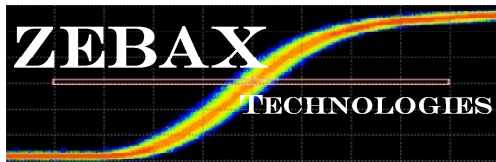


USB 2.0 USB 3.0 Test Board – Characterization report DC-1GHz

- Test case: ZX230AP and ZX230AR
- Test tool: Agilent network analyzer

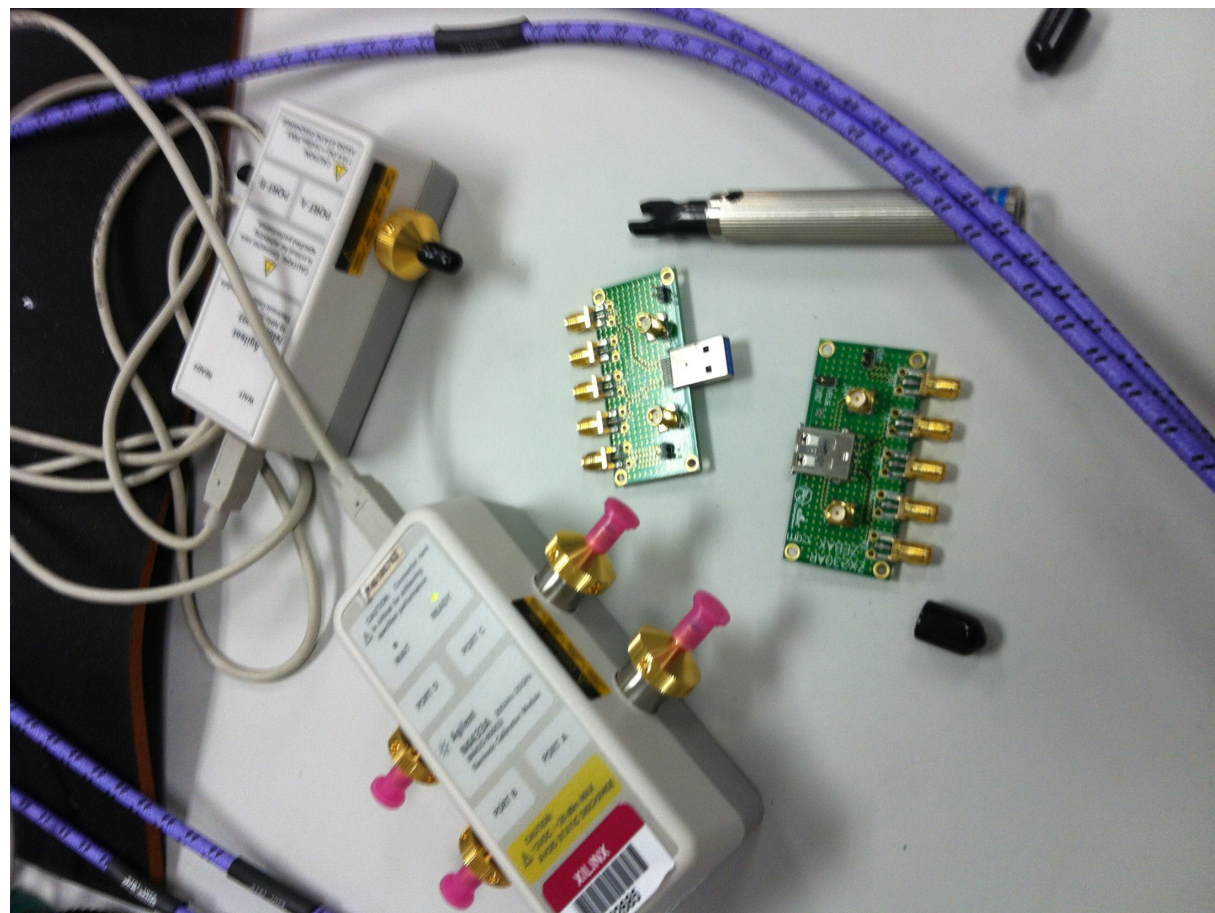
- Measured Differential Insertion Loss using ZX230 Rev 0 - test board results in :

