

Product Name: ZX230BR USB 3.0 3.1 Test Board - Type B Receptacle Transmitter & Receiver Test Fixture breakout adapter

Product Description: High Speed Inter-Chip HSIC USB 2.0 - SuperSpeed USB Inter-Chip USB 3.0 test board Transmitter and Receiver test fixture (breakout Adapter) with the USB2.0 USB 3.0 Type B connector

Designed meeting electrical compliance testing; eye diagram, jitter (random, deterministic, total jitter, SCC profiles tests. Slew, Voltage levels and more).

Designed in 4 layer - 100 Ω differential trace impedance - electrical test measurement requirements.

Includes : USB3.0 **Type B** Receptacle with standard SMA connectors.
Accessible 0.1" (2.54mm) pitch header, enabling "Power measurement" of the VBUS.

| ZX230 Insertion loss - Type B | |
|-------------------------------|----------------|
| Freq. | Log Mag (-dB) |
| 100MHz | 0.04775 |
| 1.25GHz | 0.9045 |
| 2.5GHz | 1.03775 |
| 5GHz | 3.87325 |

Test Case: Using ZX230BR (type B Receptacle)
Network Analyzer: Agilent, Model E5071C 4 ch. 8.5GHz

Application: Electrical test, Clock Jitter measurement, eye diagram, characterization test, Pre-certification full electrical test

Mates with : **Type B** – High Speed Inter-Chip HSIC USB 2.0 - SuperSpeed USB Inter-Chip Specification 3.0 Plug
SMA – Brass with Gold finish 5u" on RING, 35u" GOLD Plated at pin. Insulator: PTFE
Header 0.1" center, 0.025" SQ with 0.23" (5.8mm) post height

