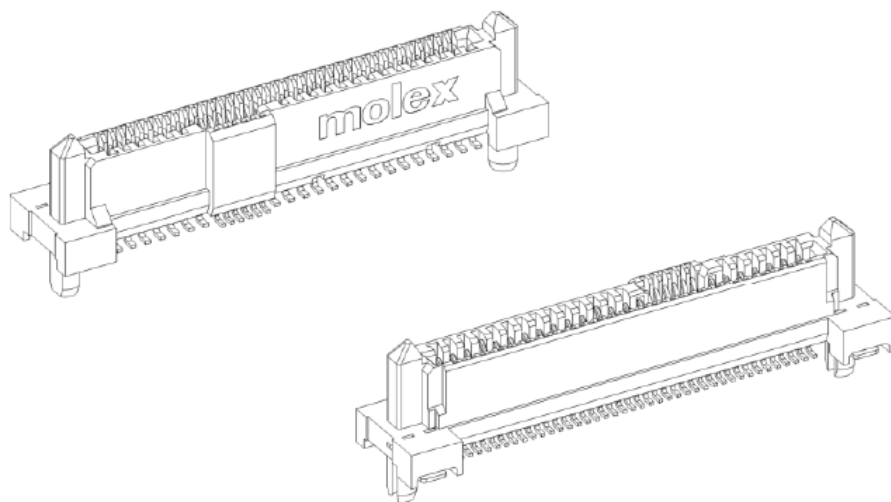




TEST SUMMARY

SIGNAL INTEGRITY TEST SUMMARY

SAS/PCIe VERTICAL SURFACE MOUNT RECEPTACLE



1.0 SCOPE

This test summary covers the signal integrity performance of SAS/PCIe vertical surface mount receptacle. The measurement was conducted with a mated SAS/PCIe plug using Molex designed test fixture. Most of the test fixture effect including the trace was removed using Agilent's Automatic Fixture Removal (AFR) tool in PLTS for all frequency domain measurement.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND SERIES NUMBER

SAS/PCIe vertical surface mount receptacle , Series # 78757

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DOCUMENT NUMBER: TS-78757-001	CREATED / REVISED BY: CMWONG	CHECKED BY: WHFOO	APPROVED BY: WTCHUA