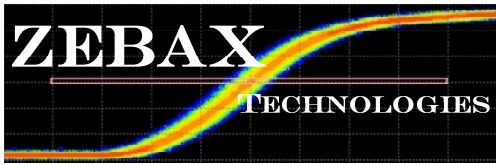
| | | |
|--------------|----------------|-------------------|
| TX+- | RX+- | DN+- |
| -2dB at 1GHz | -2.4dB at 1GHz | -1.5dB DC to 1GHz |



USB 2.0 USB 3.0 Test Board – Characterization report **DC-1GHz**

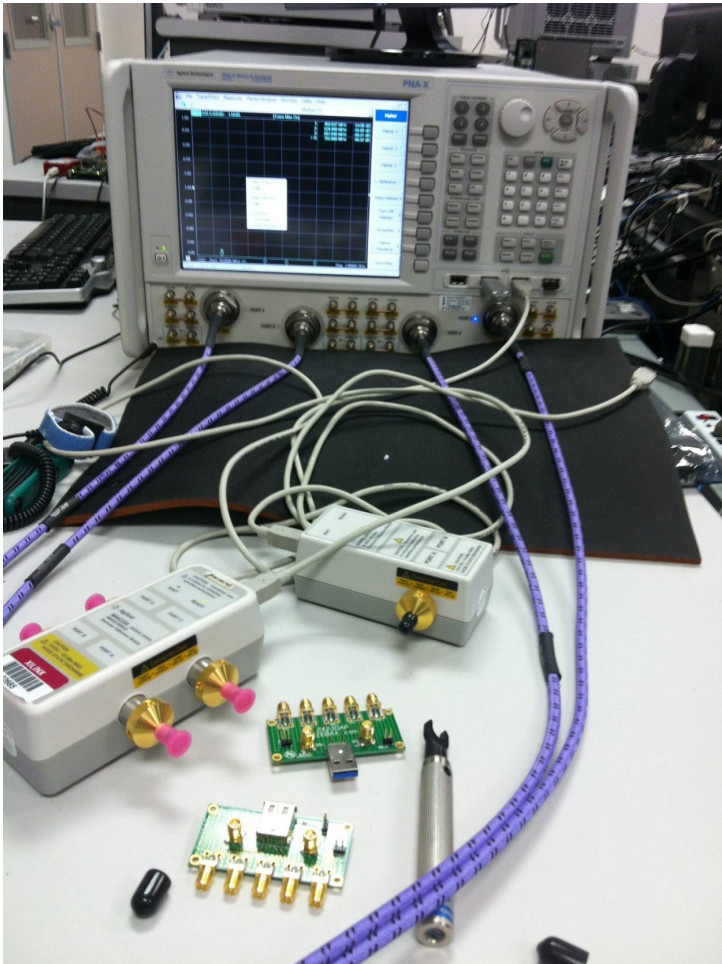
1. Test case using ZX230AP and ZX230AR



