

In Support Comment 222, 226, and 228

IEEE 802.3bj Task Force

Ali Ghiasi - Broadcom



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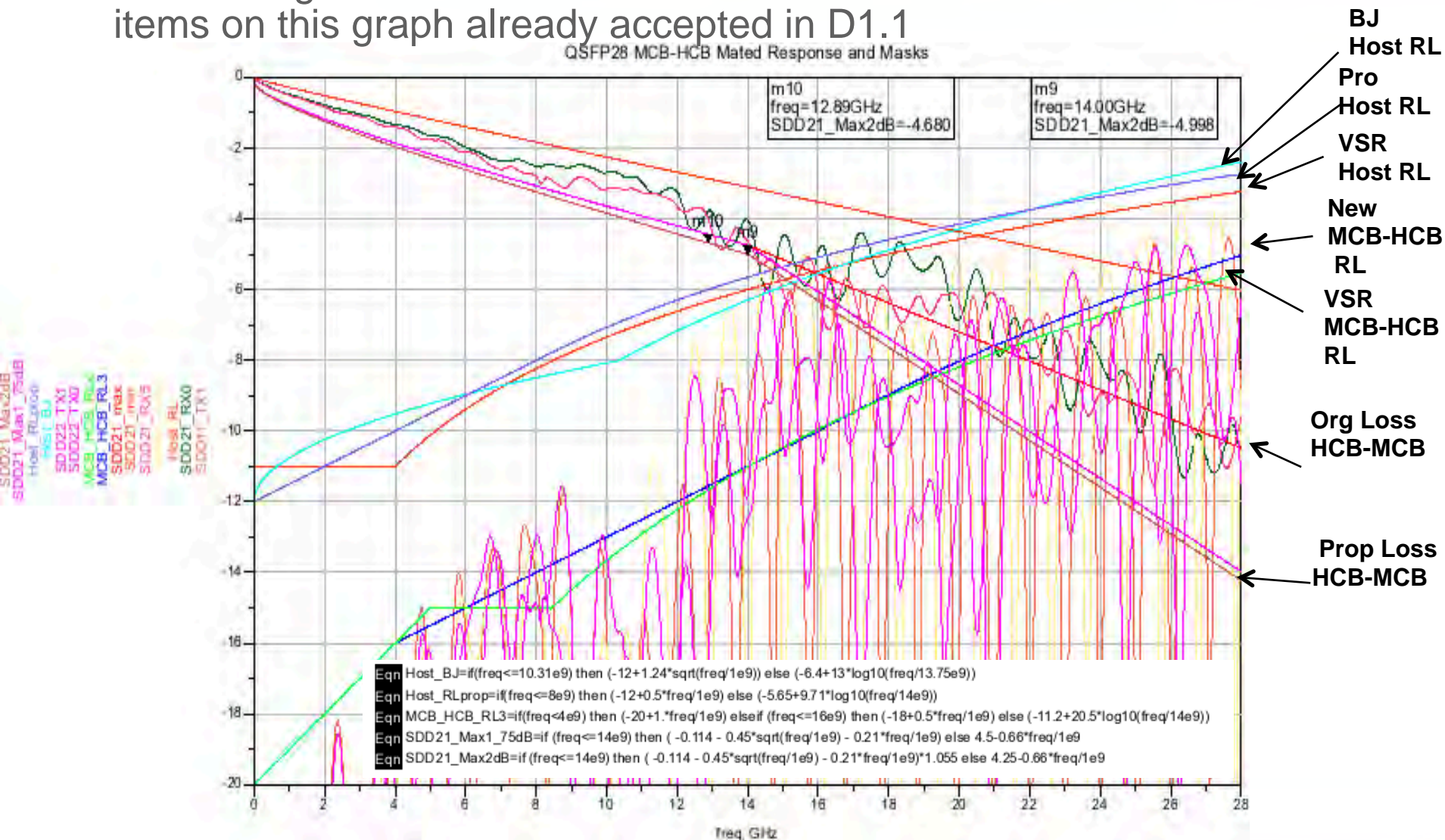
San Antonio

