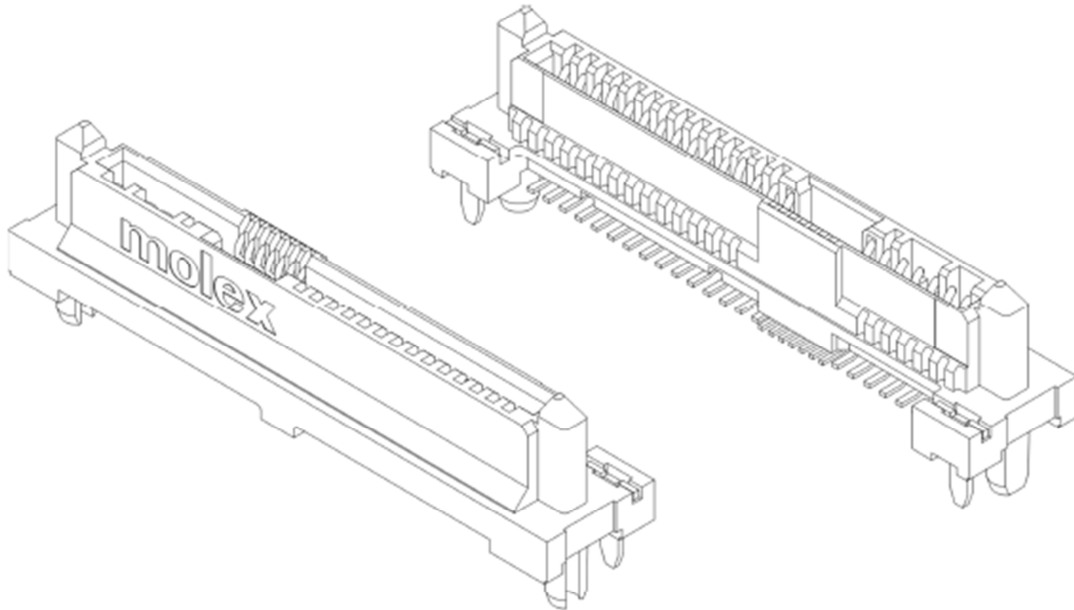




# TEST SUMMARY

## 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

SAS-3 vertical surface mount receptacle , Series # 78715

REVISION: <b>A</b>	ECN INFORMATION: EC No: <b>S2014-0710</b> DATE: <b>2014/01/23</b>	TITLE: <b>Signal Integrity Test Summary</b> <b>SAS-3 Vertical Surface Mount Receptacle</b>  <b>MOLEX CONFIDENTIAL</b>	SHEET No. <b>1 of 5</b>
DOCUMENT NUMBER: <b>TS-78715-001</b>	CREATED / REVISED BY: <b>WTCHUA 2014/01/23</b>	CHECKED BY: <b>CMWONG 2014/01/23</b>	APPROVED BY: <b>WTCHUA 2014/01/23</b>