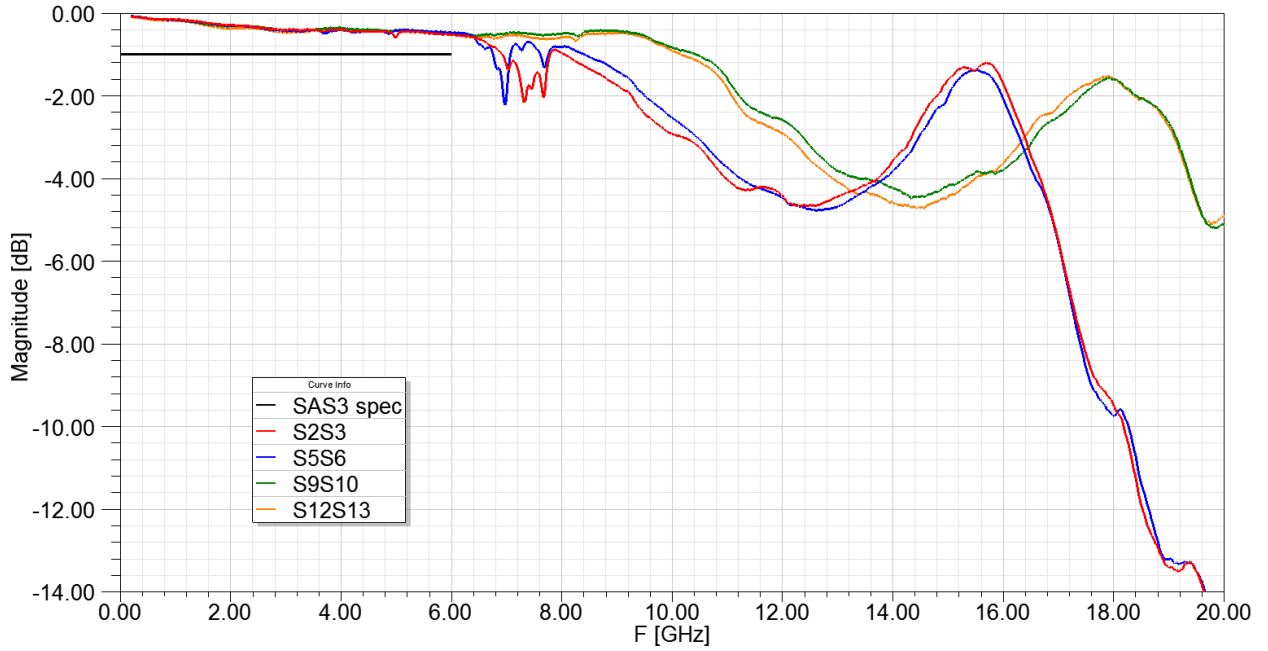


TEST SUMMARY

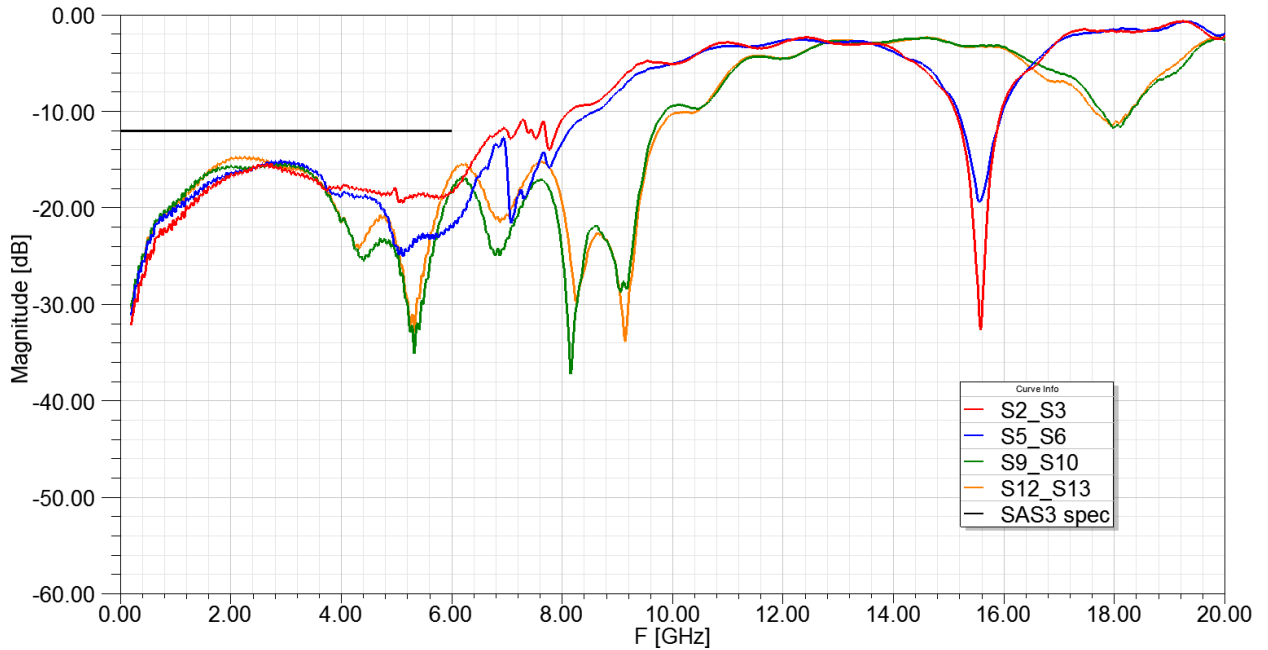
3.0 PERFORMANCE

Frequency Domain

Differential Insertion Loss (SAS 3.0)



Differential Return Loss (SAS 3.0)



