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TekExpress® M-PHY
Transmitter Automated Solution

Application Help

077-0683-04

TekExpress® M-PHY
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Application Help

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- In North America, call 1-800-833-9200.
- Worldwide, visit to *www.tek.com* find contacts in your area.

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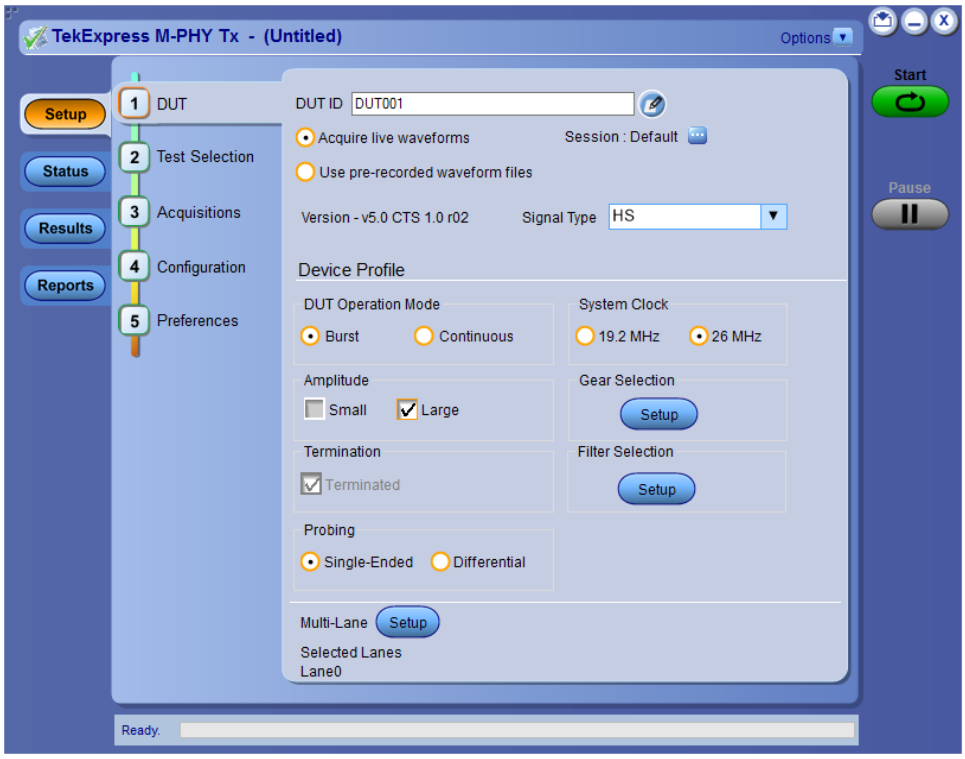
Welcome

The Tektronix TekExpress M-PHY TX Automated Test software for MPHY40 and MPHY50 runs on Tektronix real-time oscilloscopes that are based on Windows 10 computer operating systems. MPHY50 and MPHY40 Automated solution provides support for 100% of tests as per Spec 5.0 & CTS 1.0 at revision 0.2 using TekExpress 5.0 framework, a state-of-the-art tool designed for automation. This solution is designed for engineers doing verification and validation as per the CTS for HS – Gear1, Gear2, Gear3, Gear4, and Gear5 for MPHY50 and HS – Gear1, Gear2, Gear3, and Gear4 for MPHY40. It also supports 'UFS4.0 Reference Clock' measurements for both MPHY50 and MPHY40 products.



Key features of M-PHY Transmitter testing include:

- 100% Test Coverage for all modes and data rates for HS – Gear1, Gear2, Gear3, Gear4, and Gear5 for MPHY50 and HS – Gear1, Gear2, Gear3 and Gear4 for MPHY40.
- Application covers PWM and SYS modes. Supports 'UFS4.0 Reference Clock' measurements for both MPHY50 and MPHY40 products.
- M-PHY TX Automated User-defined mode allows modifying every parameter of different HS, UFS4.0 Ref Clock, PWM, and SYS tests, for comprehensive debug analysis and characterization.
- Automated testing reduces the complexity of executing transmitter tests and enables you to test devices faster.
- Performance improvement in HS measurement execution compared to previous release.
- Selection of different Gears and Sub gears of HS, PWM, and SYS signals, large/small amplitudes, impedance terminated/un-terminated.
- Full Contour Extrapolated eye diagram for BER analysis in steps at E-6 to E-12.
- HS Gear 1 Mask Dynamic Movement to provide optimum eye opening as per specification.
- Accumulation of 3 M UIs in a single acquisition reducing test times for analysis.
- Ability to embed/de-embed using filter files to enable mid bus probing.
- Support for tri mode probes for single ended and differential signaling probing using Industry lowest noise probe P76xx series.
- Manual mode testing for multi lanes.

- Highly optimized setup performs Power Spectral Density (PSD) tests using oscilloscope-integrated algorithms uniquely and does not require an external spectral analyzer or extra hardware to perform PSD measurements.
- Single printable report for all tests across different combinations provides pass/fail summary table, along with margin details, optional waveform captures, and eye diagrams. Available in (.mht and pdf).

Getting help and support

Product documents

Use the product documents for more information on the application functions, understand the theory of operation, how to remotely program or operate the application, and do other tasks.

Table 1: TekExpress Application documents

To learn about	Use this document
How to use the application How to remotely control the instrument	TekExpress M-PHY Tx Help PDF version of this document can be downloaded from *www.tek.com/downloads* Compiled HTML (CHM) version is integrated with the application. Press **F1** key from the keyboard to start the help. Tektronix Part Number: 077-xxxx-xx

Conventions

This application help uses the following conventions:

- The term "Application," and "Software" refers to the TekExpress M-PHY Tx application.
- The term “DUT” is an abbreviation for Device Under Test.
- The term “select” is a generic term that applies to the two methods of choosing a screen item (button control, list item): using a mouse or using the touch screen.
- A **Note** identifies important information.

Table 2: Icons used in the help

Icon	Description
	This icon identifies important information
	This icon identifies conditions or practices that could result in loss of data.
	This icon identifies additional information that will help you use the application more efficiently.

Technical support

Tektronix values your feedback on our products. To help us serve you better, please send us your suggestions, ideas, or comments on your application or oscilloscope. Contact Tektronix through mail, telephone, or the Web site. See *Contacting Tektronix* at the front of this document for contact information.

When you contact Tektronix Technical Support, please include the following information (be as specific as possible):

General information

- All instrument model numbers
- Hardware options, if any
- Modules used
- Your name, company, mailing address, phone number, FAX number
- Please indicate if you would like to be contacted by Tektronix about your suggestion or comments.

Application specific information

- Software version number
- Description of the problem such that technical support can duplicate the problem
- If possible, save the setup files for all the instruments used and the application
- If possible, save the TekExpress setup files, log.xml, *.TekX (session files and folders), and status messages text file

Getting started

Hardware requirements

Supported oscilloscopes and probes

The TekExpress M-PHY TX application runs HS, PWM, and SYS tests on the following Tektronix oscilloscope and probe configurations:

Table 3: TekExpress M-PHY TX [MPHY50 and MPHY40] – Supported Oscilloscopes

Model	Description
DPO/MSO70000/DX/SX	DPO (Digital Phosphor Oscilloscope), or MSO (Mixed Signal Oscilloscope) Oscilloscopes with Option DJA and Option DJAN (for BER Contours). Option SDLA64 is mandatory for Gear4 and Gear5 Differential AC Eye measurements. The following bandwidths are needed: • 6 GHz and above is recommended for HS-Gear1 • 12.5 GHz and above is recommended for up to HS-Gear2 • 23 GHz and above is recommended for up to HS-Gear3 • 25 GHz and above is recommended for up to HS-Gear4 • 33 GHz and above is recommended for up to HS-Gear5

Table 4: Recommended probes for TekExpress M-PHY TX

Gear type	Maximum Data rate	Fixtured /RF connection
HS-Gear1[1]	1.456 Gb/s	P76xx
HS-Gear2	2.912 Gb/s	P76xx
HS-Gear3	5.824 Gb/s	P76xx
HS-Gear4	11.648 Gb/s	P76xx
HS-Gear5	23.296 Gb/s	P76xx
PWM Gears (G0 to G7)[2]	10 Kbps to 576 Mbps	P7313
SYS Gears	• 26 MHz • 38.4 MHz • 52 MHz	P7313

See also

Minimum system requirements

Minimum system requirements

The following table shows the minimum system requirements for an oscilloscope to run TekExpress.

[1] RT (Resistively Terminated).
[2] NT (Not Terminated).

Table 5: System requirements

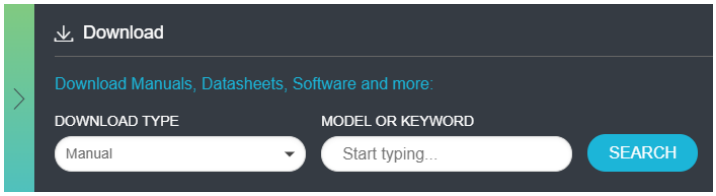
Component	Requirement
Oscilloscope	*Supported oscilloscopes and probes*
Processor	Same as the oscilloscope
Operating System	Same as the oscilloscope: • Windows 10 64-bit
Memory	Same as the oscilloscope
Hard Disk	Same as the oscilloscope.
Display	Same as the oscilloscope [3]
Firmware	TekScope v10.12 or later
Software	• SDLA v3.0.13.12 or later • DPOJET v10.4.0 or later • Microsoft .NET 4.0 Framework • Microsoft Internet Explorer 7.0 SP1 or later • Adobe Reader 7.0 or equivalent software for viewing portable document format (PDF) files
Probes	*Supported oscilloscopes and probes*

Software requirements

Downloading and installing the software

Complete the following steps to download and install the latest TekExpress M-PHY Tx application.

1. Go to *www.tek.com*.
2. Click **Downloads**. In the Downloads menu, select DOWNLOAD TYPE as Software and enter the application name in the MODEL OR KEYWORD field and click **SEARCH**.



3. Select the latest version of software and follow the instructions to download the software. Copy the executable file into the oscilloscope.
4. Double-click the executable and follow the on-screen instructions.

   The software is installed at `C:\Program Files\Tektronix\TekExpress\TekExpress MIPI_MPHY_TX`.
5. Select **Application** > **TekExpress M-PHY Tx** from the Oscilloscope menu, to open the application.

Activate the license

Activate the license using the **Option Installation** wizard in the TekScope application:

[3] If TekExpress is running on an instrument having a video resolution lower than 800x600 (for example, sampling oscilloscope), it is recommended that you connect a secondary monitor. The secondary monitor must be configured and active before launching the application.

1. In the **TekScope** application menu bar, click **Utilities** > **Option Installation**. The TekScope Option Installation wizard opens.
2. Push the **F1** key on the oscilloscope keyboard to open the Option Installation help topic.
3. Follow the directions in the help topic to activate the license.

View software version and license key details

To view version information of the application, click **Options > About TekExpress**.

Setting up the test environment

About setting up tests

Set up tests using the tabs in the Setup panel. Settings in the DUT tab use a top-down, left-to-right logic flow, so that any parameter that affects or acts as a filter for other parameters appears either to the top of or to the left of the affected parameters.

Tests are saved when you save a test setup. To avoid overwriting test results, remember to assign a unique name to the test either before running it or immediately after.

All listed tests are required for compliance testing.

See also

About test setups

Before you click Start

About running tests

Search instruments connected to the application

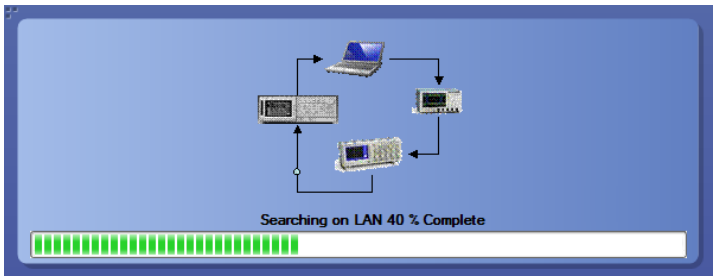
Use the TekExpress Instrument Control Settings dialog box to search the instruments (resources) connected to the application. The application uses TekVISA to discover the connected instruments.

Note: The instruments required for the test setup must be connected and detected by the application, before running the test.

To refresh the list of connected instruments:

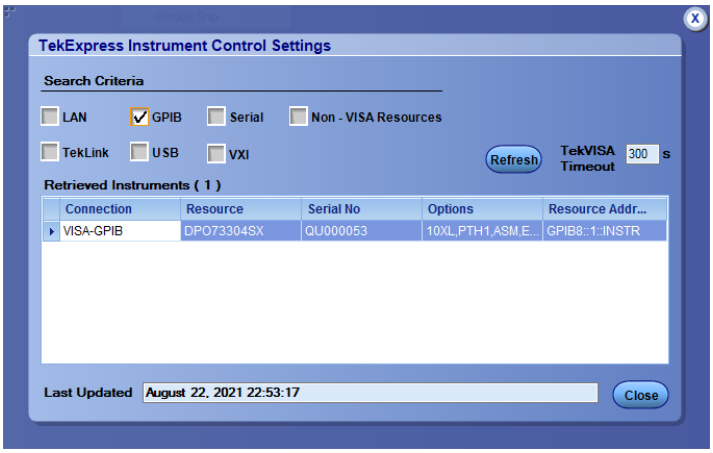
1. Select **Options > Instrument Control Settings**.
2. In the **Search Criteria** section of the **Instrument Control Settings** dialog box, select the connection types of the instruments to search. Instrument search is based on the VISA layer, but different connections determine the resource type, such as LAN, GPIB, and USB. For example, if you choose LAN, the search will include all the instruments supported by the TekExpress that are communicating over the LAN.
3. Click **Refresh**. The TekExpress application searches for the connected instruments.

   Search status of the instruments connected to LAN

4. When the search is complete, a dialog box lists the instrument-related details based on the search criteria. For example, for the Search Criteria as GPIB, the application displays all the GPIB instruments connected to the application.

   TekExpress Instrument Control Settings window.



The details of the instruments are displayed in the Retrieved Instruments table. The time and date of instrument refresh is displayed in the Last Updated field.

Deskew

If skew is present between positive and negative channels, then the channels need to be deskewed before being used for waveform measurements. TekExpress M-PHY TX provides support for channel deskew using the following method:

1. Determine what the skew is for each channel.
2. From the TekScope menu, select **Vertical** > **Deskew**.
3. In the Deskew/Attenuation window, click the channel (1 – 4) button for the first channel to be deskewed.
4. Click in the Ch(x) Deskew Time entry field and enter the skew. The skew can be +ve or –ve.
5. Click the channel button for the next channel and repeat step 4.
6. After entering the skew for all the channels that require it, from the Options menu in TekExpress M-PHY TX, select Deskew.
7. In the Deskew and Attenuation dialog box, select the desired level:
   - Less than 100 mV signal amplitude: Select this if the signal amplitude is such that the oscilloscope's vertical setting is less than 100 mV/division.
   - 100 mV or greater signal amplitude: Select this if the signal amplitude is such that the oscilloscope's vertical setting is greater than 100 mV/division.

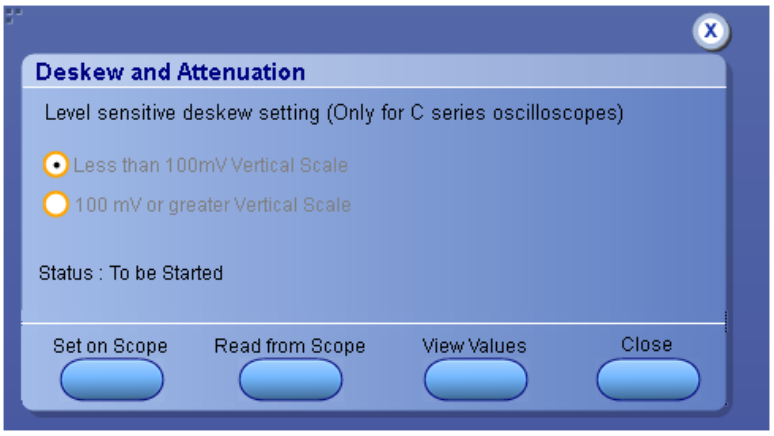
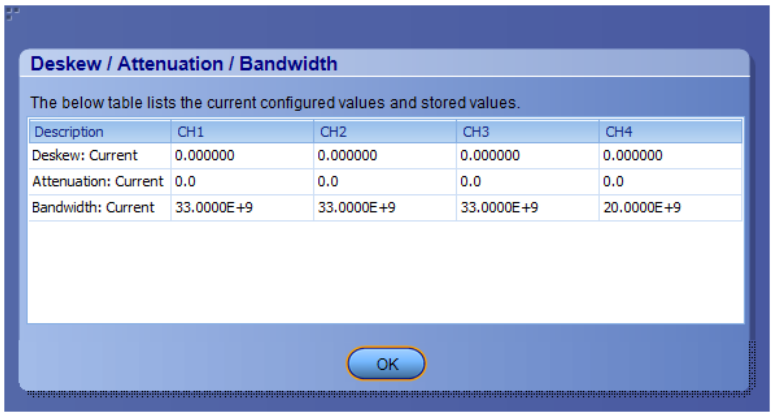


Figure 1: Deskew

8. Click **Set on Scope** to set the stored deskew and attenuation values on oscilloscope.

9. Click **Read from Scope** to read the deskew and attenuation values from the oscilloscope.
10. Click **View values** to view the deskew, attenuation, and bandwidth values.
11. When the status in the dialog box indicates the deskew is finished, click **Close**.

Each input channel has its own deskew settings. Deskew compensates individual channels for probes or cables of different lengths. The instrument applies the delay values after each completed acquisition. The deskew values are saved as part of the instrument setup. The deskew values for the selected channel are retained until you change the probe, you restore a saved setup, or you recall the factory setup.



Description	CH1	CH2	CH3	CH4
Deskew: Current	0.000000	0.000000	0.000000	0.000000
Attenuation: Current	0.0	0.0	0.0	0.0
Bandwidth: Current	33.0000E+9	33.0000E+9	33.0000E+9	20.0000E+9

Figure 2: Deskew-View values

Note: If you perform the de-embed settings, then performing the Deskew and Attenuation settings are not required.

Running tests

After selecting and configuring the test, *review the pre-run checklist* and then click **Start** to run the tests. While tests are running, you cannot access the Setup or Reports panels. To monitor the test progress, switch back and forth between the Status panel and the Results panel.

The application displays a report when the tests are complete. While the tests are running, other applications may display windows in the background. The TekScope application takes precedence over other applications, but you can switch to other applications by using the **Alt** + **Tab** key combination. To keep the TekExpress M-PHY TX application on top, select **Keep On Top** from the M-PHY TX Options menu.

See also

Configure test parameters

About setting up tests

Before you click Start

Before you click start

Before you run tests for the first time, do the following:

1. Understand where your test files are stored on the instrument.

   After you install and launch TekExpress M-PHY TX, it creates the following folders on the oscilloscope:

   - `\Program Files\Tektronix\TekExpress\` **TekExpress MIPI_MPHY_TX**

     Note: The Program Files folder for Windows 10 is for 64-bit.

   - `\My Documents\My TekExpress\` **M-PHY TX**

- `\My Documents\My TekExpress\M-PHY TX\` **Untitled Session**

  Every time you launch TekExpress M-PHY TX, an `Untitled Session` folder is created in the `M-PHY TX` folder. The `Untitled Session` folder is automatically deleted when you exit the `M-PHY TX` application (you are prompted to save the session before exiting if it has not already been saved or if there are unsaved changes).

  CAUTION: Do not directly edit or modify any of the session files or folders because this may result in loss of data or corrupted session files. Each session has multiple files associated with it. When you save a session, the application creates a .TekX file, and a folder named for the session that contains associated files, on the oscilloscope X: drive.

2. Review the *pre-run checklist* before you run a test.

See also

View test-related files

Application directories and file types

File name extensions

Pre-test checklist

Do the following before you click Start to run a test. If this is the first time you are running a test for a setup, refer to the information in *Before you click Start*.

On the oscilloscope:

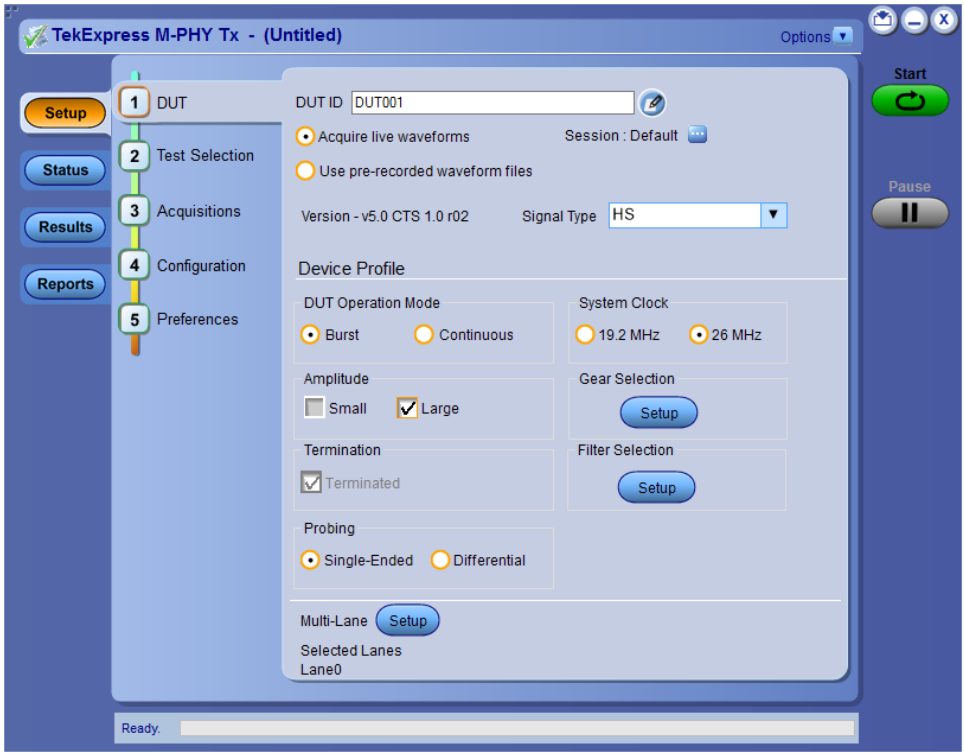
- Make sure that all the required instruments are properly warmed up (approximately 20 minutes).
- Perform Signal Path Compensation (SPC).
  1. On the oscilloscope main menu, select the **Utilities** menu.
  2. Select **Instrument Calibration** and run the SPC utility.
- Perform deskew on any cables.

In the M-PHY TX application:

1. Verify that the application is able to find the instrument. If it cannot, *perform a search for connected instruments*.
   a. Select **Setup > Test Selection**. Select any test and then click **Configure**.
   b. In the Configuration section, click **Global Settings**.
   c. In the Instruments Detected section, click the drop-down arrow to the right of the listed instruments and make sure that the instrument is listed.
2. Run the Deskew utility (**Options > Deskew**).

Starting the application

To start the TekExpress M-PHY Tx, select from the oscilloscope menu bar.**Applications > TekExpress M-PHY Tx**



During start, a "My TekExpress" folder is created in the Documents folder of the current user and gets mapped to "X" drive. When the application is closed properly, the "X" drive gets unmapped. Session files are then stored inside the `X:\M-PHY Tx` folder. If this file is not found, the application runs an instrument discovery program to detect connected instruments before starting TekExpress M-PHY Tx.

To keep the TekExpress M-PHY Tx application on top of any application, select **Keep On Top** from the *options menu*. If the application goes behind the oscilloscope application, select **Applications >TekExpress M-PHY Tx** to bring the application to the front.

Operating basics

Run the application

To run the M-PHY TX application, do either of the following:

- Select **Analyze > TekExpress M-PHY TX** from the TekScope menu.
- Click any saved M-PHY session file.

When you open the application after installation, the application checks for a file called `Resources.xml` located in the `My TekExpress` folder. If this file is not found, instrument discovery is performed before launching M-PHY TX. The `Resources.xml` file contains information regarding instruments that are available on your network.

If the application license was not installed using the TekScope menu **Utilities > Option Installation** selection, you can open and demo the application 10 times. Each time you open the application without supplying a valid license key, one of the free trials is used.

See also

Active the license

Close the application

Use the following method to exit the application:

Note: Using other methods to exit the application results in abnormal termination of the application.

1. Click  on the application title bar.
2. Do one of the following:
   - If you have an unsaved session or test setup open, you are asked to save it before exiting. To save it, click **Yes**. Otherwise click **No**. The application closes.
   - A message box appears asking if you really want to exit TekExpress. To exit, click **Yes**.

Application controls

This section describes the application controls with functionality and its details.

Table 6: Application control description

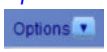
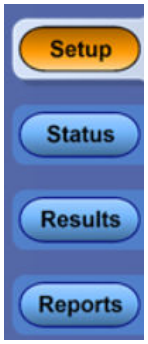
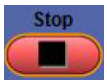
Item	Description
Options menu 	Menu to display global application controls.
Test panel 	Controls that open tabs for configuring test settings and options.
Start / Stop button  	Use the **Start** button to start the test run of the measurements in the selected order. If prior acquired measurements are not cleared, then new measurements are added to the existing set. The button toggles to the Stop mode while tests are running. Use the **Stop** button to abort the test.
Pause / Continue button 	Use the **Pause** button to pause the acquisition. When a test is paused, this button changes as **Continue**.
Clear button 	Use the **Clear** button to clear all existing measurement results. Adding or deleting a measurement, or changing a configuration parameter of an existing measurement, also clears measurements. This is to prevent the accumulation of measurement statistics or sets of statistics that are not coherent. This button is available only on *Results panel*. **Note:** This button is visible only when there are results data on the panel.
Application window move icon 	Place the cursor over the top of the application window to move the application window to the desired location
Minimize icon 	Minimizes the application.
Close icon 	Close the application.

Table continued…

Item	Description
Mini view / Normal view	Mini view displays the run messages with the time stamp, progress bar, Start / Stop button, and Pause / Continue button. The application moves to mini view when you click the **Start** button.

