Getting Started with Option SST

You can use this side of the Quick Reference to start to take measurements with the Option SST Serial ATA and Serial Attached SCSI Analysis modules that plug into the RT-Eye Compliance and Analysis Solution. The other side contains a complete menu tree for Option SST software.

NOTE. For complete operating instructions and General Safety information, refer to the online help for the application.

The Option SST Serial ATA and Serial Attached SCSI Analysis modules transform a digital oscilloscope into an analysis tool to test storage devices according to the Serial Advanced Technology Attachment or SATA (Gen I and Gen II) and Serial Attached SCSI (SAS) standards.

Performing a Differential Output Voltage Measurement

To measure the differential output voltage of a Serial ATA device, follow these steps:

- 1. Select File> Run Application> RT-Eye Serial Compliance and Analysis from the oscilloscope menu bar. (For supported B-series oscilloscopes, on the oscilloscope menu bar, click App> RT-Eye Serial Compliance and Analysis. For DPO oscilloscopes, select Analyze> RT-Eye Serial Compliance and Analysis.)
- 2. Select Measurements> Serial ATA. Set the Test Point to Transmitter, the Probe Type to Differential, and the measurement to Differential Output Voltage.
- **3.** Connect the probes to the device under test. For example, the test setup using a differential probe for Differential Output Voltage is shown below.



4. Select Measurement> Configure. Select the Source tab. Set the Test Method to BIST FIS/User. Set the channel to Ch1.



5. Select the General Config tab. Set the Usage Model as appropriate, Device Type to Drive, and set the Number of UI and Cable Attn as appropriate. Set the Diff Volt Option to Option1.



6. Push the "Running Man" button to start taking measurements. Follow the on-screen prompts to input different test patterns to complete the measurement. When the measurement is completed successfully, the application automatically displays the results. You can also view the results by selecting Results> Summary or Results> Details from the application menu bar.



7. The application displays results for the measurement.



- 8. To generate a report, select Utilities> Report Generator.
- 9. Select the template in the Generate Report tab.
- **10.** Select the Generate button to post the test data to the template.



For up-to-date information on Tektronix oscilloscope solutions for Serial ATA, access the <u>www.tektronix.com/Measurement/scopes/Web</u> page.

Option SST Ordering Information

Supports the TDS6804B, TDS6604/B, TDS7704B, and DPO/DSA70000 series oscilloscopes; refer to the *Optional Applications Software on Windows-Based Oscilloscopes Installation Manual* for a complete list of supported models. The applications CD includes a PDF file of the installation manual.

If you order the Option SST along with a TDS6804B, TDS6604/B, TDS7704B series oscilloscope, the Option SST Serial ATA and Serial Attached SCSI Analysis Software will already be installed and enabled. To order an upgrade for an existing oscilloscope:

- Opt. RTE: RT-Eye Serial Data Compliance and Analysis Software
- Opt. J3- Jitter and Timing Analysis Software

Recommended Products and Accessories

Arbitrary Waveform Generator: AWG 610/615/710/710B/715B

High Bandwidth Differential Probe: P7380, P7380SMA

SMA Cables: Tektronix part number 174-1427-00

SMA Attenuators: Tektronix part number 015-1002-01

TDR Measurement: TDS8200/80E04

Option SST Test Solution Reference

www.tektronix.com



Option SST Menu Tree



* Added when the Probe Type is Single ended.

** Added only when the Test Point is Transmitter.

*** The Report Generator utility includes online help specific to the use of the Report Generator Editor.

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