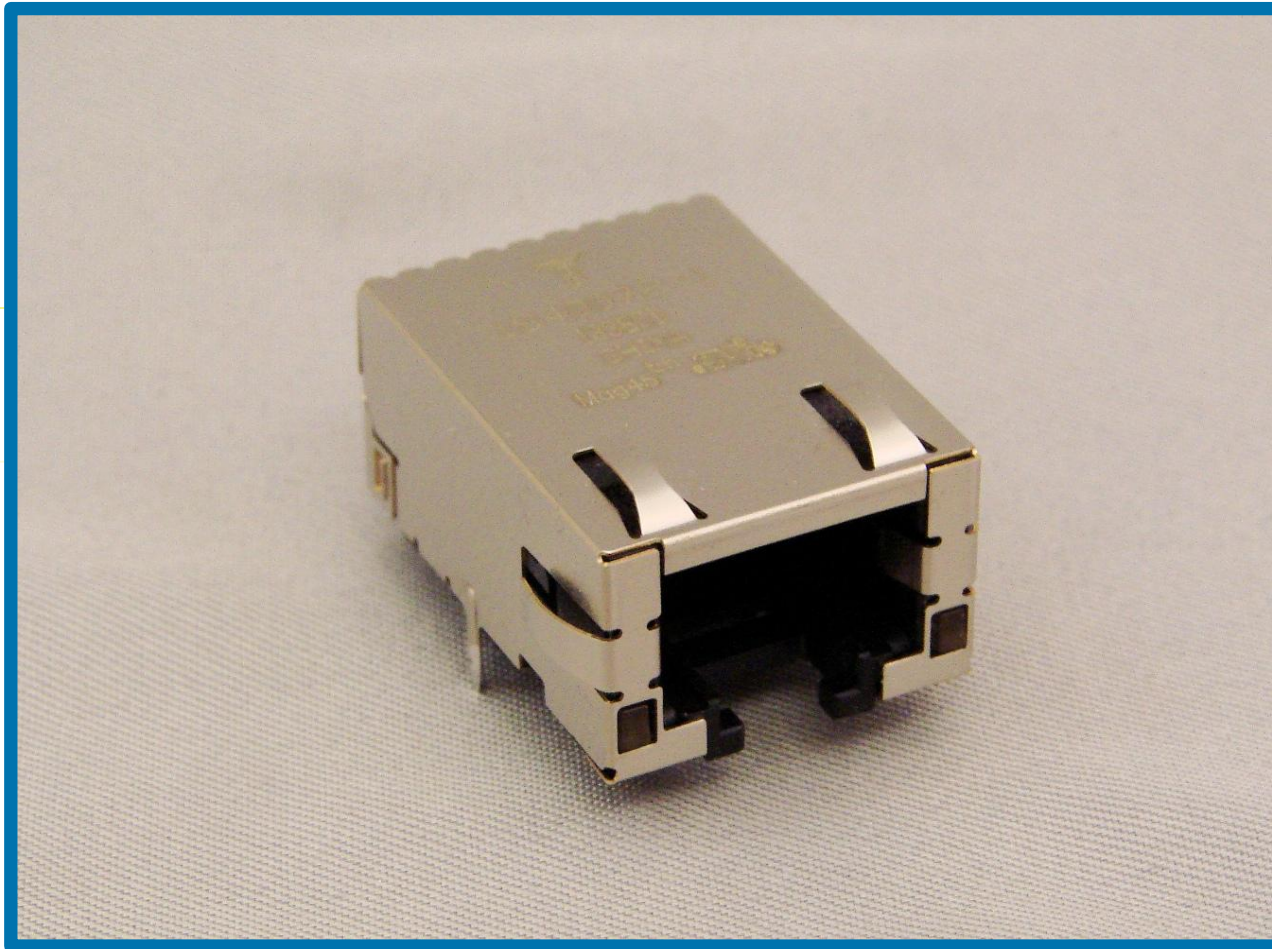# 40GBASE-T ICM

Brian Buckmeier, Victor