Options menu functions

To access the **Options** menu, click in the upper-right corner of the application. It has the following selections:

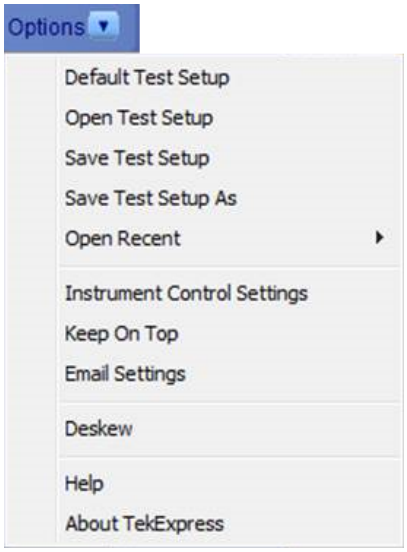


Table 7: Options menu settings

Menu	Function
Default Test Setup	Opens a new test setup with default configurations.
Open Test Setup	Opens a previously saved test setup. Displays the list of previously saved test setup file names. Make the selection and click **OK** to open the test setup.
Save Test Setup	Saves the current test configurations with the specified file name.
Save Test Setup As	Saves the current test setup with a different file name or file type.
Open Recent	Displays the recently opened test setup file names. Make the selection and click **OK** to open the test setup.
Instrument Control Settings	Detects, lists, and refreshes the connected instruments found on the specified connections (LAN, GPIB, USB, Serial, Non-VISA Resources, TekLink, and VXI).
Keep On Top	Always keeps the TekExpress M-PHY Tx application on top of all the applications.
Email Settings	Configures email options for test run and result notifications.
Deskew	Loads oscilloscope channel deskew settings into the application.
Help	Displays the TekExpress M-PHY Tx help.

Table continued…

Menu	Function
About TekExpress	Displays the application name, version, and hyperlink to end the user license agreement.

Configure email settings

Use the **Email Settings** utility to get notified by email when a measurement completes or produces any error condition. Follow the steps to configure email settings:

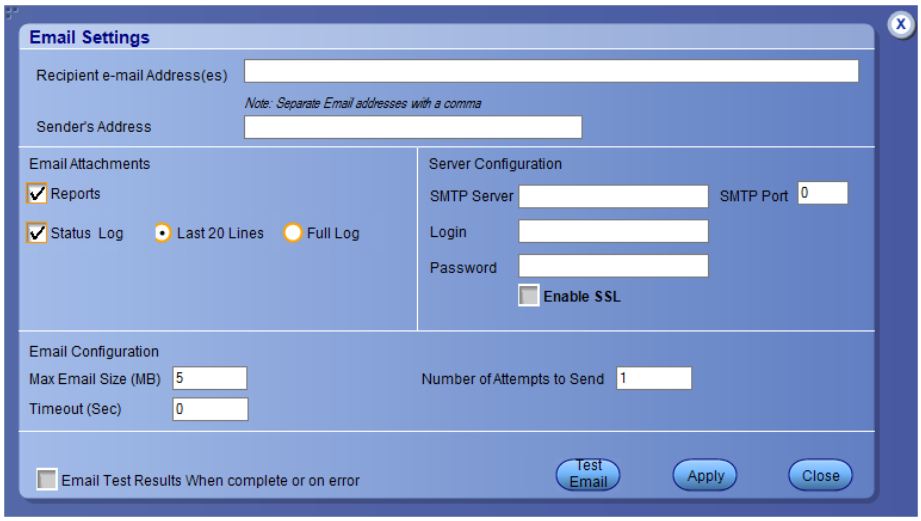


Figure 3: Email settings window

1. Select **Options > Email Settings** to open the Email Settings dialog box.
2. (Required) For **Recipient email Address(es)**, enter one or more recipient email addresses. To include multiple addresses, separate the addresses with commas.
3. (Required) For **Sender's Address**, enter the email address used by the instrument. This address consists of the instrument name, followed by an underscore, followed by the instrument serial number, then the @ symbol, and the email server ID. For example: user@yourcompany.com.
4. (Required) In the **Server Configuration** section, type the SMTP Server address of the Mail server configured at the client location, and the SMTP Port number, in the corresponding fields.

   If this server requires password authentication, enter a valid login name, password, and host name in the corresponding fields.

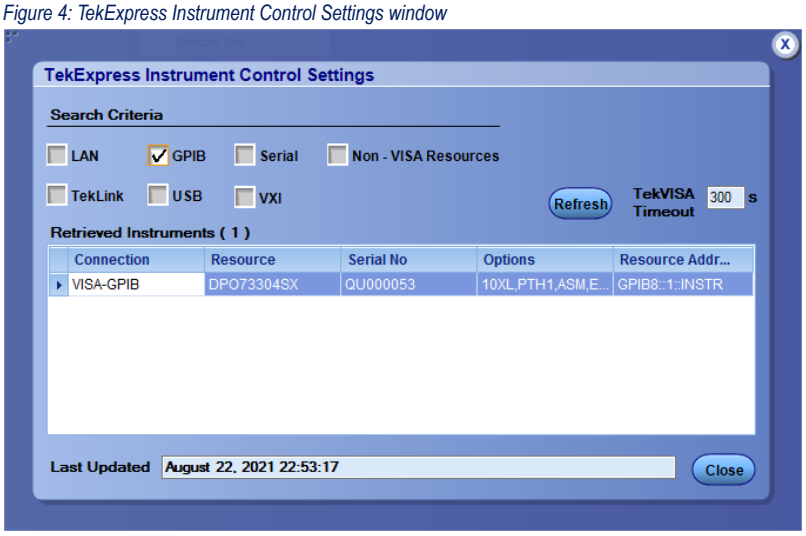
   Note: If any of the above required fields are left blank, the settings will not be saved, and email notifications will not be sent.
5. In the **Email Attachments** section, select from the following options:
   - **Reports**: Select to receive the test report with the notification email.
   - **Status Log**: Select to receive the test status log with the notification email. If you select this option, then also select whether you want to receive the full log or just the last 20 lines.
6. In the **Email Configuration** section:
   - Enter a maximum file size for the email message. Messages with attachments larger than this limit will not be sent. The default is 5 MB.
   - Enter the number in the Number of Attempts to Send field, to limit the number of attempts that the system makes to send a notification. The default is 1. You can also specify a timeout period.
7. Select the **Email Test Results When complete or on error** check box. Use this check box to quickly enable or disable email notifications.
8. To test your email settings, click **Test Email**.
9. To apply your settings, click **Apply**.
10. Click **Close** when finished.

TekExpress instrument control settings

Use the **TekExpress Instrument Control Settings** dialog box to search the instruments (resources) connected to the application. You can use the **Search Criteria** options to search the connected instruments depending on the connection type. The details of the connected instrument is displayed in the Retrieved Instruments window.

To access, click **Options** > **Instrument Control Settings**. Select **GPIB** as search criteria for TekExpress application and click **Refresh**. The connected instruments displayed in the Retrieved Instruments window and can be selected for use under Global Settings in the test configuration section.

Figure 4: TekExpress Instrument Control Settings window

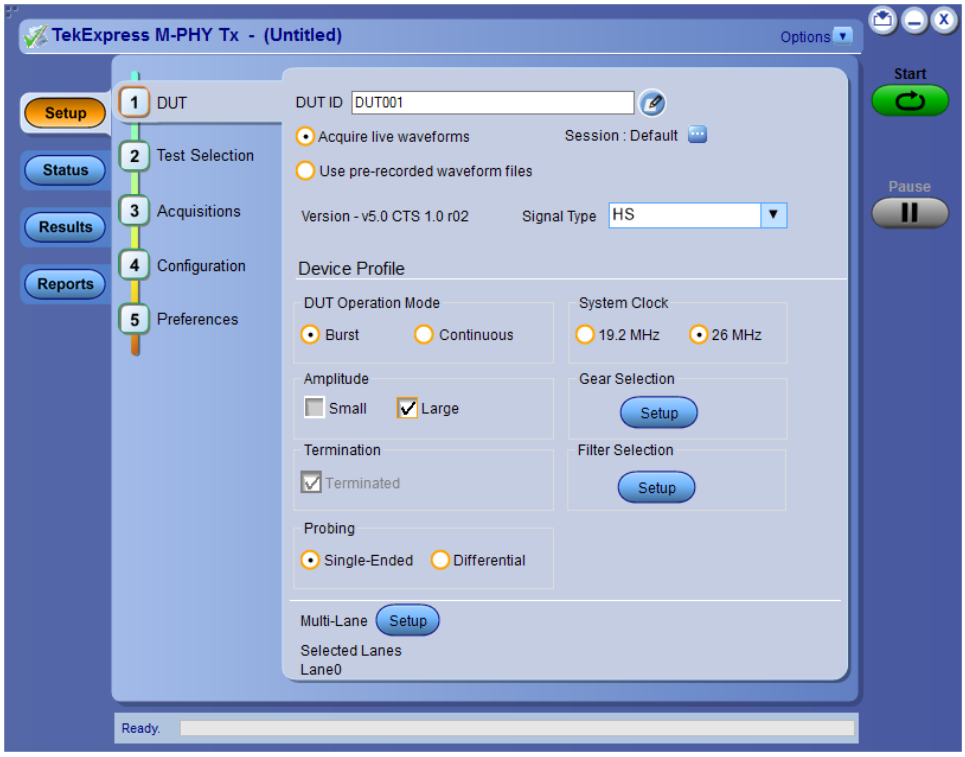


See also

Options menu functions on page 21

Setup panel: Configure the test setup

The Setup panel contains sequentially ordered tabs that help you guide through the test setup and execution process.



DUT: Set DUT settings

Use the DUT tab to select parameters for the device under test. These settings are global and apply to all tests of current session. DUT settings also affect the list of available tests in the Test Selection tab.

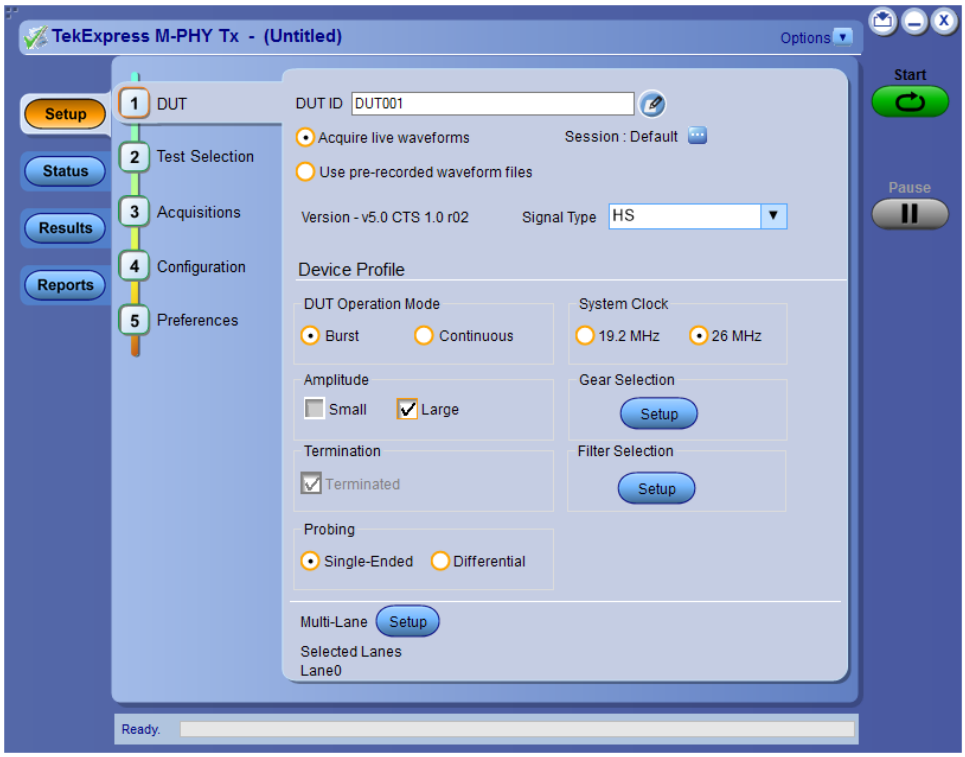


Figure 5: DUT tab

Click **Setup** > **DUT** to access the DUT parameters:

Table 8: DUT tab configuration

Setting	Description
DUT ID	Adds an optional text label for the DUT to reports. The default value is DUT001. The maximum number of characters supported is 32. You cannot use the characters (.,..,...,\,/:?"<>|*) in an ID name.
Comments icon (to the right of the DUT ID field)	Opens a comments dialog box which allows you to enter optional text to add to a report. You can enter a maximum number of 256 characters. Refer *Configure report view settings* to enable or disable comments which displays on the test report.
Acquire live waveforms	Acquire active signals from the oscilloscope for testing.
Use pre-recorded waveform files	Run an analysis on a saved run session file. Select a file from the Run Session field.
Session	Lists saved run sessions (waveform acquisitions) on which you can perform analysis. Use in conjunction with the 'Use pre-recorded waveform files' control. **Note:** Pre-recorded (saved) waveform file names follow a specific naming syntax. To use your own waveform files (generated outside

Table continued…

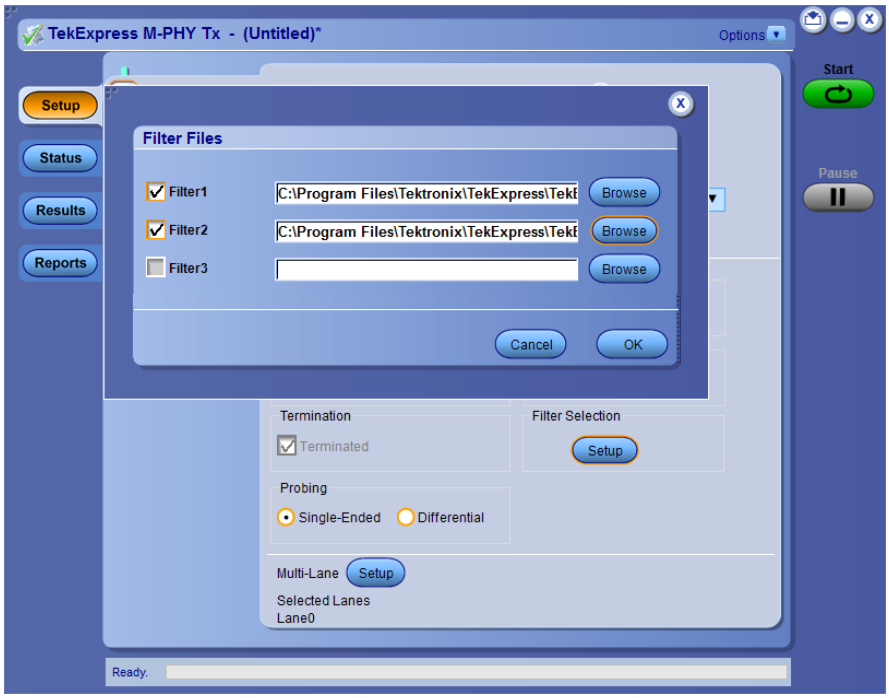
Setting	Description
	of this application), name the waveform files appropriately.Waveform naming conventions (pre-recorded mode)
Version	Displays the latest version of M-PHY TX testing specification version.
Signal Type	• HS: High Speed • PWM: Pulse Width Modulation • SYS: System Clock • UFS4 Ref Clk: Universal Flash Storage Reference Clock
DUT Operation Mode	For HS: Burst and Continuous For PWM: Burst and Continuous For SYS: Burst and Continuous
Amplitude	• Small • Large **Note:** You can select both of these settings.
Termination	• Terminated • Non Terminated (It is not applicable for Signal Type - HS) **Note:** You can select both of these settings.
Probing	• Single-Ended • Differential
System Clock	• 19.2 MHz • 26 MHz
Gear Selection for HS	If the System Clock is selected as **19.2 MHz** then the Gear and Gear variation supported by the DUT parameters are: • Gear 1A: 1.248 • Gear 1B: 1.4592 • Gear 2A: 2.496 • Gear 2B: 2.9184 • Gear 3A: 4.992 • Gear 3B: 5.8368 • Gear 4A: 9.984 • Gear 4B: 11.6736 • Gear 5A: 19.968 • Gear 5B: 23.3472
	If the System Clock is selected as **26 MHz** then the Gear and Gear variation supported by the DUT parameters are:

Table continued…

Setting	Description
	• Gear 1A: 1.248 • Gear 1B: 1.456 • Gear 2A: 2.496 • Gear 2B: 2.912 • Gear 3A: 4.992 • Gear 3B: 5.824 • Gear 4A: 9.984 • Gear 4B: 11.648 • Gear 5A: 19.968 • Gear 5B: 23.296
Gear Selection for PWM	Select one or more Gears (0-7) relevant to your DUT PWM signal testing requirements. • Gear 0: 0.01-3 Mbps • Gear 1: 3-9 Mbps • Gear 2: 6-18 Mbps • Gear 3: 12-36 Mbps • Gear 4: 24-72 Mbps • Gear 5: 48-144 Mbps • Gear 6: 96-288 Mbps • Gear 7: 192-576 Mbps
Frequency Selection for SYS	Select one or more frequencies. Available frequencies are 26 MHz, 38.4 MHz, and 52 MHz.
Frequency Selection for UFS4 Ref Clk	Select one or more frequencies. Available frequencies are 19.2 MHz, 26 MHz, 38.4 MHz, and 52 MHz.
Filter Selection	Click the **Setup** button to browse and select the filter files.
Multi-Lane	Click the **Setup** button to select the number of lanes for testing. You can select 1/2/4/8 Lanes. **Note:** The selected lanes can also be viewed on the DUT panel.

Embed / De-embed for Mid-bus probing

For M-PHY TX testing, measurements are specified at the TX pins. Many a times, users measure signals at the end of the channel to see the effect at the RX pins or some test point in the middle of the channel (Mid-bus probing). For conformance testing, to ensure the values meet the CTS, there would have a need to embed and/or de-embed channel to make measurements at the pin.



TekExpress Automated software allows you to do mid-bus probing via embedding/de-embedding signal path using filter files. You can use the "Filter Setup" option in DUT panel to add the filters. This setting will be applied globally to all the measurements during acquisition.

DUT Operation Mode - HS Tests

Test Names	Burst										Continuous									
	Differential					Single Ended					Differential					Single Ended				
	G1	G1	G3	G4	G5	G1	G2	G3	G4	G5	G1	G2	G3	G4	G5	G1	G2	G3	G4	G5
Test 1.1.1-HS-TX Unit Interval and Frequency Offset	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.1.2-HS-TX Common-Mode AC Power Spectral Magnitude Limit [4]	x	x	x	x	x	√	x	x	x	x	x	x	x	x	x	√	x	x	x	x
Test 1.1.3-HS-TX PREPARE Length	√	√	√	√	√	√	√	√	√	√	x	x	x	x	x	x	x	x	x	x
Test 1.1.4-HS-TX Common Mode DC Output Voltage Amplitude	x	x	x	x	x	√	√	√	√	√	x	x	x	x	x	x	x	x	x	x
Test 1.1.5-HS-TX Differential DC Output Voltage Amplitude	√	√	√	√	√	√	√	√	√	√	x	x	x	x	x	x	x	x	x	x
Test 1.1.6-HS-TX G1 and G2 Differential AC Eye	√	√	x	x	x	√	√	x	x	x	√	√	x	x	x	√	√	x	x	x
Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye	x	x	√	√	√	x	x	√	√	√	x	x	√	√	√	x	x	√	√	√
Test 1.1.8-HS-TX 20-80% Rise and Fall Times	√	√	√	√	√	√	√	√	√	√	x	x	x	x	x	x	x	x	x	x
Test 1.1.9-HS-TX Lane-Lane Output Skew [5]	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

Table continued…

[4] Informative test

Test Names	Burst										Continuous									
	Differential					Single Ended					Differential					Single Ended				
	G1	G1	G3	G4	G5	G1	G2	G3	G4	G5	G1	G2	G3	G4	G5	G1	G2	G3	G4	G5
Test 1.1.10-HS-TX Slew Rate Control Range [6]	√	√	√	√	√	√	√	√	√	√	x	x	x	x	x	x	x	x	x	x
Test 1.1.11-HS-TX Slew Rate Monotonicity [6]	√	√	√	√	√	√	√	√	√	√	x	x	x	x	x	x	x	x	x	x
Test 1.1.12-HS-TX Slew Rate Resolution [6]	√	√	√	√	√	√	√	√	√	√	x	x	x	x	x	x	x	x	x	x
Test 1.1.13-HS-TX Intra-Lane Output Skew	x	x	x	x	x	√	√	√	√	√	x	x	x	x	x	√	√	√	√	√
Test 1.1.14-HS-TX Transmitter Pulse Width	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.1.15-HS-TX Total Jitter	x	x	x	x	x	x	x	x	x	x	√	√	√	√	√	√	√	√	√	√
Test 1.1.16-HS-TX Short-Term Total Jitter	x	x	x	x	x	x	x	x	x	x	√	√	√	√	√	√	√	√	√	√
Test 1.1.17-HS-TX Deterministic Jitter	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.1.18-HS-TX Short term Deterministic Jitter	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
BER Eye Contour [4]	x	x	x	x	x	x	x	x	x	x	√	√	√	√	√	√	√	√	√	√

DUT Operation Mode - PWM Tests (Burst Mode)

Test Name	Differential								Single Ended							
	G0	G1	G2	G3	G4	G5	G6	G7	G0	G1	G2	G3	G4	G5	G6	G7
Test 1.2.1-PWM-TX Transmit Bit Duration	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.2.2-PWM-TX Transmit Ratio	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.2.3-PWM-TX PREPARE Length	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.2.4-PWM-TX Common Mode DC Output Voltage Amplitude	x	x	x	x	x	x	x	x	√	√	√	√	√	√	√	√
Test 1.2.5-PWM-TX Differential DC Output Voltage Amplitude	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.2.7-PWM-TX Maximum Differential AC Output Voltage Amplitude	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.2.8-PWM-TX 2080 Rise and Fall Times	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.2.9-PWM-TX Lane-to-Lane Skew	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.2.10-PWM-TX Transmit Bit Duration Tolerance	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.2.11-PWM-TX G0 Minor Duration	√	x	x	x	x	x	x	x	√	x	x	x	x	x	x	x

DUT Operation Mode - PWM Tests (Continuous Mode)

Test Name	Differential								Single Ended							
	G0	G1	G2	G3	G4	G5	G6	G7	G0	G1	G2	G3	G4	G5	G6	G7
Test 1.2.1-PWM-TX Transmit Bit Duration	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

Table continued…

[5] Supported only for multilane

[6] Informative test for Gear2 and Gear3

Test Name	Differential								Single Ended							
	G0	G1	G2	G3	G4	G5	G6	G7	G0	G1	G2	G3	G4	G5	G6	G7
Test 1.2.2-PWM-TX Transmit Ratio	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Test 1.2.3-PWM-TX PREPARE Length	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Test 1.2.4-PWM-TX Common Mode DC Output Voltage Amplitude	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Test 1.2.5-PWM-TX Differential DC Output Voltage Amplitude	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Test 1.2.7-PWM-TX Maximum Differential AC Output Voltage Amplitude	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.2.8-PWM-TX 2080 Rise and Fall Times	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Test 1.2.9-PWM-TX Lane-to-Lane Skew	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Test 1.2.10-PWM-TX Transmit Bit Duration Tolerance	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Test 1.2.11-PWM-TX G0 Minor Duration	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

DUT Operation Mode - SYS Tests

Test Name	Burst		Continuous	
	Differential	Single Ended	Differential	Single Ended
Test 1.3.1-SYS-TX Unit Interval and Frequency Offset	√	√	√	√
Test 1.3.2-SYS-TX Ref Clock frequency [7]	x	x	x	x
Test 1.3.3-SYS-TX PREPARE Length	√	√	x	x
Test 1.3.4-SYS-TX Common Mode DC Output Voltage Amplitude	x	√	x	x
Test 1.3.5-SYS-TX Differential DC Output Voltage Amplitude	√	√	x	x
Test 1.3.7-SYS-TX Maximum Differential AC Output Voltage Amplitude	√	√	√	√
Test 1.3.8-SYS-TX 20-80% Rise and Fall Times	√	√	x	x
Test 1.3.9-SYS-TX Lane-to-Lane Skew [4]	√	√	√	√

[7] Clock Signal

Test Selection: Select the tests

Use the Test Selection tab to select the tests. The test measurements available depends on the settings selected in the DUT tab.

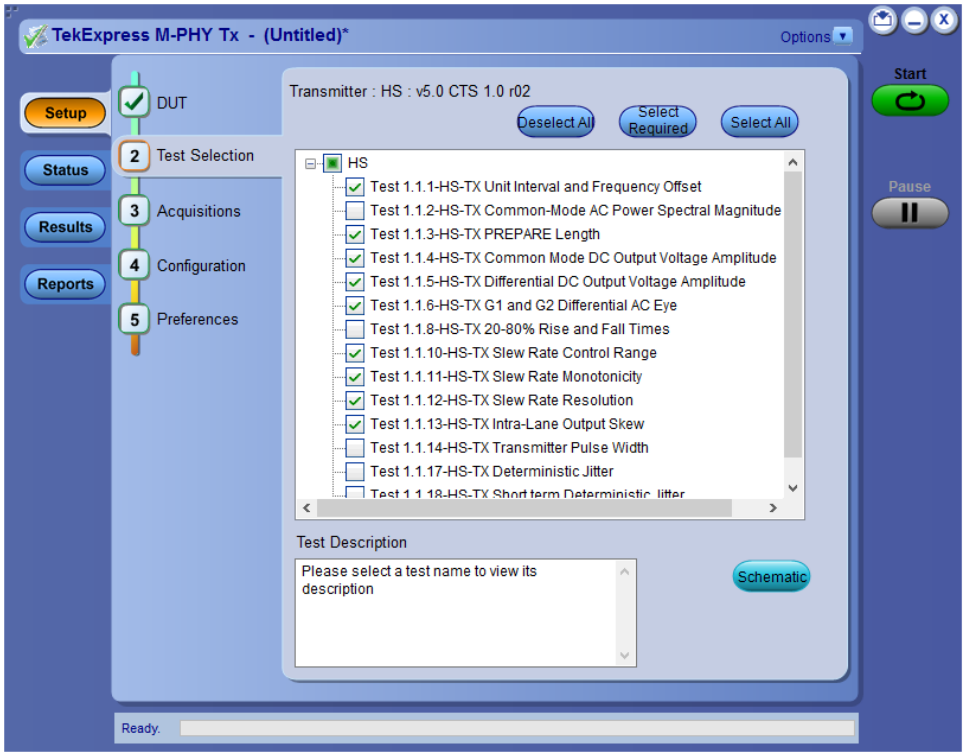


Figure 6: Test selection tab

Table 9: Test Selection tab configuration

Setting	Description
Deselect All	Deselects (clears) all tests.
Select Required	Selects all test required to pass compliance.
Select All	Selects all listed tests.
Test selection field	Lists available test and if they are selected to run. Click in the box adjacent to a test to select or unselect a test. Tests listed are affected by DUT tab selections (GEAR, Continuous Mode, Burst Mode, Single-Ended, or Differential).
Test Description field	Shows a description of the selected test.
Schematic	Opens a connection diagram that shows the DUT test setup. Use the diagram to verify the test setup before running the test.

Acquisitions: Set waveform acquisition settings

Use Acquisitions tab to view the test acquisition parameters. The contents displayed on this tab depends on the DUT type and the tests selected.

