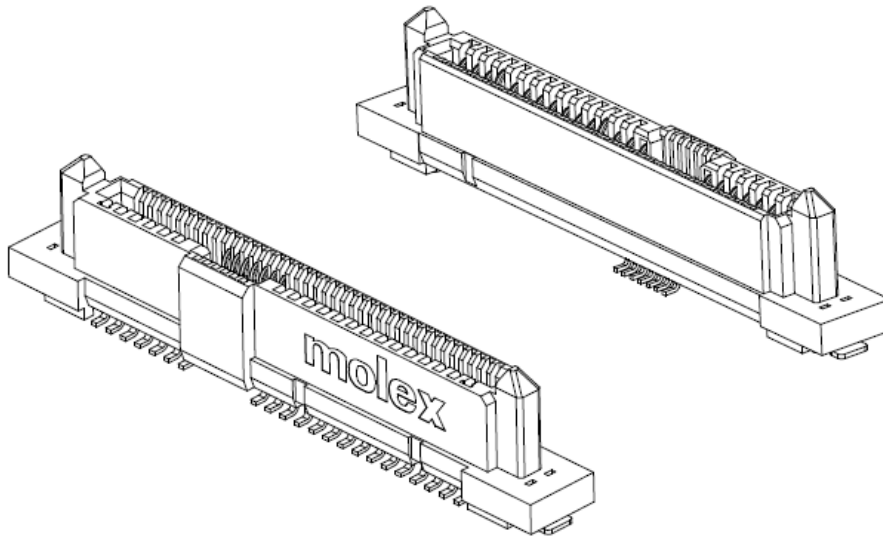




TEST SUMMARY

SIGNAL INTEGRITY TEST SUMMARY

SAS-3 VERTICAL SURFACE MOUNT RECEPTACLE



1.0 SCOPE

This test summary covers the signal integrity performance of SAS-3 vertical surface mount receptacle. The measurement was conducted with a mated SAS-3 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

Series # 78728, SAS-3 vertical surface mount receptacle

REVISION: A	ECN INFORMATION: EC No: S2015-1359 DATE: 2015/05/21	TITLE: Signal Integrity Test Summary SAS-3 Vertical Surface Mount Receptacle MOLEX CONFIDENTIAL	SHEET No. 1 of 5
DOCUMENT NUMBER: TS-78728-002	CREATED / REVISED BY: CMWONG 2015/05/21	CHECKED BY: WHFOO 2015/06/09	APPROVED BY: WTCHUA 2015/06/09

