LiTek MHL Standard Test Fixture Solution

Introduction:

Litek Technologies MHL cable test solution provides you with a fast and easy way to verify your MHL cable to meet MHL Compliance Test Specification. This solution integrates both precision test fixture and TpNA software tested with Network Analyzer (NA) and Time Domain Reflectometry (TDR) and let engineers see the interaction between time and frequency domain

The TpNA MHL Engine can be easily used to control NA and TDR, following MHL Compliance Test specification. It also outputs an Excel report file immediately that enables engineers to get a complete, fast and accurate test result and thus allowing quick troubleshooting and design improvements.

Test Parameters:

1. Differential Insertion Loss (7.1.1.7)
2. Common-Mode Insertion Loss (7.1.1.8)
3. Differential and Common-Mode Conversion (7.1.1.9)
4. CBUS Insertion Loss (7.1.1.10)
5. Far-End Crosstalk Between MHL and BUS (7.1.1.11)
6. Far-End Crosstalk BUS (7.1.1.11):
7. Differential Characteristic Impedance (7.1.1.3)
8. Differential Characteristic Impedance Connector (7.1.1.3)
9. Common-Mode Characteristic Impedance (7.1.14)
10. Differential Intra-Pair Skew (7.1.1.1)
11. Common-Mode Intra-Pair Skew (7.1.1.2)

Features:

1. Good Impedance match:100Ω +/- 5Ω
2. Short Trace Length: meet MHL spec.
3. Fast Rise Time: Less than 50 ps.
4. Low Intra pair skew: +/- 2ps
5. Low Loss design: Less than 3 dB @5.1GHz
6. Signal Pairs: MHL+/MHL- and VBUS and CBUS.
7. 4 SMA connectors and HDMI Type A receptacle.

Recommended Instrument:

Network Analyzer:Agilent PNA series(N5230A)

Agilent ENA series(E5071C)

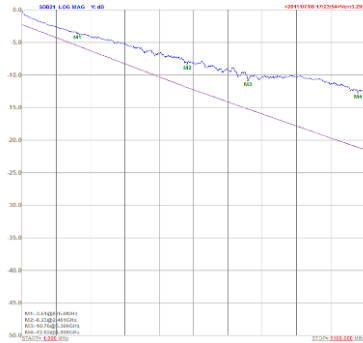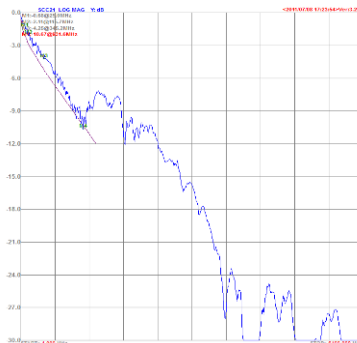Time Domain Reflectometry: Tek DSA8200

References:

VESA   http://www.VESA.org

Tektronix   http://www.tek.com

LiTek Other Products:

HDMI1.4、USB3.0、SATA1.0&2.0、SAS、MiniSAS 、InfiniBand 、CX4、,PCI-Express 、DVI…

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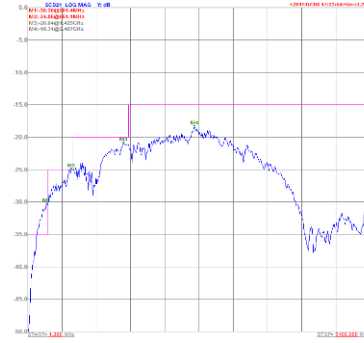
MHL Cable Test Report:
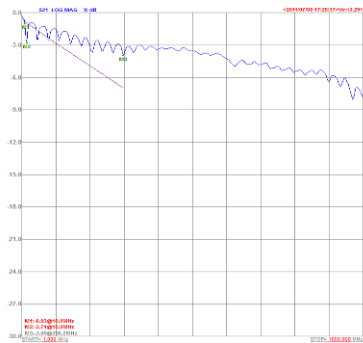
Differential Insertion Loss

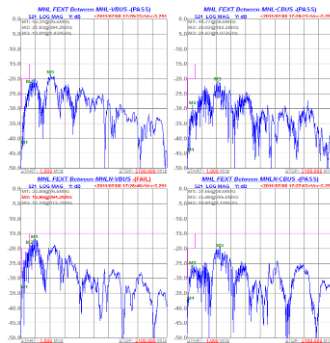### Common-Mode Insertion Loss

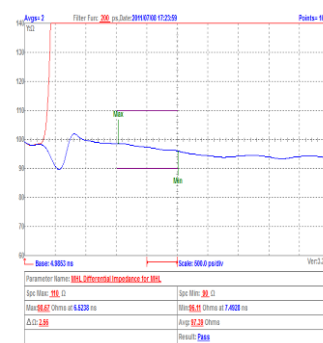### Differential and Common-Mode Conversion

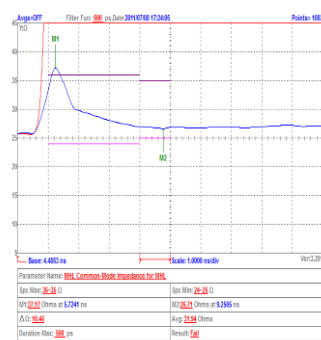

CBUS Insertion Loss

Far-End Crosstalk Between MHL and BUS

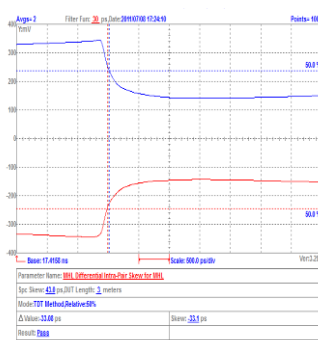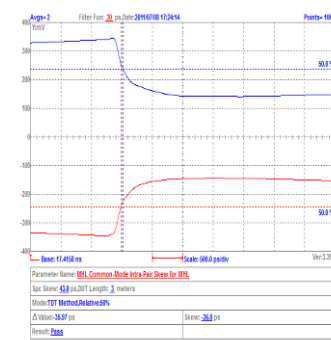### Differential Characteristic Impedance

Common-Mode Characteristic Impedance

Differential Intra-Pair Skew

Common-Mode Intra-Pair Skew

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