Renteria

October 2013
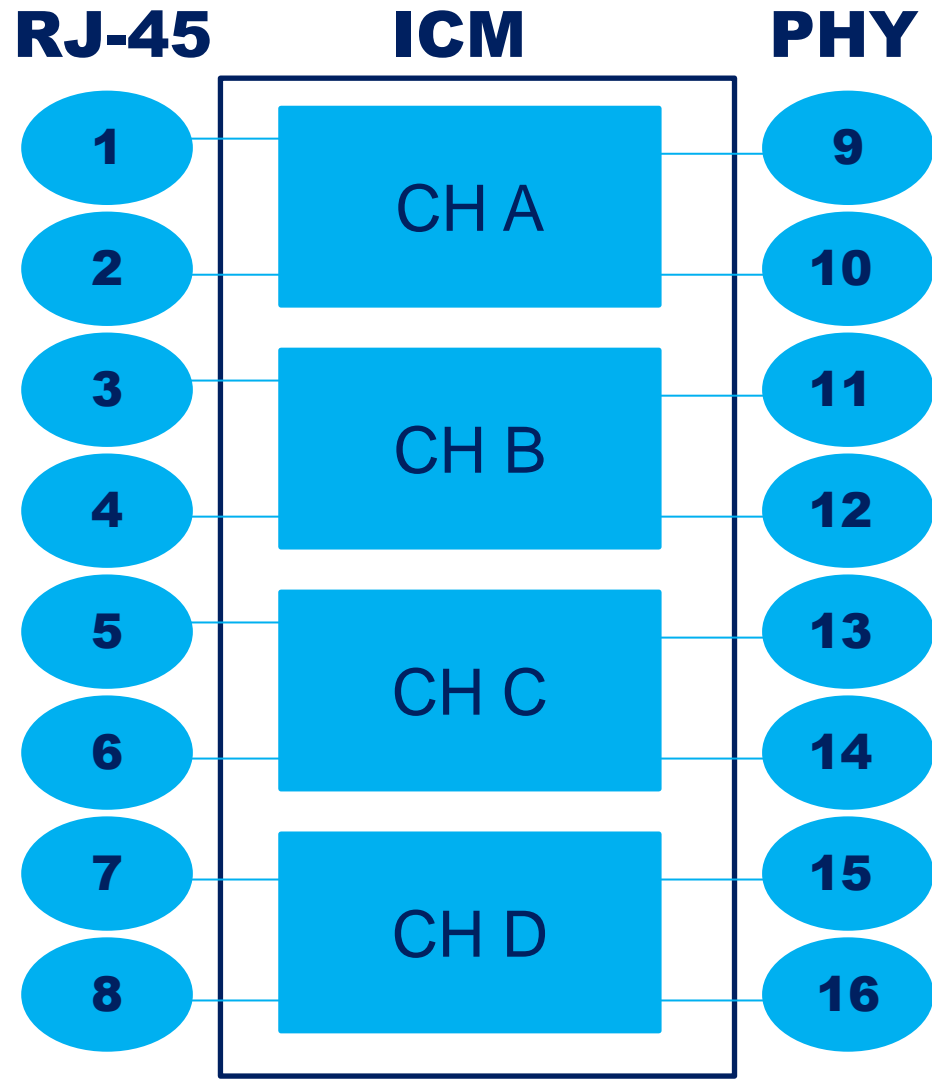