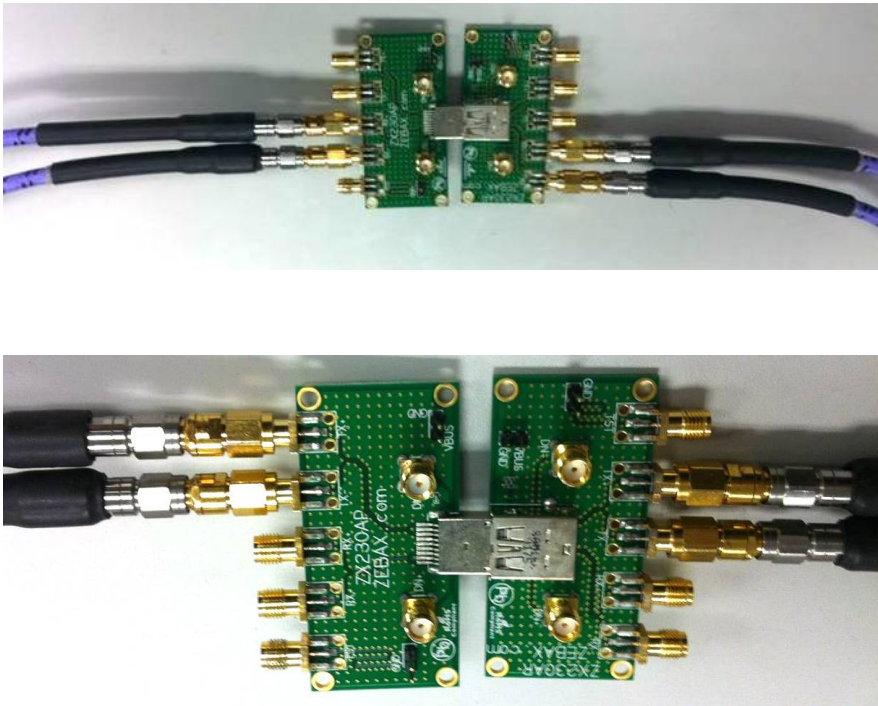


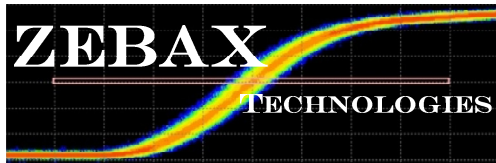
USB 2.0 USB 3.0 Test Board – Characterization report DC-1GHz

- Test setup configuration

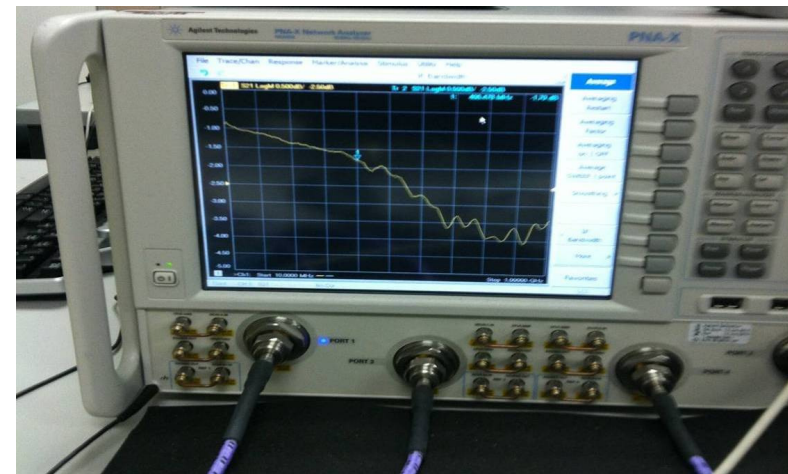
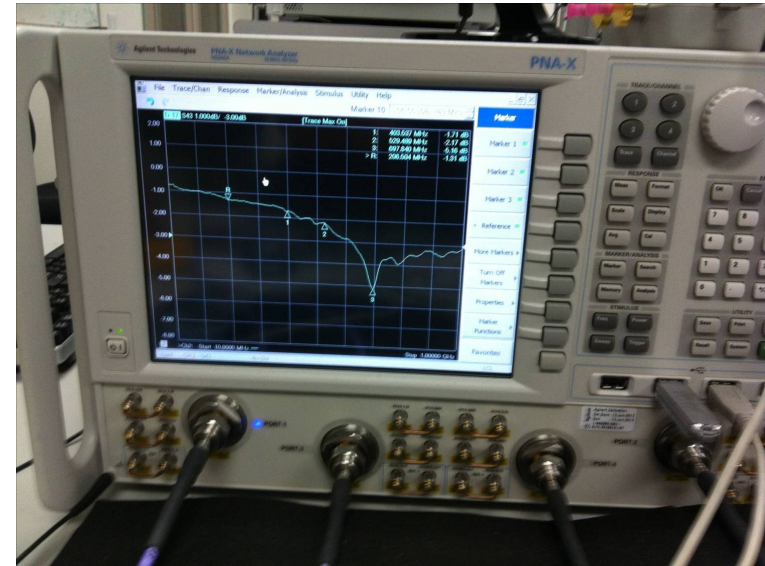
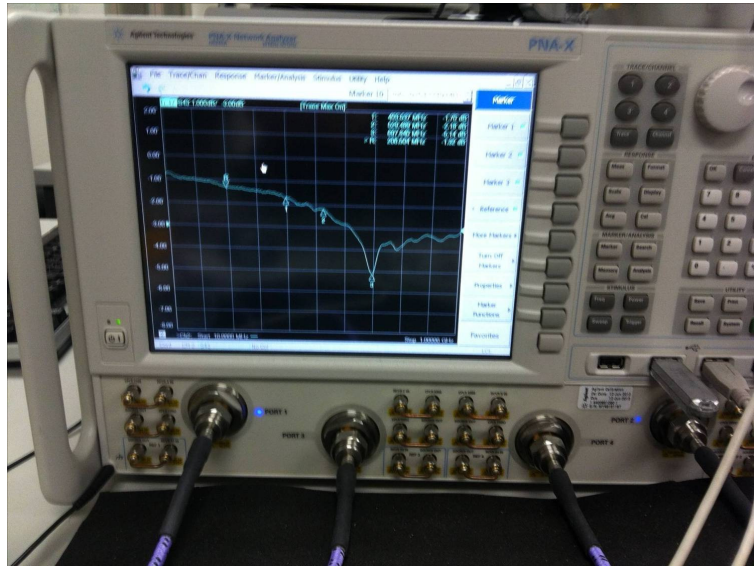