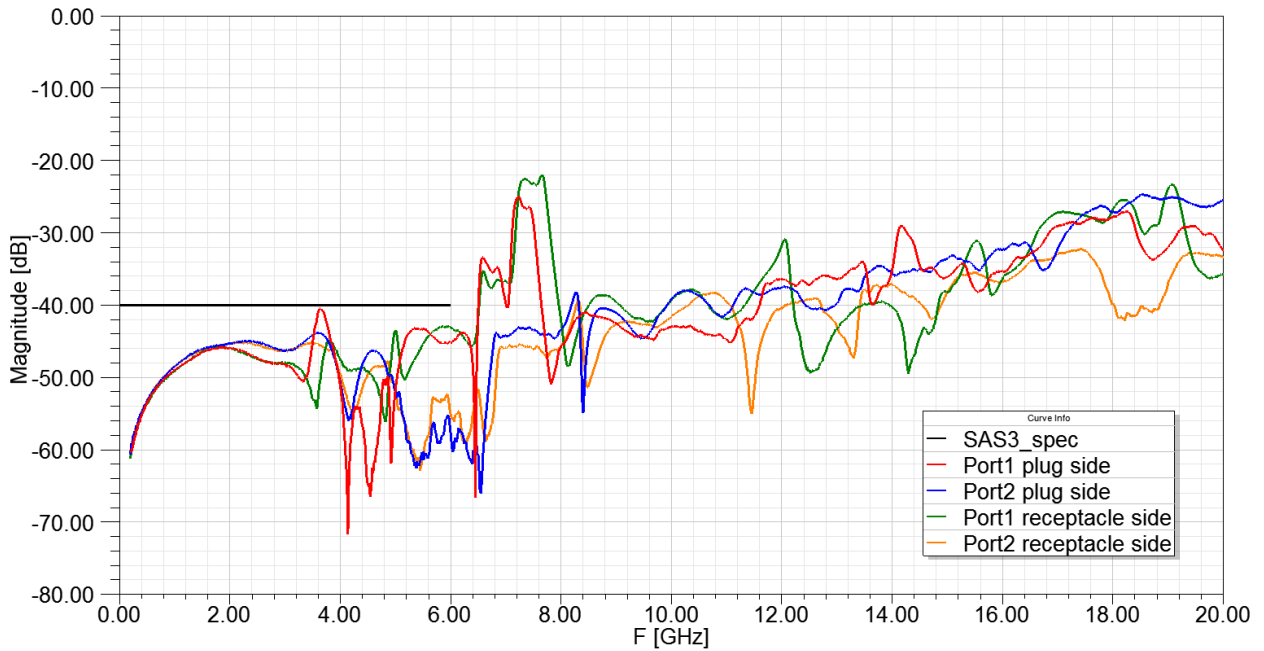
REVISION: A	ECN INFORMATION: EC No: S2016-0177 DATE: 2015/08/14	TITLE: Signal Integrity Test Summary SAS/PCIe Vertical Surface Mount Receptacle	SHEET No. 2 of 6
DOCUMENT NUMBER: TS-78757-001		CREATED / REVISED BY: CMWONG	CHECKED BY: WHFOO
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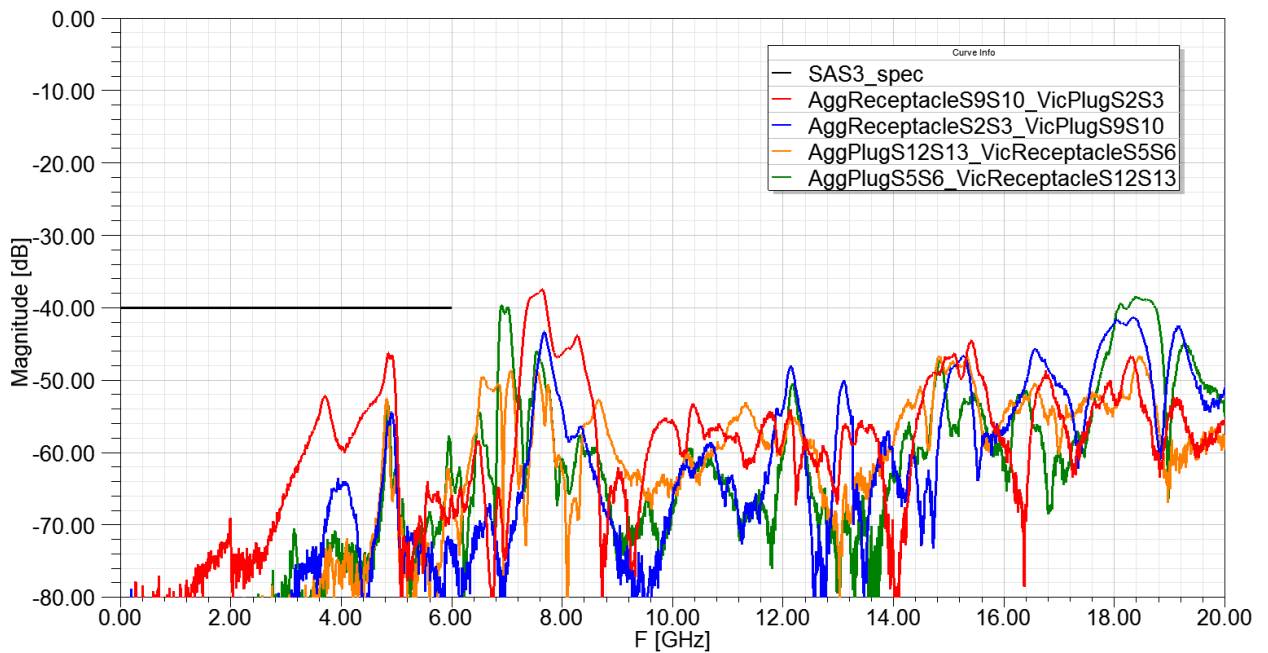
TEST SUMMARY