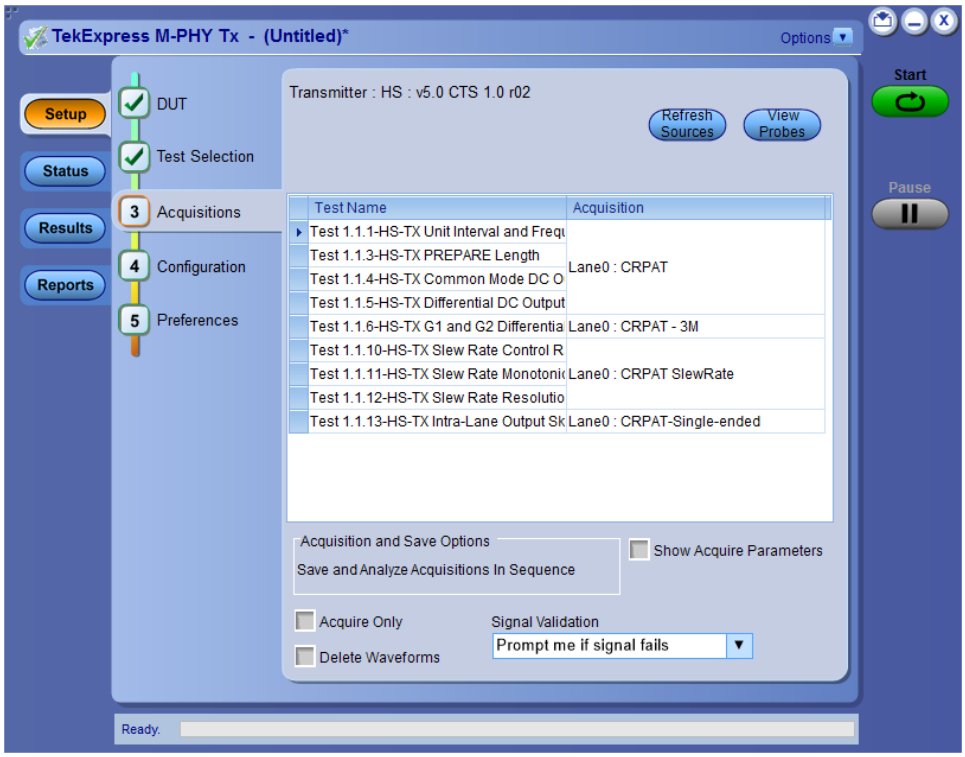


Figure 7: Acquisition tab

Table 10: Acquisitions tab configuration

Setting	Description
Refresh sources	Updates the list of available channel sources as used by the Source fields in the Device list. Click this button if you want to change the channel connections in the test setup.
View Probes	Displays the Source, Probe Type, and Probe models.
Acquisition and Save Options	Save and Analyze Acquisitions in Sequence
Show Acquire Parameters	When selected it shows the acquisition parameters in the test list.
Acquire Only	When selected will not analyze after waveforms are acquired.
Delete Waveforms	When selected will delete the waveforms after the analysis.
Signal Validation	Select a Signal validation parameter (Signal validation is valid only for Live acquisitions).

Table continued…

Setting		Description
	Prompt me if signal fails	Select to open a dialog box when the application fails to acquire a valid signal after a specified number of retries (as set in the Configuration tab or fields). Select one of the three options in the dialog box. Refer *Signal validation overview* on page 34 for more details.
	Skip test if signal fails	Select to skip all tests that depend on an acquired signal that fails signal validation. The comments section in the report file will show the details as "User skipped acquisitions for this pattern".
	Use signal as is - Don't Check	Select to skip signal validation and use the signal as-is for testing. The test results may not be as expected.

Note: In Pre-recorded mode, the acquisition table includes a column called "Waveform File Name." Use the fields in this column to browse and select waveform files to load for analysis.

TekExpress M-PHY Tx application saves all acquisition waveforms to files by default. Waveforms are saved in a unique folder for each session (a session is started when you click the Start button). The folder path is `X:\TekExpress M-PHY Tx\Untitled Session\<dutid>\<date>_<time>`. Images created for each analysis, XML files with result values, reports, and other information specific to that particular execution are also saved in this folder.

Saving a session moves the session file contents from the Untitled Session folder to the specified folder name and changes the session name to the specified name.

Signal validation overview

Options displayed in Acquisition panel for Signal Validation are

- **Prompt me if signal fails**: Signal validation is performed on the acquired signal and if the validation fails, the application will attempt to re-acquire the signal depending on the retry count set by you in the configuration menu. In case the validation still fails after exceeding the retry count, a pop-up is displayed to select one of the following three options:
  - **Re-acquire**: A fresh attempt is made to re-acquire the signal.
  - **Use Anyway**: Current acquired signal is used for all the tests.
  - **Skip Test**: Any test(s) that depend on this acquisition will be skipped and the same will be displayed in the report.
- **Skip test if signal fails**: Signal validation is performed on the acquired signal and if validation fails, any test(s) that depend on this acquisition will be skipped and the same will be displayed in the report. The comments section in the report file will display the details as 'User skipped acquisitions for this pattern'.
- **Use signal as is - Don't Check**: Signal validity will be skipped and no check will be made after the signal is acquired. The signal will directly be used for testing and hence, the final results in report may not be as expected.

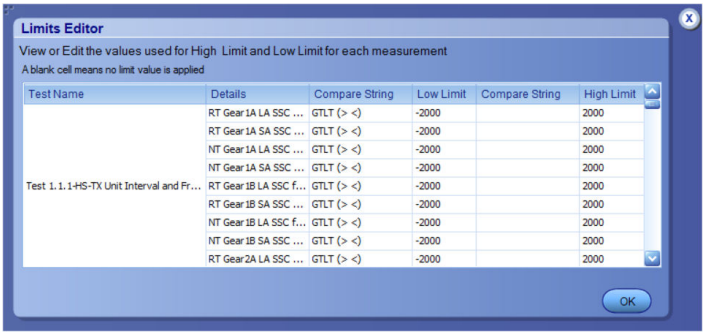
Signal validation checks the following signal parameters on each acquisition for the indicated measurement type:

- **Data Rate** (HS): If the difference between the measured and expected data rate is less than 2000 ppm, the signal is considered valid for this parameter. The Data Rate check is mandatory for signal validation.
- **MARKER0** (HS): If MARKER0 is present, the signal is considered valid for this parameter. The MARKER0 check is mandatory for signal validation.
- **CRPAT** (HS): If one complete CRPAT (LLI specific) is present, then the signal is considered valid for this parameter. The CRPAT check is not mandatory for signal validation.

Configuration: Set measurement limits for tests

Use Configuration tab to view and configure the Global Settings and the measurement configurations. The measurement specific configurations available in this tab depends on the selections made in the DUT panel and Test Selection panel.

Table 11: Configuration tab: Common parameters

Settings	Description
Limit Editor	Displays the upper and lower limits for the applicable measurement using different types of comparisons. 

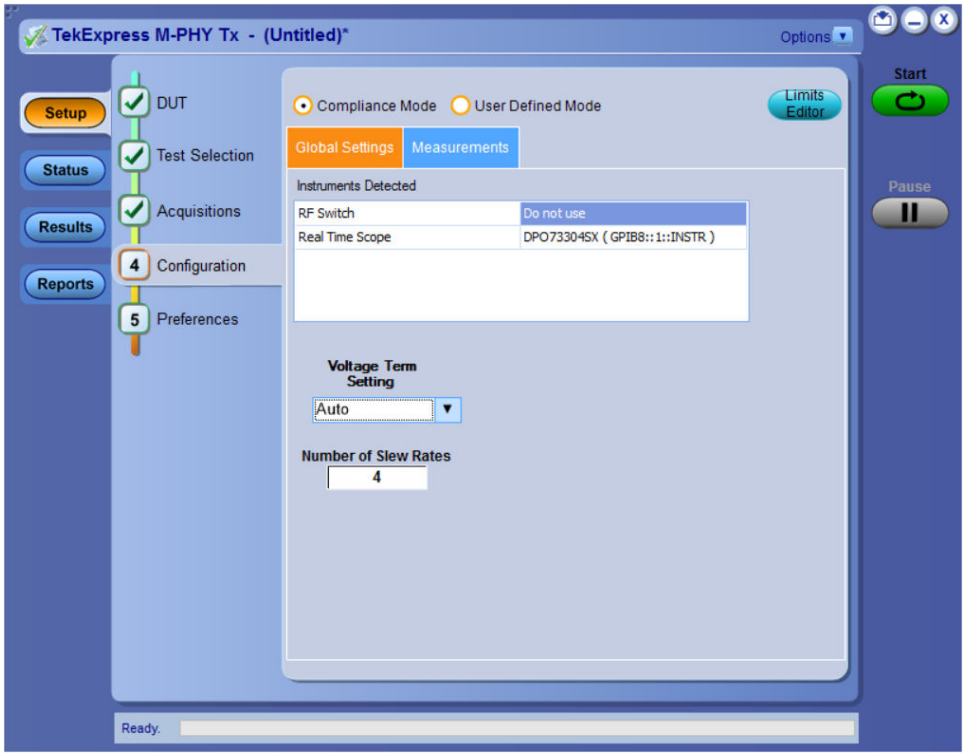


Figure 8: Configuration tab: Global Settings

Table 12: Configuration tab: Global Settings configuration

Setting	Description
Compliance Mode	Sets the global and measurement parameters of all measurements to the values required to pass compliance testing. If you are in User Define Mode, selecting compliance mode returns all global settings and measurement parameters to their compliance default values. **Note:** Save test setups made in the User Defined Mode before changing to Compliance Mode, as the application does not automatically save user defined changes or prompt you to save settings before changing modes.
User Defined Mode	Enables editing of the global and measurement parameters for tests.
Limits Editor	Opens the Limits Editor window where you can set high and low limits for each test when in User Defined Mode. If you are in Compliance Mode you can only view the default limit values. Limits Editor
Global Settings	
Instruments Detected	Click this tab to list the detected instrument(s) and any available global parameters that you can set. The global settings apply to all tests. To select a different instrument, click on the instruments list in the Instruments Detected area and select an instrument from the menu. If you do not see the desired instrument in the list, refresh the list. If the instrument is still not listed, verify that the instrument is powered on, has correct network settings, and is connected to the network or instrument.
Voltage Term Setting	

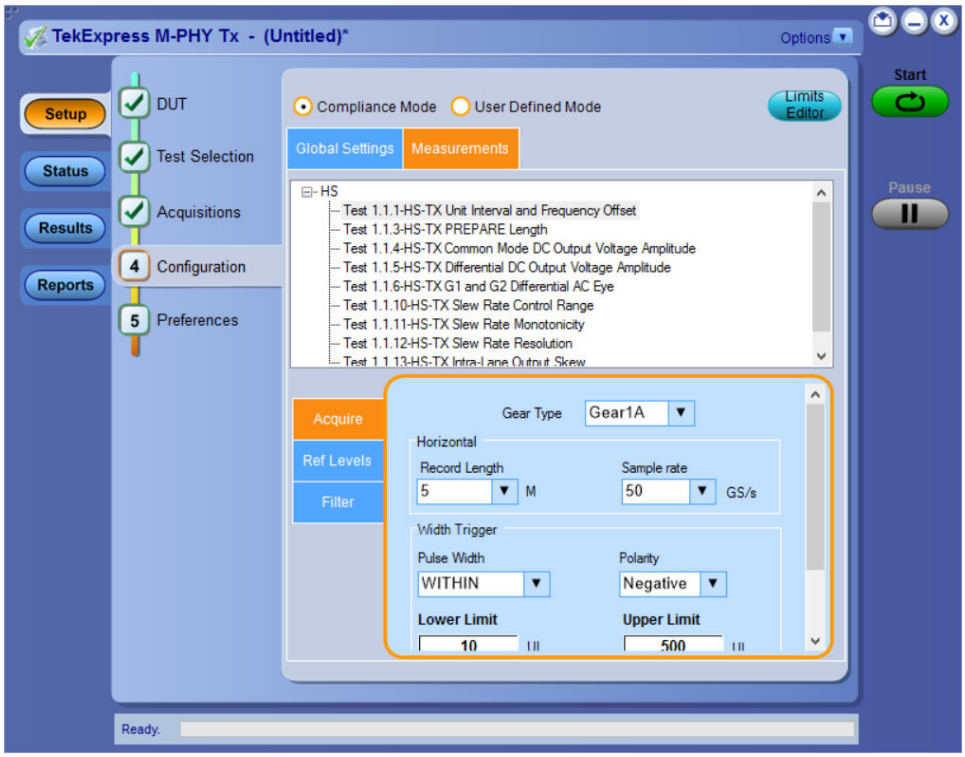


Figure 9: Configuration tab: Measurement

Table 13: Configuration tab: Measurements configuration

Setting	Description
Measurements	Lists all tests for the selected measurement type (HS or PWM or SYS or UFS). Click on a measurement to view the available parameters in the tabbed field below the list. The parameters and parameter type tabs shown depend on the selected test. Select User Defined Mode to edit test parameters. Use the scroll bar in the parameters area to scroll through all available parameters. **Note:** Save test setups made in the User Defined Mode before changing to Compliance Mode, as the application does not automatically save user defined changes or prompt you to save settings before changing modes.

Limits Editor controls

The Limits Editor window lets you set high and low limits for each test when in User Defined Mode.

Note: In Compliance Mode limit settings can only be viewed and cannot be edited.

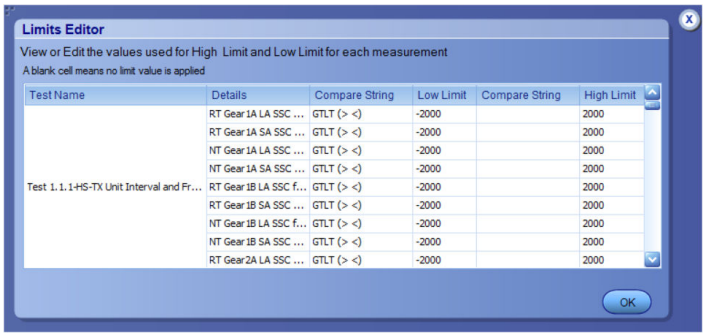


Figure 10: Limits Editor

Table 14: Limits Editor controls

Settings	Description
Test Name	The name of the test.
Details	The limit test(s) that are part of the overall test suite.
Compare String	Sets the comparison logic for the high or low limit test parameter. Click on this field and select the appropriate comparison logic from the menu. There is a separate Compare String field for each low limit and the high limit parameter.
Low Limit/High Limit	The numeric value of the low or high limit parameter. Click in the field and enter a value. The limit units are shown in the Description field for that limit test.
OK	Click OK to close the Limits Editor window and return to the test configuration view. **Note:** Save test setups made in the User Defined Mode before changing to Compliance Mode, as the application does not automatically save user defined changes or prompt you to save settings before changing modes.

Limits Editor warning

- Press the keyboard Esc button or click the X button (upper right corner of Limits Editor dialog box) to cancel or not save the current edits.
- If you enter the wrong compare string or wrong value in a field, you cannot select or move to another cell until you enter a correct value into the field in question.
- You cannot delete or clear a compare string or value once entered.

Preferences: Set the test run preferences

Use **Preferences** tab to set the application action on completion of a measurement. The **Preferences** tab has the feature to enable or disable certain options related to the measurement execution.

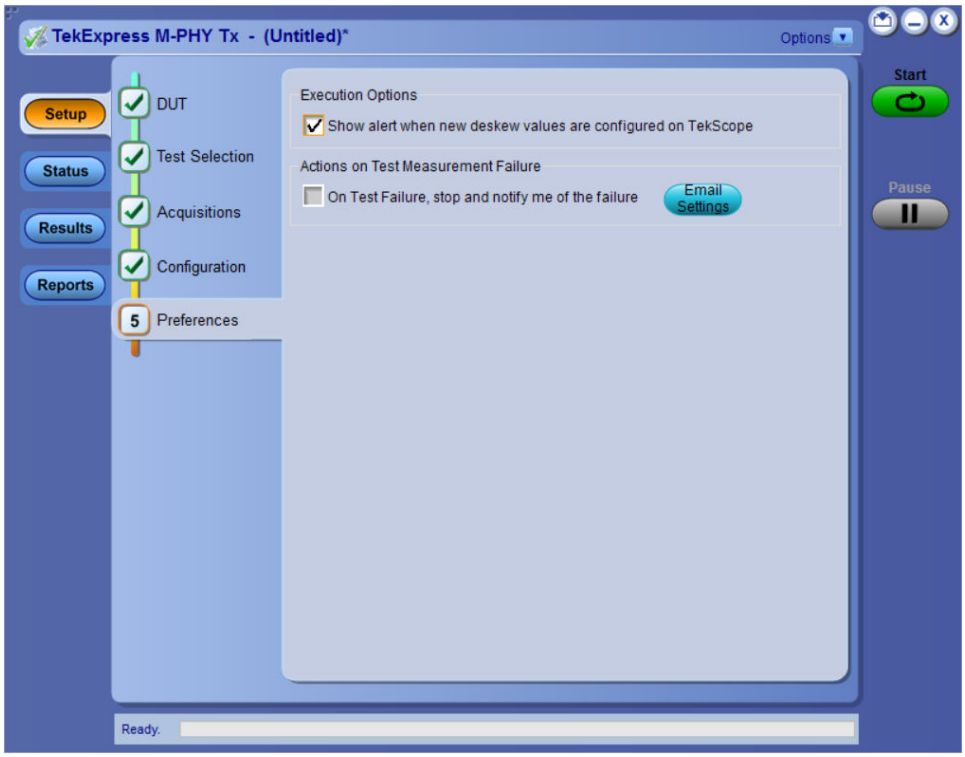


Figure 11: Preferences tab

Refer the below table for the options available in the **Preferences** tab:

Table 15: Preferences tab settings

Setting	Description
Execution Options	
Show alert when new deskew values are configured on TekScope	
Actions on Test Measurement Failure	
On Test Failure, stop and notify me of the failure	Select to stop the test run on Test Failure, and to get notified via email. By default, it is unselected. Click **Email Settings** to configure the email settings to receive notifications.

Status panel: View the test execution status

The Status panel contains the **Test Status** and **Log View** tabs, which provides status on the test acquisition and analysis (Test Status) and listing of test tasks performed (Log View tab). The application opens the **Test Status** tab when you start to execute the test. Select the **Test Status** or the **Log View** tab to view these items while the test execution is in progress.

View test execution status

The tests are grouped and displayed based on the Clock and Data lane. It displays the tests along with the acquisition type, acquire, and analysis status of the tests. In pre-recorded mode, **Acquire Status** is not valid.

The **Test Status** tab presents a collapsible table with information about each test as it is running. Use the symbols to expand (+) and collapse (−) the table rows.

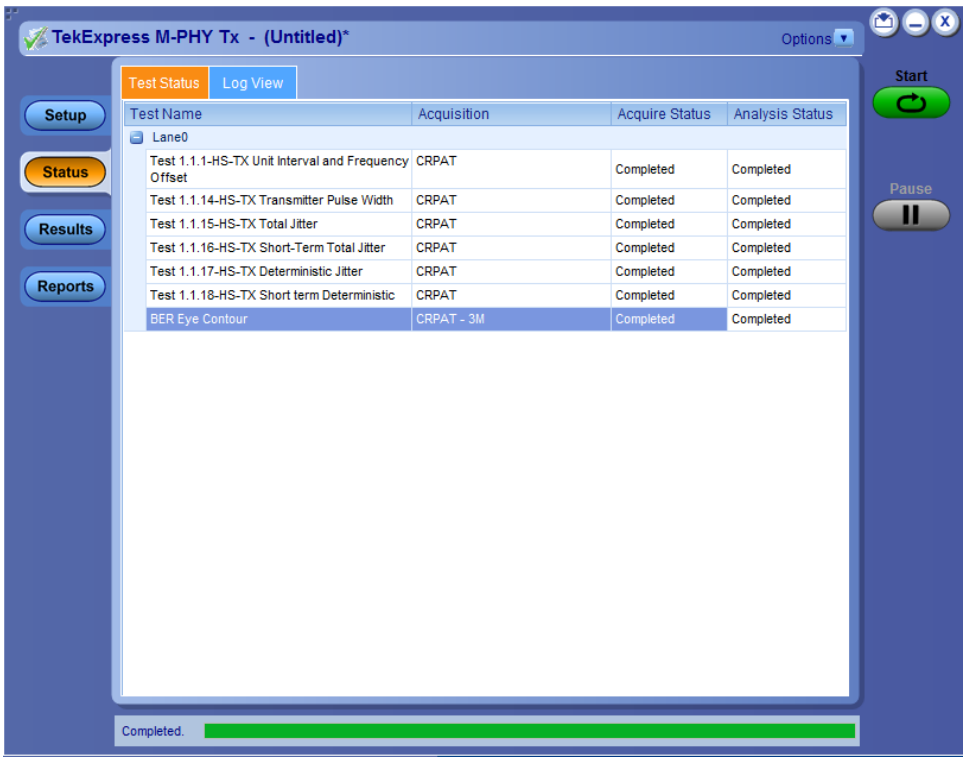


Figure 12: Test execution status view in Status panel

Table 16: Test execution status table headers

Table Header	Description
Test Name	Displays the measurement name.
Acquisition	Describes the type of data being acquired.
Acquire Status	Displays the progress state of the acquisition: • To be started • In Progress • Completed

Table continued…

Table Header	Description
Analysis Status	Displays the progress state of the analysis: • To be started • In Progress • Completed

View test execution logs

The Test Status tab displays the detailed execution status of the tests. Also, displays each and every execution step in detail with its timestamp information. The log details can be used to troubleshoot and resolve any issue/bug which is blocking the test execution process.

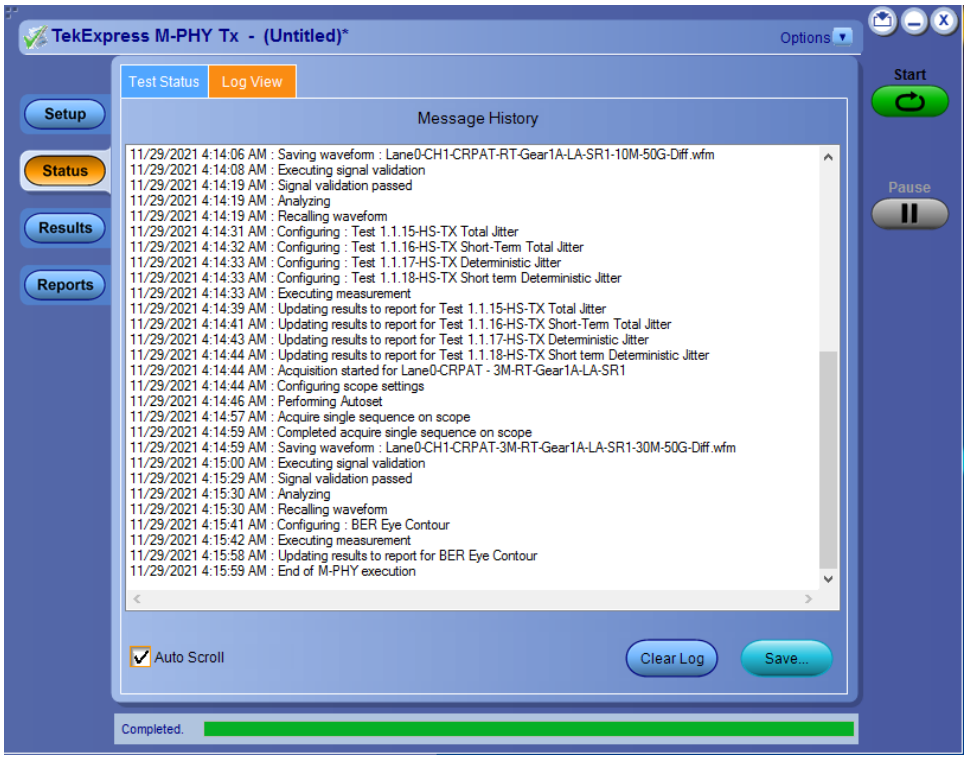


Figure 13: Log view in Status panel

Table 17: Status panel settings

Control	Description
Message History	Lists all the executed test operations and timestamp information.
Auto Scroll	Enables automatic scrolling of the log view as information is added to the log during the test execution.
Clear Log	Clears all the messages from the log view.
Save	Saves the log file into a text file format. Use the standard Save File window to navigate to and specify the folder and file name to save the log text.

Results panel: View summary of test results

When a test execution is complete, the application automatically opens the **Results** panel to display a summary of test results.

In the Results table, each test result occupies a row. By default, results are displayed in summary format with the measurement details collapsed and with the Pass/Fail column visible.

Figure 14: Results panel with measurement results

Click icon on each measurement in the row to expand and to display the minimum and maximum parameter values of the measurement.

Filter the test results

Each column in the result table can be customized and displayed by enabling or disabling any column as per your requirement. You can change the view in the following ways:

- To remove or restore the Pass/Fail column, select **Preferences** > **Show Pass/Fail**.
- To collapse all expanded tests, select **Preferences** > **View Results Summary**.
- To expand all the listed tests, select **View Results Details** from the **Preferences menu** in the upper right corner.
- To enable or disable the wordwrap feature, select **Preferences** > **Enable Wordwrap**.
- To view the results grouped by lane or test, select the corresponding item from the **Preferences** menu.
- To expand the width of a column, place the cursor over the vertical line that separates the column from the column to the right. When the cursor changes to a double-ended arrow, hold down the mouse button and drag the column to the desired width.
- To clear all test results displayed, click **Clear**.

Reports panel: Configure report generation settings

Click **Reports** panel to configure the report generation settings and select the test result information to include in the report. You can use the Reports panel to configure report generation settings, select test content to include in reports, generate the report, view the report, browse for reports, name and save reports, and select report viewing options.

Report configuration settings

The Configuration tab describes the report generation settings to configure the Reports panel. Select report settings before running a test or when creating and saving test setups. Report settings configured are included in saved test setups.