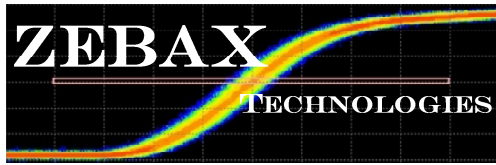
- Board to board connection interface setup





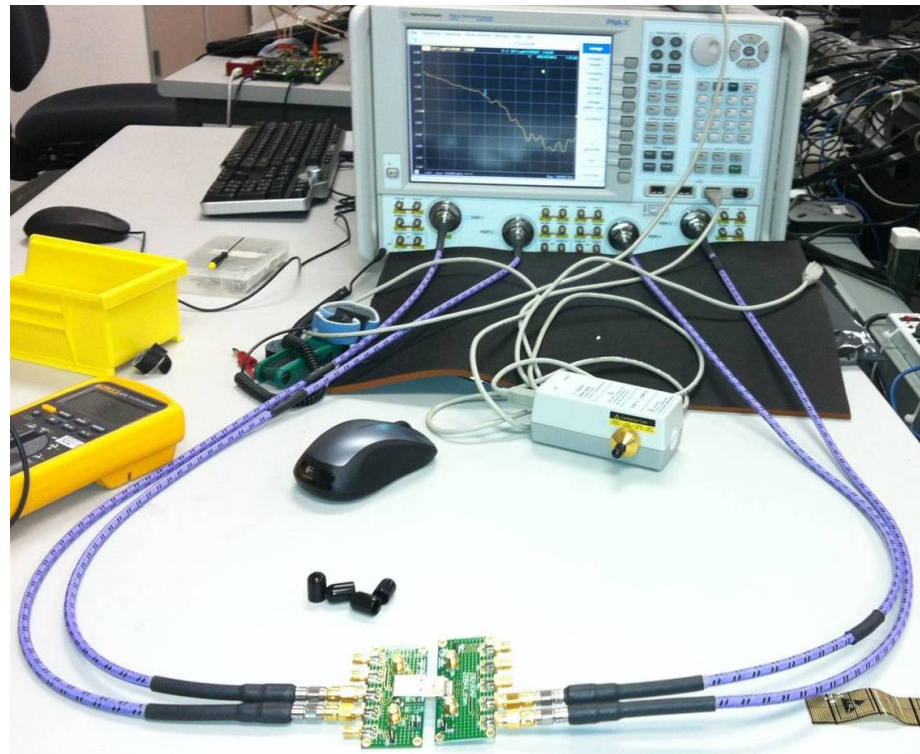
USB 2.0 USB 3.0 Test Board – Characterization report DC-1GHz

