



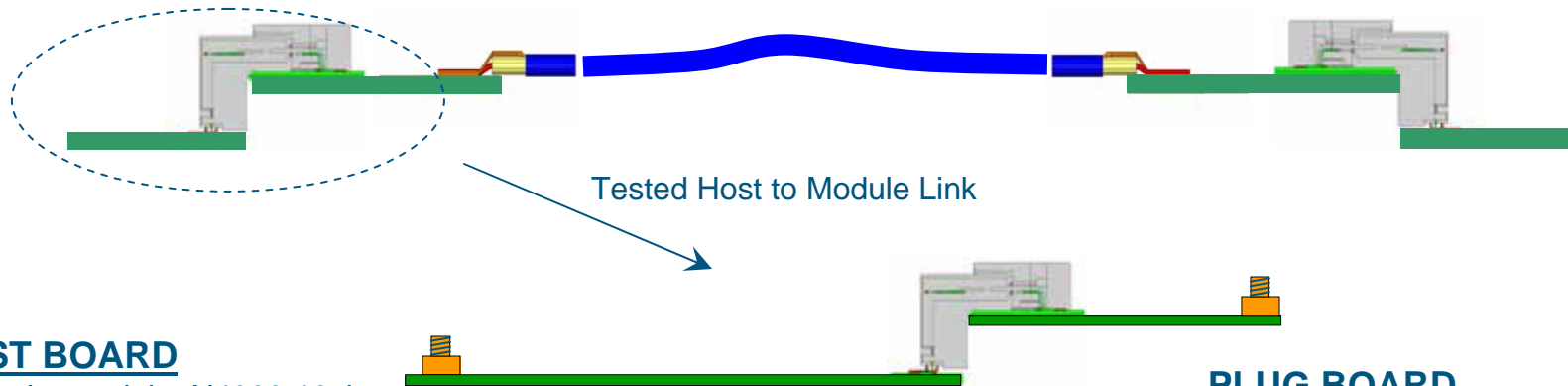
25Gb/s VSR LINK DATA

100Gb/s Ethernet Electrical Backplane and Twinaxial
Copper Cable Assemblies Study Group

January 2011, Fort Lauderdale, FL

Megha Shanbhag

PASSIVE COPPER CABLE ASSEMBLY



Tested Host to Module Link

HOST BOARD

- Board material = N4000-13si
- Trace length = **4" and 7"**
- Trace geometry = stripline
- Trace width = 5 mils
- Differential trace spacing = 6 mils
- PCB thickness = 0.093"
- 2 signal layers
- 6 ground planes
- Layer connection = layer 2 (near top)
- Counterbored

CONNECTOR

- QUADRA
- 2 piece connector design
- All 8 high speed pairs on top of the module board
- No vias required on module PCB
- Approximately the size of QSFP

PLUG BOARD

- Board Material = N4000-13si
- Trace length = 1.25"
- Trace geometry = mStrip
- Trace width = 7 mils
- Differential trace spacing = 5 mils
- PCB thickness = 1 mm

- All data is tested data
- Models are .s8p files,
pairs 3/ 4 are adjacent pairs (one upper one lower),
pairs 3/ 5 are two-aways in upper row
and pair 4/ 6 are two-aways in lower row