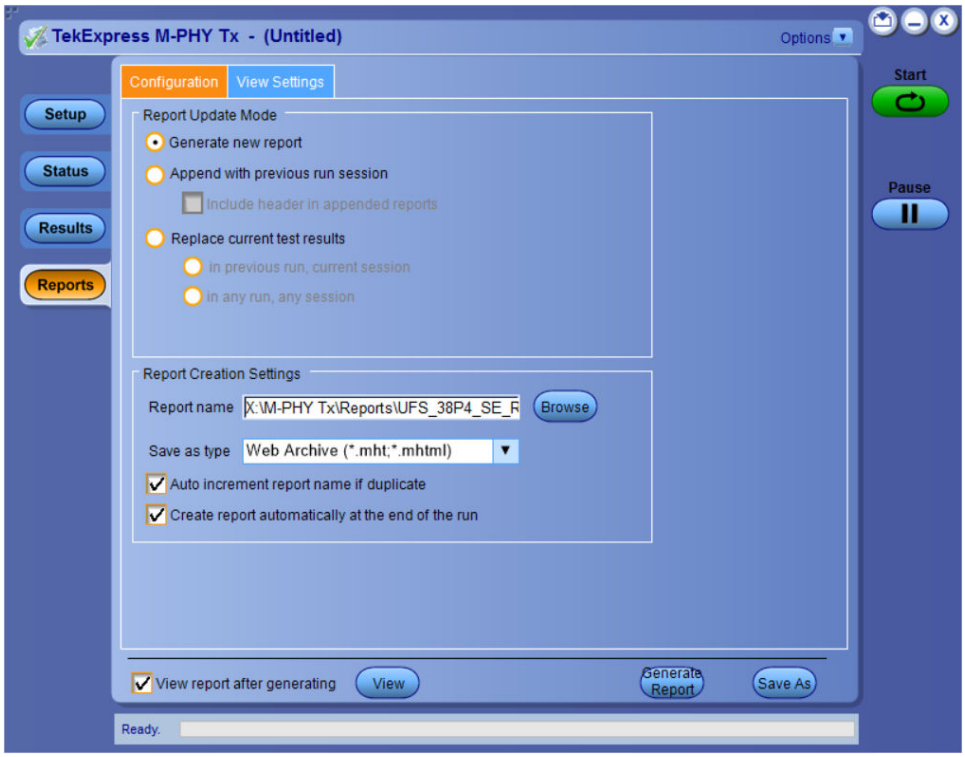


Figure 15: Report panel- Configuration tab

Table 18: Report configuration panel settings

Control	Description
View	Click to view the most current report.
Generate Report	Generates a new report based on the current analysis results.
Save As	Specify a name for the report.
Report Update Mode Settings	
Generate new report	Each time when you click **Run** and when the test execution is complete, it will create a new report. The report can be in either .mht, .pdf, or .csv file formats.
Append with previous run session	Appends the latest test results to the end of the current test results report. Each time when you click this option and run the tests, it will run the previously failed tests and replace the failed test result with the new pass test result in the same report.
Include header in appended reports	Select to include header in appended reports.

Table continued…

Control	Description
Replace current test results	Replaces the previous test results with the latest test results. Results from newly added tests are appended to the end of the report.
In previous run, current session	Select to replace current test results in the report with the test result(s) of previous run in the current session.
In any run, any session	Select to replace current test results in the report with the test result(s) in the selected run session's report. Click and select test result of any other run session.
Report Creation Settings	
Report name	Displays the name and path of the <Application Name> report. The default location is at `\My Documents>\My TekExpress\<Application Name>\Reports`. The report file in this folder gets overwritten each time you run a test unless you specify a unique name or select to auto increment the report name. **To change the report name or location, do one of the following:** • In the Report Path field, type the current folder path and name. • Double-click in the Report Path field and then make selections from the popup keyboard and click **Enter**. Be sure to include the entire folder path, the file name, and the file extension. For example: `C:\Documents and Settings\your user name\My Documents\My TekExpress\<Application Name> \DUT001.mht`. **Note:** You cannot set the file location using the Browse button. **Open an existing report** Click **Browse**, locate and select the report file and then click **View** at the bottom of the panel.
Save as type	Saves a report in the specified file type, selected from the drop-down list. The report is saved in .csv, .pdf, or .mht. **Note:** If you select a file type different from the default, be sure to change the report file name extension in the Report Name field to match.
Auto increment report name if duplicate	Sets the application to automatically increment the name of the report file if the application finds a file with the same name as the one being generated. For example: DUT001, DUT002, DUT003. This option is enabled by default.
Create report automatically at the end of the run	Select to create the report with the settings configured, at the end of run.
View report after generating	Automatically opens the report in a Web browser when the test execution is complete. This option is selected by default.

Configure report view settings

The **View Settings** tab describes the report view settings to configure the Reports panel. Select report view settings before running a test or when creating and saving test setups. Report settings configured are included in saved test setups.

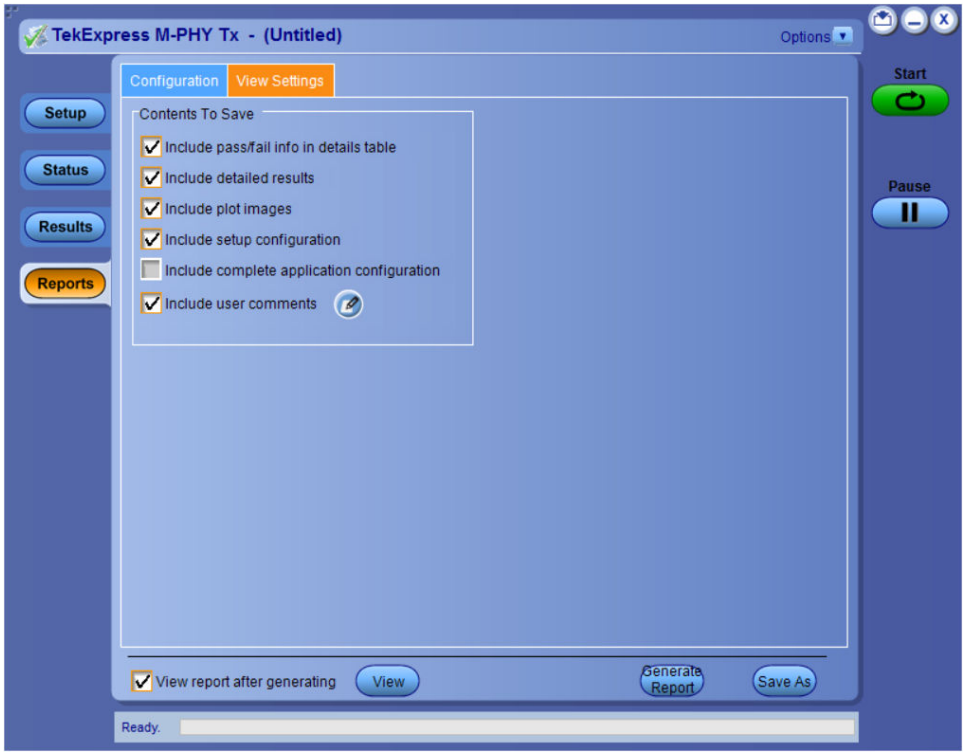


Figure 16: Report panel-View settings tab

Table 19: Report panel view settings

Control	Description
Contents To Save Settings	
Include pass/fail info in details table	Select to include pass/fail information in the details table of the report.
Include detailed results	Select to include detailed results in the report.
Include plot images	Select to include the plot images in the report.
Include setup configuration	Sets the application to include hardware and software information in the summary box at the top of the report. Information includes: the oscilloscope model and serial number, the oscilloscope firmware version, and software versions for applications used in the measurements.
Include complete application configuration	Select to include the complete application configuration in the report.
Include user comments	Select to include any comments about the test that you or another user have added in the DUT tab of the Setup panel. Comments appear in the Comments section, below the summary box at the beginning of each report.

View a generated report

Sample report and its contents

A report shows detailed results and plots, as set in the Reports panel.

Tektronix®

TekExpress M-PHY Tx

HS Test Report

Setup Information			
DUT ID	DUT001	Scope Model	MSO73304DX
Date/Time	12/13/2021 2:29:49 AM	Scope Serial Number	PQ00027
Device Type	Transmitter	SPC, Factory Calibration	PASS,PASS
TekExpress Framework Version	v5.6.0.106	Scope F/W Version	v10.12.1 Build 16
TekExpress M-PHY Tx Version	v10.2.2.15	DPO3ET Version	v10.4.0.6
CTS Version	v5.0 CTS 1.0 r02	SDLA Version	v3.0.13.12
Compliance Mode	Yes	Probing	Differential
Execution Mode	Live	DUT Operation Mode	Continuous
Overall Test Result	Pass	System Clock	26 MHz
Overall Execution Time	00:00:40		
DUT COMMENT:			

Probe Information		
Source	Probe/Connector Type	Probe/Connector Serial Number
CH1	TCA292D	N/A
CH2	TCA292D	N/A
CH3	TCA292D	N/A
CH4	P77STFLXA	P7720

Test Name Summary Table	
Test 1.1.1-HS-TX Unit Interval and Frequency Offset	Pass
Test 1.1.14-HS-TX Transmitter Pulse Width	Informative

Test 1.1.1-HS-TX Unit Interval and Frequency Offset

Lane	Measurement Details	Gear	Amplitude	Termination	Low Limit	Measured Value	High Limit	Margin	Units	Test Result
Lane0	Frequency Offset Min	Gear1A	Large (LA)	Terminated (RT)	-2000	-8.382	2000	Low: 1991.618, High: 2008.382	ppm	Pass
Lane0	Frequency Offset Mean	Gear1A	Large (LA)	Terminated (RT)	-2000	-0.103	2000	Low: 1999.897, High: 2000.103	ppm	Pass
Lane0	Frequency Offset Max	Gear1A	Large (LA)	Terminated (RT)	-2000	8.486	2000	Low: 2008.486, High: 1991.514	ppm	Pass
Lane0	Frequency Profile Mean	Gear1A	Large (LA)	Terminated (RT)	NA	801.282	NA	Low: NA, High: NA	ps	Informative

COMMENTS

Back to Summary Table

Test 1.1.14-HS-TX Transmitter Pulse Width

Lane	Measurement Details	Gear	Amplitude	Termination	Low Limit	Measured Value	High Limit	Margin	Units	Test Result
Lane0	Tx Pulse Width	Gear1A	Large (LA)	Terminated (RT)	0.9	0.983	NA	Low: 0.083, High: NA	UI	Informative

COMMENTS

Back to Summary Table

Figure 17: Report

Setup Information	The summary box at the beginning of the report lists setup configuration information. This information includes the oscilloscope model and serial number, optical module model and serial number, and software version numbers of all associated applications.
Test Name Summary Table	The test summary table lists all the tests which are executed with its result status.
Measurement	The measurement table displays the measurement related details with its parameter value.
User comments	If you had selected to include comments in the test report, any comments you added in the DUT tab are shown at the top of the report.

Saving and recalling test setup

Test setup files overview

Saved test setup information (such as the selected oscilloscope, general parameters, acquisition parameters, measurement limits, waveforms (if applicable), and other configuration settings) are saved under the setup name at `X:\TekExpress M-PHY Tx`.

Use test setups to:

- Run a new session, acquire live waveforms, using a saved test configuration.
- Create a new test setup using an existing one.
- View all the information associated with a saved test, including the log file, the history of the test status as it executed, and the results summary.
- Run a saved test using saved waveforms.

Save the configured test setup

You can save a test setup before or after running a test. You can create a test setup from already created test setup or using a default test setup. When you save a setup, all the parameters, measurement limits, waveform files (if applicable), test selections, and other configuration settings are saved under the setup name. When you select the default test setup, the parameters are set to the application's default value.

Select **Options** > **Save Test Setup** to save the opened setup.

Select **Options** > **Save Test Setup As** to save the setup with different name.

Load a saved test setup

To open (load) a saved test setup, do the following:

- Select **Options** > **Open Test Setup**.
- Select the setup from the list and click **Open**. Setup files are located at `X:\TekExpress M-PHY Tx`.

Select a pre-run session from the loaded test setup

Complete the following steps to load a test setup from a pre-run session:

1. Select **Options > Open Test Setup**.
2. Select a setup from the list and then click **Open**. Setup files are located at `X:\TekExpress M-PHY Tx\`.
3. Switch the mode to **Pre-recorded waveform files** in the DUT panel.
4. Select the required waveforms from the selected setup in the Acquisition tab and **Run** the required test.

Save the test setup with a different name

To create a test setup with a different name, follow the steps:

1. Select **Options > Open Test Setup**.
2. Select a setup from the list and then click **Open**.
3. Click application setup and modify the parameters.
4. Click application reports and modify the report options.
5. Select **Options > Save Test Setup As**.
6. Enter the test setup name and click **Save**.

SCPI Commands

About SCPI command

You can use the Standard Commands for Programmable Instruments (SCPI) to communicate remotely with the TekExpress application. Complete the TCPIP socket configuration and the TekVISA configuration in the oscilloscope or in the device where you are executing the script.

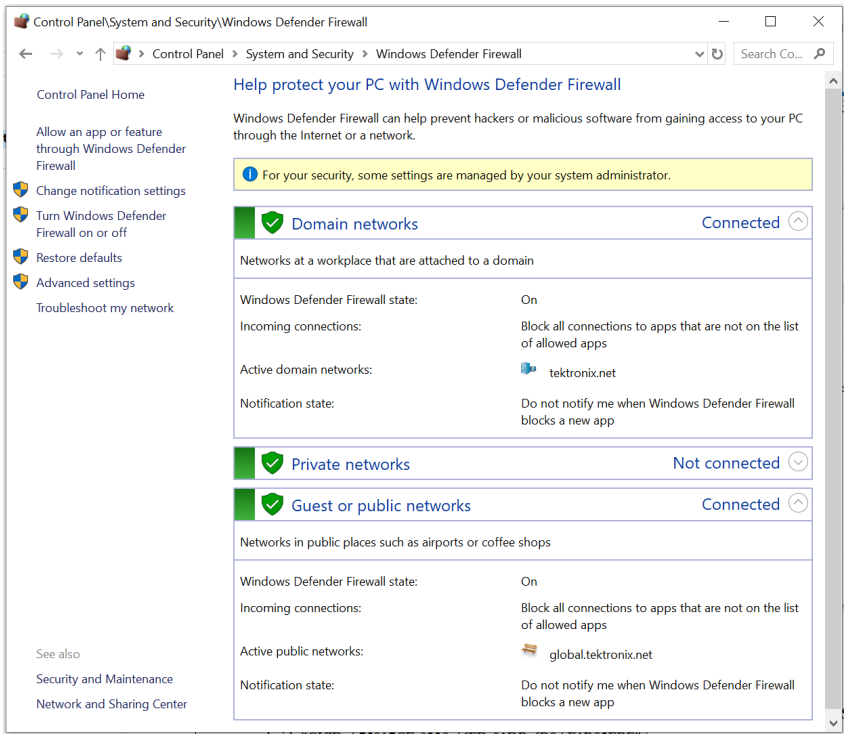
Note: If you are using an external PC to execute the remote interface commands, then install TekVISA in the PC to make the configurations.

Socket configuration for SCPI commands

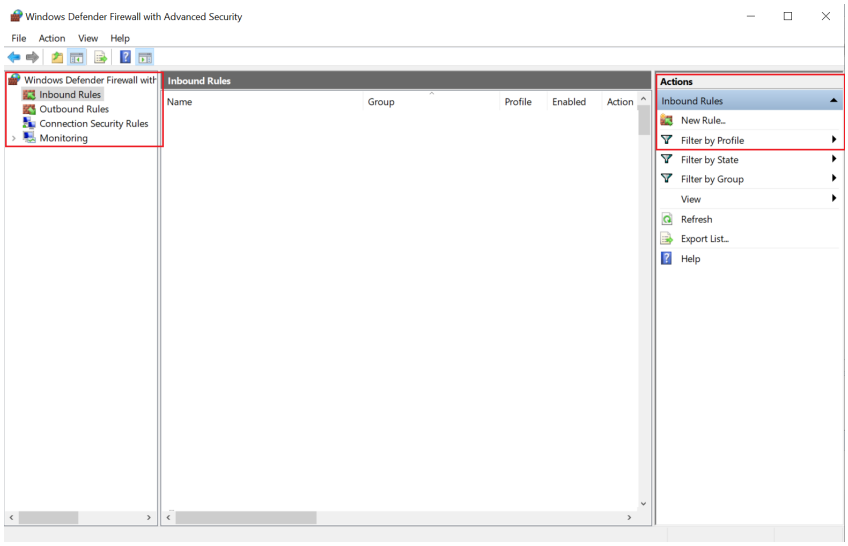
This section describes the steps to configure the TCPIP socket configuration in your script execution device and the steps to configure the TekVISA configuration in the oscilloscope to execute the SCPI commands.

TCPIP socket configuration

1. Click **Start** > **Control Panel** > **System and Security** > **Windows Firewall** > **Advanced settings**.

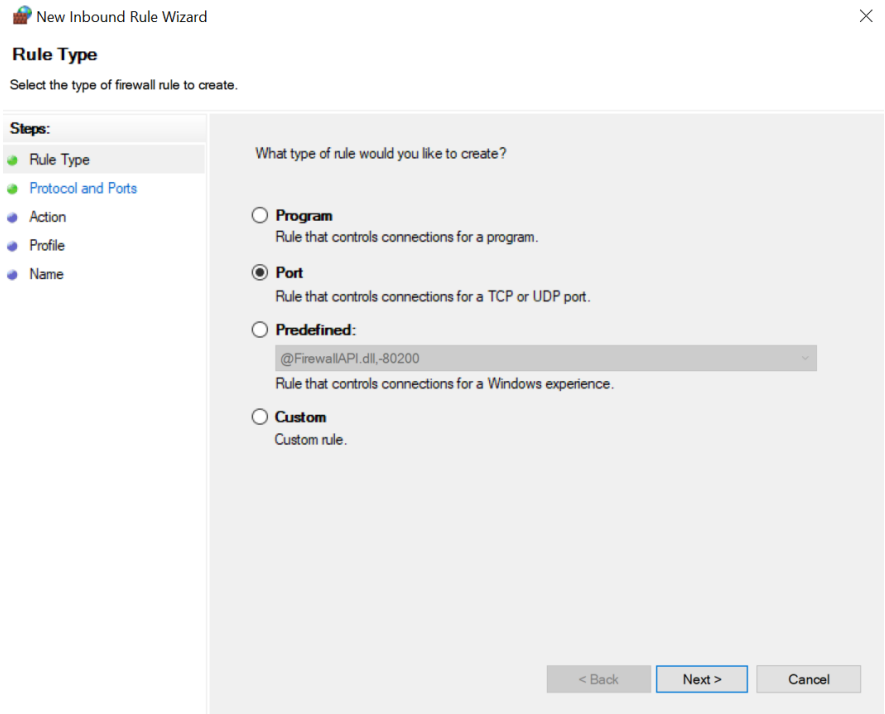


2. In Windows Firewall with Advanced Security menu, select **Windows Firewall with Advanced Security on Local Computer** > **Inbound Rules** and click **New Rule…**

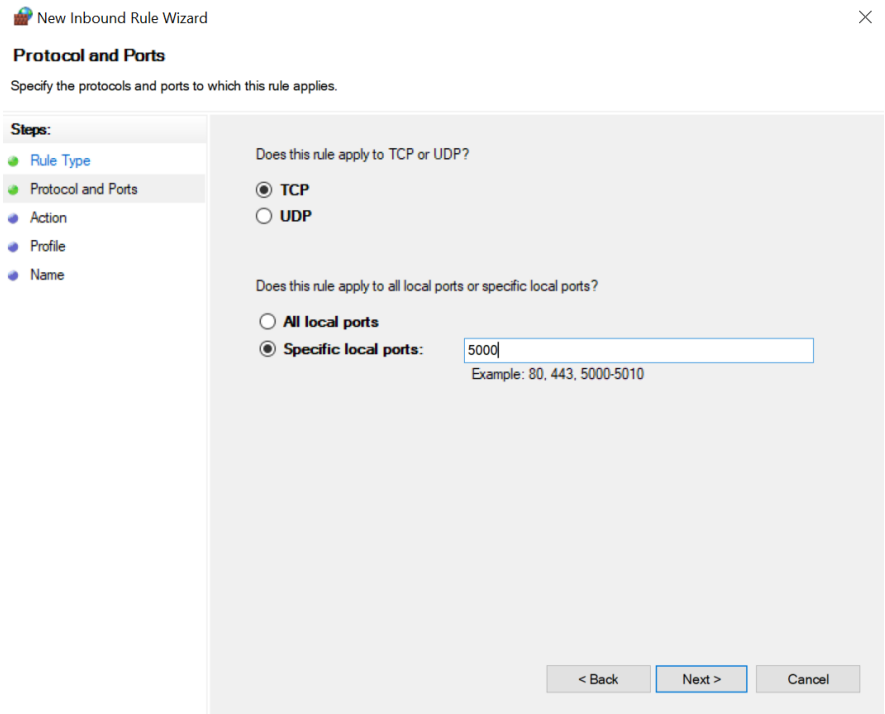


3. In **New Inbound Rule Wizard** menu

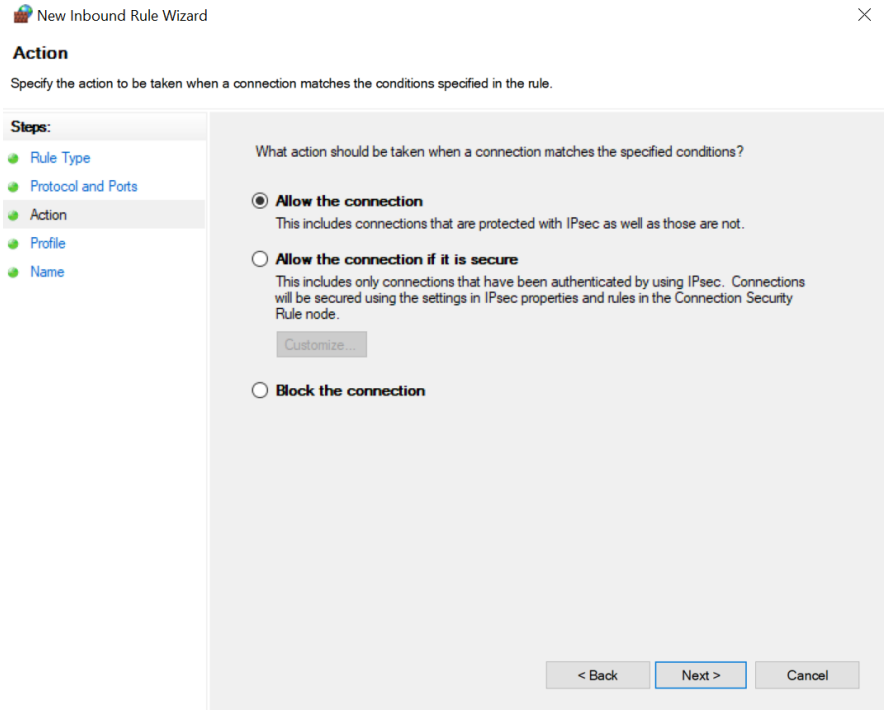
   a. Select **Port** and click **Next**.



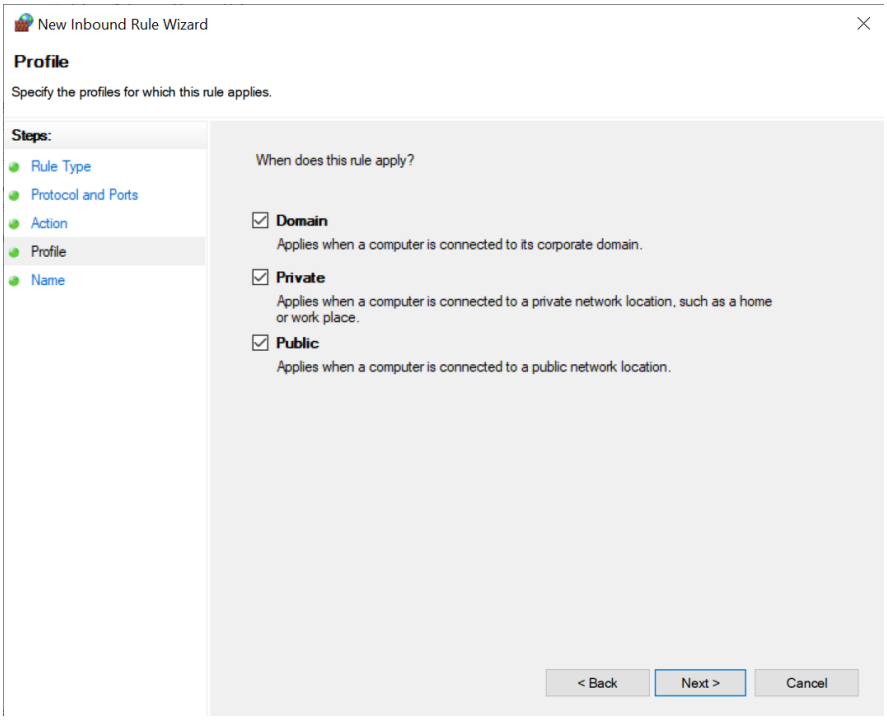
   b. Select **TCP** as rule apply, enter 5000 for **Specific local ports** and click **Next**.



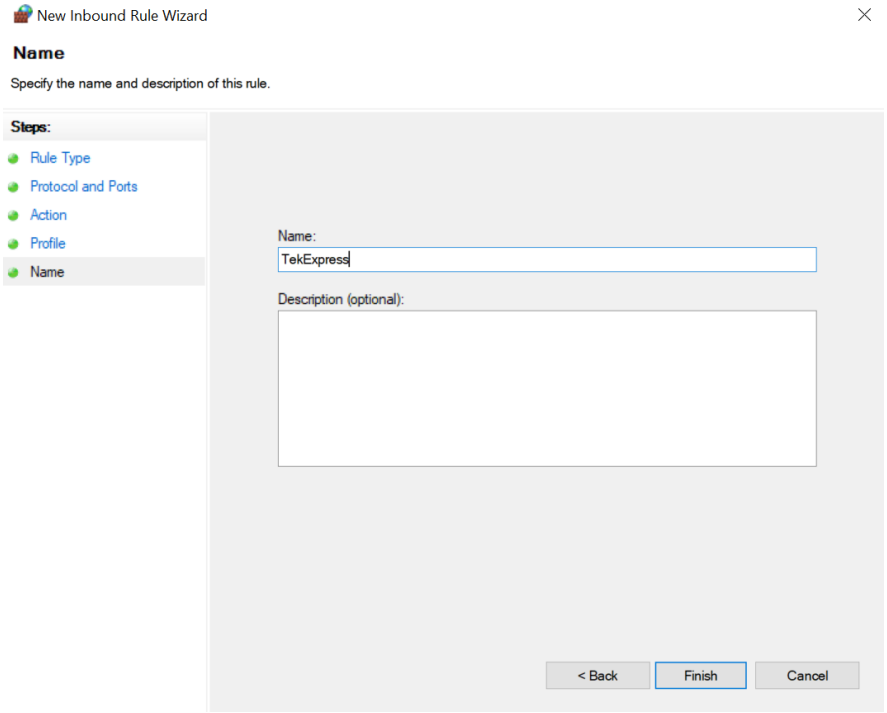
c. Select **Allow the connection** and click **Next**.