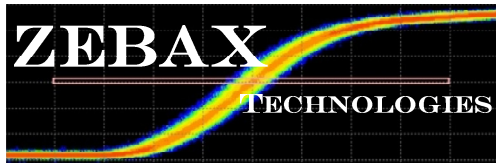




USB 2.0 USB 3.0 Test Board – Characterization report DC-1GHz

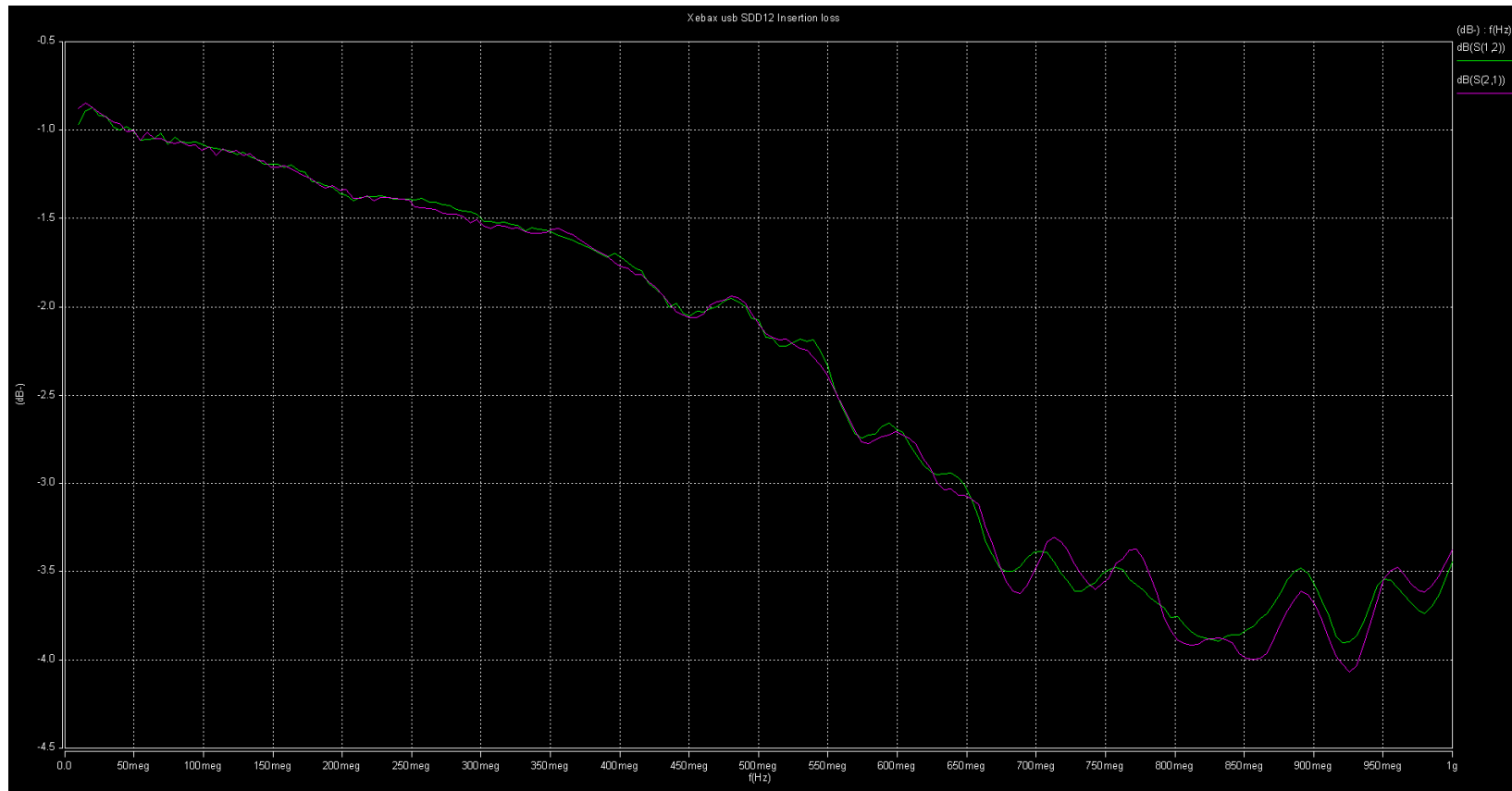
- System closed loop configuration

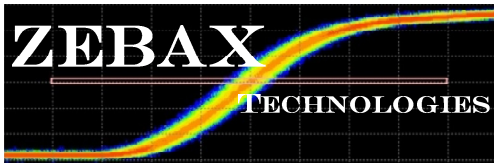




