

## Introduction:



Fig1: USB3.0 CTS Micro B receptacle Test Fixture(USB3-MR03AR)

LiTek's USB3.0 CTS Type Micro B receptacle Test fixture (USB3-MR03AR) can be used to measure the Host Device with USB3.0 Protocol Signal Generator or Real-Time Scope after connect USB3.0 Type Micro B to Type A cable assembly. It can also be used to measure USB3.0 Type Micro B plug connectors with suitable test settings

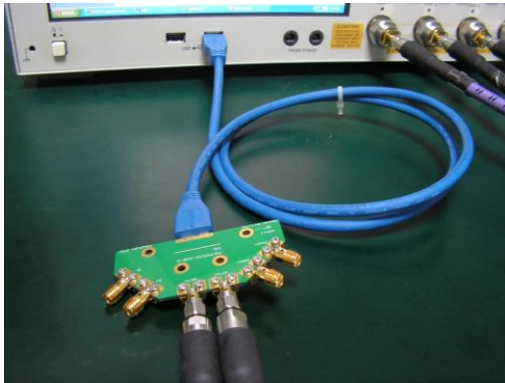


Fig2: USB3-MR03AR plugged into Host Device after Type Micro B to Type A cable assembly

For Host Device testing, we can use a determined USB3.0 cable assembly, then connecting to USB3-MR03AR.

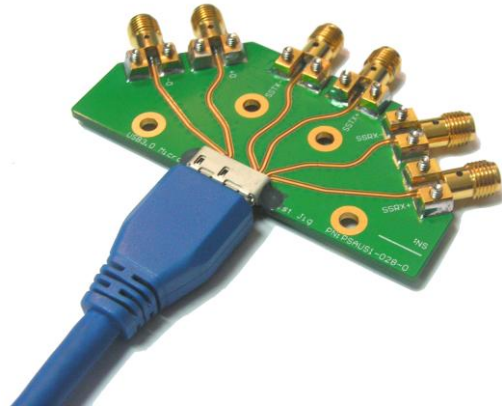


Fig3: USB3-MR03AR plugged with Type Micro B Plug DUT.

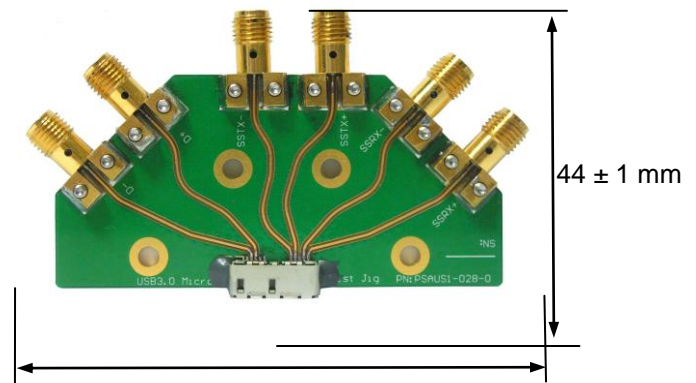
For USB3.0 CTS Type Micro B plug connector testing. We can soldered DUT on the reference board or terminated in the far end and connected with USB3-MR03AR for Impedance and NEXT testing. LiTek Also apply the reference board for standard Type Micro B Plug in option.

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

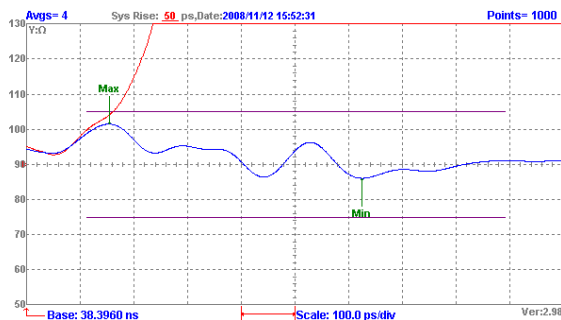
## Features:

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

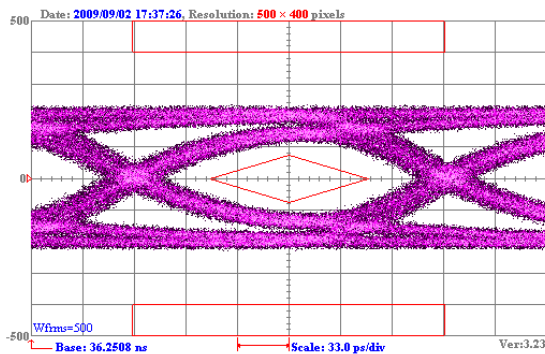
Fig4: USB3-MR03AR dimensions



## USB3.0 Mated impedance



## USB3.0 Eye diagram with 2M Cable



## Application and Reference:

USB3-MR03AR can be used to these listed as below:

- USB3.0 Host Devices.
- USB3.0 HUB with Type Micro B receptacle connectors.
- Others with Type Micro B plug connectors.
- Measurements for USB3.0 Type Micro B plugs.
- Measurements for USB3.0 Cable with Type Micro B plug side connector.

USB3.0 Measurement Related websites:

- USB Org: <http://www.usb.org>
- Agilent: <http://www.agilent.com>
- Tektronix: <http://www.tektronix.com>
- LiTeK: <http://www.litek.tw>

## Related LiTek Products:

Customer own USB3-MR03AR may also buy:

- USB3-AP01A: USB3.0 Type A plug test fixture.
- USB3-BP01A: USB3.0 Type B Plug test fixture.
- USB3-BR03AR: USB3.0 Type B receptacle test fixture.
- USB3-MP01A: USB3.0 Type Micro A/B plug test fixture.
- USB3-AR03AR: USB3.0 Type A receptacle test fixture.
- USB3-CK03AR: USB3.0 2X trace TRL Calibration Kit.
- TpNA for USB3.0 Software.

## Contact LiTek:

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