## Introduction:



Fig1:USB3.0 CTS Micro B receptacle Test Fixture(USB3-MR03AM)

LiTek's USB3.0 CTS Type Micro B receptacle Test fixture (USB3-MR03AM) 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-MR03AM plugged into Host Device after Type A to Type A cable assembly

For Host Device testing, we can use a determined USB3.0 cable assembly, then connecting to USB3-MR03AM.



Fig3: USB3-MR03AM 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:**

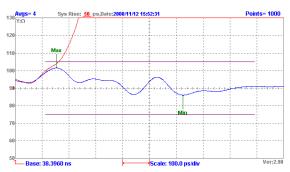
- 1. Good Impedance match:  $100 \Omega$  +/-  $5 \Omega$
- Short Trace Length: meet USB3.0 spec. 2.
- Fast Rise Time: Less than 50 ps.
- 4. Low Intra pair skew: +/- 2ps
- Low Loss design: Less than 3 dB @5GHz
- Signal Pairs: SSRX/ SSTX and USB D+/D-. 6.
- 6 SMA connectors and Type Micro B receptacle.

Fig4: USB3-MR03AM dimensions

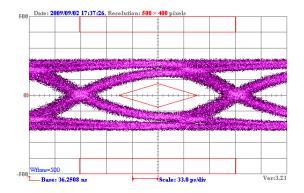


Page 1 of 2

### **USB3.0 Mated impedance**



# USB3.0 Eye diagram with 2M Cable



# **Related LiTek Products:**

## Customer own USB3-MR03AM may also buy:

- → USB3-AP01A: USB3.0 Type A plug test fixture.
- → USB3-BP01A: USB3.0 Type B Plug test fixture.
- → USB3-BR03AM: USB3.0 Type B receptacle test fixture.
- → USB3-MP01A: USB3.0 Type Micro A/B plug test fixture.
- ightarrow USB3-AR03AM: USB3.0 Type A receptacle test fixture.
- → USB3-CK03BM: USB3.0 2X trace TRL Calibration Kit.
- → TpNA for USB3.0 Software.

# **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: <a href="http://www.usb.org">http://www.usb.org</a>

→ Agilent: <a href="http://www.agilent.com">http://www.agilent.com</a>

→ Tektronix: <a href="http://www.tektronix.com">http://www.tektronix.com</a>

→ LiTeK: <a href="http://www.litektw.com">http://www.litektw.com</a>

# **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 thomas@litektw.com Cell Phone:+86-13823201991