ICM (INTEGRATED MAGNETIC MODULE)
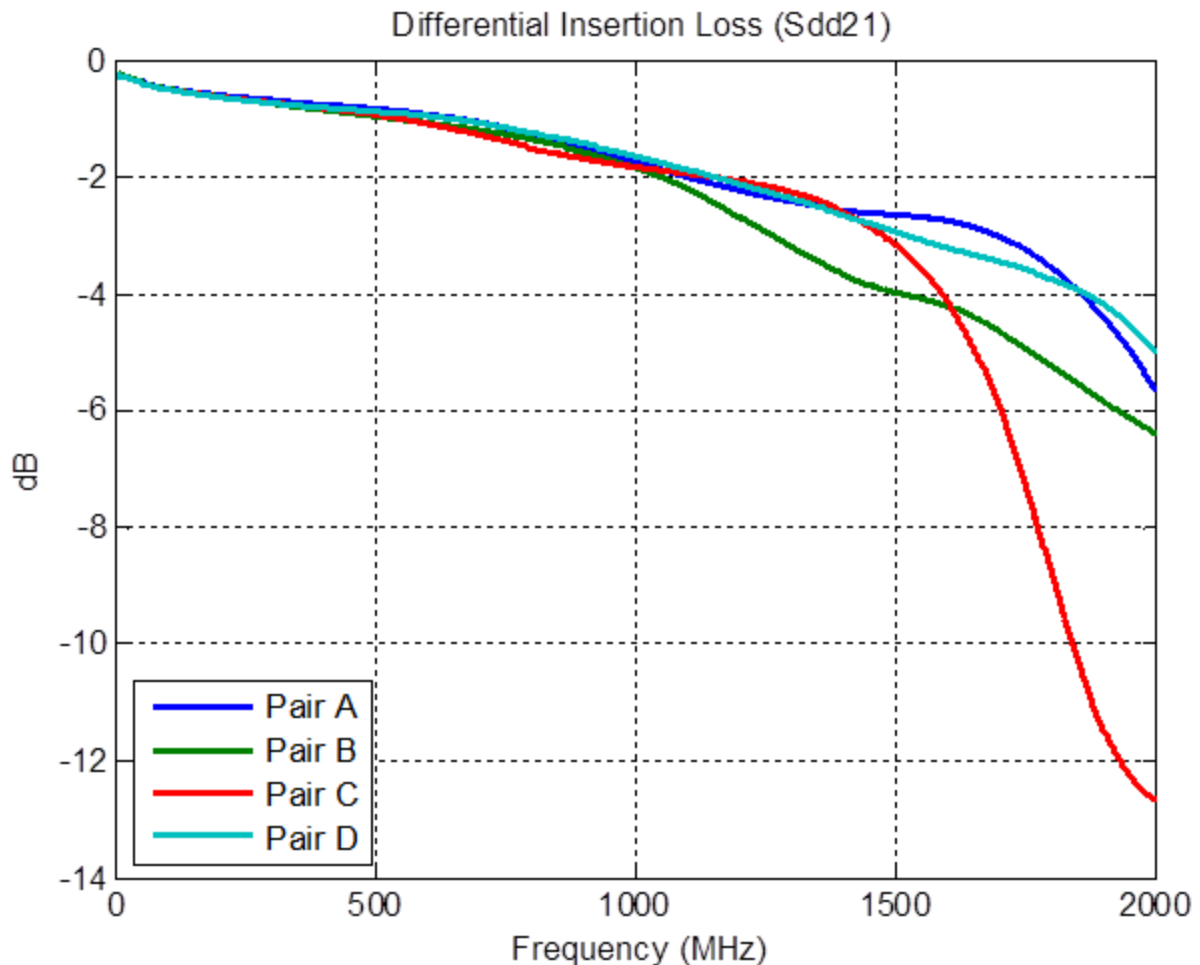