USB 2.0 USB 3.0 Test Board – Characterization report DC-1GHz

- SDD12 Insertion loss : DC .. 1GHz

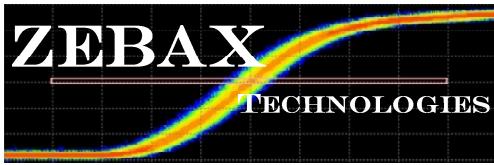




USB 2.0 USB 3.0 Test Board – Characterization report DC-1GHz

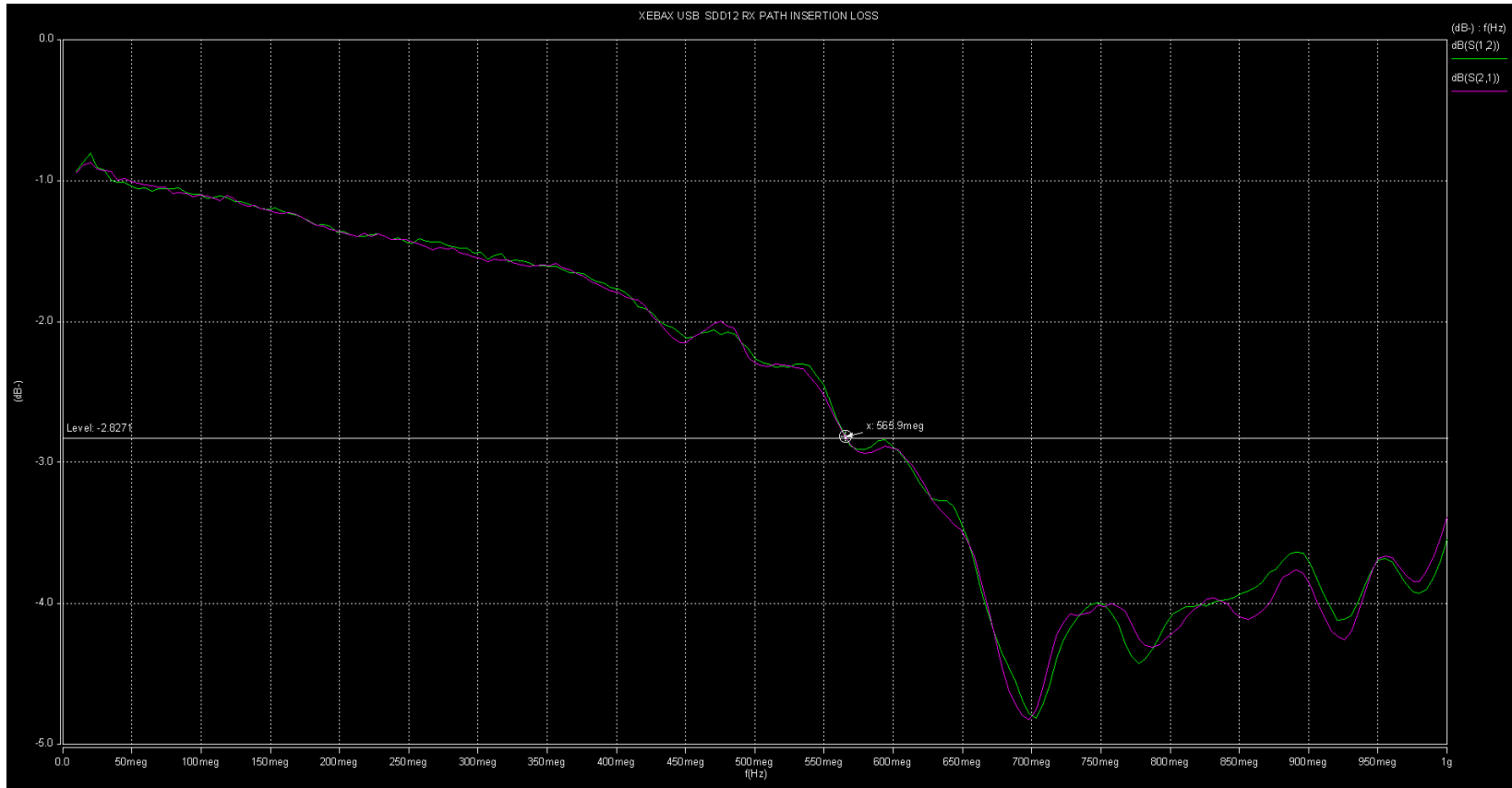
- TX+- SDD12 Insertion loss : DC .. 1GHz