Frequency Domain (continued)

Differential Near-End Crosstalk (SAS 3.0)



Differential Far-End Crosstalk (SAS 3.0 - Based on T10 configuration)



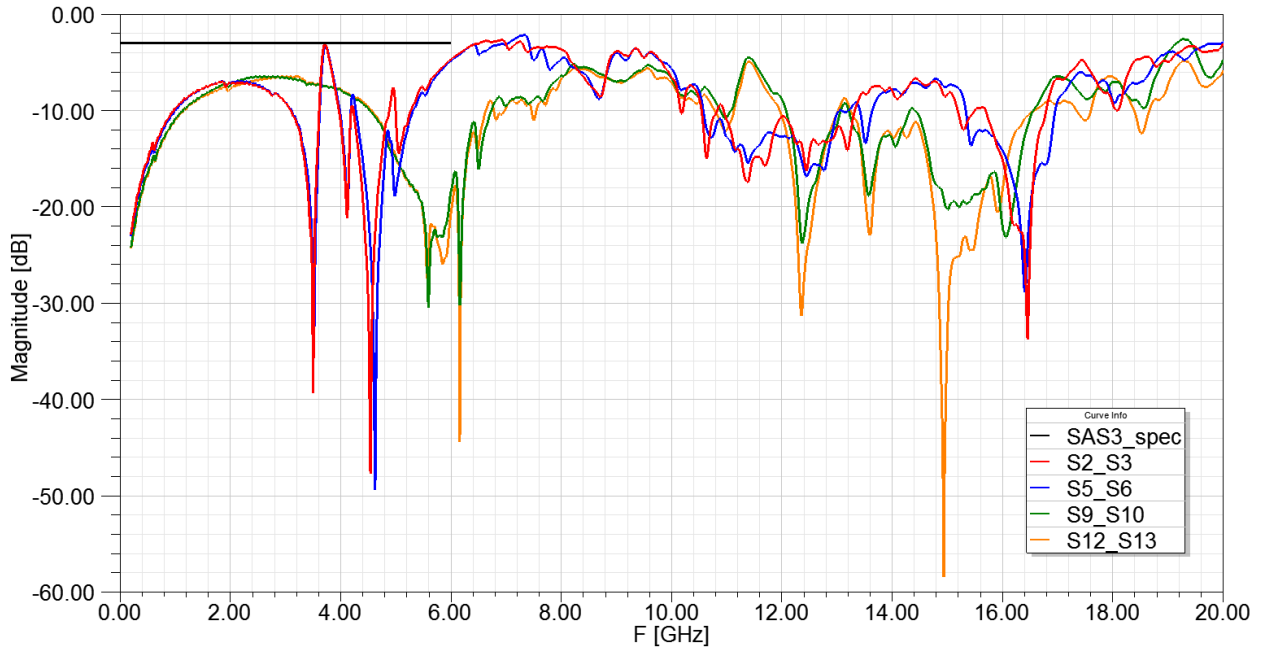
REVISION: A	ECN INFORMATION: EC No: S2016-0177 DATE: 2015/08/14	TITLE: Signal Integrity Test Summary SAS/PCIe Vertical Surface Mount Receptacle	SHEET No. 3 of 6
DOCUMENT NUMBER: TS-78757-001		CREATED / REVISED BY: CMWONG	CHECKED BY: WHFOO
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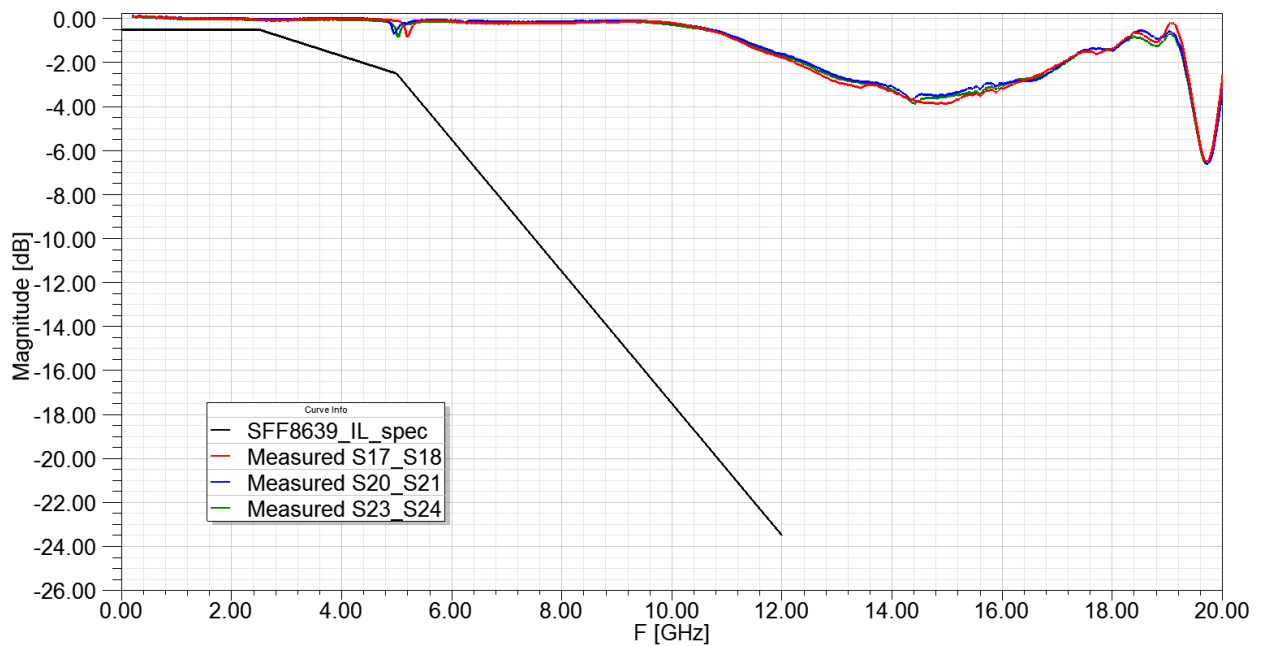
TEST SUMMARY