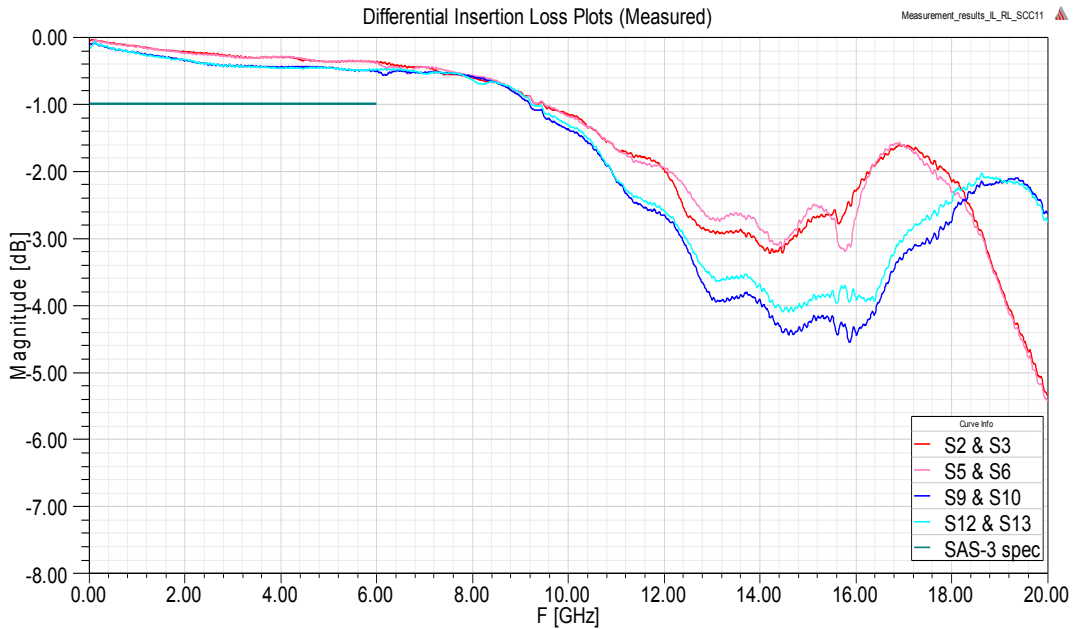


# TEST SUMMARY

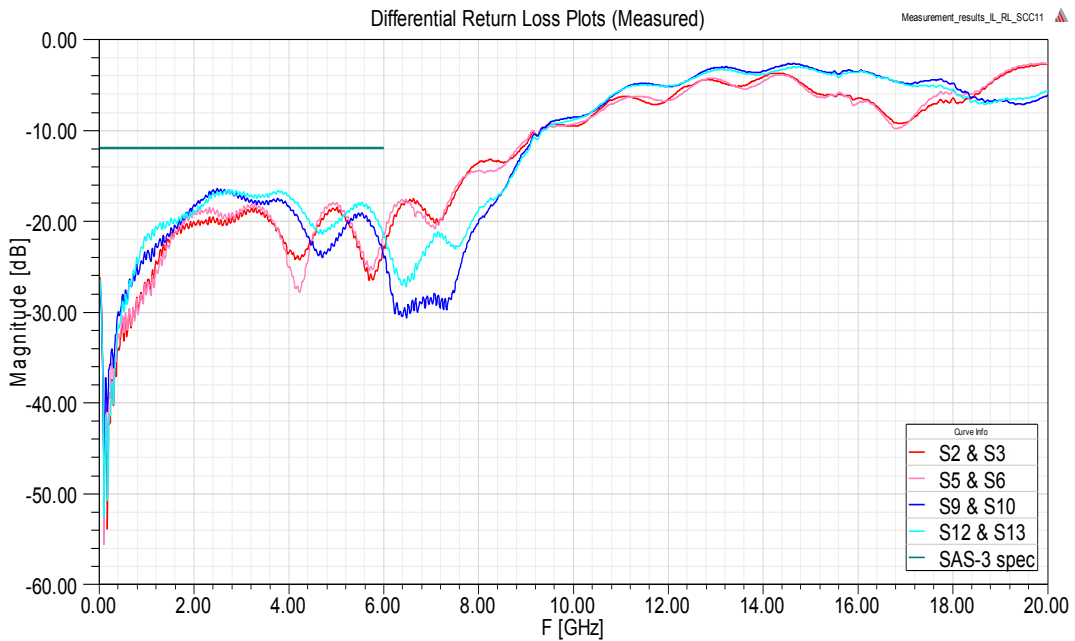
## 3.0 PERFORMANCE

### Frequency Domain

#### Differential Insertion Loss



#### Differential Return Loss



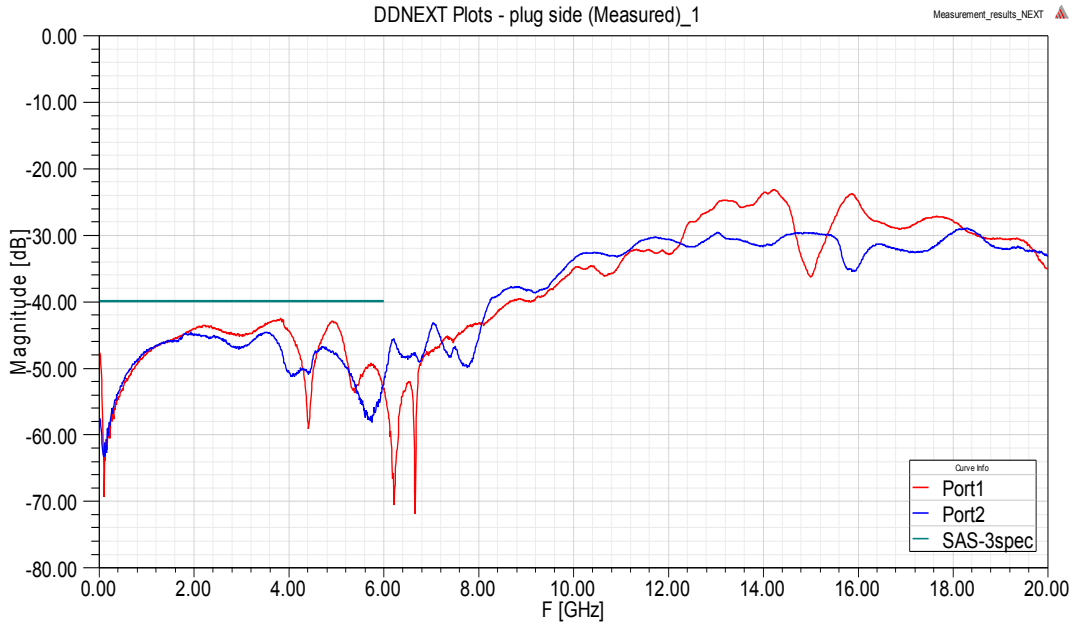
REVISION: <b>A</b>	ECN INFORMATION: EC No: <b>S2014-0710</b> DATE: <b>2014/01/23</b>	TITLE: <b>Signal Integrity Test Summary</b> <b>SAS-3 Vertical Surface Mount Receptacle</b>	SHEET No. <b>2 of 5</b>
DOCUMENT NUMBER: <b>TS-78715-001</b>		CREATED / REVISED BY: <b>WTCHUA 2014/01/23</b>	CHECKED BY: <b>CMWONG 2014/01/23</b>
		APPROVED BY: <b>WTCHUA 2014/01/23</b>	
TEMPLATE FILENAME: SPM[SIZE_AJ](V.1).DOC			