Overview

- Addressing following comments
 - 222 – TP0-TP2 and TP3 to TP5 loss
 - 226 – Near end and far end crosstalk
 - 228 – Mated test fixture min/max loss

Mated Board Loss Min/Max Loss

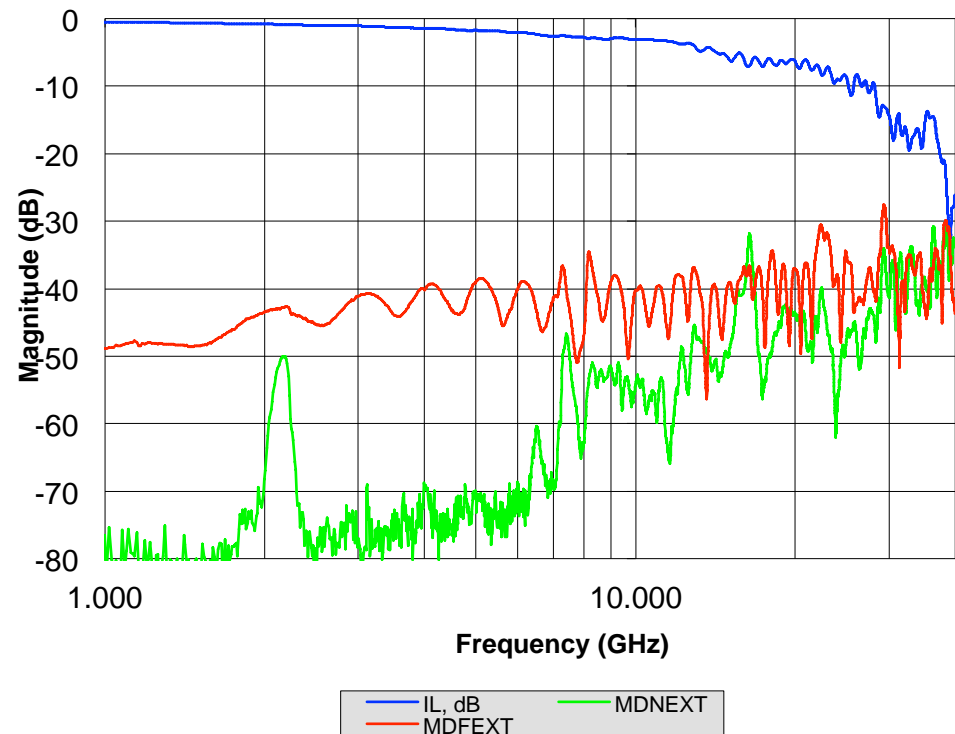
- Addressing comment 222 to remove mated board TBD with other items on this graph already accepted in D1.1



QSFP28 MCB-HCB Crosstalk

- Addressing comment 226
 - Include 4 NEXTs and 3 FEXTs
 - As the board loss has gone down crosstalk has increased

