Getting Started with TDSUSB2

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

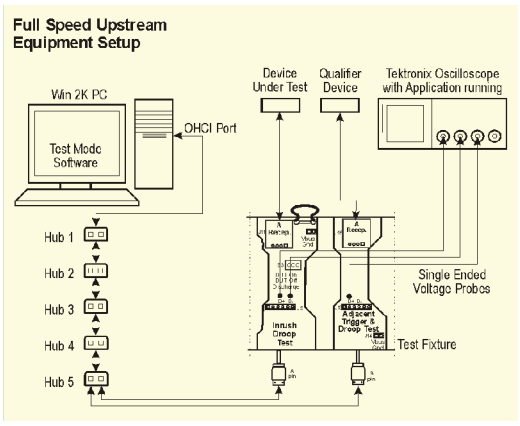
> ***NOTE.*** *For complete operating instructions and General Safety information, refer to the Online Help for the application.*

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

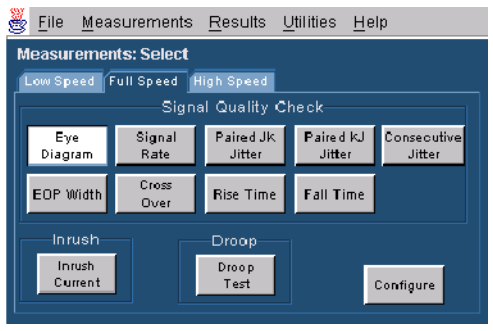
The design of the package helps you to test if USB2.0 devices meet the compliance test requirements of the USB2.0 industry for physical layer measurements. The package supports these tests: Signal Quality, Inrush current test, Droop test, Chirp and Receiver sensitivity testing.

Performing Signal Quality Test

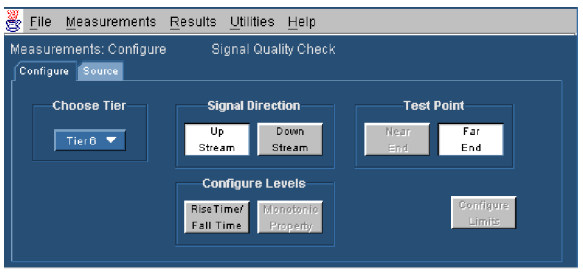
1. Select File >Run Application >TDSUSB2 in the oscilloscope menu bar.
2. Connect the device under test (DUT) to the Device SQ section of the test fixture.

