR12 - Output Low Voltage, VOL - CMD	2406	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR12 - Output Low Voltage, VOL - DAT0	2006	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR12 - Output Low Voltage, VOL - DAT1	2106	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR12 - Output Low Voltage, VOL - DAT2	2206	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR12 - Output Low Voltage, VOL - DAT3	2306	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR12 - tODLAY - CMD	1405	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR12 - tODLAY - DAT0	1005	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR12 - tODLAY - DAT1	1105	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR12 - tODLAY - DAT2	1205	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR12 - tODLAY - DAT3	1305	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR12 - tOH - CMD	1406	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR12 - tOH - DAT0	1006	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR12 - tOH - DAT1	1106	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
SDR12 - tOH - DAT2	1206	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR12 - tOH - DAT3	1306	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR25 - Output High Voltage, VOH - CMD	2407	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR25 - Output High Voltage, VOH - DAT0	2007	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR25 - Output High Voltage, VOH - DAT1	2107	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR25 - Output High Voltage, VOH - DAT2	2207	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR25 - Output High Voltage, VOH - DAT3	2307	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR25 - Output Low Voltage, VOL - CMD	2408	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR25 - Output Low Voltage, VOL - DAT0	2008	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR25 - Output Low Voltage, VOL - DAT1	2108	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR25 - Output Low Voltage, VOL - DAT2	2208	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR25 - Output Low Voltage, VOL - DAT3	2308	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR25 - tODLAY - CMD	1407	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR25 - tODLAY - DAT0	1007	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR25 - tODLAY - DAT1	1107	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR25 - tODLAY - DAT2	1207	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR25 - tODLAY - DAT3	1307	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR25 - tOH - CMD	1408	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR25 - tOH - DAT0	1008	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
SDR25 - tOH - DAT1	1108	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR25 - tOH - DAT2	1208	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR25 - tOH - DAT3	1308	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - Fall Time - CMD	1412	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Fall Time - DAT0	1012	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Fall Time - DAT0 (Precision Mode)	1504	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Fall Time - DAT1	1112	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Fall Time - DAT1 (Precision Mode)	1514	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Fall Time - DAT2	1212	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Fall Time - DAT2 (Precision Mode)	1524	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Fall Time - DAT3	1312	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Fall Time - DAT3 (Precision Mode)	1534	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Output High Voltage, VOH - CMD	2409	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR50 - Output High Voltage, VOH - DAT0	2009	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR50 - Output High Voltage, VOH - DAT1	2109	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR50 - Output High Voltage, VOH - DAT2	2209	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR50 - Output High Voltage, VOH - DAT3	2309	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR50 - Output Low Voltage, VOL - CMD	2410	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR50 - Output Low Voltage, VOL - DAT0	2010	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
SDR50 - Output Low Voltage, VOL - DAT1	2110	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR50 - Output Low Voltage, VOL - DAT2	2210	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR50 - Output Low Voltage, VOL - DAT3	2310	TestID 6-2-1 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise Time - CMD	1411	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise Time - DAT0	1011	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise Time - DAT0 (Precision Mode)	1503	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise Time - DAT1	1111	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise Time - DAT1 (Precision Mode)	1513	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise Time - DAT2	1211	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise Time - DAT2 (Precision Mode)	1523	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise Time - DAT3	1311	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise Time - DAT3 (Precision Mode)	1533	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Mismatch - CMD	1413	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Mismatch - DAT0	1013	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Mismatch - DAT0 (Precision Mode)	1505	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Mismatch - DAT1	1113	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Mismatch - DAT1 (Precision Mode)	1515	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Mismatch - DAT2	1213	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
SDR50 - Rise/Fall Time Mismatch - DAT2 (Precision Mode)	1525	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Mismatch - DAT3	1313	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Mismatch - DAT3 (Precision Mode)	1535	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Relation - CMD	1414	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Relation - DAT0	1014	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Relation - DAT0 (Precision Mode)	1506	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Relation - DAT1	1114	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Relation - DAT1 (Precision Mode)	1516	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Relation - DAT2	1214	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Relation - DAT2 (Precision Mode)	1526	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Relation - DAT3	1314	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - Rise/Fall Time Relation - DAT3 (Precision Mode)	1536	TestID 6-2-8 (Physical Test Specification for Card Version 3.00)
SDR50 - tODLAY - CMD	1409	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tODLAY - DAT0	1009	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tODLAY - DAT0 (Precision Mode)	1501	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tODLAY - DAT1	1109	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)

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

Name	TestID	Description
SDR50 - tODLAY - DAT1 (Precision Mode)	1511	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tODLAY - DAT2	1209	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tODLAY - DAT2 (Precision Mode)	1521	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tODLAY - DAT3	1309	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tODLAY - DAT3 (Precision Mode)	1531	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tOH - CMD	1410	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tOH - DAT0	1010	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tOH - DAT0 (Precision Mode)	1502	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tOH - DAT1	1110	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tOH - DAT1 (Precision Mode)	1512	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tOH - DAT2	1210	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tOH - DAT2 (Precision Mode)	1522	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tOH - DAT3	1310	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
SDR50 - tOH - DAT3 (Precision Mode)	1532	TestID 6-2-11 (Physical Test Specification for Card Version 3.00)
TED GUI Launch	1901	TED GUI Launch

### 3 Test Names and IDs

## 4 Instruments

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

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

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

**Table 5** Example Instrument Information

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

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

ARSL syntax (replace [description] with actual parameter)

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

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

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

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

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

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

Here are the actual instrument names used by this application:

**NOTE**

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

---

**Table 6** Instrument Names

Instrument Name	Description
scope	Primary oscilloscope

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