40GBASE-T ICM

Sixteen port model

- VNA ports 1 and 2 are RJ side
- VNA ports 3 AND 4 are PHY side
- E5071C ENA used
- Measurements made @ 50 Ohms single ended
- Swept 1MHz TO 2GHz
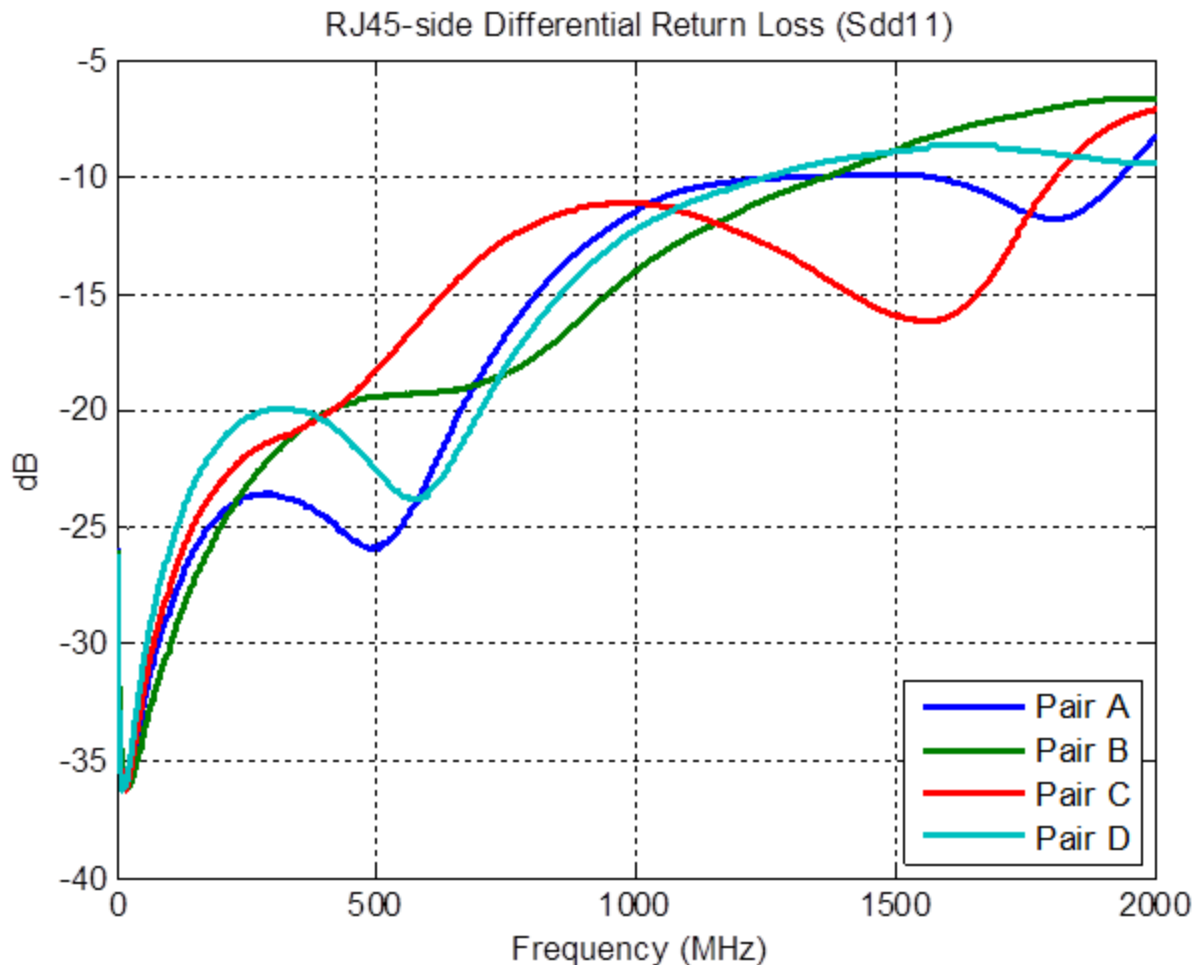- 1601 points used, maximum allowed by E5071C

