



U7242A USB 3.0 Test Fixture

User's Guide



Agilent Technologies

Notices

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U7242A USB 3.0 Test Fixture Description

The U7242A USB3.0 test fixture is required to perform the measurement with the Agilent U7243A USB3.0 Electrical Compliance Test Application. The fixture helps you to easily access the USB3.0 test signals.

The U7242A USB3.0 test fixture is required for the all the Far End (TP1) tests including:

- Far End Unit Internal test
- Far End SSC Slew Rate test
- Far End Template test
- Far End Peak-to-Peak Differential Output Voltage test
- Far End RMS Random Jitter test
- Far End Maximum Deterministic Jitter test
- Far End Total Jitter at BER-12 test

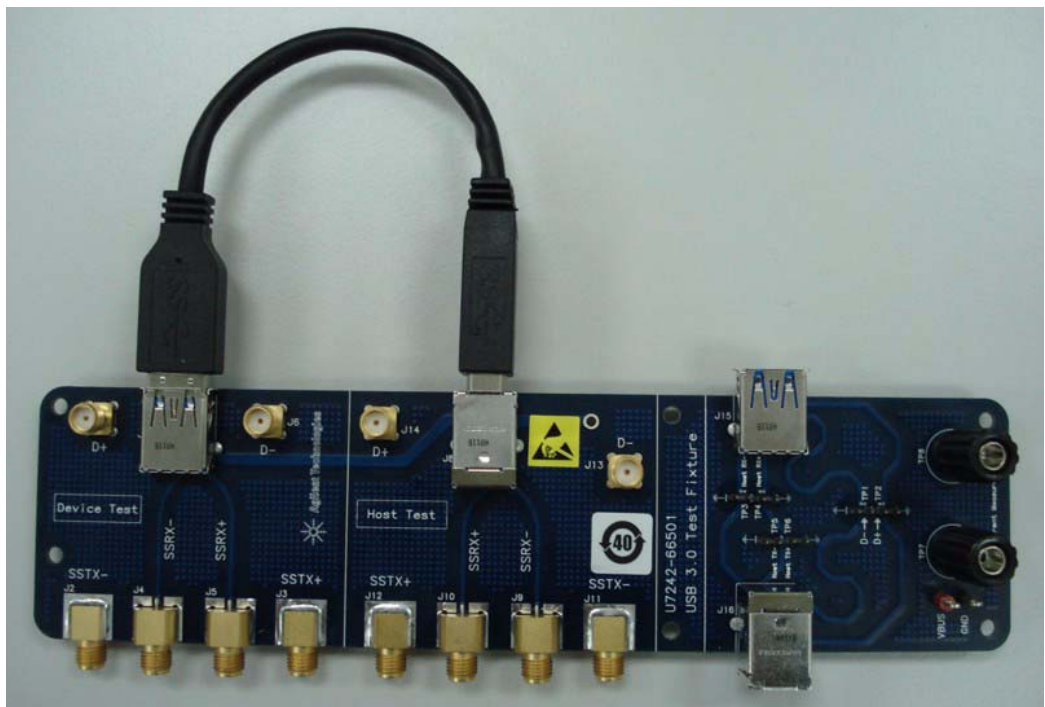


Figure 1 U7242A USB3.0 Test Fixture Board

Fixture and Accessories

The complete set of USB 3.0 test fixture contains the following items:

Part Number	Description	Quantity
U7242-66501	USB 3.0 test fixture	1 unit
8121-1880	USB 3.0 Std-A to Std-B cable (4 inches)	1 unit
8121-1924	USB 3.0 Std-A to Std-B cable (3.1 inches)	1 unit
1253-8358	Double Banana Plug With Shorting Bar	1 unit

Dimension

The dimension of the U7242A test fixture board is as follows:

PCB board height = 2.00 inches

PCB board width = 7.75 inches

PCB board thickness = 0.063 inches

Characteristics, Regulatory, and Safety Information

Electrical Characteristics

The following electrical characteristics are the specification of the U7242A USB3.0 test fixture:

Description	Specification
Trace Impedance	3 GHz
Mated Connector	15 dB \pm 1 dB (including transmission line)
Cable	> 30 dB

Operating and Non-operating Environmental Characteristics

The following are the environmental characteristics of the U7237A 10GBASE-T transmitter test fixture:

Description	Minimum Requirement
Ambient temperature	Operating = 0°C to 40°C Non-operating = - 51°C to 71°C
Humidity	Operating = 95% RH at 40°C for 24 hours
Altitude	Operating = 4,570m (15,000 ft) Non-operating = 15,244m (50,000 ft)
Indoor use	This fixture is rated for indoor use only
Random vibration	HP/Agilent class B1 and MIL-PRF-2880 OF Class 3 random
Mechanical shock	HP/Agilent class B1 and MIL-PRF-2880 OF (operating 30g, 1/2 sine, 11-ms duration, 3 shocks/axis along major axis. Total of 18 shocks)

Safety Information

The U7237A 10GBASE-T transmitter test fixture herewith complies with the essential requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC, and carries the CE-marking accordingly. The product was tested in a typical configuration with HP/Agilent test systems.

The following are the safety regulatory information of the U7237A 10GBASE-T transmitter test fixture:

Minimum Requirement:

IEC 61010-1: Second edition 2001-2

EN 61010-1:2001

UL3111-1 or UL 6101B-1:2003 (must be an Agilent ID)

Canada: CSA-C22.2 No. 1010.1:1992

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