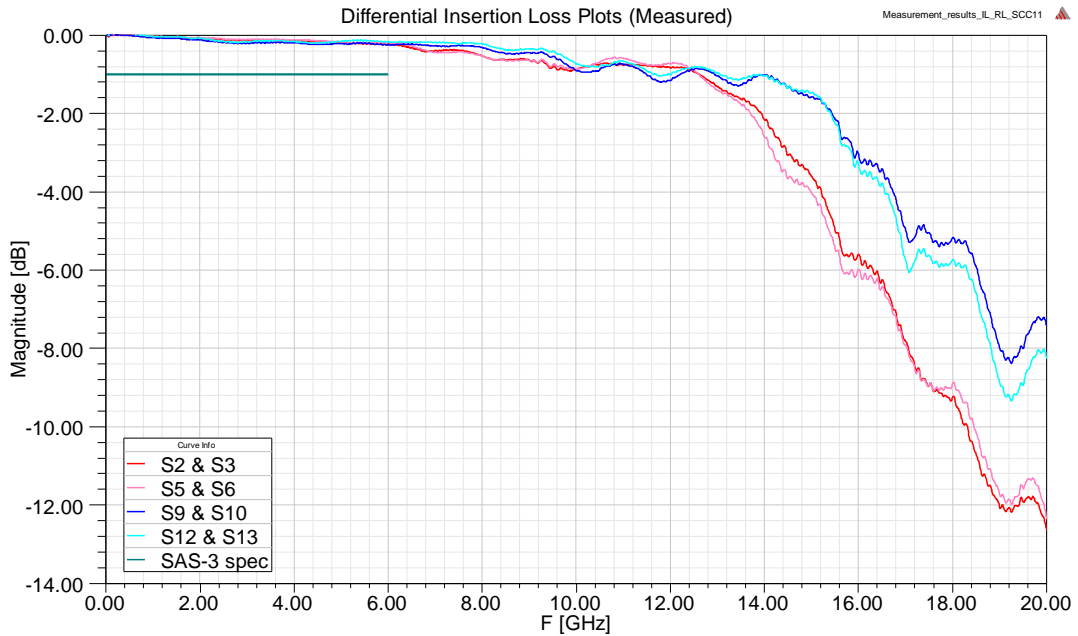


TEST SUMMARY

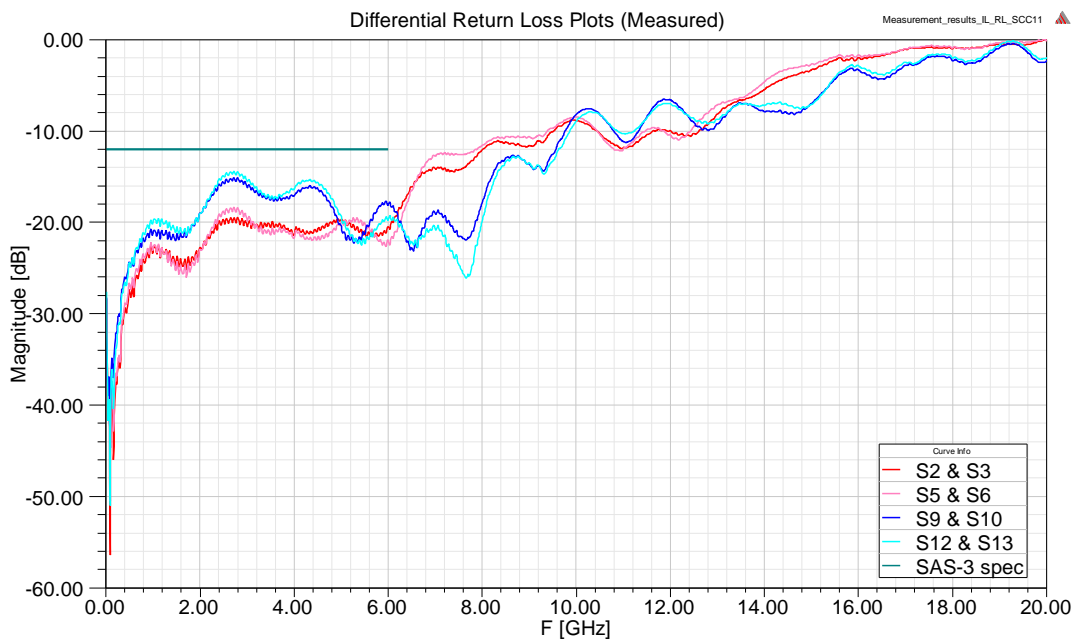
3.0 PERFORMANCE

Frequency Domain

Differential Insertion Loss



Differential Return Loss



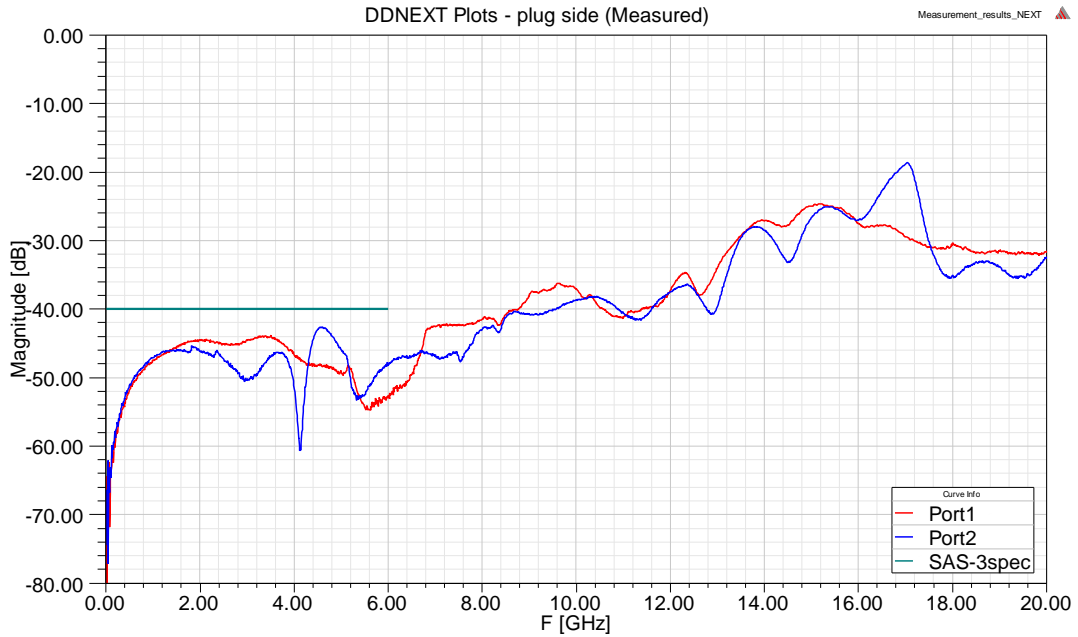
REVISION: A	ECN INFORMATION: EC No: S2015-1359 DATE: 2015/05/21	TITLE: Signal Integrity Test Summary SAS-3 Vertical Surface Mount Receptacle MOLEX CONFIDENTIAL	SHEET No. 2 of 5