RJ-45   **ICM**   **PHY**

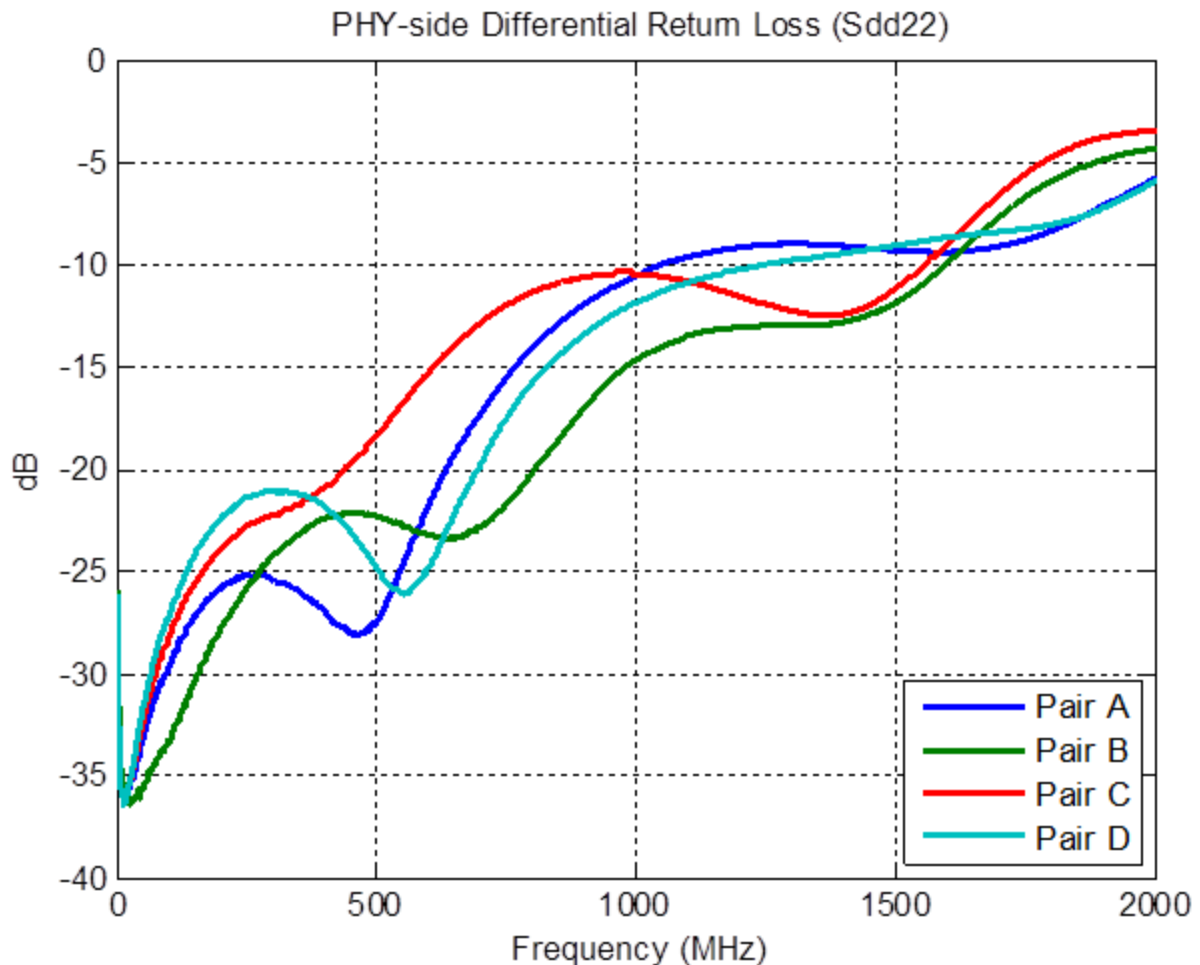| RJ-45	ICM	PHY
1	CH A	9
2		10
3	CH B	11
4		12
5	CH C	13
6		14
7	CH D	15
8		16

40GBASE-T ICM

bel COMPONENTS FOR A CONNECTED PLANET®

TRP connector

Typical insertion loss

Differential Insertion Loss (Sdd21)

Pair A
Pair B
Pair C
Pair D

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Typical return loss

RJ45-side Differential Return Loss (Sdd11)

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Typical return loss

PHY-side Differential Return Loss (Sdd22)

