Introduction:



Fig1: USB3.0 CTS Type B receptacle Test Fixture(USB3-BR03AR)

LiTek's USB3.0 CTS Type B receptacle Test fixture (USB3-BR03AR) can be used to measure the Device with USB3.0 Protocol Signal Generator or Real-Time Scope after connect USB3.0 Type A to Type B cable assembly. It can also be used to measure USB3.0 Type B plug connectors with suitable test settings.



Fig2: USB3-BR03AR plugged into Host Device after Type B to Type A cable assembly

For Host Device testing, we can use a determined USB3.0 cable assembly, then connecting to USB3-BR03AR. SSRX in the test fixture can be connected to real-time scope. SSTX in the test fixture can be connected to Signal generator or protocol generator.

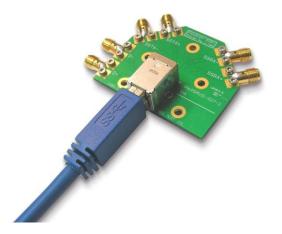


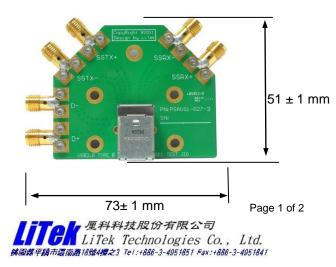
Fig3: USB3-BR03AR plugged with Type B Plug DUT. For USB3.0 CTS Type B plug connector testing. We can soldered DUT on the reference board or terminated in the far end and connected with USB3-BR03AR for Impedance and NEXT testing. LiTek Also apply the reference board for standard Type B Plug in option.

In some case, we may change the Type B Receptacle for user purpose. Customers can apply their considered type B receptacle to do the USB3-BRXXX as the other test fixtures.

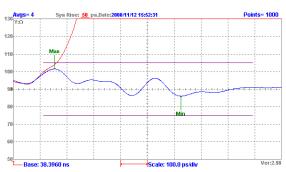
Features:

- 1. Good Impedance match: $100 \Omega + 5 \Omega$
- 2. Short Trace Length: meet USB3.0 spec.
- 3. Fast Rise Time: Less than 50 ps.
- 4. Low Intra pair skew: +/- 2ps
- 5. Low Loss design: Less than 3 dB @5GHz
- 6. Signal Pairs: SSRX/ SSTX and USB D+/D-.
- 7. 6 SMA connectors and Type B receptalce.

Fig4: USB3-BR03AR dimensions

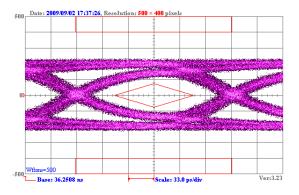


Copyright 2011.All right reserved. This document will be subjected to change without notices. All trade names referenced are the service marks or registered trade marks of their respective companies.



USB3.0 Mated impedance

USB3.0 Eye diagram with 2M Cable



Related LiTek Products:

Customer own USB3-BR03AR may also buy:

- → USB3-AP01A: USB3.0 Type A plug test fixture.
- → USB3-BP01A: USB3.0 Type B Plug test fixture.
- \rightarrow USB3-AR03AR: USB3.0 Type A receptacle test fixture.
- → USB3-MP01A: USB3.0 Type Micro A/B plug test fixture.
- → USB3-MR03AR: USB3.0 Type Micro A/B receptacle test fixture.
- → USB3-CK03AR: USB3.0 2X trace TRL Calibration Kit.
- → TpNA for USB3.0 Software.

Application and Reference:

USB3-BR03AR can be used to these listed as below:

- \rightarrow USB3.0 Host Devices.
- \rightarrow USB3.0 HUB with Type B receptacle connectors.
- \rightarrow Others with Type B plug connectors.
- \rightarrow Measurements for USB3.0 Type B plugs.

→ Measurements for USB3.0 Cable with TypeB plug side connector.

USB3.0 Measurement Related websites:

- → USB Org: <u>http://www.usb.org</u>
- → Agilent: <u>http://www.agilent.com</u>
- → Tektronix: <u>http://www.tektronix.com</u>
- → LiTeK: <u>http://www.litektw.com</u>

Contact LiTek:

Taiwan: 4F-3,No.18,Huannan Rd., Pingzhen City,Taoyuan County 32448,Taiwan Tel:+886-3-4951851 Fax:+886-3-4951841 李文福 經理 Leo Lee <u>leo@litektw.com</u> Cell Phone:+886-922330325 China: 901R Shencai Building Fuyong Boulevard Fuyong Town Baoan District Shenzhen Guangdong 洪瑋駿 經理 Thomas Hung <u>thomas@litektw.com</u> Cell Phone:+86-13823201991

Copyright 2011.All right reserved. This document will be subjected to change without notices. All trade names referenced are the service marks or registered trade marks of their respective companies.