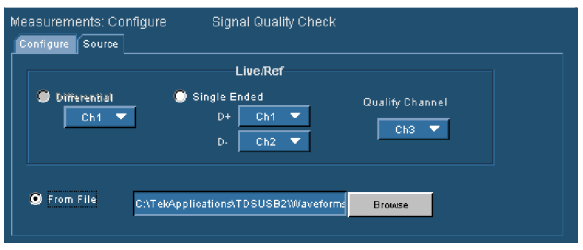


3. Select Measurement > Select and choose a test for the appropriate signal speed (Low, Full or High speed).

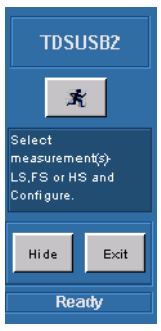


4. Select Measurement > Configure and set up the application in the Configure and Source tabs.

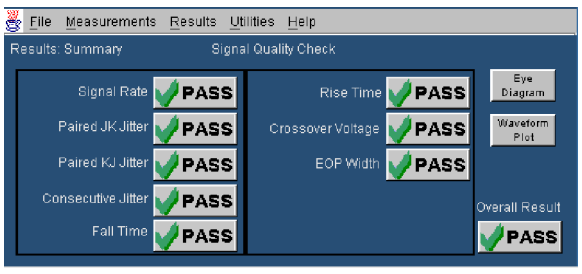


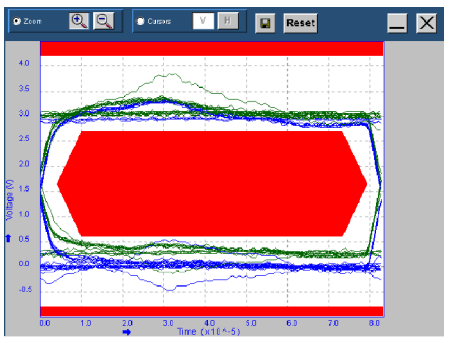


5. Push the "Running Man" button to start taking measurements.

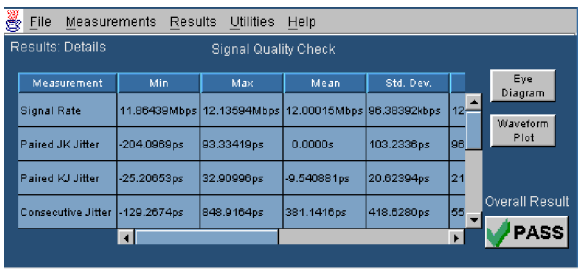


The application displays results as a summary and as an eye-diagram as shown below.





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

(Supports CSA7000, TDS5000 (except TDS5052), TDS6000, and TDS7000 series, and TDS694C 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 TDS5UP Option USB (software only)
- Order the TDS6UP Option USB (software only)
- Order the TDS7UP Option USB (software only)

To order for an existing TDS694C oscilloscope:

- Order TDSUSB2 for the USB 2.0 Compliance package; this includes software and hardware (TDSUSBF)
- Order the TDSUSBS (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

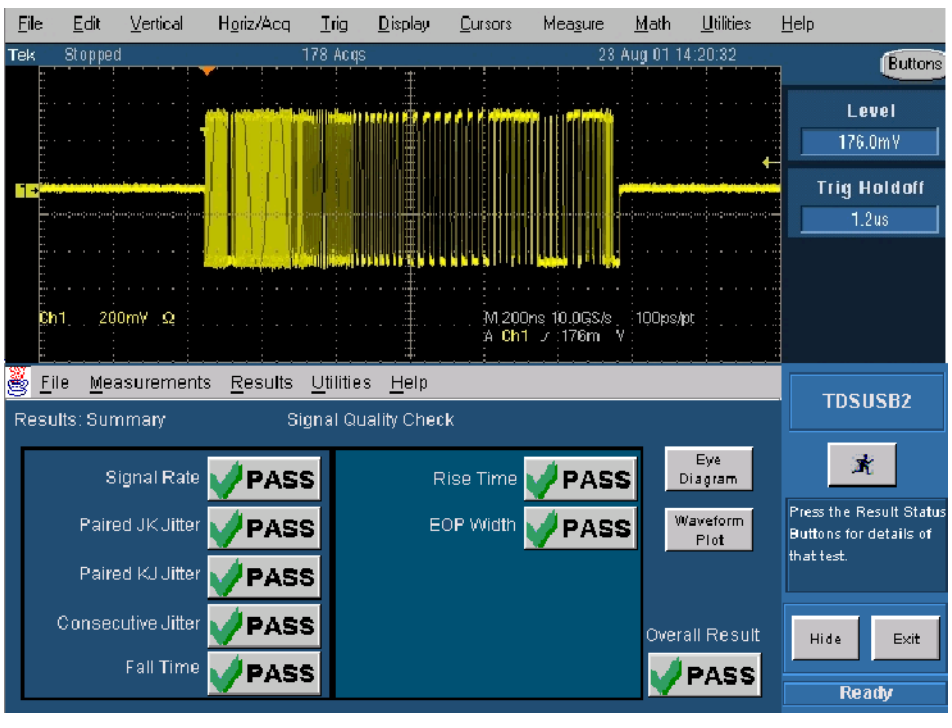
TDS8000 series oscilloscope with an 80E04 Time Domain Reflectometer (TDR) sampling module