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Typical NEXT

RJ45-side Differential NEXT

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Typical FEXT

RJ45 to PHY Differential FEXT
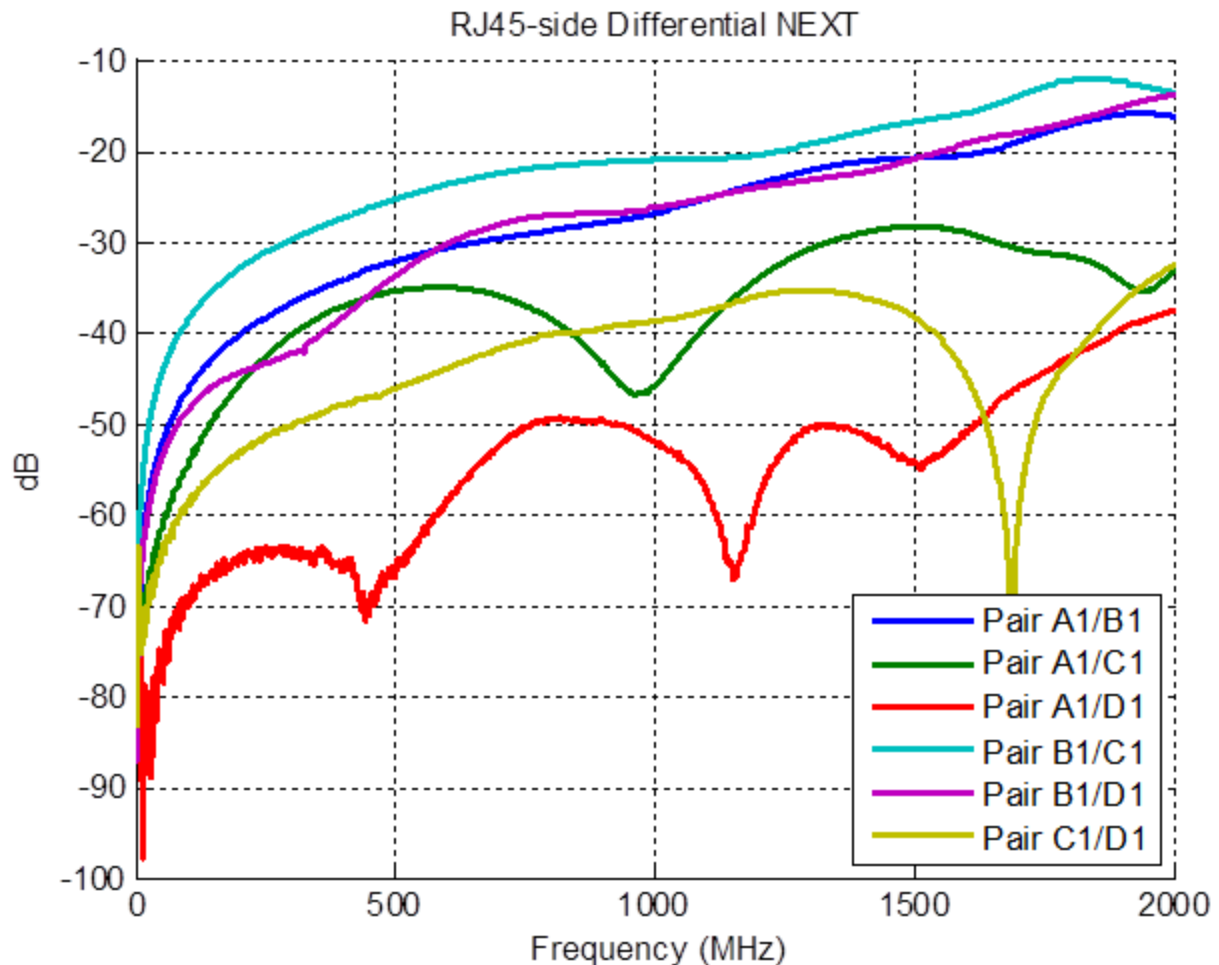
40GBASE-T ICM
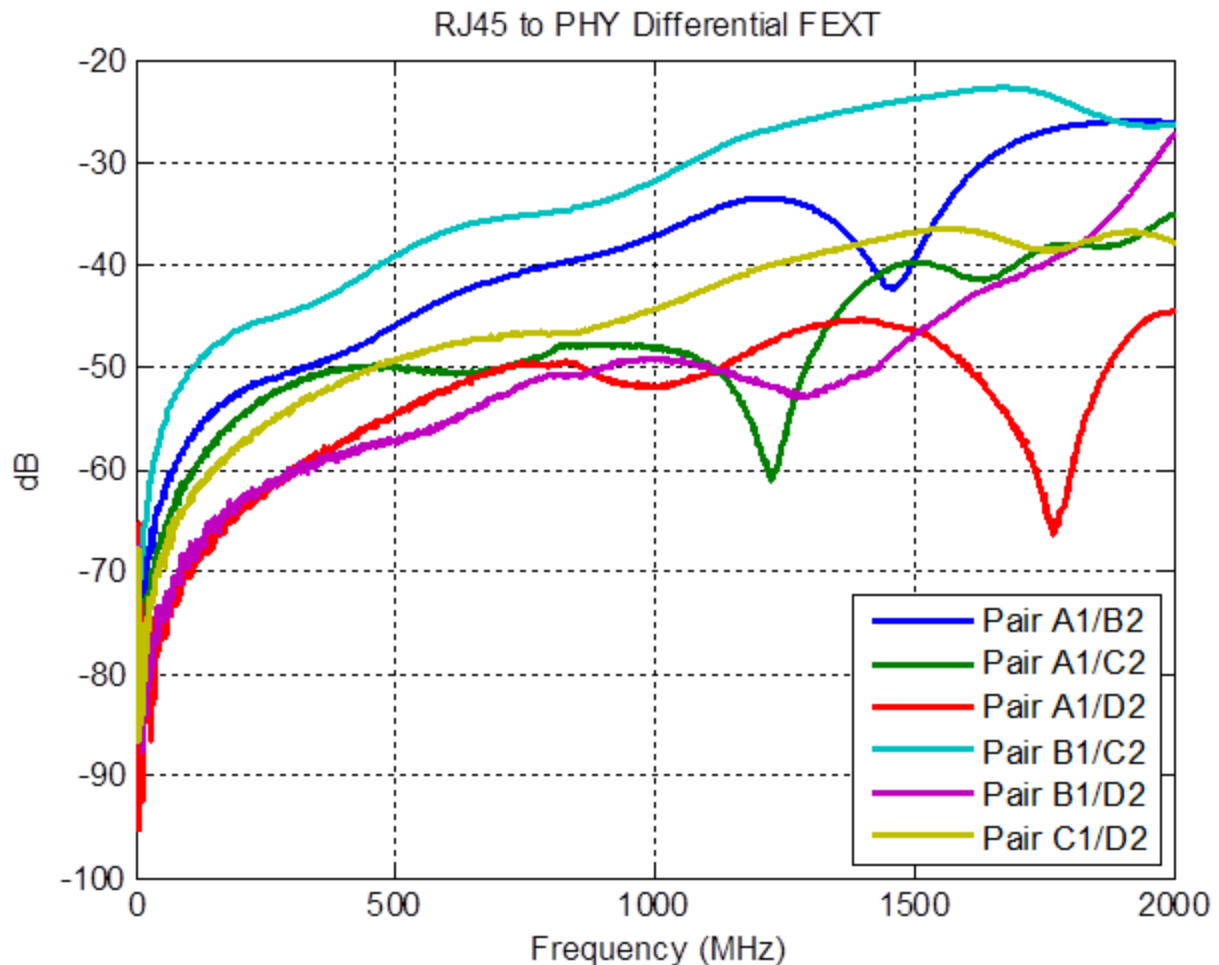
Typical FEXT