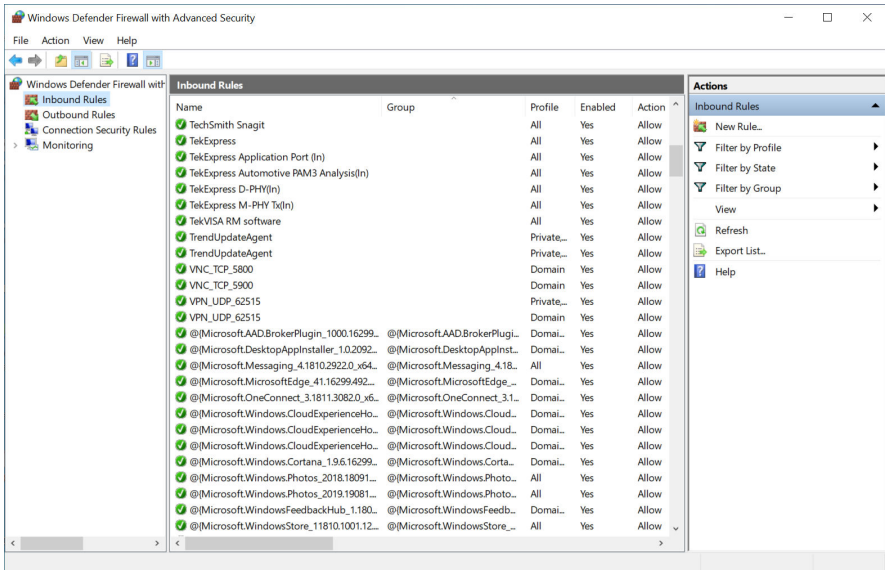
d. Select **Domain, Private, Public** checkbox and click **Next**.



e. Enter **Name**, Description (optional), and click **Finish**.

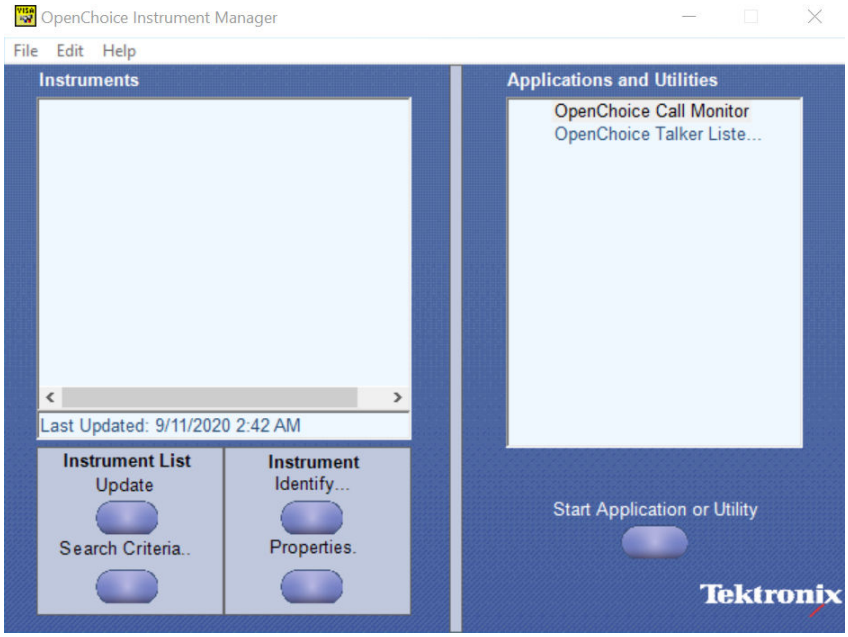


4. Check whether the Rule name is displayed in **Windows Firewall with Advanced Security menu** > **Inbound Rules**.



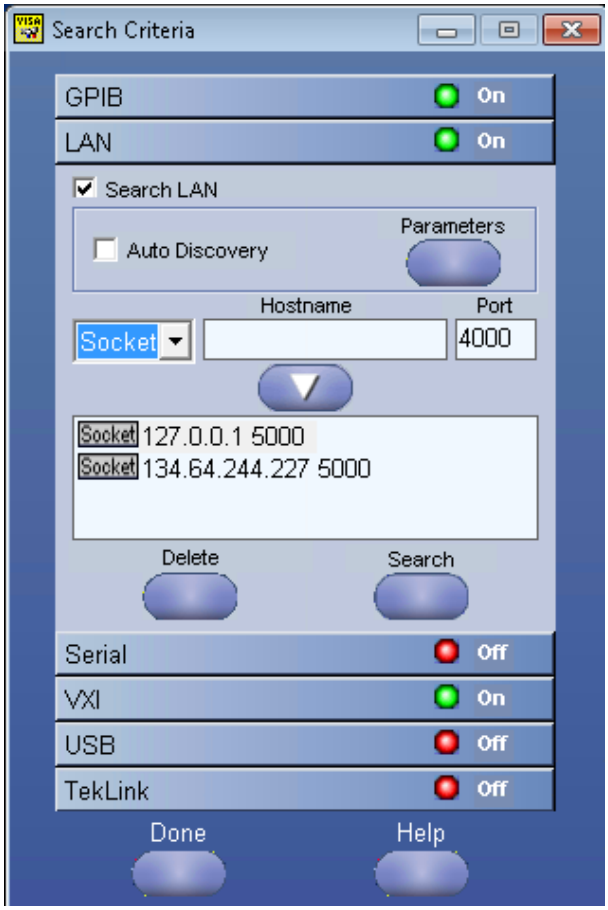
TekVISA configuration

1. Click **Start** > **All Programs** > **TekVISA** > **OpenChoice Instrument Manager**.

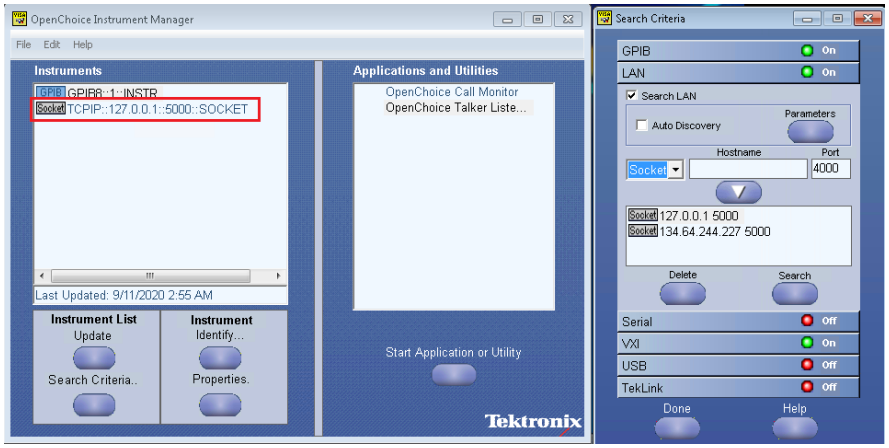


2. Click **Search Criteria**. In **Search Criteria** menu, click **LAN** to Turn-on. Select **Socket** from the drop-down list, enter the IP address of the TekExpress device in **Hostname** and type **Port** as 5000. Click  to configure the IP address with Port.

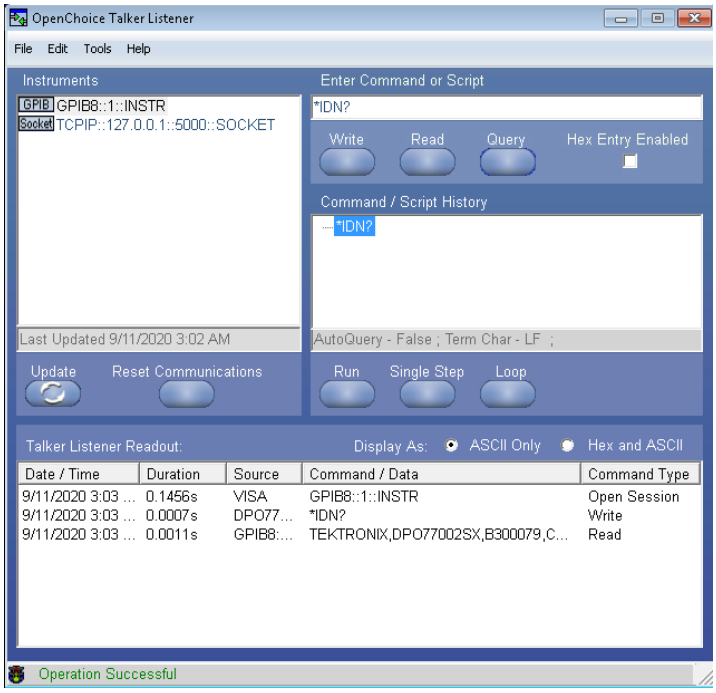
   Enter the Hostname as 127.0.0.1 if the TekVISA and TekExpress application are in the same system, else enter the IP address of the oscilloscope where the TekExpress application is running.



3. Click **Search** to setup the TCPIP connection with the host. Check whether the TCPIP host name is displayed in **OpenChoice Instrument Manager** > **Instruments**.



4. Double-click **OpenChoice Talker Listener** and enter the Command *IDN? in command entry field and click **Query**. Check that the Operation is successful and Talker Listener Readout displays the Command / Data.



TEKEXP:*IDN?

This command queries the active TekExpress application name running on the oscilloscope.

Syntax

```
TEKEXP:*IDN?\n
```

Inputs

NA

Outputs

Returns active TekExpress application name running on the oscilloscope.

TEKEXP:*OPC?

This command queries the execution status of the last executed command.

Syntax

```
TEKEXP:*OPC?\n
```

Inputs

NA

Outputs

0 - last command execution is not complete

1 - last command execution is complete

TEKEXP:ACQUIRE_MODE

This command sets the acquire mode as live or pre-recorded.

Syntax

```
TEKEXP:ACQUIRE_MODE {LIVE | PRE-RECORDED}\n
```

Inputs

```
{LIVE | PRE-RECORDED}
```

Outputs

NA

TEKEXP:ACQUIRE_MODE?

This command queries the acquire mode type.

Syntax

```
TEKEXP:ACQUIRE_MODE?\n
```

Inputs

```
NA
```

Outputs

```
{LIVE | PRE-RECORDED}
```

TEKEXP:EXPORT

This command returns all the bytes of data to the specified file.

Syntax	Outputs
`TEKEXP:EXPORT REPORT\n`	Returns the report file in bytes
`TEKEXP:EXPORT WFM,"<FileName>"\n`	Returns the specified waveform file in bytes
`TEKEXP:EXPORT IMAGE,"<FileName>"\n`	Returns the specified image file in bytes

Inputs

`FileName` - Specifies the file name

TEKEXP:INFO?

This command queries the information about the file(s).

Syntax	Outputs
`TEKEXP:INFO? REPORT\n`	<ReportFileSize>,"<ReportFileName.mht>"
`TEKEXP:INFO? WFM\n`	<WfmFile1Size>,"<WfmFileName1.wfm>";<WfmFile2Size>,"<WfmFileName2.wfm>";...
`TEKEXP:INFO? IMAGE\n`	<Image1FileSize>,"<Image1FileName>";<Image2FileSize>,"<Image2FileName>" ;...

TEKEXP:INSTRUMENT

This command sets the value for the selected instrument type.

Syntax

```
TEKEXP:INSTRUMENT "<InstrumentType>",<Value>"\n
```

Inputs

```
InstrumentType
```

```
Value
```

Note: Check Command parameters list section for InstrumentType and Value parameters.

Outputs

NA

TEKEXP:INSTRUMENT?

This command queries the instrument selected for the specified instrument type.

Syntax

```
TEKEXP:INSTRUMENT? "<InstrumentType>"\n
```

Inputs

```
InstrumentType
```

Note: Check Command parameters list section for InstrumentType parameters.

Outputs

Returns the instrument selected for the specified instrument type

TEKEXP:LASTERROR?

This command queries the last error string occurred for the current TCP session. If there are no errors since startup, or since the last call to TEKEXP:LASTERROR?\n, this command returns an empty string.

Syntax

```
TEKEXP:LASTERROR?\n
```

Inputs

NA

Outputs

<string>

TEKEXP:LIST?

This command queries the list of available device, suite, test, version or instrument.

Syntax	Outputs
`TEKEXP:LIST? DEVICE\n`	Returns the list of available device(s) as comma separated values.
`TEKEXP:LIST? SUITE\n`	Returns the list of available suite(s) as comma separated values.
`TEKEXP:LIST? TEST\n`	Returns the list of available test(s) as comma separated values.
`TEKEXP:LIST? VERSION\n`	Returns the list of available version(s) as comma separated values.
`TEKEXP:LIST? INSTRUMENT,"<InstrumentType>"\n`	Returns the list of available instruments' for the given Instrument type as comma separated values.

Note: This command returns the list of items within double quotes ("""). Iterate the receive procedure until the list ends with double quotes otherwise the next query commands won't work as expected.

Inputs

`InstrumentType`

Note: Check Command parameters list section for InstrumentType parameters.

TEKEXP:MODE

This command sets the execution mode as compliance or user defined.

Syntax

`TEKEXP:MODE {COMPLIANCE | USER-DEFINED}\n`

Inputs

`{COMPLIANCE | USER-DEFINED}`

Outputs

NA

TEKEXP:MODE?

This command queries the execution mode type.

Syntax

`TEKEXP:MODE?\n`

Inputs

NA

Outputs

`{COMPLIANCE | USER-DEFINED}`

TEKEXP:POPUP

This command sets the response to the active popup shown in the application.

Syntax

`TEKEXP:POPUP "<PopupResponse>"\n`

Inputs

`PopupResponse`

Outputs

NA

TEKEXP:POPUP?

This command queries the active popup information shown in the application.

Syntax

`TEKEXP:POPUP?\n`

Inputs

`NA`

Outputs

Returns the active popup information in the application.

TEKEXP:REPORT

This command generates the report for the current session.

Syntax

`TEKEXP:REPORT GENERATE\n`

Inputs

`GENERATE`

Outputs

NA

TEKEXP:REPORT?

This command queries the queried header field value in the report.

Syntax

`TEKEXP:REPORT? “<HeaderField>”\n`

Inputs

`HeaderField` - Specifies to return the measured value for the indicated test.

Note: Check **Report** for HeaderField parameters.

Outputs

Returns the queried header field value in the report

TEKEXP:RESULT?

This command queries the result available in report summary/details table.

Syntax	Outputs
`TEKEXP:RESULT? "<TestName>"\n`	Return Pass/Fail status of the test.
`TEKEXP:RESULT? "<TestName>","<ColumnName>"\n`	Returns all the row values of the specified column for the test.
`TEKEXP:RESULT? "<TestName>","<ColumnName>",<RowNumber>\n`	Returns the column value for the specified row number

Inputs

`TestName` - Specifies the name of the test for which to obtain the test result value.

`ColumnName` - Specifies the column name for the measurement

`RowNumber` - Specifies the row number of the measurement

Note: Check **Results** panel for TestName, ColumnName, and RowNumber parameters.

TEKEXP:SELECT

This command selects the device, suite, version, or test.

Syntax

```
TEKEXP:SELECT <string1>,<string2>,<string4>\n
TEKEXP:SELECT TEST,<string3>,<string4>\n
```

Inputs

```
<string1> = {DEVICE | SUITE | VERSION}
<string2> = {DeviceName | SuiteName | VersionName}
<string3> = {"<TestName>"| ALL| REQUIRED }
<string4> = {TRUE | FALSE}
```

Note: Check Command parameters list section for DeviceName, SuiteName, VersionName, and TestName parameters.

Outputs

NA

TEKEXP:SELECT?

This command queries the name of the selected device, suite, version, or test.

Syntax

```
TEKEXP:SELECT? {DEVICE | SUITE | TEST | VERSION}\n
```

Inputs

```
{DEVICE | SUITE | TEST | VERSION}
```

Outputs

Returns the name of the selected device, suite, version, or test.

TEKEXP:SETUP

This command sets the value of the current setup.

Syntax	Outputs
`TEKEXP:SETUP DEFAULT\n`	Restore to default Setup
`TEKEXP:SETUP OPEN,"<SessionName>"\n`	Open the session
`TEKEXP:SETUP SAVE\n`	Saves the already existing modified session
`TEKEXP:SETUP SAVE,"<SessionName>"\n`	Save the session

Inputs

`SessionName` - The name of the session

TEKEXP:STATE

This command sets the execution state of the application.

Syntax

`TEKEXP:STATE {RUN | STOP | PAUSE | RESUME}\n`

Inputs

`{RUN | STOP | PAUSE | RESUME}`

Outputs

NA

TEKEXP:STATE?

This command queries the current setup state.

Syntax	Outputs
`TEKEXP:STATE?`	RUNNING | PAUSED | WAIT | ERROR | READY
`TEKEXP:STATE? SETUP`	SAVED | NOT_SAVED

TEKEXP:VALUE

This command sets the value of parameters of type General, Acquire, Analyze, or DUTID.

Syntax

```
TEKEXP:VALUE GENERAL,"<ParameterName>",“<Value>”\n
TEKEXP:VALUE ACQUIRE,“<TestName>","<AcquireType>", "<ParameterName>",“<Value>”\n
TEKEXP:VALUE ANALYZE,“<TestName>","<ParameterName>".“<Value>”\n
```

```
TEKEXP:VALUE DUTID,“<Value>”\n
TEKEXP:VALUE VERBOSE,{TRUE | FALSE}\n
TEKEXP:VALUE WFMFILE,<Test_Name>,<Aquire_Type>,<FilesName1$FileName2>\n
```

Inputs

`ParameterName` - Specifies the parameter name

`TestName` - Specifies the test name

`AcquireType` - Specifies the acquire type

`Value` - Specifes the value to set

`FilesName1$FileName2` - Specifies the waveform file name

`TRUE` - Pop-ups are enabled

`FALSE` - Pop-ups are disabled

Note: Check Command parameters list section for ParameterName, AcquireType, and Value parameters.

Outputs

NA

TEKEXP:VALUE?

This command queries the value of the parameter for type General, Acquire, Analyze, or DUTID.

Syntax	Outputs
`TEKEXP:VALUE? GENERAL,"<ParameterName>"\n`	Returns the value of Parameter for type GENERAL
`TEKEXP:VALUE? ACQUIRE,“<TestName>", "<AcquireType>","<ParameterName>"\n`	Returns the value of Parameter for type ACQUIRE
`TEKEXP:VALUE? ANALYZE, “<TestName>","<ParameterName>"\n`	Returns the value of Parameter for type ANALYZE
`TEKEXP:VALUE? DUTID\n`	Returns the DUTID value
`TEKEXP:VALUE? WFMFILE,<Test_Name>,<Aquire_Type>\n`	Returns the waveform file name
`TEKEXP:VALUE? VERBOSE`	Returns the verbose mode type

Inputs

`ParameterName` - Specifies the parameter name

`TestName` - Specifies the test name

`AcquireType` - Specifies the acquire type

`TRUE` - Pop-ups are enabled

`FALSE` - Pop-ups are disabled

Note: Check Command parameters list section for ParameterName and AcquireType parameters.

Outputs

Returns the value of Parameter for type GENERAL | ACQUIRE | ANALYZE | DUTID.

Test Name

Test Names for HS

Example to Select a Test TEKEXP:SELECT TEST,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset",True

Example to check Test selection status TEKEXP:SELECT? TEST,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset"

Example to Deselect a Test TEKEXP:SELECT TEST,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset",False

Test Name
Test 1.1.1-HS-TX Unit Interval and Frequency Offset
Test 1.1.2-HS-TX Common-Mode AC Power Spectral Magnitude Limit
Test 1.1.3-HS-TX PREPARE Length
Test 1.1.4-HS-TX Common Mode DC Output Voltage Amplitude
Test 1.1.5-HS-TX Differential DC Output Voltage Amplitude
Test 1.1.6-HS-TX G1 and G2 Differential AC Eye
Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye
Test 1.1.8-HS-TX 20-80% Rise and Fall Times
Test 1.1.9-HS-TX Lane-Lane Output Skew
Test 1.1.10-HS-TX Slew Rate Control Range
Test 1.1.11-HS-TX Slew Rate Monotonicity
Test 1.1.12-HS-TX Slew Rate Resolution
Test 1.1.13-HS-TX Intra-Lane Output Skew
Test 1.1.14-HS-TX Transmitter Pulse Width
Test 1.1.15-HS-TX Total Jitter
Test 1.1.16-HS-TX Short-Term Total Jitter
Test 1.1.17-HS-TX Deterministic Jitter
Test 1.1.18-HS-TX Short term Deterministic Jitter
BER Eye Contour

Test Names for SYS

Example to Select a Test TEKEXP:SELECT TEST,"Test 1.3.1-SYS-TX Unit Interval and Frequency Offset",True

Example to check Test selection status TEKEXP:SELECT? TEST,"Test 1.3.1-SYS-TX Unit Interval and Frequency Offset"

Example to Deselect a Test TEKEXP:SELECT TEST,"Test 1.3.1-SYS-TX Unit Interval and Frequency Offset",False

Test Name
Test 1.3.1-SYS-TX Unit Interval and Frequency Offset
Test 1.3.2-SYS-TX Ref Clock frequency
Test 1.3.3-SYS-TX PREPARE Length

Table continued…

Test Name
Test 1.3.4-SYS-TX Common Mode DC Output Voltage Amplitude
Test 1.3.5-SYS-TX Differential DC Output Voltage Amplitude
Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude
Test 1.3.8-SYS-TX 20-80% Rise and Fall Times
Test 1.3.9-SYS-TX Lane-Lane Output Skew

Test Names for PWM

Example to Select a Test TEKEXP:SELECT TEST,"Test 1.2.1-PWM-TX Transmit Bit Duration",True

Example to check Test selection status TEKEXP:SELECT? TEST,"Test 1.2.1-PWM-TX Transmit Bit Duration"

Example to Deselect a Test TEKEXP:SELECT TEST,"Test 1.2.1-PWM-TX Transmit Bit Duration",False

Test Name
Test 1.2.1-PWM-TX Transmit Bit Duration
Test 1.2.2-PWM-TX Transmit Ratio
Test 1.2.3-PWM-TX PREPARE Length
Test 1.2.4-PWM-TX Common Mode DC Output Voltage Amplitude
Test 1.2.5-PWM-TX Differential DC Output Voltage Amplitude
Test 1.2.7-PWM-TX Maximum Differential AC Output Voltage Amplitude
Test 1.2.8-PWM-TX 2080 Rise and Fall Times
Test 1.2.9-PWM-TX Lane-Lane Output Skew
Test 1.2.10-PWM-TX Transmit Bit Duration Tolerance
Test 1.2.11-PWM-TX G0 Minor Duration

Test Names for UFS4 Ref Clock

Example to Select a Test TEKEXP:SELECT TEST,"Frequency",True

Example to check Test selection status TEKEXP:SELECT? TEST,"Frequency"

Example to Deselect a Test TEKEXP:SELECT TEST,"Frequency",False

Test Name
Frequency
Frequency Error
Input High Voltage
Input Low Voltage
Input Clock Rise Time
Input Clock Fall Time
Duty Cycle
Random Jitter
Deterministic Jitter

Command Parameters with Examples

This section provides the parameters list for the SCPI commands.

General Parameters:

Parameter Names	Example to set	Example to query
DeskewAlertEnabled	TEKEXP:VALUE GENERAL,"DeskewAlertEnabled","True"	TEKEXP:VALUE? GENERAL,"DeskewAlertEnabled"
Report Update Mode	TEKEXP:VALUE GENERAL,"Report Update Mode","New"	TEKEXP:VALUE? GENERAL,"Report Update Mode"
Appviewmode	TEKEXP:VALUE GENERAL,"Appviewmode","Compliance"	TEKEXP:VALUE? GENERAL,"Appviewmode"
Report Generation Template Path	TEKEXP:VALUE GENERAL,"Report Generation Template Path","INSTALL FOLDER\Report Generator\TekExpress_Template_GroupByTestName.xsl"	TEKEXP:VALUE? GENERAL,"Report Generation Template Path"
Report Settings:Column Template	TEKEXP:VALUE GENERAL,"Report Settings:Column Template","INSTALL FOLDER\Report Generator\MPHYTX-TekExpress_ReportColumnTemplate_MultiLane.xml"	TEKEXP:VALUE? GENERAL,"Report Settings:Column Template"
Create report at the end	TEKEXP:VALUE GENERAL,"Create report at the end","True"	TEKEXP:VALUE? GENERAL,"Create report at the end"
ComplianceMode	TEKEXP:VALUE GENERAL,"ComplianceMode","True"	TEKEXP:VALUE? GENERAL,"ComplianceMode"
Validate	TEKEXP:VALUE GENERAL,"Validate","Default"	TEKEXP:VALUE? GENERAL,"Validate"
Trace Variable	TEKEXP:VALUE GENERAL,"Trace Variable","YES"	TEKEXP:VALUE? GENERAL,"Trace Variable"
HS System Clock	TEKEXP:VALUE GENERAL,"HS System Clock","26MHz"	TEKEXP:VALUE? GENERAL,"HS System Clock"
Probing Type	TEKEXP:VALUE GENERAL,"Probing Type","Single-ended"	TEKEXP:VALUE? GENERAL,"Probing Type"
DUT Type	TEKEXP:VALUE GENERAL,"DUT Type","Type1"	TEKEXP:VALUE? GENERAL,"DUT Type"
DUT Tracing	TEKEXP:VALUE GENERAL,"DUT Tracing","Excluded"	TEKEXP:VALUE? GENERAL,"DUT Tracing"
RF Switch	TEKEXP:VALUE GENERAL,"RF Switch","Excluded"	TEKEXP:VALUE? GENERAL,"RF Switch"
Tek Fixture	TEKEXP:VALUE GENERAL,"Tek Fixture","Excluded"	TEKEXP:VALUE? GENERAL,"Tek Fixture"
Acquire Only	TEKEXP:VALUE GENERAL,"Acquire Only","False"	TEKEXP:VALUE? GENERAL,"Acquire Only"
Delete Waveforms	TEKEXP:VALUE GENERAL,"Delete Waveforms","False"	TEKEXP:VALUE? GENERAL,"Delete Waveforms"
Scope Bandwidth	TEKEXP:VALUE GENERAL,"Scope Bandwidth","330"	TEKEXP:VALUE? GENERAL,"Scope Bandwidth"
DUT Tracing Filter Path	TEKEXP:VALUE GENERAL,"DUT Tracing Filter Path","<Path to the filter file *.flt>"	TEKEXP:VALUE? GENERAL,"DUT Tracing Filter Path"
RF Switch Filter Path	TEKEXP:VALUE GENERAL,"RF Switch Filter Path","<Path to the filter file *.flt>"	TEKEXP:VALUE? GENERAL,"RF Switch Filter Path"