08-09

14-15

11-12

17-18

HOST TO MODULE LINK

4" Host Trace

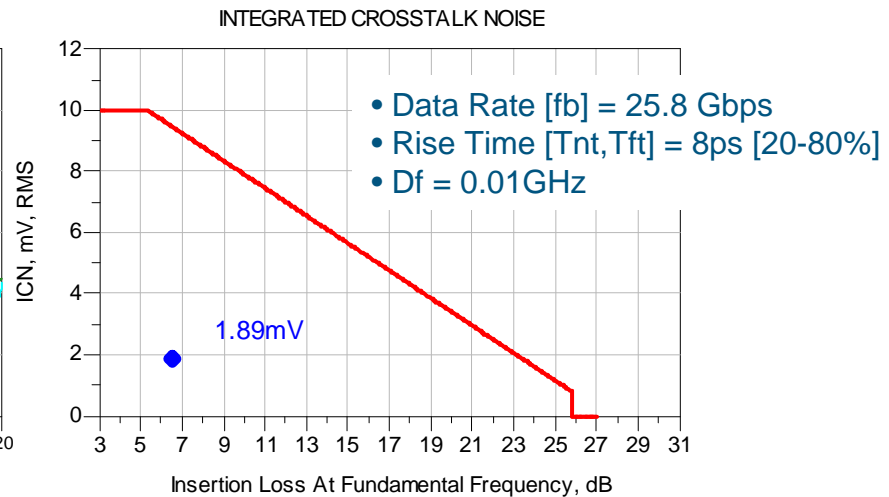
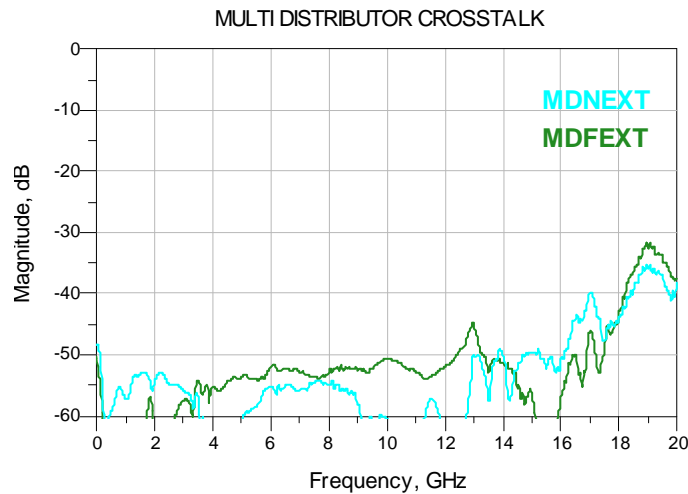
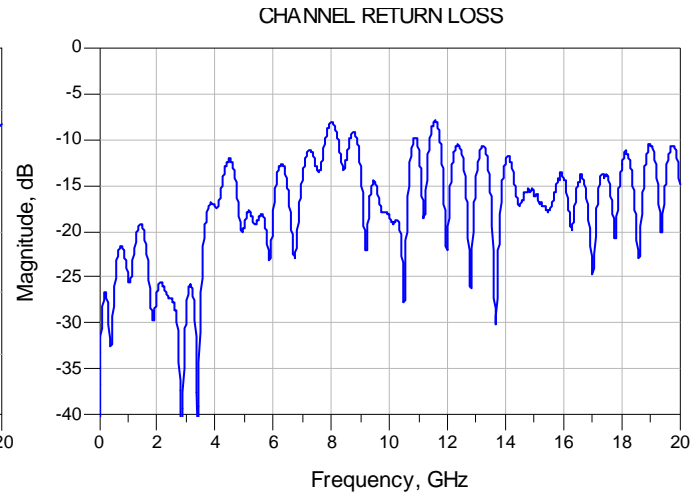
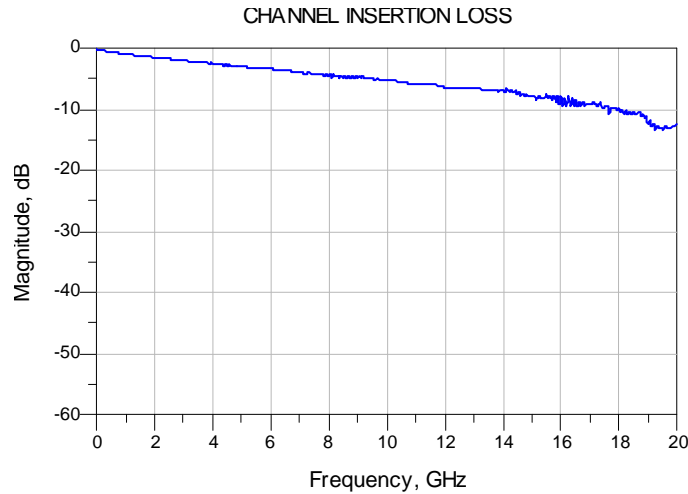
RX

TX

TX

RX

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ICN Limit from OIF2008.161.10, OIF2010.189.04