P6248 Differential probe

TCP202 Current probe

P6245/ **P6243** Single ended probes

> ***NOTE.*** *To test High Speed USB2.0 devices, you can use this application with TDS694C, TDS7404, and TDS7254 oscilloscopes.*

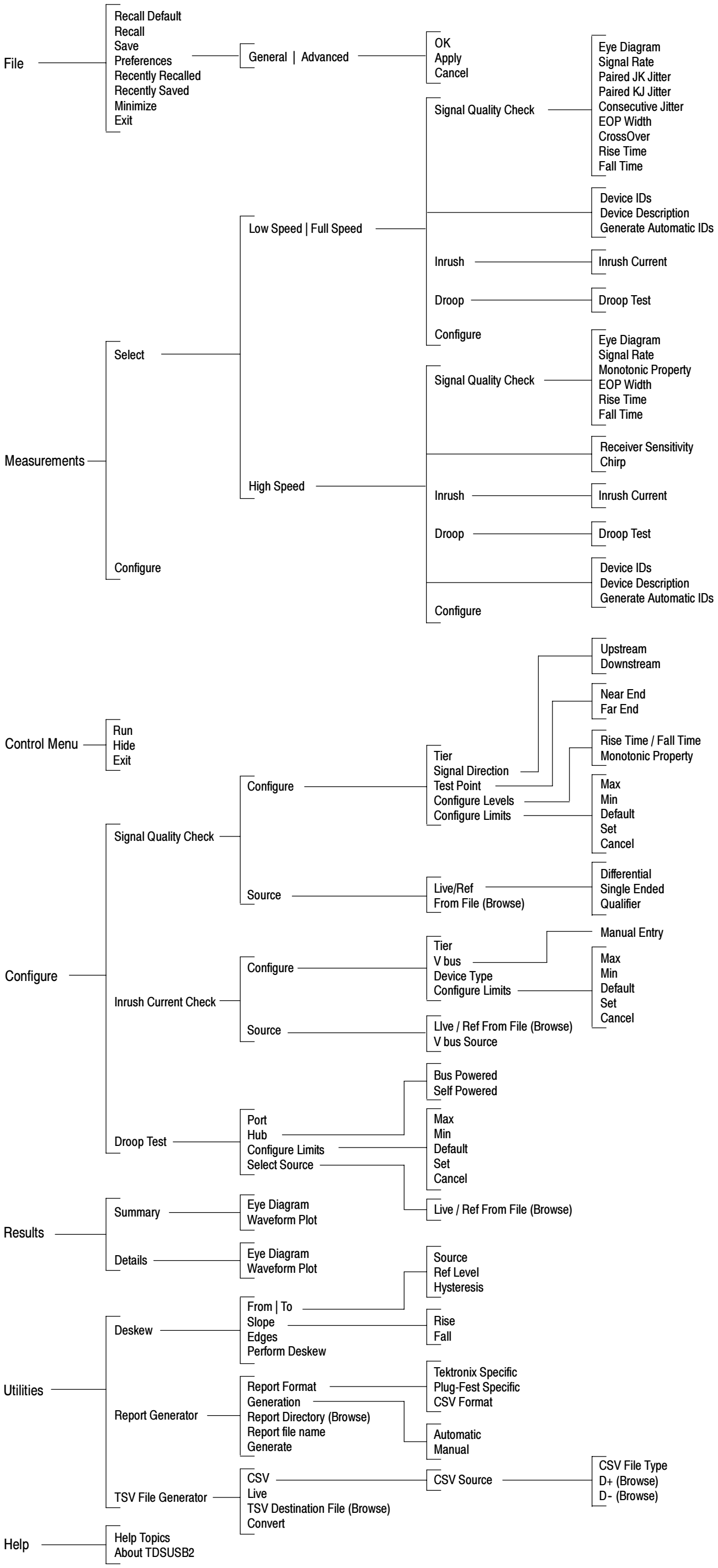


TDSUSB2
Universal Serial Bus Package
Reference

www.tektronix.com

071-1049-03

TDSUSB2 Menu Tree



Tektronix