Table continued…

Parameter Names	Example to set	Example to query
Tek Fixture Filter Path	TEKEXP:VALUE GENERAL,"Tek Fixture Filter Path","<Path to the filter file *.flt>"	TEKEXP:VALUE? GENERAL,"Tek Fixture Filter Path"
Lane0	TEKEXP:VALUE GENERAL,"Lane0","Included"	TEKEXP:VALUE? GENERAL,"Lane0"
Lane1	TEKEXP:VALUE GENERAL,"Lane1","Excluded"	TEKEXP:VALUE? GENERAL,"Lane1"
Lane2	TEKEXP:VALUE GENERAL,"Lane2","Excluded"	TEKEXP:VALUE? GENERAL,"Lane2"
Lane3	TEKEXP:VALUE GENERAL,"Lane3","Excluded"	TEKEXP:VALUE? GENERAL,"Lane3"
Lane4	TEKEXP:VALUE GENERAL,"Lane4","Excluded"	TEKEXP:VALUE? GENERAL,"Lane4"
Lane5	TEKEXP:VALUE GENERAL,"Lane5","Excluded"	TEKEXP:VALUE? GENERAL,"Lane5"
Lane6	TEKEXP:VALUE GENERAL,"Lane6","Excluded"	TEKEXP:VALUE? GENERAL,"Lane6"
Lane7	TEKEXP:VALUE GENERAL,"Lane7","Excluded"	TEKEXP:VALUE? GENERAL,"Lane7"
DUT Operation Mode	TEKEXP:VALUE GENERAL,"DUT Operation Mode","Burst"	TEKEXP:VALUE? GENERAL,"DUT Operation Mode"
CRPAT	TEKEXP:VALUE GENERAL,"CRPAT","Included"	TEKEXP:VALUE? GENERAL,"CRPAT"
Termination	TEKEXP:VALUE GENERAL,"Termination","Terminated"	TEKEXP:VALUE? GENERAL,"Termination"
Acquire-Analyze Sequence	TEKEXP:VALUE GENERAL,"Acquire-Analyze Sequence","Save All Waveform Before Analysis"	TEKEXP:VALUE? GENERAL,"Acquire-Analyze Sequence"
Gear1	TEKEXP:VALUE GENERAL,"Gear1","Included"	TEKEXP:VALUE? GENERAL,"Gear1"
HS Gear1A	TEKEXP:VALUE GENERAL,"HS Gear1A","Included"	TEKEXP:VALUE? GENERAL,"HS Gear1A"
HS Gear2A	TEKEXP:VALUE GENERAL,"HS Gear2A","Excluded"	TEKEXP:VALUE? GENERAL,"HS Gear2A"
HS Gear3A	TEKEXP:VALUE GENERAL,"HS Gear3A","Excluded"	TEKEXP:VALUE? GENERAL,"HS Gear3A"
HS Gear1B	TEKEXP:VALUE GENERAL,"HS Gear1B","Excluded"	TEKEXP:VALUE? GENERAL,"HS Gear1B"
HS Gear2B	TEKEXP:VALUE GENERAL,"HS Gear2B","Excluded"	TEKEXP:VALUE? GENERAL,"HS Gear2B"
HS Gear3B	TEKEXP:VALUE GENERAL,"HS Gear3B","Excluded"	TEKEXP:VALUE? GENERAL,"HS Gear3B"
HS Gear4A	TEKEXP:VALUE GENERAL,"HS Gear4A","Excluded"	TEKEXP:VALUE? GENERAL,"HS Gear4A"
HS Gear4B	TEKEXP:VALUE GENERAL,"HS Gear4B","Excluded"	TEKEXP:VALUE? GENERAL,"HS Gear4B"
HS Gear5A	TEKEXP:VALUE GENERAL,"HS Gear5A","Excluded"	TEKEXP:VALUE? GENERAL,"HS Gear5A"
HS Gear5B	TEKEXP:VALUE GENERAL,"HS Gear5B","Excluded"	TEKEXP:VALUE? GENERAL,"HS Gear5B"
Amplitude	TEKEXP:VALUE GENERAL,"Amplitude","Large Amplitude"	TEKEXP:VALUE? GENERAL,"Amplitude"
Number of slew rates	TEKEXP:VALUE GENERAL,"Number of slew rates","4"	TEKEXP:VALUE? GENERAL,"Number of slew rates"
DUT control	TEKEXP:VALUE GENERAL,"DUT control","Manual"	TEKEXP:VALUE? GENERAL,"DUT control"
Signal Validation	TEKEXP:VALUE GENERAL,"Signal Validation","Prompt me if signal fails"	TEKEXP:VALUE? GENERAL,"Signal Validation"
Email when test setup change is needed	TEKEXP:VALUE GENERAL,"Email when test setup change is needed","False"	TEKEXP:VALUE? GENERAL,"Email when test setup change is needed"
On Failure Stop and Notify	TEKEXP:VALUE GENERAL,"On Failure Stop and Notify","False"	TEKEXP:VALUE? GENERAL,"On Failure Stop and Notify"

Table continued…

Parameter Names	Example to set	Example to query
Lane0 Connected to:Lane0:Differential	TEKEXP:VALUE GENERAL,"Lane0 Connected to:Lane0:Differential","CH1"	TEKEXP:VALUE? GENERAL,"Lane0 Connected to:Lane0:Differential"
Lane0 Connected to:Lane0+: Single Ended	TEKEXP:VALUE GENERAL,"Lane0 Connected to:Lane0+: Single Ended","CH1"	TEKEXP:VALUE? GENERAL,"Lane0 Connected to:Lane0+: Single Ended"
Lane0 Connected to:Lane0-: Single Ended	TEKEXP:VALUE GENERAL,"Lane0 Connected to:Lane0-: Single Ended","CH3"	TEKEXP:VALUE? GENERAL,"Lane0 Connected to:Lane0-: Single Ended"
Lane1 Connected to:Lane1:Differential	TEKEXP:VALUE GENERAL,"Lane1 Connected to:Lane1:Differential","CH2"	TEKEXP:VALUE? GENERAL,"Lane1 Connected to:Lane1:Differential"
Lane1 Connected to:Lane1+: Single Ended	TEKEXP:VALUE GENERAL,"Lane1 Connected to:Lane1+: Single Ended","CH2"	TEKEXP:VALUE? GENERAL,"Lane1 Connected to:Lane1+: Single Ended"
Lane1 Connected to:Lane1-: Single Ended	TEKEXP:VALUE GENERAL,"Lane1 Connected to:Lane1-: Single Ended","CH4"	TEKEXP:VALUE? GENERAL,"Lane1 Connected to:Lane1-: Single Ended"
Lane2 Connected to:Lane2:Differential	TEKEXP:VALUE GENERAL,"Lane2 Connected to:Lane2:Differential","CH3"	TEKEXP:VALUE? GENERAL,"Lane2 Connected to:Lane2:Differential"
Lane2 Connected to:Lane2+: Single Ended	TEKEXP:VALUE GENERAL,"Lane2 Connected to:Lane2+: Single Ended","CH1"	TEKEXP:VALUE? GENERAL,"Lane2 Connected to:Lane2+: Single Ended"
Lane2 Connected to:Lane2-: Single Ended	TEKEXP:VALUE GENERAL,"Lane2 Connected to:Lane2-: Single Ended","CH3"	TEKEXP:VALUE? GENERAL,"Lane2 Connected to:Lane2-: Single Ended"
Lane3 Connected to:Lane3:Differential	TEKEXP:VALUE GENERAL,"Lane3 Connected to:Lane3:Differential","CH4"	TEKEXP:VALUE? GENERAL,"Lane3 Connected to:Lane3:Differential"
Lane3 Connected to:Lane3+: Single Ended	TEKEXP:VALUE GENERAL,"Lane3 Connected to:Lane3+: Single Ended","CH2"	TEKEXP:VALUE? GENERAL,"Lane3 Connected to:Lane3+: Single Ended"
Lane3 Connected to:Lane3-: Single Ended	TEKEXP:VALUE GENERAL,"Lane3 Connected to:Lane3-: Single Ended","CH4"	TEKEXP:VALUE? GENERAL,"Lane3 Connected to:Lane3-: Single Ended"
Lane4 Connected to:Lane4:Differential	TEKEXP:VALUE GENERAL,"Lane4 Connected to:Lane4:Differential","CH1"	TEKEXP:VALUE? GENERAL,"Lane4 Connected to:Lane4:Differential"
Lane4 Connected to:Lane4+: Single Ended	TEKEXP:VALUE GENERAL,"Lane4 Connected to:Lane4+: Single Ended","CH1"	TEKEXP:VALUE? GENERAL,"Lane4 Connected to:Lane4+: Single Ended"
Lane4 Connected to:Lane4-: Single Ended	TEKEXP:VALUE GENERAL,"Lane4 Connected to:Lane4-: Single Ended","CH3"	TEKEXP:VALUE? GENERAL,"Lane4 Connected to:Lane4-: Single Ended"
Lane5 Connected to:Lane5:Differential	TEKEXP:VALUE GENERAL,"Lane5 Connected to:Lane5:Differential","CH2"	TEKEXP:VALUE? GENERAL,"Lane5 Connected to:Lane5:Differential"
Lane5 Connected to:Lane5-: Single Ended	TEKEXP:VALUE GENERAL,"Lane5 Connected to:Lane5-: Single Ended","CH4"	TEKEXP:VALUE? GENERAL,"Lane5 Connected to:Lane5-: Single Ended"
Lane6 Connected to:Lane6:Differential	TEKEXP:VALUE GENERAL,"Lane6 Connected to:Lane6:Differential","CH3"	TEKEXP:VALUE? GENERAL,"Lane6 Connected to:Lane6:Differential"
Lane6 Connected to:Lane6+: Single Ended	TEKEXP:VALUE GENERAL,"Lane6 Connected to:Lane6+: Single Ended","CH1"	TEKEXP:VALUE? GENERAL,"Lane6 Connected to:Lane6+: Single Ended"
Lane6 Connected to:Lane6-: Single Ended	TEKEXP:VALUE GENERAL,"Lane6 Connected to:Lane6-: Single Ended","CH3"	TEKEXP:VALUE? GENERAL,"Lane6 Connected to:Lane6-: Single Ended"
Lane7 Connected to:Lane7:Differential	TEKEXP:VALUE GENERAL,"Lane7 Connected to:Lane7:Differential","CH4"	TEKEXP:VALUE? GENERAL,"Lane7 Connected to:Lane7:Differential"

Table continued…

Parameter Names	Example to set	Example to query
Lane7 Connected to:Lane7+: Single Ended	TEKEXP:VALUE GENERAL,"Lane7 Connected to:Lane7+: Single Ended","CH2"	TEKEXP:VALUE? GENERAL,"Lane7 Connected to:Lane7+: Single Ended"
Lane7 Connected to:Lane7-: Single Ended	TEKEXP:VALUE GENERAL,"Lane7 Connected to:Lane7-: Single Ended","CH4"	TEKEXP:VALUE? GENERAL,"Lane7 Connected to:Lane7-: Single Ended"
Auto increment report name if duplicate	TEKEXP:VALUE GENERAL,"Auto increment report name if duplicate","True"	TEKEXP:VALUE? GENERAL,"Auto increment report name if duplicate"
Include Pass/Fail Results Summary	TEKEXP:VALUE GENERAL,"Include Pass/Fail Results Summary","True"	TEKEXP:VALUE? GENERAL,"Include Pass/Fail Results Summary"
Include Detailed Results	TEKEXP:VALUE GENERAL,"Include Detailed Results","True"	TEKEXP:VALUE? GENERAL,"Include Detailed Results"
Report Settings:Include Header In Appended Reports	TEKEXP:VALUE GENERAL,"Report Settings:Include Header In Appended Reports","False"	TEKEXP:VALUE? GENERAL,"Report Settings:Include Header In Appended Reports"
Include Plot Images	TEKEXP:VALUE GENERAL,"Include Plot Images","True"	TEKEXP:VALUE? GENERAL,"Include Plot Images"
Include Setup Configuration	TEKEXP:VALUE GENERAL,"Include Setup Configuration","True"	TEKEXP:VALUE? GENERAL,"Include Setup Configuration"
Include Complete Application Configuration	TEKEXP:VALUE GENERAL,"Include Complete Application Configuration","False"	TEKEXP:VALUE? GENERAL,"Include Complete Application Configuration"
Include User Comments	TEKEXP:VALUE GENERAL,"Include User Comments","True"	TEKEXP:VALUE? GENERAL,"Include User Comments"
Save As Type	TEKEXP:VALUE GENERAL,"Save As Type","Web Archive (*.mht;*.mhtml)"	TEKEXP:VALUE? GENERAL,"Save As Type"
View Report After Generating	TEKEXP:VALUE GENERAL,"View Report After Generating","True"	TEKEXP:VALUE? GENERAL,"View Report After Generating"
Report Path	TEKEXP:VALUE GENERAL,"Report Path","X:\M-PHY Tx\Reports\DUT001.mht"	TEKEXP:VALUE? GENERAL,"Report Path"
DUTID Comment	TEKEXP:VALUE GENERAL,"DUTID Comment","SomeText"	TEKEXP:VALUE? GENERAL,"DUTID Comment"
Link Widths	TEKEXP:VALUE GENERAL,"Link Widths","1 Lane"	TEKEXP:VALUE? GENERAL,"Link Widths"
Vterm Source	TEKEXP:VALUE GENERAL,"Vterm Source","Auto"	TEKEXP:VALUE? GENERAL,"Vterm Source"
Vterm Source (Vt)	TEKEXP:VALUE GENERAL,"Vterm Source (Vt)","0"	TEKEXP:VALUE? GENERAL,"Vterm Source (Vt)"
Acquisition Save Options	TEKEXP:VALUE GENERAL,"Acquisition Save Options","Save and Analyze Acquisitions In Sequence"	TEKEXP:VALUE? GENERAL,"Acquisition Save Options"
PreRecorded Mode	TEKEXP:VALUE GENERAL,"PreRecorded Mode","False"	TEKEXP:VALUE? GENERAL,"PreRecorded Mode"
View Probes	TEKEXP:VALUE GENERAL,"View Probes","False"	TEKEXP:VALUE? GENERAL,"View Probes"
Gear1 Pos Mask File Path	TEKEXP:VALUE GENERAL,"Gear1 Pos Mask File Path","INSTALL FOLDER\Lib\Filter Files\P7520A Gear1\SE Mode\Gear1_ch1.flt"	TEKEXP:VALUE? GENERAL,"Gear1 Pos Mask File Path"

Table continued…

Parameter Names	Example to set	Example to query
Gear1 Neg Mask File Path	TEKEXP:VALUE GENERAL,"Gear1 Neg Mask File Path","INSTALL FOLDER\Lib\Filter Files\P7520A Gear1\SE Mode\Gear1_ch2.flt"	TEKEXP:VALUE? GENERAL,"Gear1 Neg Mask File Path"
Gear2 Pos Mask File Path	TEKEXP:VALUE GENERAL,"Gear2 Pos Mask File Path","INSTALL FOLDER\Lib\Filter Files\P7520A Gear2\SE Mode\Gear2_ch1.flt"	TEKEXP:VALUE? GENERAL,"Gear2 Pos Mask File Path"
Gear2 Neg Mask File Path	TEKEXP:VALUE GENERAL,"Gear2 Neg Mask File Path","INSTALL FOLDER\Lib\Filter Files\P7520A Gear2\SE Mode\Gear2_ch2.flt"	TEKEXP:VALUE? GENERAL,"Gear2 Neg Mask File Path"
Gear3 Pos Mask File Path	TEKEXP:VALUE GENERAL,"Gear3 Pos Mask File Path","INSTALL FOLDER\Lib\Filter Files\P7520A Gear3\SE Mode\Gear3_ch1.flt"	TEKEXP:VALUE? GENERAL,"Gear3 Pos Mask File Path"
Gear3 Neg Mask File Path	TEKEXP:VALUE GENERAL,"Gear3 Neg Mask File Path","INSTALL FOLDER\Lib\Filter Files\P7520A Gear3\SE Mode\Gear3_ch2.flt"	TEKEXP:VALUE? GENERAL,"Gear3 Neg Mask File Path"
Gear1 Diff Mask File Path	TEKEXP:VALUE GENERAL,"Gear1 Diff Mask File Path","INSTALL FOLDER\Lib\Filter Files\P7520A Gear1\Diff Mode\Gear1_diff.flt"	TEKEXP:VALUE? GENERAL,"Gear1 Diff Mask File Path"
Gear2 Diff Mask File Path	TEKEXP:VALUE GENERAL,"Gear2 Diff Mask File Path","INSTALL FOLDER\Lib\Filter Files\P7520A Gear2\Diff Mode\Gear2_diff.flt"	TEKEXP:VALUE? GENERAL,"Gear2 Diff Mask File Path"
Gear3 Diff Mask File Path	TEKEXP:VALUE GENERAL,"Gear3 Diff Mask File Path","INSTALL FOLDER\Lib\Filter Files\P7520A Gear3\Diff Mode\Gear3_diff.flt"	TEKEXP:VALUE? GENERAL,"Gear3 Diff Mask File Path"
Gear0	TEKEXP:VALUE GENERAL,"Gear0","Included"	TEKEXP:VALUE? GENERAL,"Gear0"
Gear5	TEKEXP:VALUE GENERAL,"Gear5","Excluded"	TEKEXP:VALUE? GENERAL,"Gear5"
Gear6	TEKEXP:VALUE GENERAL,"Gear6","Excluded"	TEKEXP:VALUE? GENERAL,"Gear6"
Gear7	TEKEXP:VALUE GENERAL,"Gear7","Excluded"	TEKEXP:VALUE? GENERAL,"Gear7"
Gear0 Sample rate	TEKEXP:VALUE GENERAL,"Gear0 Sample rate","0.25"	TEKEXP:VALUE? GENERAL,"Gear0 Sample rate"
Gear1 Sample rate	TEKEXP:VALUE GENERAL,"Gear1 Sample rate","0.25"	TEKEXP:VALUE? GENERAL,"Gear1 Sample rate"
Gear2 Sample rate	TEKEXP:VALUE GENERAL,"Gear2 Sample rate","0.25"	TEKEXP:VALUE? GENERAL,"Gear2 Sample rate"
Gear3 Sample rate	TEKEXP:VALUE GENERAL,"Gear3 Sample rate","0.625"	TEKEXP:VALUE? GENERAL,"Gear3 Sample rate"
Gear4 Sample rate	TEKEXP:VALUE GENERAL,"Gear4 Sample rate","0.625"	TEKEXP:VALUE? GENERAL,"Gear4 Sample rate"
Gear5 Sample rate	TEKEXP:VALUE GENERAL,"Gear5 Sample rate","1.25"	TEKEXP:VALUE? GENERAL,"Gear5 Sample rate"
Gear6 Sample rate	TEKEXP:VALUE GENERAL,"Gear6 Sample rate","1.25"	TEKEXP:VALUE? GENERAL,"Gear6 Sample rate"
Gear7 Sample rate	TEKEXP:VALUE GENERAL,"Gear7 Sample rate","3.5"	TEKEXP:VALUE? GENERAL,"Gear7 Sample rate"

Table continued…

Parameter Names	Example to set	Example to query
Gear0 Horizontal Scale (us/div)	TEKEXP:VALUE GENERAL,"Gear0 Horizontal Scale (us/div)","2000"	TEKEXP:VALUE? GENERAL,"Gear0 Horizontal Scale (us/div)"
Gear1 Horizontal Scale (us/div)	TEKEXP:VALUE GENERAL,"Gear1 Horizontal Scale (us/div)","2000"	TEKEXP:VALUE? GENERAL,"Gear1 Horizontal Scale (us/div)"
Gear2 Horizontal Scale (us/div)	TEKEXP:VALUE GENERAL,"Gear2 Horizontal Scale (us/div)","2000"	TEKEXP:VALUE? GENERAL,"Gear2 Horizontal Scale (us/div)"
Gear3 Horizontal Scale (us/div)	TEKEXP:VALUE GENERAL,"Gear3 Horizontal Scale (us/div)","800"	TEKEXP:VALUE? GENERAL,"Gear3 Horizontal Scale (us/div)"
Gear4 Horizontal Scale (us/div)	TEKEXP:VALUE GENERAL,"Gear4 Horizontal Scale (us/div)","800"	TEKEXP:VALUE? GENERAL,"Gear4 Horizontal Scale (us/div)"
Gear5 Horizontal Scale (us/div)	TEKEXP:VALUE GENERAL,"Gear5 Horizontal Scale (us/div)","160"	TEKEXP:VALUE? GENERAL,"Gear5 Horizontal Scale (us/div)"
Gear6 Horizontal Scale (us/div)	TEKEXP:VALUE GENERAL,"Gear6 Horizontal Scale (us/div)","160"	TEKEXP:VALUE? GENERAL,"Gear6 Horizontal Scale (us/div)"
Gear7 Horizontal Scale (us/div)	TEKEXP:VALUE GENERAL,"Gear7 Horizontal Scale (us/div)","64"	TEKEXP:VALUE? GENERAL,"Gear7 Horizontal Scale (us/div)"
Lane5 Connected to:Lane5+: Single Ended	TEKEXP:VALUE GENERAL,"Lane5 Connected to:Lane5+: Single Ended","CH3"	TEKEXP:VALUE? GENERAL,"Lane5 Connected to:Lane5+: Single Ended"
Number of retries for signal acquisition	TEKEXP:VALUE GENERAL,"Number of retries for signal acquisition","3"	TEKEXP:VALUE? GENERAL,"Number of retries for signal acquisition"
Clock Lane	TEKEXP:VALUE GENERAL,"Clock Lane","CH1"	TEKEXP:VALUE? GENERAL,"Clock Lane"
Clock Source	TEKEXP:VALUE GENERAL,"Clock Source","External"	TEKEXP:VALUE? GENERAL,"Clock Source"
SYS 19.2MHz	TEKEXP:VALUE GENERAL,"SYS 19.2MHz","Excluded"	TEKEXP:VALUE? GENERAL,"SYS 19.2MHz"
SYS 26MHz	TEKEXP:VALUE GENERAL,"SYS 26MHz","Included"	TEKEXP:VALUE? GENERAL,"SYS 26MHz"
SYS 38.4MHz	TEKEXP:VALUE GENERAL,"SYS 38.4MHz","Excluded"	TEKEXP:VALUE? GENERAL,"SYS 38.4MHz"
SYS 52MHz	TEKEXP:VALUE GENERAL,"SYS 52MHz","Excluded"	TEKEXP:VALUE? GENERAL,"SYS 52MHz"
Automate with RF Switch	TEKEXP:VALUE GENERAL,"Automate with RF Switch","False"	TEKEXP:VALUE? GENERAL,"Automate with RF Switch"
DUT Tracing Terminated	TEKEXP:VALUE GENERAL,"DUT Tracing Terminated","Included"	TEKEXP:VALUE? GENERAL,"DUT Tracing Terminated"
RF Switch Terminated	TEKEXP:VALUE GENERAL,"RF Switch Terminated","Excluded"	TEKEXP:VALUE? GENERAL,"RF Switch Terminated"
Tek Fixture Terminated	TEKEXP:VALUE GENERAL,"Tek Fixture Terminated","Excluded"	TEKEXP:VALUE? GENERAL,"Tek Fixture Terminated"
DUT Tracing Unterminated	TEKEXP:VALUE GENERAL,"DUT Tracing Unterminated","Excluded"	TEKEXP:VALUE? GENERAL,"DUT Tracing Unterminated"
RF Switch Unterminated	TEKEXP:VALUE GENERAL,"RF Switch Unterminated","Excluded"	TEKEXP:VALUE? GENERAL,"RF Switch Unterminated"

Table continued…

Parameter Names	Example to set	Example to query
Tek Fixture Unterminated	TEKEXP:VALUE GENERAL,"Tek Fixture Unterminated","Excluded"	TEKEXP:VALUE? GENERAL,"Tek Fixture Unterminated"
DUT Tracing Filter Path Terminated	TEKEXP:VALUE GENERAL,"DUT Tracing Filter Path Terminated","INSTALL FOLDER\Lib\Filter Files\UFS\Ideal RC filter.flt"	TEKEXP:VALUE? GENERAL,"DUT Tracing Filter Path Terminated"
RF Switch Filter Path Terminated	TEKEXP:VALUE GENERAL,"RF Switch Filter Path Terminated","<path to flt file>"	TEKEXP:VALUE? GENERAL,"RF Switch Filter Path Terminated"
Tek Fixture Filter Path Terminated	TEKEXP:VALUE GENERAL,"Tek Fixture Filter Path Terminated","<Path to flt file>"	TEKEXP:VALUE? GENERAL,"Tek Fixture Filter Path Terminated"
DUT Tracing Filter Path Unterminated	TEKEXP:VALUE GENERAL,"DUT Tracing Filter Path Unterminated","<Path to the filter file *.flt>"	TEKEXP:VALUE? GENERAL,"DUT Tracing Filter Path Unterminated"
RF Switch Filter Path Unterminated	TEKEXP:VALUE GENERAL,"RF Switch Filter Path Unterminated","<path to flt file>"	TEKEXP:VALUE? GENERAL,"RF Switch Filter Path Unterminated"
Tek Fixture Filter Path Unterminated	TEKEXP:VALUE GENERAL,"Tek Fixture Filter Path Unterminated","<Path to flt file>"	TEKEXP:VALUE? GENERAL,"Tek Fixture Filter Path Unterminated"
Clock Connected to:Clock:Differential	TEKEXP:VALUE GENERAL,"Clock Connected to:Clock:Differential","CH1"	TEKEXP:VALUE? GENERAL,"Clock Connected to:Clock:Differential"
Clock Connected to:Clock+: Single Ended	TEKEXP:VALUE GENERAL,"Clock Connected to:Clock+: Single Ended","CH1"	TEKEXP:VALUE? GENERAL,"Clock Connected to:Clock+: Single Ended"
Clock Connected to:Clock-: Single Ended	TEKEXP:VALUE GENERAL,"Clock Connected to:Clock-: Single Ended","CH3"	TEKEXP:VALUE? GENERAL,"Clock Connected to:Clock-: Single Ended"
Signaling Mode	TEKEXP:VALUE GENERAL,"Signaling Mode","HS"	TEKEXP:VALUE? GENERAL,"Signaling Mode"
UFS4 19.2MHz	TEKEXP:VALUE GENERAL,"UFS4 19.2MHz","Excluded"	TEKEXP:VALUE? GENERAL,"UFS4 19.2MHz"
UFS4 26MHz	TEKEXP:VALUE GENERAL,"UFS4 26MHz","Excluded"	TEKEXP:VALUE? GENERAL,"UFS4 26MHz"
UFS4 38.4MHz	TEKEXP:VALUE GENERAL,"UFS4 38.4MHz","Excluded"	TEKEXP:VALUE? GENERAL,"UFS4 38.4MHz"
UFS4 52MHz	TEKEXP:VALUE GENERAL,"UFS4 52MHz","Included"	TEKEXP:VALUE? GENERAL,"UFS4 52MHz"

Acquire Parameters:

Parameter Names	Example to set	Example to query
Trigger shared settings	TEKEXP:VALUE ACQUIRE,"Deterministic Jitter","UFS4-Ref-Clock","Trigger shared settings","Shared"	TEKEXP:VALUE? ACQUIRE,"Deterministic Jitter","UFS4-Ref-Clock","Trigger shared settings"
Width Trigger Upper Limit Gear5B	TEKEXP:VALUE ACQUIRE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","CRPAT","Width Trigger Upper Limit Gear5B","3000"	TEKEXP:VALUE? ACQUIRE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","CRPAT","Width Trigger Upper Limit Gear5B"
Width Trigger Upper Limit Gear5B	TEKEXP:VALUE ACQUIRE,"Test 1.1.10-HS-TX Slew Rate Control Range","CRPAT SlewRate","Width Trigger Upper Limit Gear5B","3000"	TEKEXP:VALUE? ACQUIRE,"Test 1.1.10-HS-TX Slew Rate Control Range","CRPAT SlewRate","Width Trigger Upper Limit Gear5B"