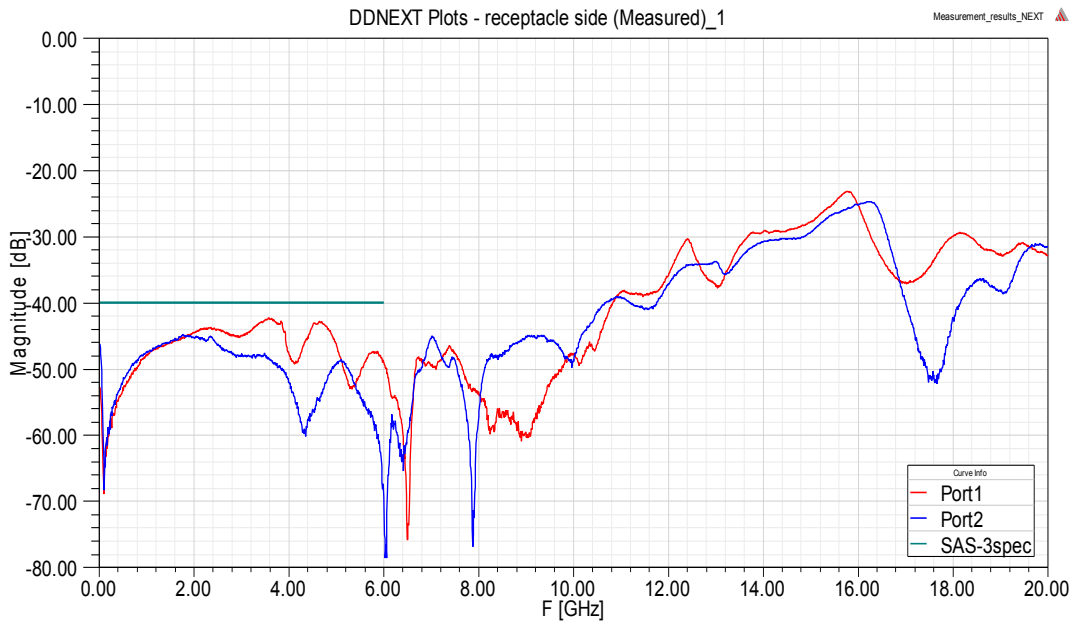
# TEST SUMMARY

## Frequency Domain (continued)

### Differential Near End Crosstalk (Plug Side)



### Differential Near End Crosstalk (Receptacle Side)

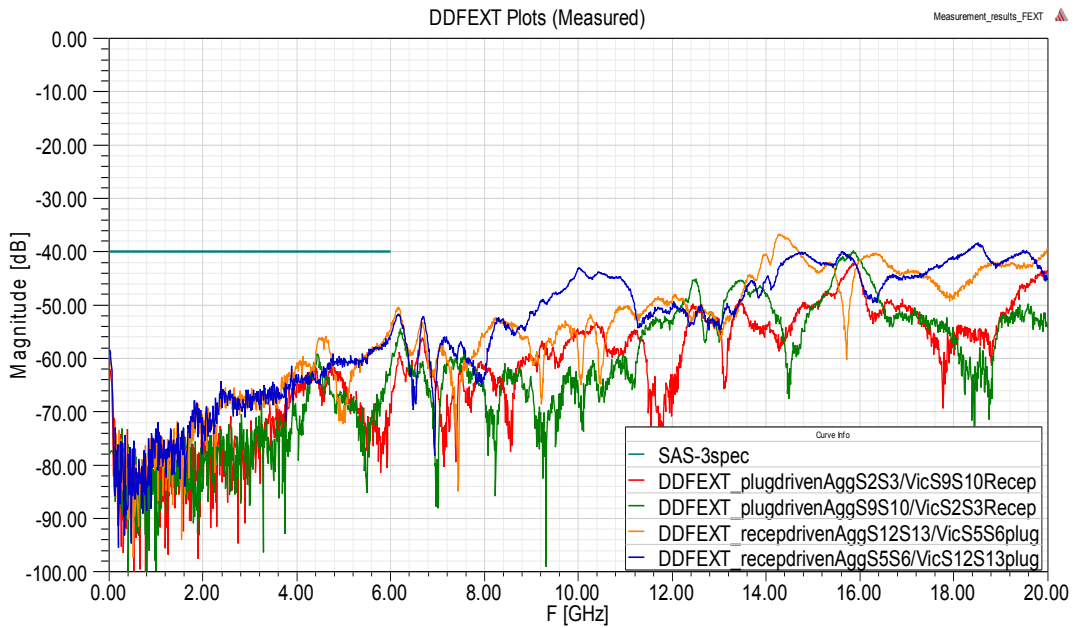


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DOCUMENT NUMBER: <b>TS-78715-001</b>	CREATED / REVISED BY: <b>WTCHUA 2014/01/23</b>	CHECKED BY: <b>CMWONG 2014/01/23</b>	APPROVED BY: <b>WTCHUA 2014/01/23</b>