DOCUMENT NUMBER: TS-78728-002	CREATED / REVISED BY: CMWONG 2015/05/21	CHECKED BY: WHFOO 2015/06/09	APPROVED BY: WTCHUA 2015/06/09



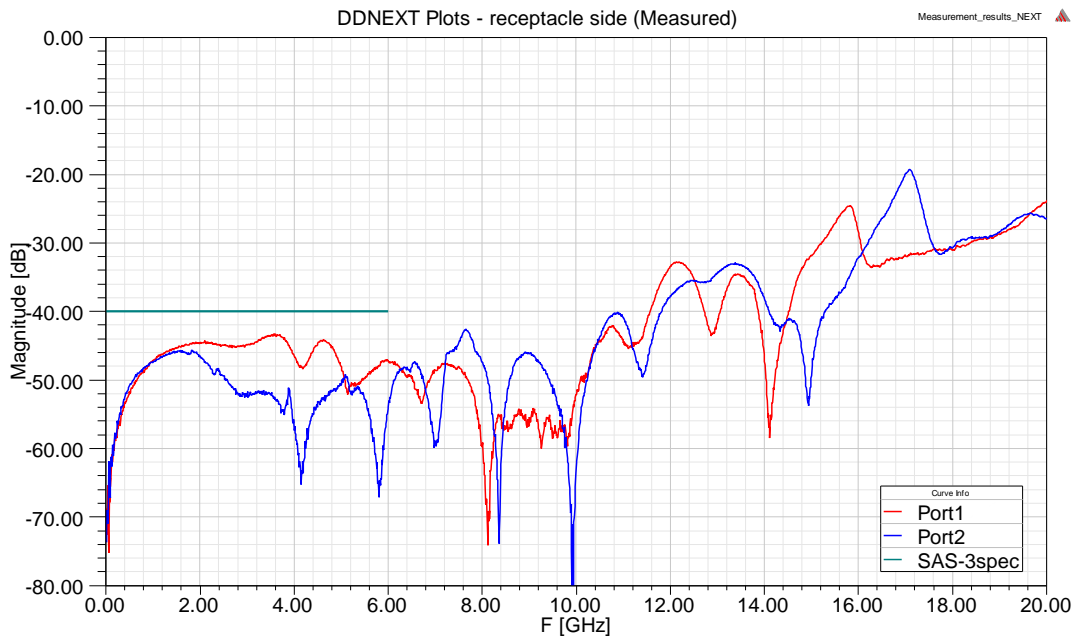
TEST SUMMARY

Frequency Domain (continued)

Differential Near End Crosstalk (Plug Side)



Differential Near End Crosstalk (Receptacle Side)