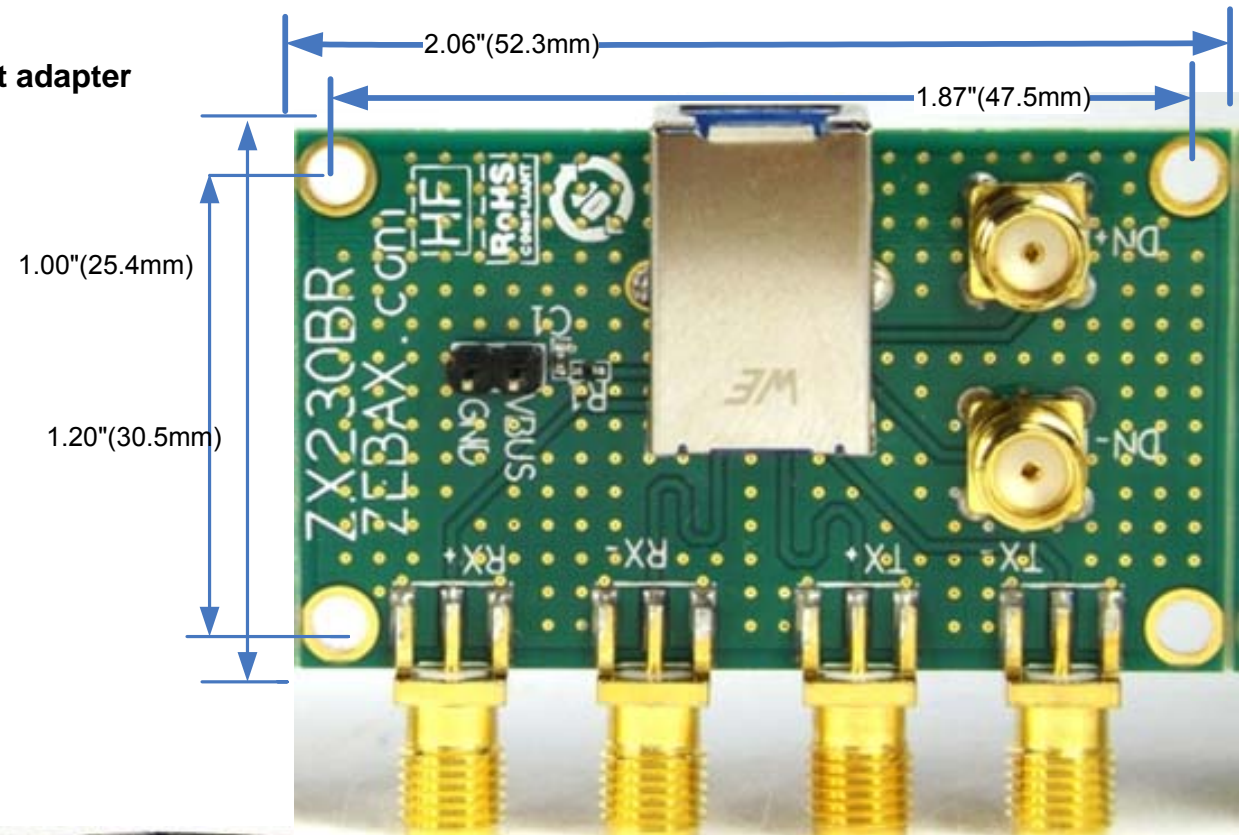
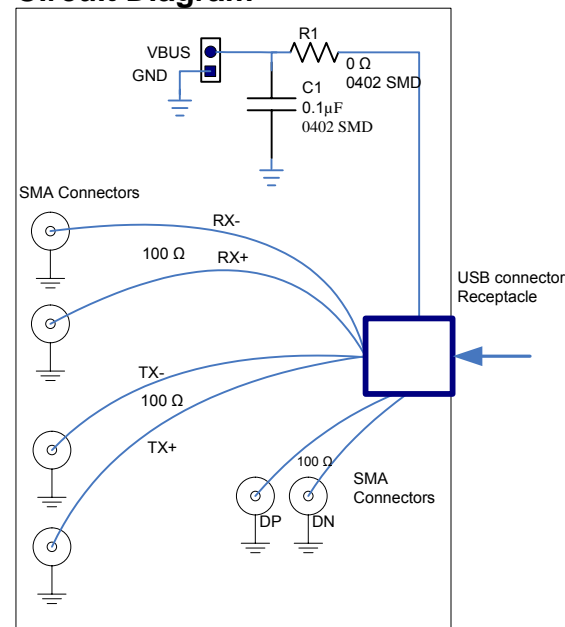
Test procedure: Compatible with Agilent, Tektronix and Lecroy automated test procedure

Pinouts: **USB 2.0 USB 3.0 Type B Receptacle** and the header pin assignments listed.

USB Bandwidth : Table below lists the standard USB USB 2.0 and USB 3.0 signal bandwidth.

| USB | |
|--------------------|---------|
| Low Speed USB 2.0 | 1.5Mbps |
| Full Speed USB 2.0 | 12Mbps |
| High Speed USB 2.0 | 480Mbps |
| SuperSpeed USB3.0 | 5Gbps |

Circuit Diagram



| Type B Receptacle | | Power | |
|-------------------|----------|-------|----------|
| Pin | Function | Pin | Function |
| 1 | VBUS | 1 | GND |
| 2 | DN | 2 | VBUS |
| 3 | DP | | |
| 4 | GND | | |
| 5 | TX- | | |
| 6 | TX+ | | |
| 7 | GND | | |
| 8 | RX- | | |
| 9 | RX+ | | |

VBUS Power measurements:
Use **JVBUS** for power measurements.

Note
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| SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT | ASSEMBLY DRAWING | |
| | ITEM:ZX230BR USB 3.0 Test Board | |
| DESCRIPTION: HSIC USB 2.0 SuperSpeed Inter-Chip USB 3.0 Test Board – Type A Receptacle breakout adapter Test Fixture | | |
| CHECKED: M. MARINA | DRAWN: SLAVIK | REVISION: 1.0 |
| | | SHEET: 1 OF 1 |

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