Table continued…

Parameter Names	Example to set	Example to query
Width Trigger Upper Limit Gear5B	TEKEXP:VALUE ACQUIRE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","CRPAT-Single-ended","Width Trigger Upper Limit Gear5B","3000"	TEKEXP:VALUE? ACQUIRE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","CRPAT-Single-ended","Width Trigger Upper Limit Gear5B"
Width Trigger Upper Limit Gear5B	TEKEXP:VALUE ACQUIRE,"Test 1.1.2-HS-TX Common-Mode AC Power Spectral Magnitude Limit","CRPAT PSD-Single-ended","Width Trigger Upper Limit Gear5B","3000"	TEKEXP:VALUE? ACQUIRE,"Test 1.1.2-HS-TX Common-Mode AC Power Spectral Magnitude Limit","CRPAT PSD-Single-ended","Width Trigger Upper Limit Gear5B"
Width Trigger Upper Limit Gear5B	TEKEXP:VALUE ACQUIRE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","CRPAT - 3M","Width Trigger Upper Limit Gear5B","3000"	TEKEXP:VALUE? ACQUIRE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","CRPAT - 3M","Width Trigger Upper Limit Gear5B"
Width Trigger Upper Limit Gear5B	TEKEXP:VALUE ACQUIRE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","CRPAT - Eye","Width Trigger Upper Limit Gear5B","3000"	TEKEXP:VALUE? ACQUIRE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","CRPAT - Eye","Width Trigger Upper Limit Gear5B"
Sample Rate Gear5B	TEKEXP:VALUE ACQUIRE,"Test 1.1.9-HS-TX Lane-Lane Output Skew","CRPAT-Lane-Lane","Sample Rate Gear5B","100"	TEKEXP:VALUE? ACQUIRE,"Test 1.1.9-HS-TX Lane-Lane Output Skew","CRPAT-Lane-Lane","Sample Rate Gear5B"
Gear7 Width trigger upper limit (UI)	TEKEXP:VALUE ACQUIRE,"Test 1.2.1-PWM-TX Transmit Bit Duration","CRPAT","Gear7 Width trigger upper limit (UI)","15"	TEKEXP:VALUE? ACQUIRE,"Test 1.2.1-PWM-TX Transmit Bit Duration","CRPAT","Gear7 Width trigger upper limit (UI)"
Width trigger upper limit (UI)	TEKEXP:VALUE ACQUIRE,"Test 1.2.9-PWM-TX Lane-Lane Output Skew","CRPAT-Lane-Lane","Width trigger upper limit (UI)","1"	TEKEXP:VALUE? ACQUIRE,"Test 1.2.9-PWM-TX Lane-Lane Output Skew","CRPAT-Lane-Lane","Width trigger upper limit (UI)"
SYS 52MHz Width trigger upper limit (UI)	TEKEXP:VALUE ACQUIRE,"Test 1.3.1-SYS-TX Unit Interval and Frequency Offset","CRPAT","SYS 52MHz Width trigger upper limit (UI)","2550"	TEKEXP:VALUE? ACQUIRE,"Test 1.3.1-SYS-TX Unit Interval and Frequency Offset","CRPAT","SYS 52MHz Width trigger upper limit (UI)"
SYS 52MHz Width trigger upper limit (UI)	TEKEXP:VALUE ACQUIRE,"Test 1.3.2-SYS-TX Ref Clock frequency","CRPAT-Clock","SYS 52MHz Width trigger upper limit (UI)","2550"	TEKEXP:VALUE? ACQUIRE,"Test 1.3.2-SYS-TX Ref Clock frequency","CRPAT-Clock","SYS 52MHz Width trigger upper limit (UI)"
SYS 52MHz Width trigger upper limit (UI)	TEKEXP:VALUE ACQUIRE,"Test 1.3.9-SYS-TX Lane-Lane Output Skew","CRPAT-Lane-Lane","SYS 52MHz Width trigger upper limit (UI)","2550"	TEKEXP:VALUE? ACQUIRE,"Test 1.3.9-SYS-TX Lane-Lane Output Skew","CRPAT-Lane-Lane","SYS 52MHz Width trigger upper limit (UI)"

Analyze Parameters:

Parameter Names	Example to set	Example to query
High pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Deterministic Jitter","High pass filter (MHz)","1"	TEKEXP:VALUE? ANALYZE,"Deterministic Jitter","High pass filter (MHz)"
Clock recovery method	TEKEXP:VALUE ANALYZE,"Deterministic Jitter","Clock recovery method","Constant Clock-Mean"	TEKEXP:VALUE? ANALYZE,"Deterministic Jitter","Clock recovery method"
Clock edge	TEKEXP:VALUE ANALYZE,"Deterministic Jitter","Clock edge","RISE"	TEKEXP:VALUE? ANALYZE,"Deterministic Jitter","Clock edge"
Jitter Method	TEKEXP:VALUE ANALYZE,"Deterministic Jitter","Jitter Method","DJ"	TEKEXP:VALUE? ANALYZE,"Deterministic Jitter","Jitter Method"

Table continued…

Parameter Names	Example to set	Example to query
Nominal Frequency	TEKEXP:VALUE ANALYZE,"Frequency Error","Nominal Frequency","AUTO"	TEKEXP:VALUE? ANALYZE,"Frequency Error","Nominal Frequency"
Nominal Frequency Value	TEKEXP:VALUE ANALYZE,"Frequency Error","Nominal Frequency Value","19.2"	TEKEXP:VALUE? ANALYZE,"Frequency Error","Nominal Frequency Value"
Ref Levels Autoset Basetop Method	TEKEXP:VALUE ANALYZE,"Frequency","Ref Levels Autoset Basetop Method","AUTO"	TEKEXP:VALUE? ANALYZE,"Frequency","Ref Levels Autoset Basetop Method"
Filter ramp time (ms)	TEKEXP:VALUE ANALYZE,"Input High Voltage","Filter ramp time (ms)","0.25"	TEKEXP:VALUE? ANALYZE,"Input High Voltage","Filter ramp time (ms)"
BIT Type	TEKEXP:VALUE ANALYZE,"Input High Voltage","BIT Type","ALLBITS"	TEKEXP:VALUE? ANALYZE,"Input High Voltage","BIT Type"
SSC Profile	TEKEXP:VALUE ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","SSC Profile","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","SSC Profile"
SSC Frequency Deviation	TEKEXP:VALUE ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","SSC Frequency Deviation","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","SSC Frequency Deviation"
Low level	TEKEXP:VALUE ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","Low level","10"	TEKEXP:VALUE? ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","Low level"
Mid level_absolute	TEKEXP:VALUE ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","Mid level_absolute","0"	TEKEXP:VALUE? ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","Mid level_absolute"
Low pass filter (F2) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","Low pass filter (F2) spec","SECOND"	TEKEXP:VALUE? ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","Low pass filter (F2) spec"
Low pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","Low pass filter (MHz)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","Low pass filter (MHz)"
Gating	TEKEXP:VALUE ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","Gating","CURSOR"	TEKEXP:VALUE? ANALYZE,"Test 1.1.1-HS-TX Unit Interval and Frequency Offset","Gating"
High level_percentage	TEKEXP:VALUE ANALYZE,"Test 1.1.10-HS-TX Slew Rate Control Range","High level_percentage","90"	TEKEXP:VALUE? ANALYZE,"Test 1.1.10-HS-TX Slew Rate Control Range","High level_percentage"
Mid level_percentage	TEKEXP:VALUE ANALYZE,"Test 1.1.10-HS-TX Slew Rate Control Range","Mid level_percentage","50"	TEKEXP:VALUE? ANALYZE,"Test 1.1.10-HS-TX Slew Rate Control Range","Mid level_percentage"
Low level_percentage	TEKEXP:VALUE ANALYZE,"Test 1.1.10-HS-TX Slew Rate Control Range","Low level_percentage","10"	TEKEXP:VALUE? ANALYZE,"Test 1.1.10-HS-TX Slew Rate Control Range","Low level_percentage"
Mid level	TEKEXP:VALUE ANALYZE,"Test 1.1.11-HS-TX Slew Rate Monotonicity","Mid level","50"	TEKEXP:VALUE? ANALYZE,"Test 1.1.11-HS-TX Slew Rate Monotonicity","Mid level"
Low level_absolute	TEKEXP:VALUE ANALYZE,"Test 1.1.11-HS-TX Slew Rate Monotonicity","Low level_absolute","0"	TEKEXP:VALUE? ANALYZE,"Test 1.1.11-HS-TX Slew Rate Monotonicity","Low level_absolute"
Hysteresis_absolute	TEKEXP:VALUE ANALYZE,"Test 1.1.11-HS-TX Slew Rate Monotonicity","Hysteresis_absolute","0.05"	TEKEXP:VALUE? ANALYZE,"Test 1.1.11-HS-TX Slew Rate Monotonicity","Hysteresis_absolute"
Hysteresis_percentage	TEKEXP:VALUE ANALYZE,"Test 1.1.12-HS-TX Slew Rate Resolution","Hysteresis_percentage","5"	TEKEXP:VALUE? ANALYZE,"Test 1.1.12-HS-TX Slew Rate Resolution","Hysteresis_percentage"

Table continued…

Parameter Names	Example to set	Example to query
Skew	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Skew","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Skew"
From Edge value	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","From Edge value","BOTH"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","From Edge value"
To Edge value	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","To Edge value","SAMEAS"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","To Edge value"
Hysteresis	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Hysteresis","3"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Hysteresis"
Gear1A High pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1A High pass filter (MHz)","1"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1A High pass filter (MHz)"
Gear1A Low pass filter (F2) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1A Low pass filter (F2) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1A Low pass filter (F2) spec"
Gear1A Low pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1A Low pass filter (MHz)","624"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1A Low pass filter (MHz)"
Gear1B High pass filter (F1) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1B High pass filter (F1) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1B High pass filter (F1) spec"
Gear1B High pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1B High pass filter (MHz)","1"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1B High pass filter (MHz)"
Gear1B Low pass filter (F2) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1B Low pass filter (F2) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1B Low pass filter (F2) spec"
Gear1B Low pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1B Low pass filter (MHz)","728.8"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1B Low pass filter (MHz)"
Gear1B Filter ramp time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1B Filter ramp time (ms)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1B Filter ramp time (ms)"
Gear1B Filter blanking time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1B Filter blanking time (ms)","4"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear1B Filter blanking time (ms)"
Gear2A High pass filter (F1) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2A High pass filter (F1) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2A High pass filter (F1) spec"
Gear2A High pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2A High pass filter (MHz)","1"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2A High pass filter (MHz)"
Gear2A Low pass filter (F2) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2A Low pass filter (F2) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2A Low pass filter (F2) spec"

Table continued…

Parameter Names	Example to set	Example to query
Gear2A Low pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2A Low pass filter (MHz)","1248"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2A Low pass filter (MHz)"
Gear2A Filter ramp time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2A Filter ramp time (ms)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2A Filter ramp time (ms)"
Gear2A Filter blanking time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2A Filter blanking time (ms)","4"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2A Filter blanking time (ms)"
Gear2B High pass filter (F1) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2B High pass filter (F1) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2B High pass filter (F1) spec"
Gear2B High pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2B High pass filter (MHz)","1"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2B High pass filter (MHz)"
Gear2B Low pass filter (F2) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2B Low pass filter (F2) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2B Low pass filter (F2) spec"
Gear2B Low pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2B Low pass filter (MHz)","1457.6"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2B Low pass filter (MHz)"
Gear2B Filter ramp time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2B Filter ramp time (ms)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2B Filter ramp time (ms)"
Gear2B Filter blanking time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2B Filter blanking time (ms)","4"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear2B Filter blanking time (ms)"
Gear3A High pass filter (F1) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3A High pass filter (F1) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3A High pass filter (F1) spec"
Gear3A High pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3A High pass filter (MHz)","1"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3A High pass filter (MHz)"
Gear3A Low pass filter (F2) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3A Low pass filter (F2) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3A Low pass filter (F2) spec"
Gear3A Low pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3A Low pass filter (MHz)","2496"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3A Low pass filter (MHz)"
Gear3A Filter ramp time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3A Filter ramp time (ms)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3A Filter ramp time (ms)"
Gear3A Filter blanking time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3A Filter blanking time (ms)","4"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3A Filter blanking time (ms)"

Table continued…

Parameter Names	Example to set	Example to query
Gear4B High pass filter (F1) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4B High pass filter (F1) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4B High pass filter (F1) spec"
Gear3B High pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3B High pass filter (MHz)","1"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3B High pass filter (MHz)"
Gear3B Low pass filter (F2) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3B Low pass filter (F2) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3B Low pass filter (F2) spec"
Gear3B Low pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3B Low pass filter (MHz)","2915.2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3B Low pass filter (MHz)"
Gear3B Filter ramp time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3B Filter ramp time (ms)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3B Filter ramp time (ms)"
Gear3B Filter blanking time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3B Filter blanking time (ms)","4"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3B Filter blanking time (ms)"
Gear4A High pass filter (F1) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4A High pass filter (F1) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4A High pass filter (F1) spec"
Gear4A High pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4A High pass filter (MHz)","1"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4A High pass filter (MHz)"
Gear4A Low pass filter (F2) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4A Low pass filter (F2) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4A Low pass filter (F2) spec"
Gear4A Low pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4A Low pass filter (MHz)","2496"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4A Low pass filter (MHz)"
Gear4A Filter ramp time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4A Filter ramp time (ms)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4A Filter ramp time (ms)"
Gear4A Filter blanking time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4A Filter blanking time (ms)","4"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4A Filter blanking time (ms)"
Gear3B High pass filter (F1) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3B High pass filter (F1) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear3B High pass filter (F1) spec"
Gear4B High pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4B High pass filter (MHz)","1"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4B High pass filter (MHz)"
Gear4B Low pass filter (F2) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4B Low pass filter (F2) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4B Low pass filter (F2) spec"

Table continued…

Parameter Names	Example to set	Example to query
Gear4B Low pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4B Low pass filter (MHz)","2915.2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4B Low pass filter (MHz)"
Gear4B Filter ramp time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4B Filter ramp time (ms)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4B Filter ramp time (ms)"
Gear4B Filter blanking time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4B Filter blanking time (ms)","4"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear4B Filter blanking time (ms)"
Gear5A High pass filter (F1) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5A High pass filter (F1) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5A High pass filter (F1) spec"
Gear5A High pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5A High pass filter (MHz)","1"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5A High pass filter (MHz)"
Gear5A Low pass filter (F2) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5A Low pass filter (F2) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5A Low pass filter (F2) spec"
Gear5A Low pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5A Low pass filter (MHz)","9984"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5A Low pass filter (MHz)"
Gear5A Filter ramp time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5A Filter ramp time (ms)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5A Filter ramp time (ms)"
Gear5A Filter blanking time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5A Filter blanking time (ms)","4"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5A Filter blanking time (ms)"
Gear5B High pass filter (F1) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5B High pass filter (F1) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5B High pass filter (F1) spec"
Gear5B High pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5B High pass filter (MHz)","1"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5B High pass filter (MHz)"
Gear5B Low pass filter (F2) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5B Low pass filter (F2) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5B Low pass filter (F2) spec"
Gear5B Low pass filter (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5B Low pass filter (MHz)","11660"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5B Low pass filter (MHz)"
Gear5B Filter ramp time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5B Filter ramp time (ms)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5B Filter ramp time (ms)"
Gear5B Filter blanking time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5B Filter blanking time (ms)","4"	TEKEXP:VALUE? ANALYZE,"Test 1.1.13-HS-TX Intra-Lane Output Skew","Gear5B Filter blanking time (ms)"

Table continued…

Parameter Names	Example to set	Example to query
Positive width	TEKEXP:VALUE ANALYZE,"Test 1.1.14-HS-TX Transmitter Pulse Width","Positive width","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.14-HS-TX Transmitter Pulse Width","Positive width"
PLL Model Type	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","PLL Model Type","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","PLL Model Type"
Damping (m)	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Damping (m)","700"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Damping (m)"
Loop bandwidth (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Loop bandwidth (MHz)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Loop bandwidth (MHz)"
Loop bandwidth Gear 1(MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Loop bandwidth Gear 1(MHz)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Loop bandwidth Gear 1(MHz)"
Loop bandwidth Gear 2(MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Loop bandwidth Gear 2(MHz)","4"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Loop bandwidth Gear 2(MHz)"
Loop bandwidth Gear 3(MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Loop bandwidth Gear 3(MHz)","8"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Loop bandwidth Gear 3(MHz)"
Loop bandwidth Gear 4(MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Loop bandwidth Gear 4(MHz)","8"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Loop bandwidth Gear 4(MHz)"
Loop bandwidth Gear 5(MHz)	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Loop bandwidth Gear 5(MHz)","16"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Loop bandwidth Gear 5(MHz)"
Nominal data rate	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Nominal data rate","True"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Nominal data rate"
Signal type	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Signal type","DATA"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Signal type"
RjDj Pattern type	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","RjDj Pattern type","Arbitrary"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","RjDj Pattern type"
Arbitrary window length (UI)	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Arbitrary window length (UI)","5"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Arbitrary window length (UI)"
Repeating pattern length (UI)	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Repeating pattern length (UI)","1270"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Repeating pattern length (UI)"
Population	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Population","100"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Population"
Target BER (1e-)	TEKEXP:VALUE ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Target BER (1e-)","12"	TEKEXP:VALUE? ANALYZE,"Test 1.1.15-HS-TX Total Jitter","Target BER (1e-)"
TJBER	TEKEXP:VALUE ANALYZE,"Test 1.1.16-HS-TX Short-Term Total Jitter","TJBER","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.16-HS-TX Short-Term Total Jitter","TJBER"
TIE	TEKEXP:VALUE ANALYZE,"Test 1.1.16-HS-TX Short-Term Total Jitter","TIE","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.16-HS-TX Short-Term Total Jitter","TIE"
Ref levels	TEKEXP:VALUE ANALYZE,"Test 1.1.16-HS-TX Short-Term Total Jitter","Ref levels","Percentage"	TEKEXP:VALUE? ANALYZE,"Test 1.1.16-HS-TX Short-Term Total Jitter","Ref levels"
Loop Bandwidth Type	TEKEXP:VALUE ANALYZE,"Test 1.1.16-HS-TX Short-Term Total Jitter","Loop Bandwidth Type","JTFBW"	TEKEXP:VALUE? ANALYZE,"Test 1.1.16-HS-TX Short-Term Total Jitter","Loop Bandwidth Type"
Known data pattern	TEKEXP:VALUE ANALYZE,"Test 1.1.16-HS-TX Short-Term Total Jitter","Known data pattern","False"	TEKEXP:VALUE? ANALYZE,"Test 1.1.16-HS-TX Short-Term Total Jitter","Known data pattern"

Table continued…

Parameter Names	Example to set	Example to query
DJDIRAC1	TEKEXP:VALUE ANALYZE,"Test 1.1.17-HS-TX Deterministic Jitter","DJDIRAC1","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.17-HS-TX Deterministic Jitter","DJDIRAC1"
High level_absolute	TEKEXP:VALUE ANALYZE,"Test 1.1.17-HS-TX Deterministic Jitter","High level_absolute","0"	TEKEXP:VALUE? ANALYZE,"Test 1.1.17-HS-TX Deterministic Jitter","High level_absolute"
Gear1A High pass filter (F1) spec	TEKEXP:VALUE ANALYZE,"Test 1.1.17-HS-TX Deterministic Jitter","Gear1A High pass filter (F1) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.17-HS-TX Deterministic Jitter","Gear1A High pass filter (F1) spec"
Pattern file path	TEKEXP:VALUE ANALYZE,"Test 1.1.18-HS-TX Short term Deterministic Jitter","Pattern file path",""	TEKEXP:VALUE? ANALYZE,"Test 1.1.18-HS-TX Short term Deterministic Jitter","Pattern file path"
Comparison string	TEKEXP:VALUE ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","Comparison string","GE"	TEKEXP:VALUE? ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","Comparison string"
HS Prepare Length Gear1A	TEKEXP:VALUE ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear1A","10"	TEKEXP:VALUE? ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear1A"
HS Prepare Length Gear1B	TEKEXP:VALUE ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear1B","10"	TEKEXP:VALUE? ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear1B"
HS Prepare Length Gear2A	TEKEXP:VALUE ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear2A","10"	TEKEXP:VALUE? ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear2A"
HS Prepare Length Gear2B	TEKEXP:VALUE ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear2B","10"	TEKEXP:VALUE? ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear2B"
HS Prepare Length Gear3A	TEKEXP:VALUE ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear3A","10"	TEKEXP:VALUE? ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear3A"
HS Prepare Length Gear3B	TEKEXP:VALUE ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear3B","10"	TEKEXP:VALUE? ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear3B"
HS Prepare Length Gear4A	TEKEXP:VALUE ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear4A","10"	TEKEXP:VALUE? ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear4A"
HS Prepare Length Gear4B	TEKEXP:VALUE ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear4B","10"	TEKEXP:VALUE? ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear4B"
HS Prepare Length Gear5A	TEKEXP:VALUE ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear5A","10"	TEKEXP:VALUE? ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear5A"
HS Prepare Length Gear5B	TEKEXP:VALUE ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear5B","10"	TEKEXP:VALUE? ANALYZE,"Test 1.1.3-HS-TX PREPARE Length","HS Prepare Length Gear5B"
High level	TEKEXP:VALUE ANALYZE,"Test 1.1.5-HS-TX Differential DC Output Voltage Amplitude","High level","90"	TEKEXP:VALUE? ANALYZE,"Test 1.1.5-HS-TX Differential DC Output Voltage Amplitude","High level"
Eye high	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Eye high","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Eye high"
Eye low	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Eye low","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Eye low"
Period	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Period","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Period"
Mask hits	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Mask hits","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Mask hits"

Table continued…

Parameter Names	Example to set	Example to query
Measurement point of UI (%)	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Measurement point of UI (%)","50"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Measurement point of UI (%)"
RT Gear1B LA Mask file path 19.2MHz	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","RT Gear1B LA Mask file path 19.2MHz","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear1B\G1B_1p4592G_LA_RT.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","RT Gear1B LA Mask file path 19.2MHz"
RT Gear1B SA Mask file path 19.2MHz	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","RT Gear1B SA Mask file path 19.2MHz","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear1B\G1B_1p4592G_SA_RT.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","RT Gear1B SA Mask file path 19.2MHz"
RT Gear2A LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","RT Gear2A LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear2A\1.1.6_VDIFF_AC_LA_RT_G2A.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","RT Gear2A LA Mask file path"
RT Gear2B LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","RT Gear2B LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear2B\1.1.6_VDIFF_AC_LA_RT_G2B.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","RT Gear2B LA Mask file path"
RT Gear2B LA Mask file path 19.2MHz	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","RT Gear2B LA Mask file path 19.2MHz","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear2B\G2B_2p9184G_LA_RT.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","RT Gear2B LA Mask file path 19.2MHz"
RT Gear3A LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-Tx G3, G4 and G5 Differential AC Eye","RT Gear3A LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear3A\1.1.7_EYE_LA_RT_G3A.msk	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear3A LA Mask file path"
RT Gear3B LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear3B LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear3B\1.1.7_EYE_LA_RT_G3B.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear3B LA Mask file path"
RT Gear3B SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear3B SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear3B\1.1.7_EYE_SA_RT_G3B.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear3B SA Mask file path"

Table continued…

Parameter Names	Example to set	Example to query
RT Gear3B SA Mask file path 19.2MHz	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","RT Gear3B SA Mask file path 19.2MHz","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear3B\G3B_5p8368G_SA_RT.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","RT Gear3B SA Mask file path 19.2MHz"
Gear3A Short(CH1)	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3A Short(CH1)","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Filter Files\Gear3A\ShortChannel_G3A.flt"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3A Short(CH1)"
Gear3A Long(CH2)	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3A Long(CH2)","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Filter Files\Gear3A\LongChannel_G3A_G3A.flt"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3A Long(CH2)"
Gear3B Short(CH1)	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3B Short(CH1)","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Filter Files\Gear3A\ShortChannel_G3B.flt"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3B Short(CH1)"
Gear3B Long(CH2)	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3B Long(CH2)","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Filter Files\Gear3A\LongChannel_G3B.flt"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3B Long(CH2)"
Gear3A Short	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3A Short","Excluded"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3A Short"
Gear3A Long	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3A Long","Excluded"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3A Long"
Gear3B Short	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3B Short","Excluded"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3B Short"
Gear3B Long	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3B Long","Excluded"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Gear3B Long"
De-Emphasis 3.5dB	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","De-Emphasis 3.5dB","Excluded"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","De-Emphasis 3.5dB"
De-Emphasis 6.0dB	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","De-Emphasis 6.0dB","Excluded"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","De-Emphasis 6.0dB"
De-Emphasis 0dB	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","De-Emphasis 0dB","Excluded"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","De-Emphasis 0dB"

Table continued…

Parameter Names	Example to set	Example to query
Setup File	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Setup File","AWG Setup2.set"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Setup File"
Save Waveform	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Save Waveform","False"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Save Waveform"
Enable Eye Rendering	TEKEXP:VALUE ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Enable Eye Rendering","True"	TEKEXP:VALUE? ANALYZE,"Test 1.1.6-HS-TX G1 and G2 Differential AC Eye","Enable Eye Rendering"
RT Gear1A LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear1A LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear1A\1.1.7_VDIFF_AC_LA_RT_G1A.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear1A LA Mask file path"
RT Gear1A SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear1A SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear1A\1.1.7_VDIFF_AC_SA_RT_G1A.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear1A SA Mask file path"
RT Gear1B LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear1B LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear1B\1.1.7_VDIFF_AC_LA_RT_G1B.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear1B LA Mask file path"
RT Gear1B SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear1B SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear1B\1.1.7_VDIFF_AC_SA_RT_G1B.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear1B SA Mask file path"
RT Gear2A SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear2A SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear2A\1.1.7_VDIFF_AC_SA_RT_G2A.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear2A SA Mask file path"
RT Gear2B SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear2B SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear2B\1.1.7_VDIFF_AC_SA_RT_G2B.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear2B SA Mask file path"
RT Gear2B SA Mask file path 19.2MHz	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear2B SA Mask file path 19.2MHz","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear2B\G2B_2p9184G_SA_RT.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear2B SA Mask file path 19.2MHz"