Frequency Domain (continued)

Common Mode Return Loss (SAS 3.0)



Differential Insertion Loss (PCI Express 3.0 – Renormalized to differential 85Ω)



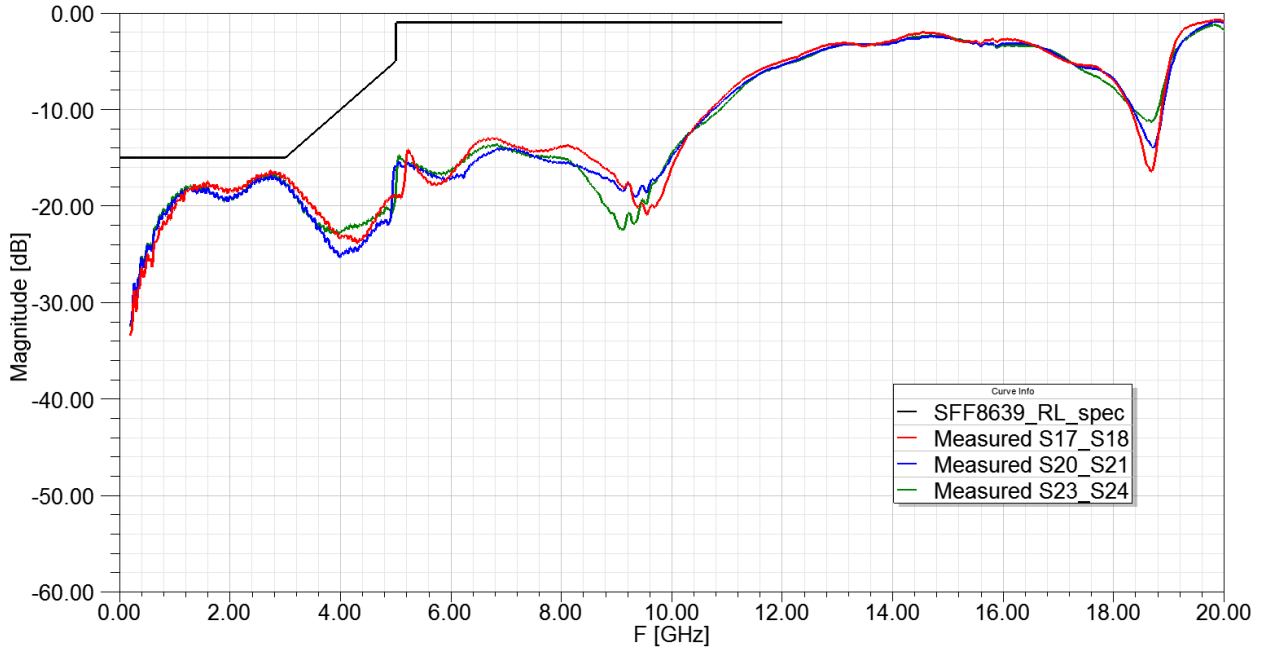
REVISION: A	ECN INFORMATION: EC No: S2016-0177 DATE: 2015/08/14	TITLE: Signal Integrity Test Summary SAS/PCIe Vertical Surface Mount Receptacle	SHEET No. 4 of 6
DOCUMENT NUMBER: TS-78757-001		CREATED / REVISED BY: CMWONG	CHECKED BY: WHFOO
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TEST SUMMARY

