

QSFP-DD TP1-TP4 Channel Simulations



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Palkert_3ck_02_1119

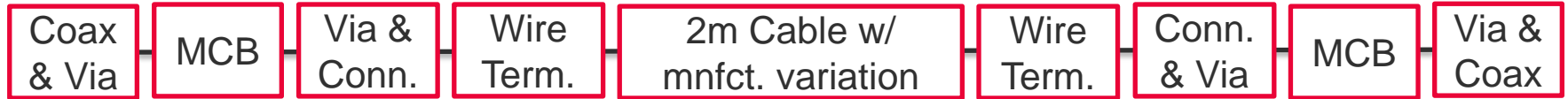
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Contributors & Supporters

- Contributors: Alex Haser, CheeKit Chu, Ayman Isaac (Molex), Arturo Pachon Munoz, Jane Lim, Upen

Overview:

- TP1-TP4 modeled with a 2m cable:



- S4P's are provided for end-to-end simulation
 - 7 FEXT and 8 NEXT files accompany each THRU
 - Files provided for both legacy (Rx3) and DD (Rx7) pairs (palkert_3ck_02_1119)

Pinout: Legacy Victim Pair

Key:

Victim

NEXT Aggressors

FEXT Aggressors

P1 Rx1	↔	P2 Tx1
P1 Rx2	↔	P2 Tx2
P1 Rx3	↔	P2 Tx3
P1 Rx4	↔	P2 Tx4
P1 Rx5	↔	P2 Tx5
P1 Rx6	↔	P2 Tx6
P1 Rx7	↔	P2 Tx7
P1 Rx8	↔	P2 Tx8
P1 Tx8	↔	P2 Rx8
P1 Tx7	↔	P2 Rx7
P1 Tx6	↔	P2 Rx6
P1 Tx5	↔	P2 Rx5
P1 Tx4	↔	P2 Rx4
P1 Tx3	↔	P2 Rx3
P1 Tx2	↔	P2 Rx2
P1 Tx1	↔	P2 Rx1

Pinout: DD Victim Pair

Key:

Victim

NEXT Aggressors

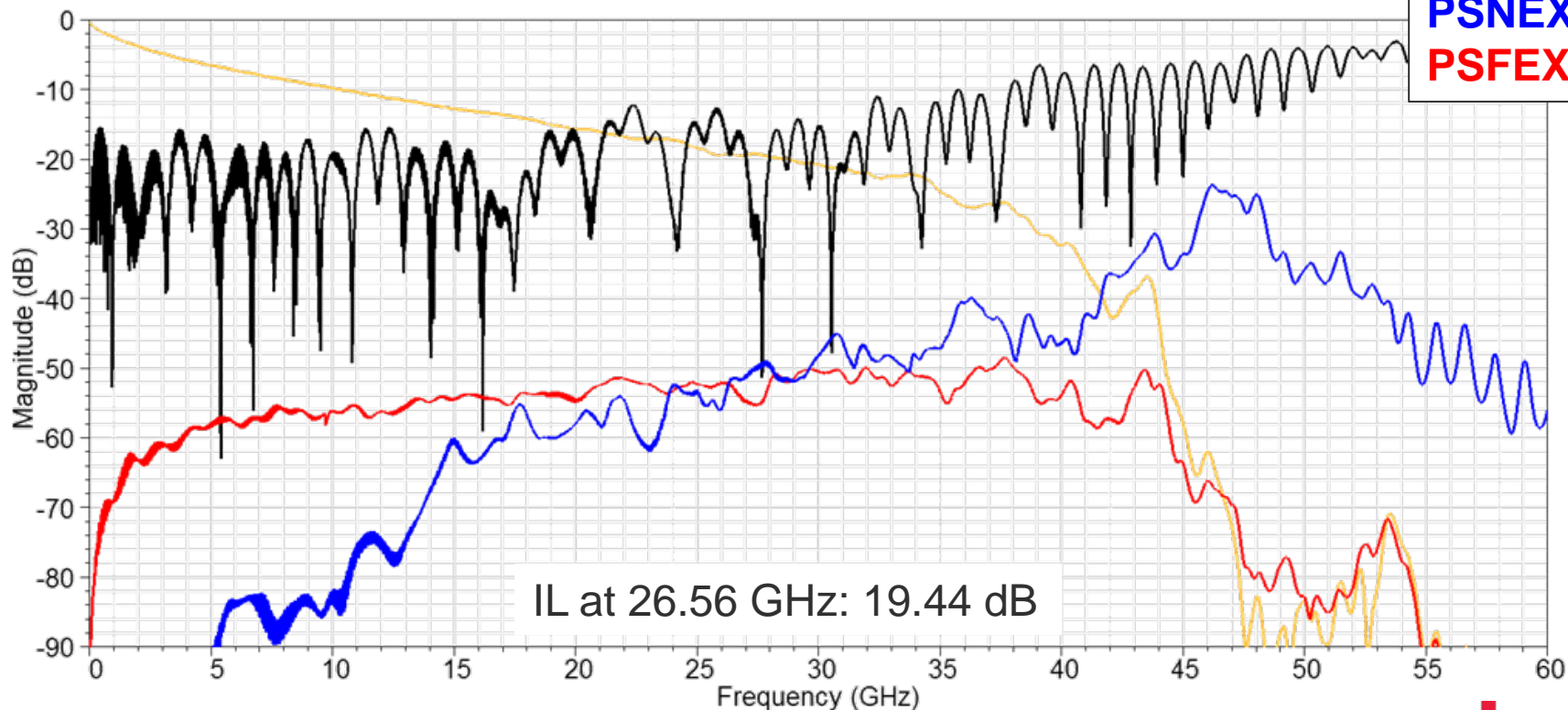
FEXT Aggressors

P1 Rx1	↔	P2 Tx1
P1 Rx2	↔	P2 Tx2
P1 Rx3	↔	P2 Tx3
P1 Rx4	↔	P2 Tx4
P1 Rx5	↔	P2 Tx5
P1 Rx6	↔	P2 Tx6
P1 Rx7	↔	P2 Tx7
P1 Rx8	↔	P2 Tx8
P1 Tx8	↔	P2 Rx8
P1 Tx7	↔	P2 Rx7
P1 Tx6	↔	P2 Rx6
P1 Tx5	↔	P2 Rx5
P1 Tx4	↔	P2 Rx4
P1 Tx3	↔	P2 Rx3
P1 Tx2	↔	P2 Rx2
P1 Tx1	↔	P2 Rx1



Frequency Domain Results

Legacy Victim Pair:



Key:

IL

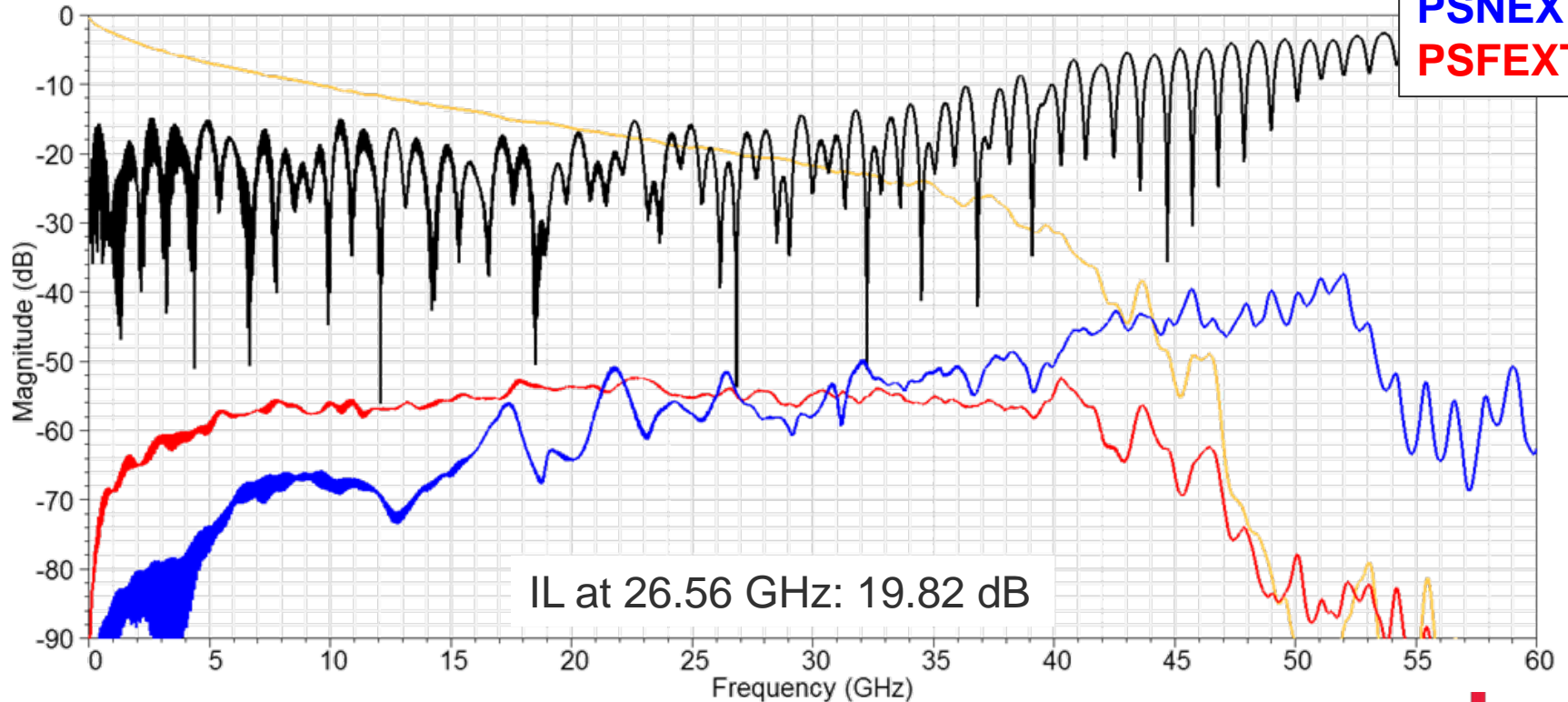
RL

PSNEXT

PSFEXT

IL at 26.56 GHz: 19.44 dB

DD Victim Pair:



Key:
IL
RL
PSNEXT
PSFEXT

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