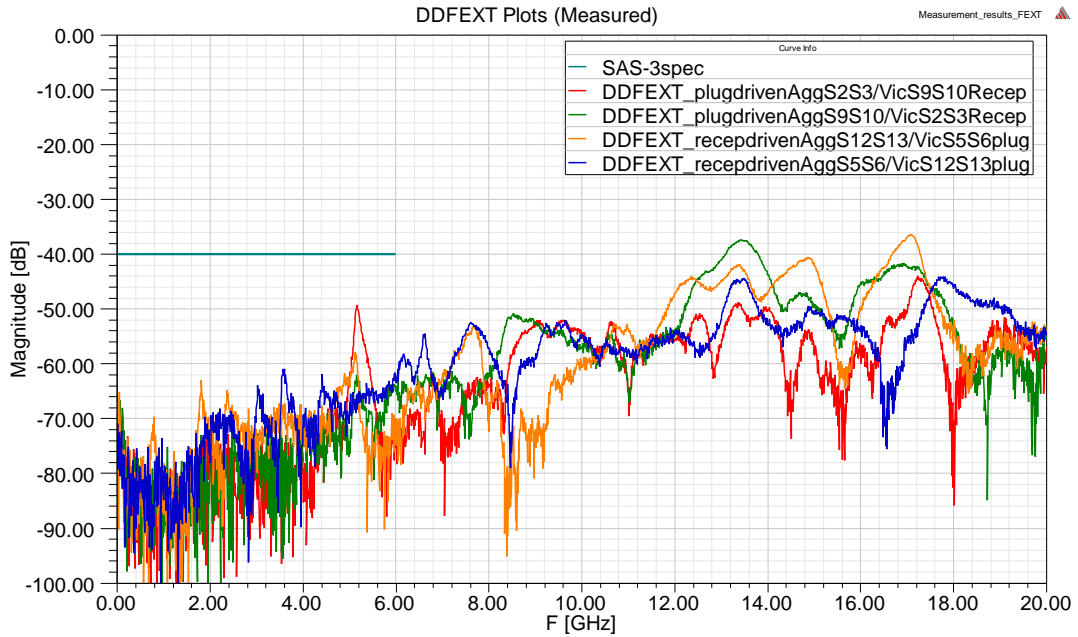
REVISION: A	ECN INFORMATION: EC No: S2015-1359 DATE: 2015/05/21	TITLE: Signal Integrity Test Summary SAS-3 Vertical Surface Mount Receptacle MOLEX CONFIDENTIAL	SHEET No. 3 of 5
DOCUMENT NUMBER: TS-78728-002	CREATED / REVISED BY: CMWONG 2015/05/21	CHECKED BY: WHFOO 2015/06/09	APPROVED BY: WTCHUA 2015/06/09



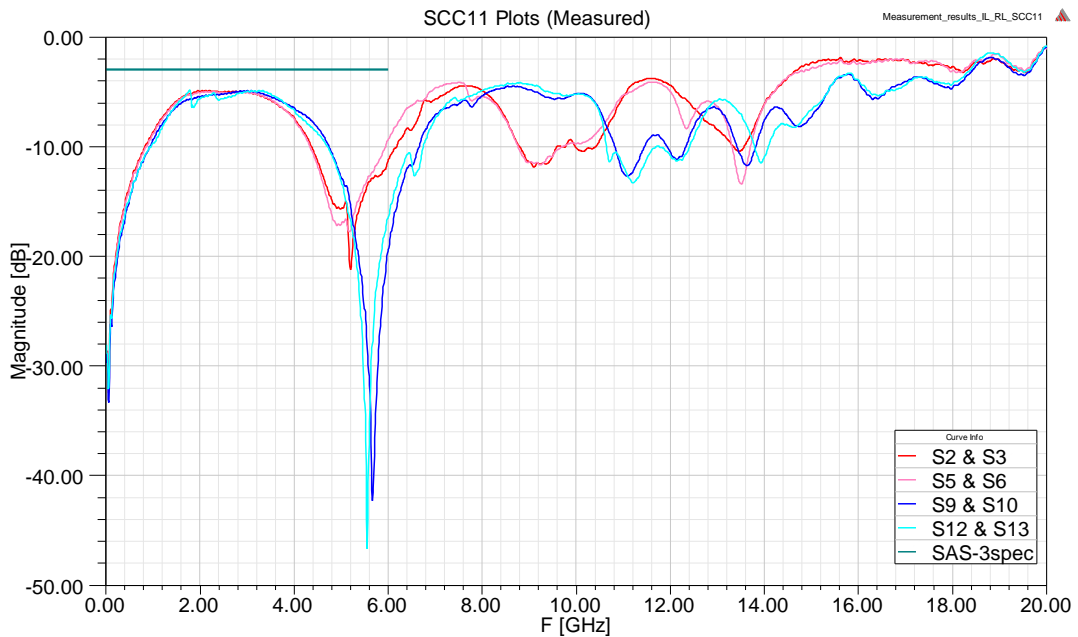
TEST SUMMARY

Frequency Domain (continued)