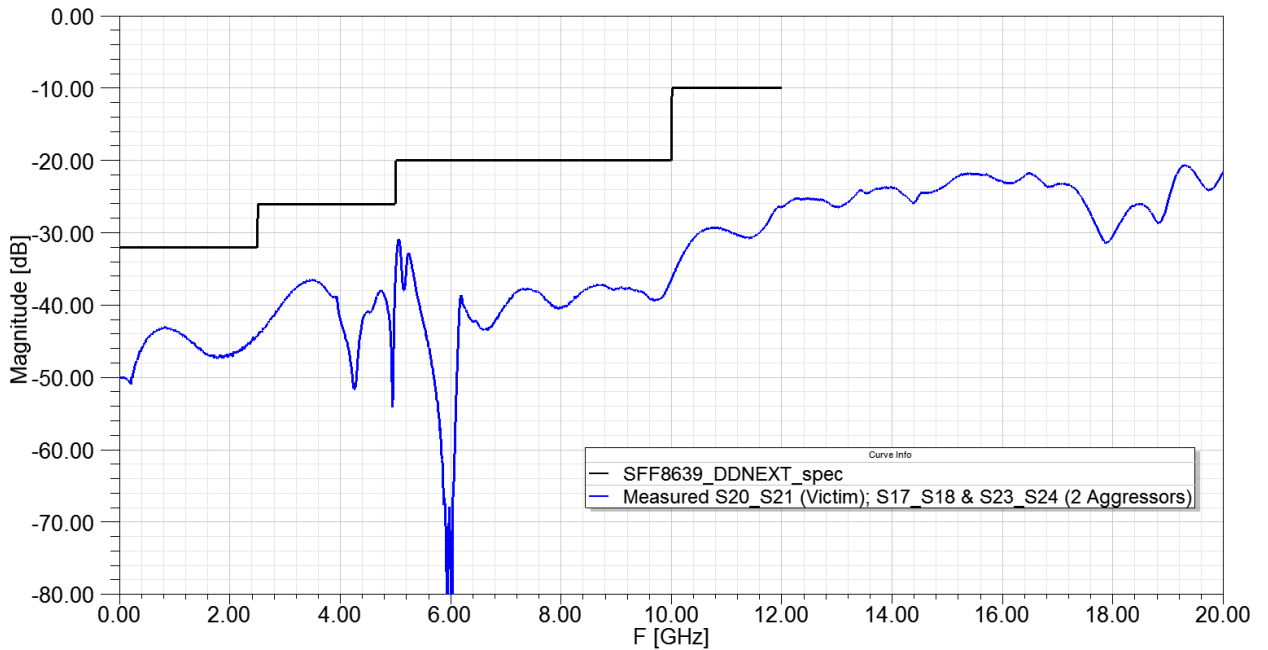
Frequency Domain (continued)

Differential Return Loss (PCI Express 3.0 – Renormalized to differential 85Ω)