PHY to RJ45 Differential FEXT
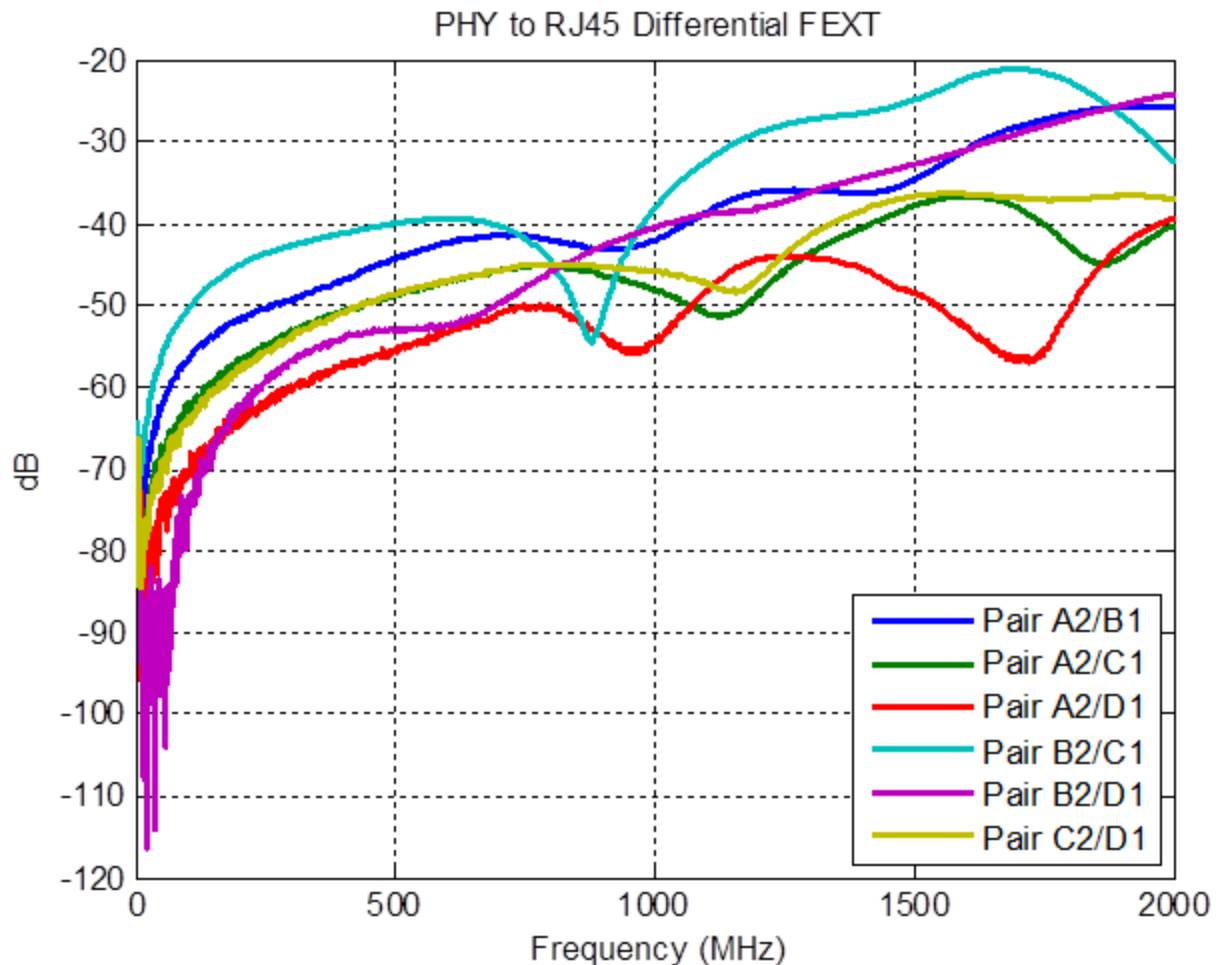
40GBASE-T ICM

Other parameters

- OCL > 160uH
- Meets IEEE HIPOT specification

THANK YOU!

40GBASE-T ICM