HOST TO MODULE LINK

7" Host Trace

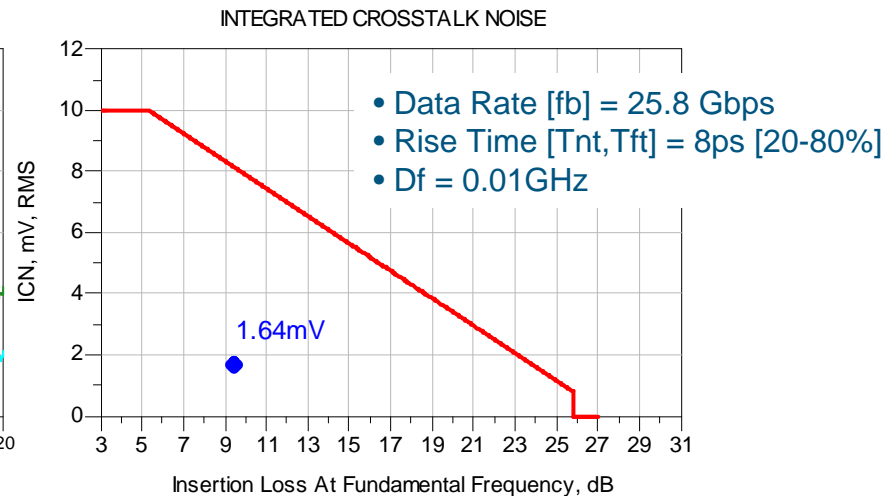
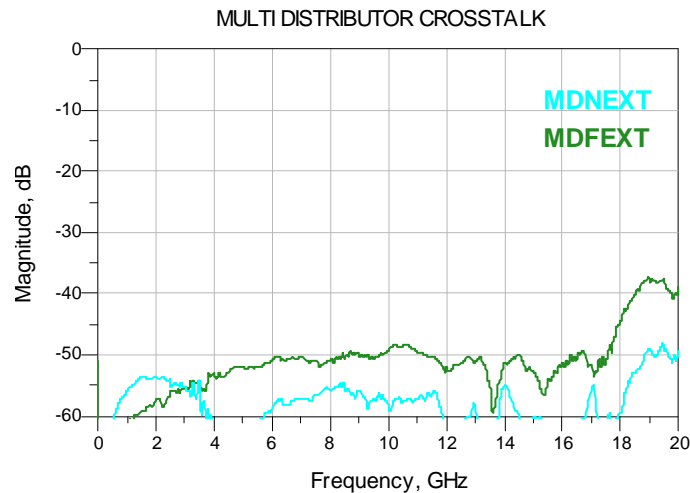
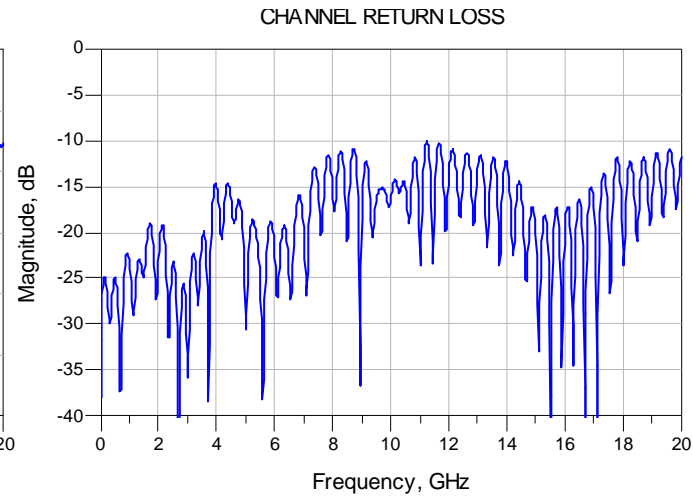
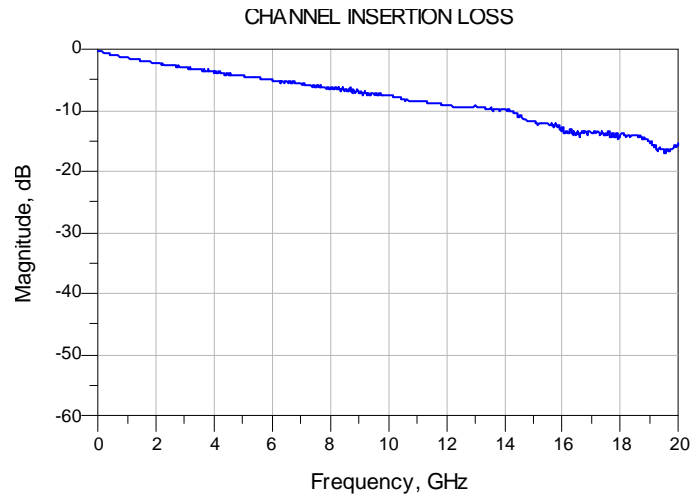
RX

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TX

RX

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ICN Limit from OIF2008.161.10, OIF2010.189.04