Table continued…

Parameter Names	Example to set	Example to query
RT Gear3A SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear3A SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear3A\1.1.7_EYE_SA_RT_G3A.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear3A SA Mask file path"
RT Gear3B LA Mask file path 19.2MHz	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear3B LA Mask file path 19.2MHz","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear3B\G3B_5p8368G_LA_RT.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear3B LA Mask file path 19.2MHz"
RT Gear4A LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear4A LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear4A\1.1.7_EYE_LA_RT_G4A.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear4A LA Mask file path"
RT Gear4A SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear4A SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear4A\1.1.7_EYE_SA_RT_G4A.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear4A SA Mask file path"
RT Gear4B LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear4B LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear4B\1.1.7_EYE_LA_RT_G4B.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear4B LA Mask file path"
RT Gear4B SA Mask file path 19.2MHz	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear4B SA Mask file path 19.2MHz","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear4B\G4B_11p6736G_SA_RT.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear4B SA Mask file path 19.2MHz"
RT Gear4B SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear4B SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear4B\1.1.7_EYE_SA_RT_G4B.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear4B SA Mask file path"
RT Gear4B LA Mask file path 19.2MHz	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear4B LA Mask file path 19.2MHz","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear4B\G4B_11p6736G_LA_RT.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear4B LA Mask file path 19.2MHz"
RT Gear5A LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear5A LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear5A\1.1.7_EYE_LA_RT_G5A.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear5A LA Mask file path"

Table continued…

Parameter Names	Example to set	Example to query
RT Gear5A SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear5A SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear5A\1.1.7_EYE_SA_RT_G5A.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear5A SA Mask file path"
RT Gear5B LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear5B LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear5B\1.1.7_EYE_LA_RT_G5B.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear5B LA Mask file path"
RT Gear5B SA Mask file path 19.2MHz	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear5B SA Mask file path 19.2MHz","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear5B\G5B_23p3472G_SA_RT.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear5B SA Mask file path 19.2MHz"
RT Gear5B SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear5B SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear5B\1.1.7_EYE_SA_RT_G5B.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear5B SA Mask file path"
RT Gear5B LA Mask file path 19.2MHz	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear5B LA Mask file path 19.2MHz","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\Mask Files\Gear5B\G5B_23p3472G_LA_RT.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","RT Gear5B LA Mask file path 19.2MHz"
SDLA Settings File Path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","SDLA Settings File Path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\HS\SDLAEqualizerSettings.csv"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","SDLA Settings File Path"
Gear4AB Short(CH1)(Continuous)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Short(CH1)(Continuous)","INSTALL FOLDER\Lib\SDLA\Associated_s4p_file.s4p	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Short(CH1)(Continuous)"
Gear4AB Long(CH2)(Continuous)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Long(CH2)(Continuous)","INSTALL FOLDER\Lib\SDLA\Associated_s4p_file.s4p	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Long(CH2)(Continuous)"
Gear4AB Package(Continuous)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Package(Continuous)","INSTALL FOLDER\Lib\SDLA\Associated_s4p_file.s4p	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Package(Continuous)"
Gear4AB Short(CH1)(Burst)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Short(CH1)(Burst)","INSTALL FOLDER\Lib\Filter Files\Gear4B\26\Ref1.flt"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Short(CH1)(Burst)"

Table continued…

Parameter Names	Example to set	Example to query
Gear4AB Long(CH2)(Burst)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Long(CH2)(Burst)","INSTALL FOLDER\Lib\Filter Files\Gear4B\26\Ref2.flt"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Long(CH2)(Burst)"
Gear4AB Package(Burst)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Package(Burst)","INSTALL FOLDER\Lib\Filter Files\Gear4B\26\Package.flt"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Package(Burst)"
Gear4A De-embed Filter(Continuous)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4A De-embed Filter(Continuous)","INSTALL FOLDER\Lib\SDLA\DeEmbed\Associated_s4p_file.s4p	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4A De-embed Filter(Continuous)"
Gear4B De-embed Filter(Continuous)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4B De-embed Filter(Continuous)","INSTALL FOLDER\Lib\SDLA\DeEmbed\Associated_s4p_file.s4p	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4B De-embed Filter(Continuous)"
Gear4A De-embed Filter(Burst)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4A De-embed Filter(Burst)",""	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4A De-embed Filter(Burst)"
Gear4B De-embed Filter(Burst)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4B De-embed Filter(Burst)",""	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4B De-embed Filter(Burst)"
Gear4AB Short	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Short","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Short"
Gear4AB Long	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Long","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear4AB Long"
Include Gear4AB Package	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear4AB Package","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear4AB Package"
Include Gear4A De-embed Filter	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear4A De-embed Filter","Excluded"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear4A De-embed Filter"
Include Gear4B De-embed Filter	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear4B De-embed Filter","Excluded"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear4B De-embed Filter"
Run Continuous as per spec	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Run Continuous as per spec","Excluded"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Run Continuous as per spec"
Manual Setting Mode	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Manual Setting Mode","UI Selection"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Manual Setting Mode"

Table continued…

Parameter Names	Example to set	Example to query
SDLA Mode	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","SDLA Mode","Auto"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","SDLA Mode"
Adc	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Adc","2"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Adc"
fz	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","fz","1.2(GHz)"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","fz"
fp1	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","fp1","2.3(GHz)"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","fp1"
fp2	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","fp2","10(GHz)"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","fp2"
De-Emphasis 6.0dB Gear3A/3B	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 6.0dB Gear3A/3B","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 6.0dB Gear3A/3B"
De-Emphasis 3.5dB Gear3A/3B	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 3.5dB Gear3A/3B","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 3.5dB Gear3A/3B"
De-Emphasis 0dB Gear3A/3B	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 0dB Gear3A/3B","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 0dB Gear3A/3B"
De-Emphasis 6.0dB Gear4A/4B	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 6.0dB Gear4A/4B","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 6.0dB Gear4A/4B"
De-Emphasis 3.5dB Gear4A/4B	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 3.5dB Gear4A/4B","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 3.5dB Gear4A/4B"
De-Emphasis 0dB Gear4A/4B	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 0dB Gear4A/4B","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 0dB Gear4A/4B"
De-Emphasis 0dB Gear5A/5B	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 0dB Gear5A/5B","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 0dB Gear5A/5B"
De-Emphasis 3.5dB Gear5A/5B	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 3.5dB Gear5A/5B","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 3.5dB Gear5A/5B"
De-Emphasis 6.0dB Gear5A/5B	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 6.0dB Gear5A/5B","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","De-Emphasis 6.0dB Gear5A/5B"
Include Gear5AB Reference Channel(Ch1)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5AB Reference Channel(Ch1)","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5AB Reference Channel(Ch1)"
Gear5AB Reference Channel(Ch1) Path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5AB Reference Channel(Ch1) Path","INSTALL FOLDER\Lib\SDLA\Gear-5A-5B\Associated_s4p_file.s4p	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5AB Reference Channel(Ch1) Path"

Table continued…

Parameter Names	Example to set	Example to query
Include Gear5AB Tx Package	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5AB Tx Package","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5AB Tx Package"
Gear5AB Tx Package Path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5AB Tx Package Path","INSTALL FOLDER\Lib\SDLA\Gear-5A-5B\Associated_s4p_file.s4p	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5AB Tx Package Path"
Include Gear5AB Rx Package	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5AB Rx Package","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5AB Rx Package"
Gear5AB Rx Package Path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5AB Rx Package Path","INSTALL FOLDER\Lib\SDLA\Gear-5A-5B\Associated_s4p_file.s4p	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5AB Rx Package Path"
Include Gear5AB Tx Tcoll	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5AB Tx Tcoll","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5AB Tx Tcoll"
Gear5AB Tx Tcoll Path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5AB Tx Tcoll Path","INSTALL FOLDER\Lib\SDLA\Gear-5A-5B\Associated_s4p_file.s4p	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5AB Tx Tcoll Path"
Include Gear5AB Rx Tcoll	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5AB Rx Tcoll","Included"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5AB Rx Tcoll"
Gear5AB Rx Tcoll Path	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5AB Rx Tcoll Path","INSTALL FOLDER\Lib\SDLA\Gear-5A-5B\Associated_s4p_file.s4p	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5AB Rx Tcoll Path"
Include Gear5A De-embed Filter	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5A De-embed Filter","Excluded"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5A De-embed Filter"
Include Gear5B De-embed Filter	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5B De-embed Filter","Excluded"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Include Gear5B De-embed Filter"
Gear5A De-embed Filter(Continuous)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5A De-embed Filter(Continuous)","INSTALL FOLDER\Lib\SDLA\DeEmbed\Associated_s4p_file.s4p	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5A De-embed Filter(Continuous)"

Table continued…

Parameter Names	Example to set	Example to query
Gear5B De-embed Filter(Continuous)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5B De-embed Filter(Continuous)","INSTALL FOLDER\Lib\SDLA\DeEmbed\Associated_s4p_file.s4p	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5B De-embed Filter(Continuous)"
Gear5A De-embed Filter(Burst)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5A De-embed Filter(Burst)",""	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5A De-embed Filter(Burst)"
Gear5B De-embed Filter(Burst)	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5B De-embed Filter(Burst)",""	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Gear5B De-embed Filter(Burst)"
Enable Eye Rendering Gear3A3B	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Enable Eye Rendering Gear3A3B","True"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Enable Eye Rendering Gear3A3B"
Enable Eye Rendering Gear4A4B	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Enable Eye Rendering Gear4A4B","True"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Enable Eye Rendering Gear4A4B"
Enable Eye Rendering Gear5A5B	TEKEXP:VALUE ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Enable Eye Rendering Gear5A5B","True"	TEKEXP:VALUE? ANALYZE,"Test 1.1.7-HS-TX G3, G4 and G5 Differential AC Eye","Enable Eye Rendering Gear5A5B"
Reference levels	TEKEXP:VALUE ANALYZE,"Test 1.2.1-PWM-TX Transmit Bit Duration","Reference levels","Percentage"	TEKEXP:VALUE? ANALYZE,"Test 1.2.1-PWM-TX Transmit Bit Duration","Reference levels"
Reference Level - High (%)	TEKEXP:VALUE ANALYZE,"Test 1.2.1-PWM-TX Transmit Bit Duration","Reference Level - High (%)","80"	TEKEXP:VALUE? ANALYZE,"Test 1.2.1-PWM-TX Transmit Bit Duration","Reference Level - High (%)"
Reference Level - Low (%)	TEKEXP:VALUE ANALYZE,"Test 1.2.1-PWM-TX Transmit Bit Duration","Reference Level - Low (%)","20"	TEKEXP:VALUE? ANALYZE,"Test 1.2.1-PWM-TX Transmit Bit Duration","Reference Level - Low (%)"
Reference Level - Hysteresis (%)	TEKEXP:VALUE ANALYZE,"Test 1.2.1-PWM-TX Transmit Bit Duration","Reference Level - Hysteresis (%)","10"	TEKEXP:VALUE? ANALYZE,"Test 1.2.1-PWM-TX Transmit Bit Duration","Reference Level - Hysteresis (%)"
High Pass Filter Spec (F1)	TEKEXP:VALUE ANALYZE,"Test 1.2.1-PWM-TX Transmit Bit Duration","High Pass Filter Spec (F1)","FIRST"	TEKEXP:VALUE? ANALYZE,"Test 1.2.1-PWM-TX Transmit Bit Duration","High Pass Filter Spec (F1)"
High Pass Frequency F1 (MHz)	TEKEXP:VALUE ANALYZE,"Test 1.2.1-PWM-TX Transmit Bit Duration","High Pass Frequency F1 (MHz)","4"	TEKEXP:VALUE? ANALYZE,"Test 1.2.1-PWM-TX Transmit Bit Duration","High Pass Frequency F1 (MHz)"
LS Prepare Length Gear0	TEKEXP:VALUE ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear0","10"	TEKEXP:VALUE? ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear0"
LS Prepare Length Gear1	TEKEXP:VALUE ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear1","9"	TEKEXP:VALUE? ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear1"
LS Prepare Length Gear2	TEKEXP:VALUE ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear2","8"	TEKEXP:VALUE? ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear2"

Table continued…

Parameter Names	Example to set	Example to query
LS Prepare Length Gear3	TEKEXP:VALUE ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear3","7"	TEKEXP:VALUE? ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear3"
LS Prepare Length Gear4	TEKEXP:VALUE ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear4","6"	TEKEXP:VALUE? ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear4"
LS Prepare Length Gear5	TEKEXP:VALUE ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear5","5"	TEKEXP:VALUE? ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear5"
LS Prepare Length Gear6	TEKEXP:VALUE ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear6","4"	TEKEXP:VALUE? ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear6"
LS Prepare Length Gear7	TEKEXP:VALUE ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear7","3"	TEKEXP:VALUE? ANALYZE,"Test 1.2.3-PWM-TX PREPARE Length","LS Prepare Length Gear7"
Gear1A Filter blanking time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.2.9-PWM-TX Lane-Lane Output Skew","Gear1A Filter blanking time (ms)","4"	TEKEXP:VALUE? ANALYZE,"Test 1.2.9-PWM-TX Lane-Lane Output Skew","Gear1A Filter blanking time (ms)"
High pass filter (F1) spec	TEKEXP:VALUE ANALYZE,"Test 1.3.1-SYS-TX Unit Interval and Frequency Offset","High pass filter (F1) spec","NONE"	TEKEXP:VALUE? ANALYZE,"Test 1.3.1-SYS-TX Unit Interval and Frequency Offset","High pass filter (F1) spec"
Filter blanking time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.3.2-SYS-TX Ref Clock frequency","Filter blanking time (ms)","0.25"	TEKEXP:VALUE? ANALYZE,"Test 1.3.2-SYS-TX Ref Clock frequency","Filter blanking time (ms)"
LS Prepare Length 19.2MHz	TEKEXP:VALUE ANALYZE,"Test 1.3.3-SYS-TX PREPARE Length","LS Prepare Length 19.2MHz","10"	TEKEXP:VALUE? ANALYZE,"Test 1.3.3-SYS-TX PREPARE Length","LS Prepare Length 19.2MHz"
LS Prepare Length 26MHz	TEKEXP:VALUE ANALYZE,"Test 1.3.3-SYS-TX PREPARE Length","LS Prepare Length 26MHz","10"	TEKEXP:VALUE? ANALYZE,"Test 1.3.3-SYS-TX PREPARE Length","LS Prepare Length 26MHz"
LS Prepare Length 38.4MHz	TEKEXP:VALUE ANALYZE,"Test 1.3.3-SYS-TX PREPARE Length","LS Prepare Length 38.4MHz","10"	TEKEXP:VALUE? ANALYZE,"Test 1.3.3-SYS-TX PREPARE Length","LS Prepare Length 38.4MHz"
LS Prepare Length 52MHz	TEKEXP:VALUE ANALYZE,"Test 1.3.3-SYS-TX PREPARE Length","LS Prepare Length 52MHz","10"	TEKEXP:VALUE? ANALYZE,"Test 1.3.3-SYS-TX PREPARE Length","LS Prepare Length 52MHz"
RT 19.2MHz LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 19.2MHz LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\19.2MHz\1.3.7_T_EYE_TX_LA_RT_19.2.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 19.2MHz LA Mask file path"
RT 19.2MHz SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 19.2MHz SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\19.2MHz\1.3.7_T_EYE_TX_SA_RT_19.2.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 19.2MHz SA Mask file path"

Table continued…

Parameter Names	Example to set	Example to query
NT 19.2MHz LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 19.2MHz LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\19.2MHz\1.3.7_T_EYE_TX_LA_NT_19.2.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 19.2MHz LA Mask file path"
NT 19.2MHz SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 19.2MHz SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\19.2MHz\1.3.7_T_EYE_TX_SA_NT_19.2.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 19.2MHz SA Mask file path"
RT 26MHz LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 26MHz LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\26MHz\1.3.7_T_EYE_TX_LA_RT_26.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 26MHz LA Mask file path"
RT 26MHz SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 26MHz SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\26MHz\1.3.7_T_EYE_TX_SA_RT_26.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 26MHz SA Mask file path"
NT 26MHz LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 26MHz LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\26MHz\1.3.7_T_EYE_TX_LA_NT_26.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 26MHz LA Mask file path"
NT 26MHz SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 26MHz SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\26MHz\1.3.7_T_EYE_TX_SA_NT_26.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 26MHz SA Mask file path"
RT 38.4MHz LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 38.4MHz LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\38.4MHz\1.3.7_T_EYE_TX_LA_RT_38.4.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 38.4MHz LA Mask file path"
RT 38.4MHz SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 38.4MHz SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\38.4MHz\1.3.7_T_EYE_TX_SA_RT_38.4.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 38.4MHz SA Mask file path"

Table continued…

Parameter Names	Example to set	Example to query
NT 38.4MHz LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 38.4MHz LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\38.4MHz\1.3.7_T_EYE_TX_LA_NT_38.4.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 38.4MHz LA Mask file path"
NT 38.4MHz SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 38.4MHz SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\38.4MHz\1.3.7_T_EYE_TX_SA_NT_38.4.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 38.4MHz SA Mask file path"
RT 52MHz LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 52MHz LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\52MHz\1.3.7_T_EYE_TX_LA_RT_52.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 52MHz LA Mask file path"
RT 52MHz SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 52MHz SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\52MHz\1.3.7_T_EYE_TX_SA_RT_52.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","RT 52MHz SA Mask file path"
NT 52MHz LA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 52MHz LA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\52MHz\1.3.7_T_EYE_TX_LA_NT_52.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 52MHz LA Mask file path"
NT 52MHz SA Mask file path	TEKEXP:VALUE ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 52MHz SA Mask file path","INSTALL FOLDER\Compliance Suites\MIPI\M-PHY\Transmitter\SYS\Mask Files\52MHz\1.3.7_T_EYE_TX_SA_NT_52.msk"	TEKEXP:VALUE? ANALYZE,"Test 1.3.7-SYS-TX Maximum Diffrential AC Output Voltage Amplitude","NT 52MHz SA Mask file path"
Gear1A Filter ramp time (ms)	TEKEXP:VALUE ANALYZE,"Test 1.3.9-SYS-TX Lane-Lane Output Skew","Gear1A Filter ramp time (ms)","2"	TEKEXP:VALUE? ANALYZE,"Test 1.3.9-SYS-TX Lane-Lane Output Skew","Gear1A Filter ramp time (ms)"

References

Application directories

You can find the application files at *C:\Program Files\Tektronix\TekExpress M-PHY Tx*. The application directory and associated files are organized as follows:

The following table lists the default directory names and their usage:

Table 20: Application directories and usage

Directory names	Usage
Bin	Contains application libraries
Compliance Suites	Contains test suite specific files
ICP	Contains instrument and application specific interface libraries
Images	Contains images of the application
Lib	Contains utility files specific to the application
Licenses	Contains all the license files
Report Generator	Contains style sheets for report generation
Tools	Contains instrument and application specific files

File name extensions

The TekExpress M-PHY Tx software uses the following file name extensions:

Table 21: File name extension

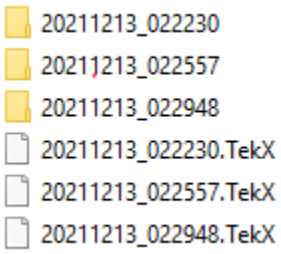
File name extension	Description
*.TekX	Application session files (the extensions may not be displayed)
*.py	Python sequence file.
*.xml	Test-specific configuration information (encrypted) files. Application log files
*.csv	Test result reports Plot data
*.mht	Test result reports (default) Test reports can also be saved in HTML format
*.pdf	Test result reports Application help document
*.xslt	Style sheet used to generate reports
*.png	Captured images

View test-related files

Files related to tests are stored in My Documents\TekExpress M-PHY Tx\Untitled session folder. Each test setup in this folder has both a test setup file and a test setup folder, both with the test setup name. The test setup file is preceded by the TekExpress icon.

Inside the test setup folder is another folder named for the DUT ID used in the test sessions. The default is DUT001.

Inside the DUT001 folder are the session folders and files. Each session also has a folder and file pair, both named for the test session using the naming convention (date)_(time). Each session file is stored outside its matching session folder:



Each session folder contains image files of any plots generated from running the test session. If you selected to save all waveforms or ran tests using prerecorded waveform files, these are included here.

The first time you run a new, unsaved session, the session files are stored in the Untitled Session folder located at X:\TekExpress M-PHY Tx. When you name and save the session, the files are placed in a folder with the name that you specify. A copy of the test files stay in the Untitled Session folder until you run a new test or until you close the application.

Waveform naming conventions (pre-recorded mode)

HS test output file name conventions

The following file name syntax is used for HS test output waveform files:

[Lanex]-[Source]-[AcquireType]-[Termination]-[Gear]-[Amplitude]-[SRn]-[RecordLength in M]-[SampleRate in G]-[Diff/SEPos/SENeg].wfm

Table 22: Waveform naming convention for HS signal type in TekExpress M-PHY Tx v10.2 and above

Test Name	Acquistion	Acquistion Name	Waveform Naming in Pre-recorded mode for HS-Signal type	
			Differential	Single Ended
Test 1.1.1	1	CRPAT	Lane0-CH1-CRPAT-RT-Gear4A-LA-SR1-5M-100G-Diff.wfm	Lane0-CH1-CRPAT-RT-Gear4A-LA-SR1-5M-100G-SEPos.wfm Lane0-CH3-CRPAT-RT-Gear4A-LA-SR1-5M-100G-SENeg.wfm
Test 1.1.3				
Test 1.1.4				
Test 1.1.5				
Test 1.1.8				
Test 1.1.14				
Test 1.1.2	2	CRPAT PSD-Single-ended	Not applicable for pre-recorded mode	
Test 1.1.6	3	CRPAT - 3M	Not applicable for pre-recorded mode	
Test 1.1.7	4	CRPAT - Eye	Not applicable for pre-recorded mode	

Table continued…

Test Name	Acquistion	Acquistion Name	Waveform Naming in Pre-recorded mode for HS-Signal type	
			Differential	Single Ended
Test 1.1.9	5	CRPAT-Lane-Lane	Lane0-Lane1-CH2-CRPAT-Lane-Lane-RT-Gear4A-LA-SR1-5M-100G-Diff Lane0-Lane1-CH4-CRPAT-Lane-Lane-RT-Gear4A-LA-SR1-5M-100G-Diff	Lane0-Lane1-CH1-CRPAT-Lane-Lane-RT-Gear4A-LA-SR1-5M-100G-SEPos.wfm Lane0-Lane1-CH3-CRPAT-Lane-Lane-RT-Gear4A-LA-SR1-5M-100G-SENeg.wfm Lane0-Lane1-CH2-CRPAT-Lane-Lane-RT-Gear4A-LA-SR1-5M-100G-SEPos.wfm Lane0-Lane1-CH4-CRPAT-Lane-Lane-RT-Gear4A-LA-SR1-5M-100G-SENeg.wfm
Test 1.1.10	6	CRPAT SlewRate	Lane0-CH1-CRPATSlewRate-RT-Gear4A-LA-SR1-5M-100G-Diff.wfm Lane0-CH1-CRPATSlewRate-RT-Gear4A-LA-SR2-5M-100G-Diff.wfm	Lane0-CH1-CRPATSlewRate-RT-Gear4A-LA-SR1-5M-100G-SEPos.wfm Lane0-CH3-CRPATSlewRate-RT-Gear4A-LA-SR1-5M-100G-SENeg.wfm Lane0-CH1-CRPATSlewRate-RT-Gear4A-LA-SR2-5M-100G-SEPos.wfm Lane0-CH3-CRPATSlewRate-RT-Gear4A-LA-SR2-5M-100G-SENeg.wfm
Test 1.1.11				
Test 1.1.12				
Test 1.1.13	7	CRPAT-Single-ended	Not applicable for differential mode	Lane0-CH1-CRPAT-Single-ended-RT-Gear4A-LA-SR1-5M-100G-SEPos.wfm Lane0-CH3-CRPAT-Single-ended-RT-Gear4A-LA-SR1-5M-100G-SENeg.wfm
Test 1.1.15	8	CRPAT	Lane0-CH1-CRPAT-RT-Gear4A-LA-SR1-10M-100G-Diff.wfm	Lane0-CH1-CRPAT-RT-Gear4A-LA-SR1-10M-100G-SEPos.wfm Lane0-CH3-CRPAT-RT-Gear4A-LA-SR1-10M-100G-SENeg.wfm
Test 1.1.16				
Test 1.1.17				
Test 1.1.18				
Ber Eye Contour	9	CRPAT - 3M	Not applicable for pre-recorded mod	

PWM test output file name conventions

The following file name syntax is used for PWM test output waveform files:

[LANEx] [CHy] [CRPAT] [Termination] [Gear] [Amplitude] [Horizontal Scale] [Resolution] [POS/NEG].wfm

The following are a few PWM file name examples:

Lane0 CH3 CRPAT RT Gear0 LA 2000usdiv 4000pspt POS.wfm

Lane0 CH3 CRPAT RT Gear0 LA 2000usdiv 4000pspt NEG.wfm

SYS test output file name conventions

The following file name syntax is used for SYS test output waveform files:

[LANEx] [CHy] [CRPAT] [Termination] [Gear] [Amplitude] [Horizontal Scale] [Resolution] [POS/NEG].wfm

In the pre recorded mode, the automation expects the waveforms to be provided in the same naming format.

Note: For Lane to Lane skew measurements in HS, PWM, and SYS (Test 1.1.9 - HS-TX Lane-to-Lane Skew, 1.2.9 - PWM-TX Lane-to Lane Skew, and 1.3.9 -SYS-TX Lane-to-Lane Skew) uses inputs from two lanes. The following file name syntax is used for Lane to Lane skew measurements for HS, PWM and SYS tests for output waveform file:

[LANEx] [LANEX1] [CHy] [CRPAT] [Termination] [Gear] [Amplitude] [Horizontal Scale] [Resolution] [POS/NEG].wfm

where X is reference lane (Lane0/L0) and X1 is another lane (Lane1, Lane2, Lane3...).

UFS4 test output file name conventions

The following file name syntax is used for UFS test output waveform files:

UFS4-[Source]-[AcquireType]-[Termination]-[Frequency]-[RecordLength in M]-[SampleRate in G]-[Diff/SEPos/SENeg].wfm

Table 23: Waveform naming convention for UFS4 Ref Clock signal type in TekExpress M-PHY Tx v10.2 and above

Test Name	Acquistion	Acquistion Name	Waveform Naming in Pre-recorded mode for UFS4-Signal type	
			Differential	Single Ended
Frequency	1	UFS4-Ref-Clock	UFS4-CH1-UFS4-Ref-Clock-NT-52MHz-5M-25G-Diff.wfm	UFS4-CH1-UFS4-Ref-Clock-NT-52MHz-5M-25G-SEPos.wfm UFS4-CH3-UFS4-Ref-Clock-NT-52MHz-5M-25G-SENeg.wfm
Frequency Error				
Input High Voltage				
Input Low Voltage				
Input Clock Rise Time				
Input Clock Fall Time				
Duty Cycle				
RJ				
DJ				

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