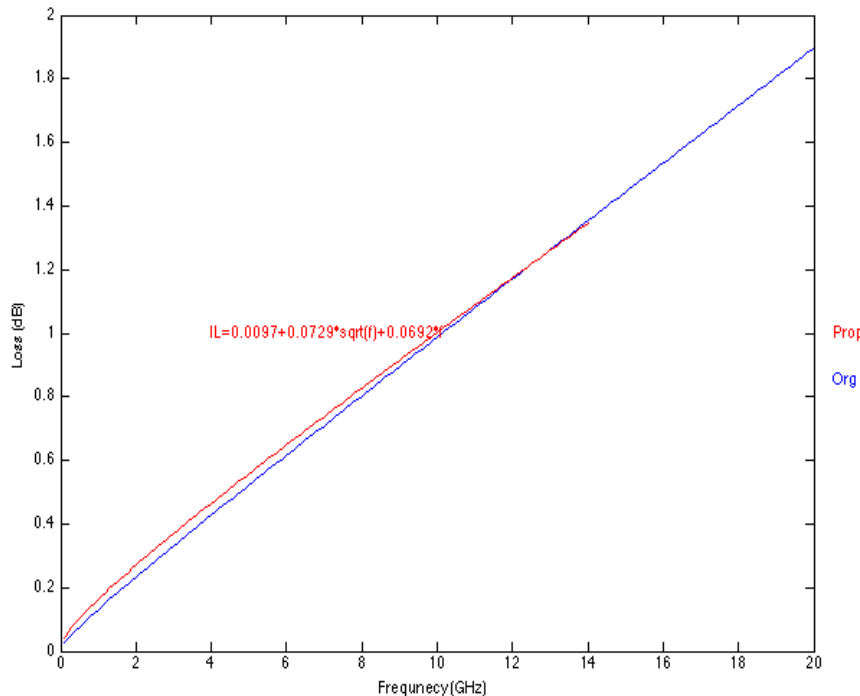
MCB-HCB Crosstalk	10.3125 GBd ICN (mV)	25.78 GBd ICN (mV)	28.0 GBd ICN (mV)
Rise Time 20-80% (ps)	24.000	9.600	8.840
NEXT	0.283	0.516	0.550
FEXT	2.250	2.426	2.513
MDNEXT	0.323	1.390	1.612
MDFEXT	3.593	4.562	4.673
ICN	3.607	4.769	4.943



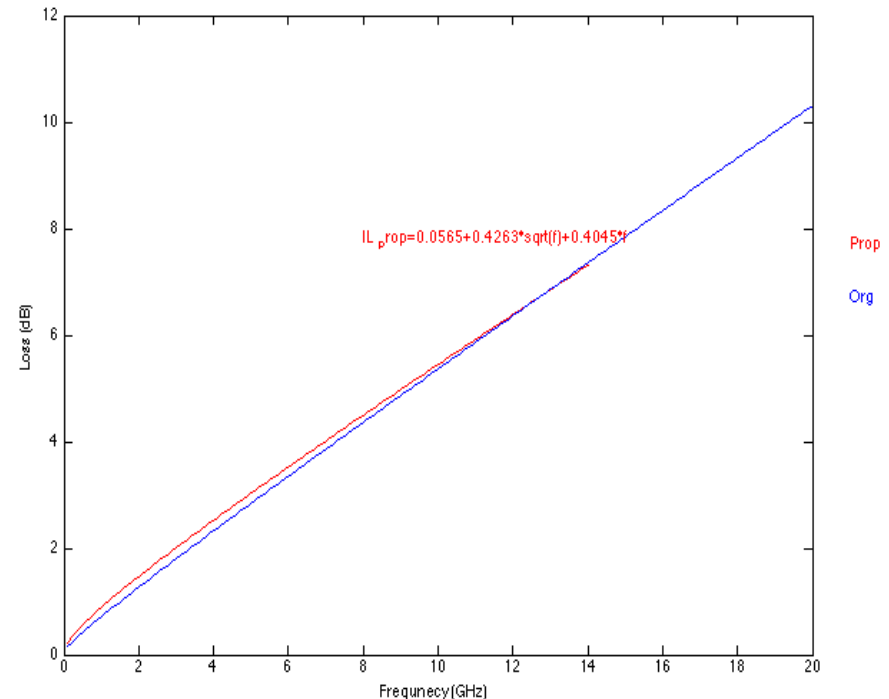
Transmitter and Receiver Differential Host Board Loss

- Addressing comment 228
 - Current differential PCB loss is not consistent with the channel TP0-TP2 or TP3-TP5
 - Equation 92A-1 and 92A-2 linear term is >2x the sqrt term
 - But the channel loss Eq 92-4 linear term ~ as the sqrt term

Min Loss



Max Loss



Summary

- All parameters related to mated board were accepted during D1.1 ballot
 - These parameters were part of a set
 - We need to remove the TBD and add the mated board min/max loss
- Current draft has TBD for CR4 connector crosstalk
 - Data provided here are based on board overall nearly meeting all the proposed mated board specifications
- The channel TP0-TP2/TP3-TP5 linear ~ sqrt term
 - The channel PCB need to follow similar profile instead of one dominated by linear term.

Thank You