Getting Started with TDSET2

You can use this side of the Quick Reference to get started with testing the Ethernet's physical layer for 1000Base-T Templates. The other side contains a complete menu tree for the TDSET2 application.

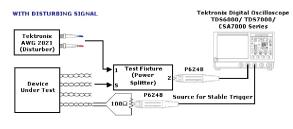
NOTE. For complete operating instructions, refer to the Online Help for the application.

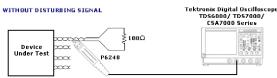
TDSET2 Ethernet Compliance Test Software coupled with TDS7000, CSA7000 and TDS6000 Series oscilloscopes, enhances efficiency with faster validation cycles and much higher reliability.

Testing 1000Base-T Templates

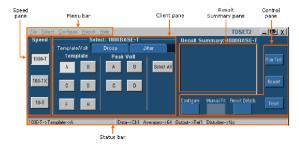
Follow these steps:

Connect the probes to the Device Under Test (DUT).
 For example, the test setup for 1000Base-T Template is shown below.



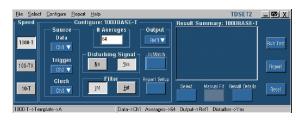


- **2.** Select File> Run Application> Ethernet Compliance Software in the oscilloscope menu bar.
- 3. Select 1000-T in the Speed pane.
- 4. In the Template/Volt tab, click Select All.



NOTE. You can also select one template at a time to test.

5. Select the Configure toggle button in the Control pane to change the configuration settings.



- **6.** Select the data source and set the reference waveform on which the processed waveform will be stored.
- To test Templates with disturbing signal, select Disturbing Signal as Yes and assign trigger and clock channels.

NOTE. If you want to test Templates without disturbing signal, select Disturbing Signal as No and skip step 8 to 12.

8. Measure and compensate the disturbance of the test fixture using Jig Match.



- 9. Connect the disturbing signal at Port1 and measure amplitude and frequency across PortS with 100ohm termination
- **10.** Connect the CLK signal across 100 ohm termination and measure phase difference with respect to disturbing signal.
- Click Next in Jig Match dialog box, connect the DUT signal at PortS with Port1 connected to 100 ohm termination and measure amplitude.



For up-to-date information on Tektronix oscilloscope solutions for Ethernet Compliance Test, access the www.tektronix.com web page.

TDSET2 Ordering Information

(Supports the TDS6000, TDS7000, CSA7000 Series of oscilloscopes. Refer to the *Optional Applications Software on Windows-Based Oscilloscopes Installation Manual* for a list of specific models. The applications CD includes a PDF file of the installation manual.)

If you order Option ET2 along with TDS6000/TDS7000/CSA7000

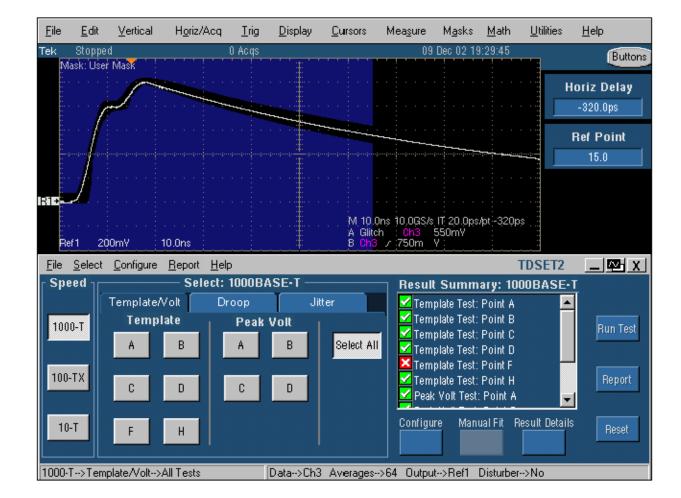
Ethernet Compliance Test Software is installed and enabled

To order an upgrade for an existing oscilloscope:

- Order TDS6UP Opt. ET2
- Order TDS7UP Opt. ET2
- Order CSA7UP Opt. ET2

Recommended Accessories

Opt. 2M for TDS7000/CSA7000



- 12. Connect the DUT signal at probing point with Port1 connected to 100 ohm termination and measure attenuation.
- **13.** Select Report Setup to configure the report setup to identify and automatically preview the report.



14. Select Run Test in the Control pane. The application displays the resulting waveform and the results as pass or fail in the Result Summary pane as shown below.



NOTE. To manually fit the waveform into the mask, select Manual Fit in the Control pane. You can manually fit only one waveform at a time into the mask.

15. Select Result Details in the Control pane for more information



- **16.** To generate a report automatically, select Report in the Control pane.
- 17. If you want to customize the report format, select Report> Report Generator. In the Generate Report tab, select the template and select the Generate button to post the test data to the template.

TDSET2 Ethernet Compliance Test Software Reference

www.tektronix.com

071-1260-00

TDSET2 Menu Tree