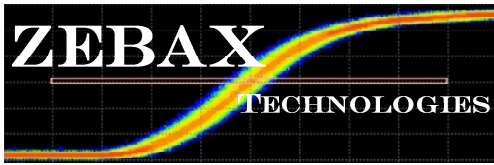




USB 2.0 USB 3.0 Test Board – Characterization report DC-1GHz

- RX+- SDD12 Insertion loss : DC .. 1GHz

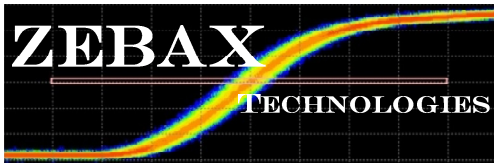




USB 2.0 USB 3.0 Test Board – Characterization report DC-1GHz

- DN+- SDD12 Insertion loss : DC .. 1GHz

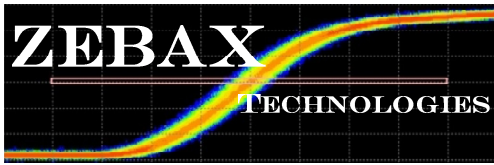




USB 2.0 USB 3.0 Test Board – Characterization report DC-1GHz

- SDD12 Insertion loss : DC .. 1GHz

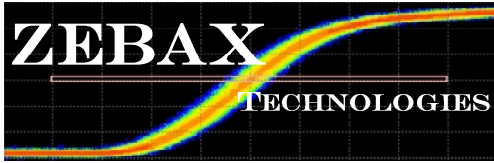




USB 2.0 USB 3.0 Test Board – Characterization report

- SDD12 Insertion loss : DC .. 1GHz





USB 2.0 USB 3.0 Test Board – Characterization report DC-1GHz

- Differential Insertion Loss (EIA-360-101)

The differential insertion loss, SDD12, measures the differential signal energy transmitted through the mated cable assembly.

- Chart below is the USB Differential Insertion loss Requirement. The ZX230 exceeds DC-1GHz design requirements.