Differential Near-End Crosstalk (PCI Express 3.0 – Renormalized to differential 85Ω)

- Victim – S20S21; Aggressors – S17S18, S23S24



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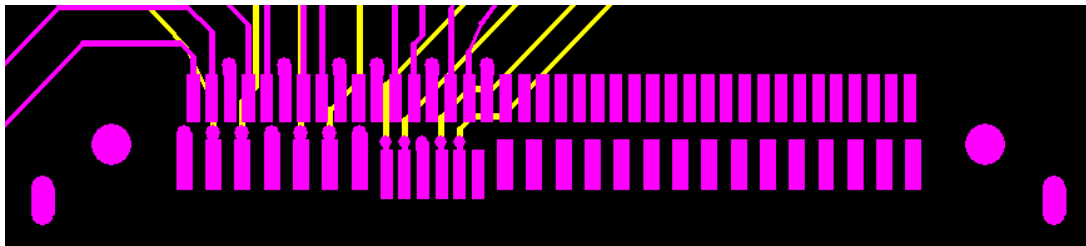
TEST SUMMARY

4.0 TEST FIXTURES

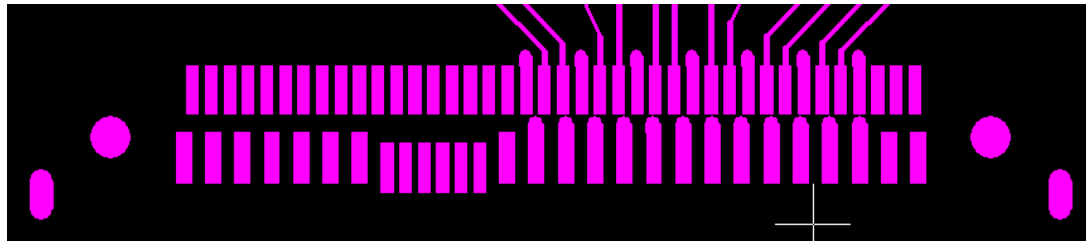
Molex Test Boards Information

Material : TU 872-SLK
 Thickness : 1.58mm, 4 Layers
 High Speed Traces : High-Speed Signals on Layer 1 & 4
 0.1397mm dielectric thickness between Top Layer & Layer 2 ; Layer 3 & Bottom Layer
 45.72mm single-ended trace length (both plug board and receptacle board)

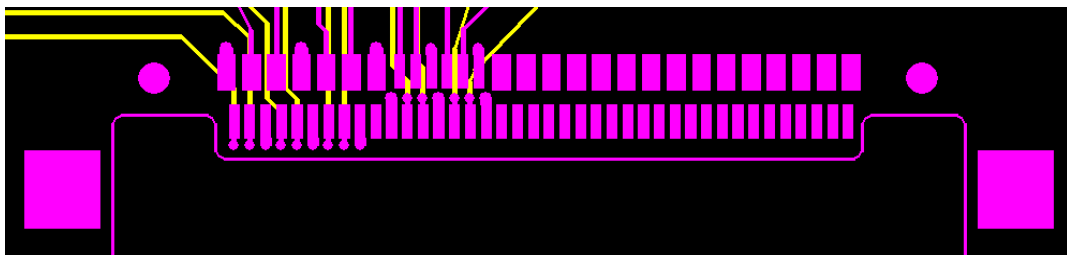
SAS Host Board (Receptacle)



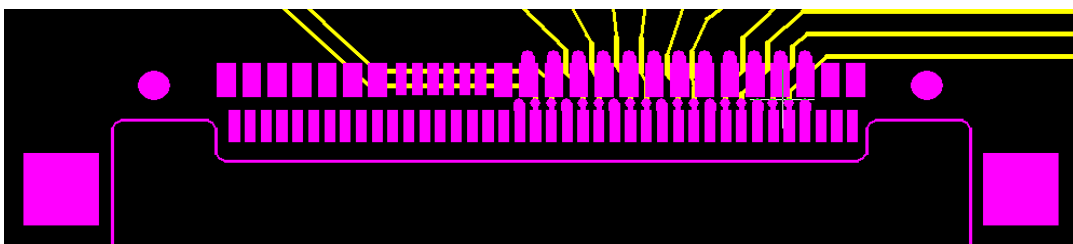
PCIe Host Board (Receptacle)



SAS Device Board (Plug)



PCIe Device Board (Plug)



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		APPROVED BY: WTCHUA	