Differential Far End Crosstalk (Based on T10 configuration)



Common Mode Return Loss (SCC11)



REVISION: A	ECN INFORMATION: EC No: S2015-1359 DATE: 2015/05/21	TITLE: Signal Integrity Test Summary SAS-3 Vertical Surface Mount Receptacle MOLEX CONFIDENTIAL	SHEET No. 4 of 5
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TEST SUMMARY

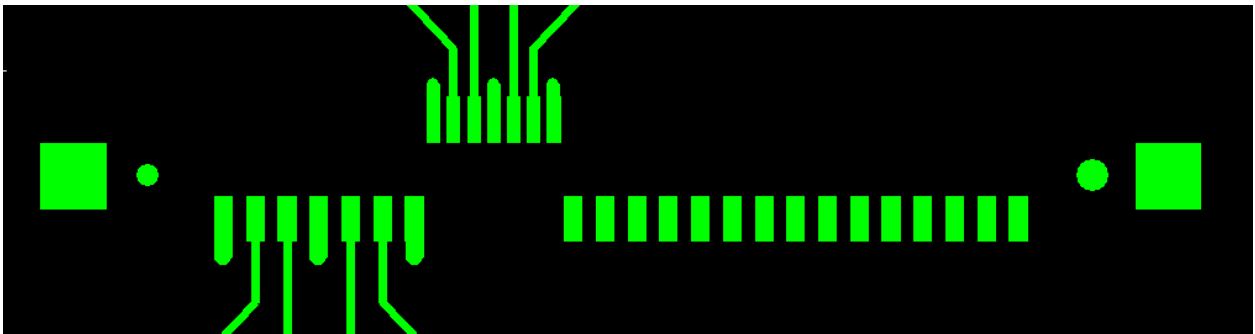
4.0 TEST FIXTURES

Molex Test Boards Information

Material : TU 872-SLK
 Thickness : 1.58mm, 4 Layers
 High Speed Traces : High-Speed Signals on Layer 1
 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)

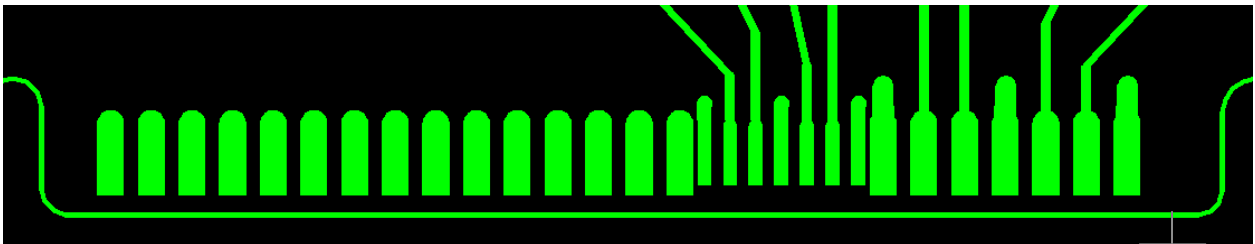
Trace Break-out Details

Host Board (Receptacle)



0.508mm single-ended trace included in measurement.

Device Board (Plug)



0.508mm single-ended trace included in measurement.

For all frequency domain measurement, 90.424mm of single-ended trace will be remove via Agilent's Automatic Fixture Removal (AFR) tool in PLTS (on both host and device boards).

REVISION: A	ECN INFORMATION: EC No: S2015-1359 DATE: 2015/05/21	TITLE: Signal Integrity Test Summary SAS-3 Vertical Surface Mount Receptacle MOLEX CONFIDENTIAL	SHEET No. 5 of 5
DOCUMENT NUMBER: TS-78728-002	CREATED / REVISED BY: CMWONG 2015/05/21	CHECKED BY: WHFOO 2015/06/09	APPROVED BY: WTCHUA 2015/06/09