Getting Started with TDSUSB2

You can use this side of the Quick Reference to start taking measurements with the USB2.0 Compliance Test Package (TDSUSB2). The other side contains a complete menu tree for TDSUSB2 software.

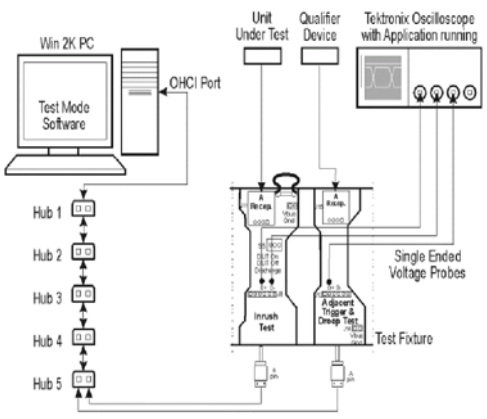
> ***NOTE.*** *For complete operating instructions and General Safety information, refer to the Online Help for the application.*

The package includes an application (Universal Serial Bus measurements software) and an optional USB2.0 comprehensive compliance test fixture.

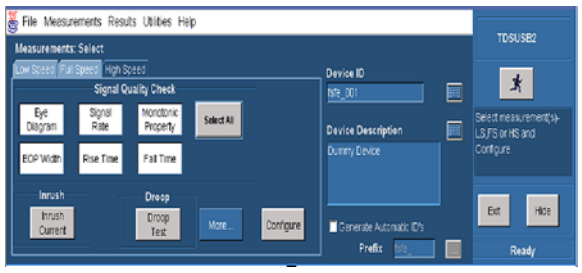
The design of the package helps you to test if USB2.0 devices meet the compliance test requirements of the USB2.0 industry for physical layer measurements. The package supports these tests: Signal Quality, Inrush current test, Droop test, Chirp and Receiver sensitivity testing, Suspend, Resume, Reset from High Speed, Reset from Suspend, and Packet Parameter tests.

Performing Signal Quality Test

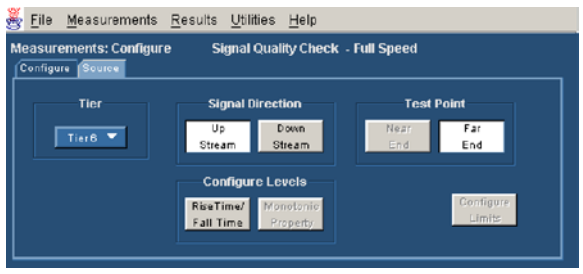
1. Select File > Run Application > in the oscilloscope menu bar. Then select TDSUSB2.0 Test Package, App > USB2.0 Test Package, or Analyze > USB2.0 Test Package.
2. Connect the device under test (DUT) to the Device SQ section of the test fixture.

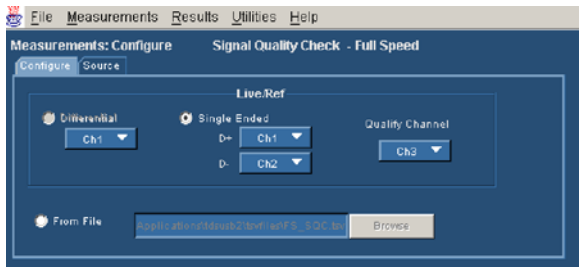


3. Select Measurement > Select and choose a test for the appropriate signal speed (Low, Full or High speed).

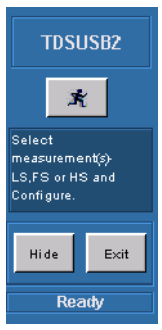


4. Select Measurement > Configure and set up the application in the Configure and Source tabs.

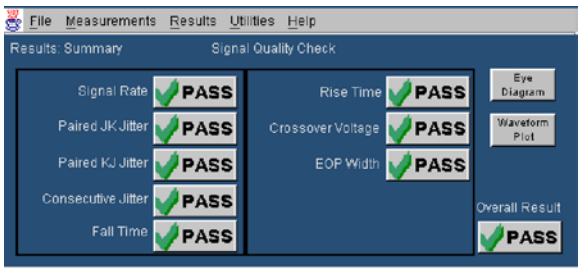


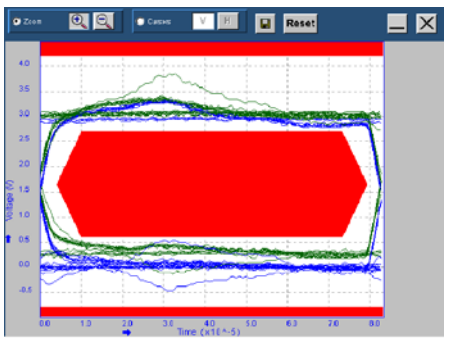


5. Push the “Running Man” button to start taking measurements.

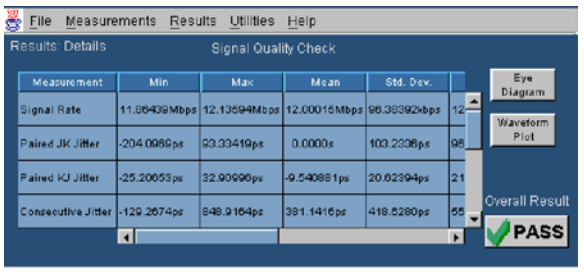


The application displays results as a summary and as an eye diagram as shown below.





6. Select Results > Details to view the results in a statistical format.



Generating a Compliance Report

To produce a compliance test report, select Utilities > Report Generator.

For up-to-date information on Tektronix oscilloscope solutions for USB2.0 compliance testing, access the **www.tektronix.com/Measurement/scopes/** web page.

TDSUSB2 Ordering Information

This application supports TDS5000/B (except TDS5052/B and TDS5032/B), TDS6604, TDS6404, TDS6604B, TDS6804B, TDS6124C, TDS6154C, TDS/CSA7000/B, and DPO7000 series 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 USB with a new oscilloscope:

- USB 2.0 Universal Serial Bus Measurements Software is installed and enabled

To order for an existing Windows-based oscilloscope:

- Order the CSA7UP Option USB (software only)
- Order the CSA7BUP Option USB (software only)
- Order the TDS5UP Option USB (software only)
- Order the TDS5BUP Option USB (software only)
- Order the TDS6UP Option USB (software only)
- Order the TDS6BUP Option USB (software only)
- Order the TDS7UP Option USB (software only)
- Order the TDS7BUP Option USB (software only)
- Order the DPO7UP Option USB (software only)

If you order TDSUSBF

- USB 2.0 Compliance Test Fixture only

Recommended Accessories

- **TDSUSBF** USB2.0 Compliance Test Fixture
- **DG2040** Data Generator
- **AWG610** Arbitrary Waveform Generator
- **TDS8000** series oscilloscope with an 80E04 Time Domain Reflectometer (TDR) Sampling Module
- **P6248** Differential Probe
- **TCP202/TCP0030** Current Probe
- **P6245, TAP1500/ P6243** Single-Ended Probes

> ***NOTE.*** *To test High Speed USB2.0 devices, you can use this application with DPO7254, TDS6404, TDS6804B, TDS6604/B, TDS6804B, TDS6124C, TDS6154C, TDS7404/B, CSA7404/B, TDS7704B, and TDS7254/B oscilloscopes.*

TDSUSB2
Universal Serial Bus Package Reference

www.tektronix.com

071-1882-00

TDSUSB2 Menu Tree