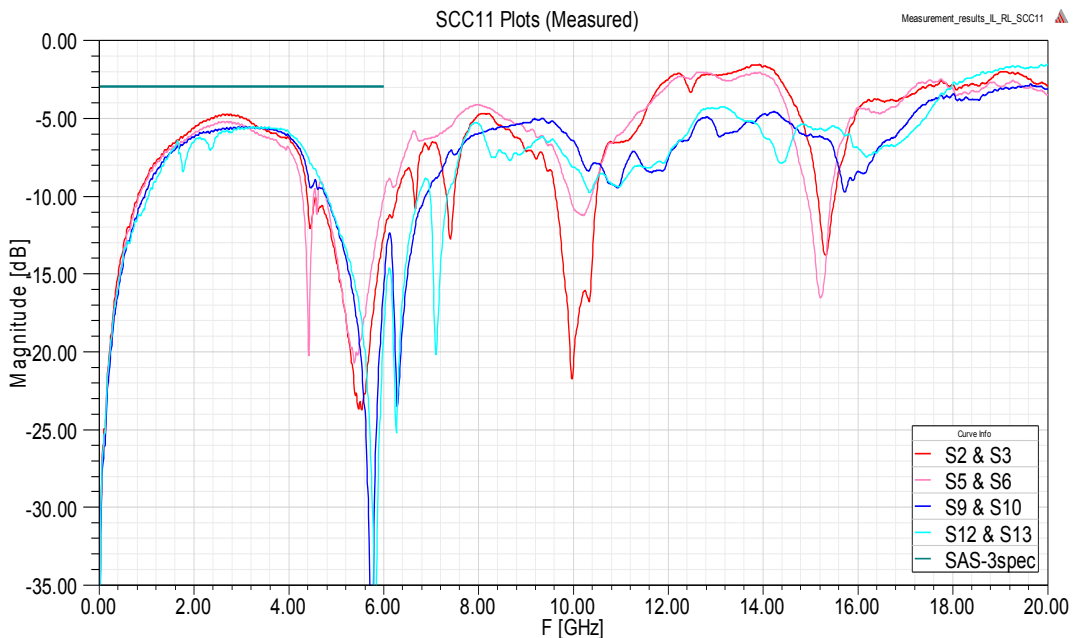
# TEST SUMMARY

## Differential Far End Crosstalk (Based on T10 configuration)



## Frequency Domain (continued)

## Common Mode Return Loss (SCC11)



REVISION: <b>A</b>	ECN INFORMATION: EC No: <b>S2014-0710</b> DATE: <b>2014/01/23</b>	TITLE: <b>Signal Integrity Test Summary SAS-3 Vertical Surface Mount Receptacle</b>	SHEET No. <b>4 of 5</b>
DOCUMENT NUMBER: <b>TS-78715-001</b>		CREATED / REVISED BY: <b>WTCHUA 2014/01/23</b>	CHECKED BY: <b>CMWONG 2014/01/23</b>
		APPROVED BY: <b>WTCHUA 2014/01/23</b>	
MOLEX CONFIDENTIAL			
TEMPLATE FILENAME: SPM[SIZE_AJ](V.1).DOC			



# TEST SUMMARY

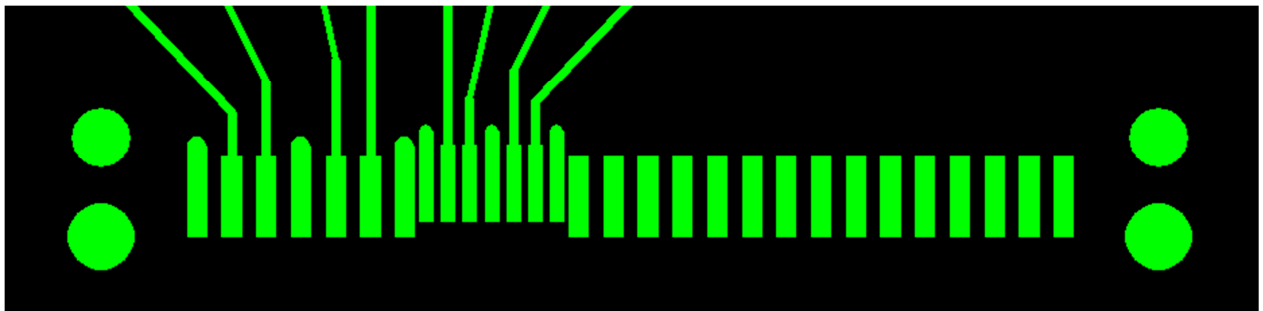
## 4.0 TEST FIXTURES

### 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)

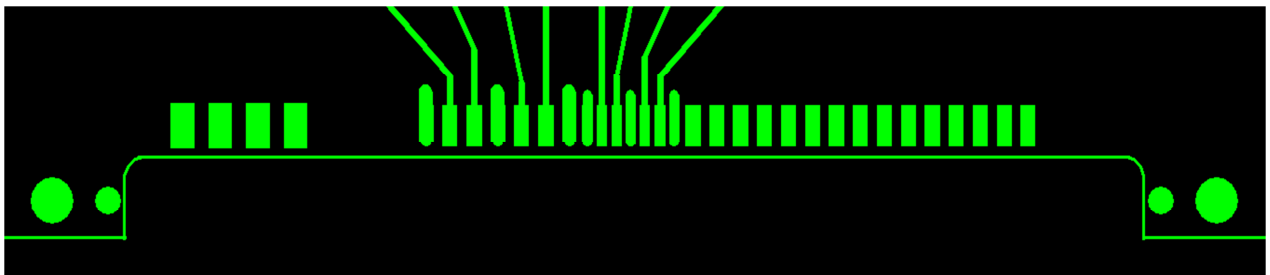
### Trace Break-out Details

#### 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).

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DOCUMENT NUMBER: <b>TS-78715-001</b>	CREATED / REVISED BY: <b>WTCHUA 2014/01/23</b>	CHECKED BY: <b>CMWONG 2014/01/23</b>	APPROVED BY: <b>WTCHUA 2014/01/23</b>