

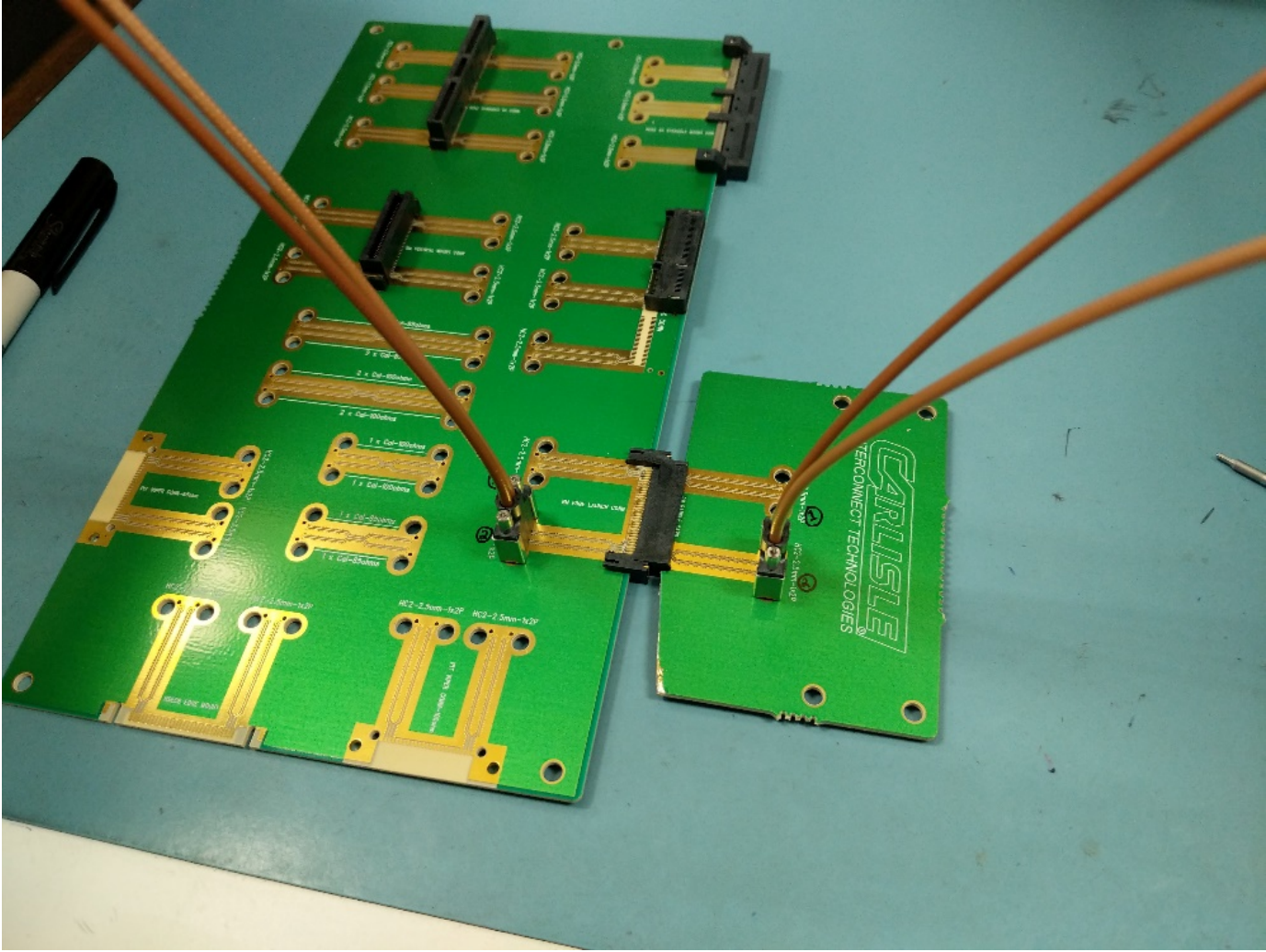


## **Signal Integrity Report**

P/N: MBB-VM-30-62-30-ST & P/N: MBB-EM-30-62-30-ST

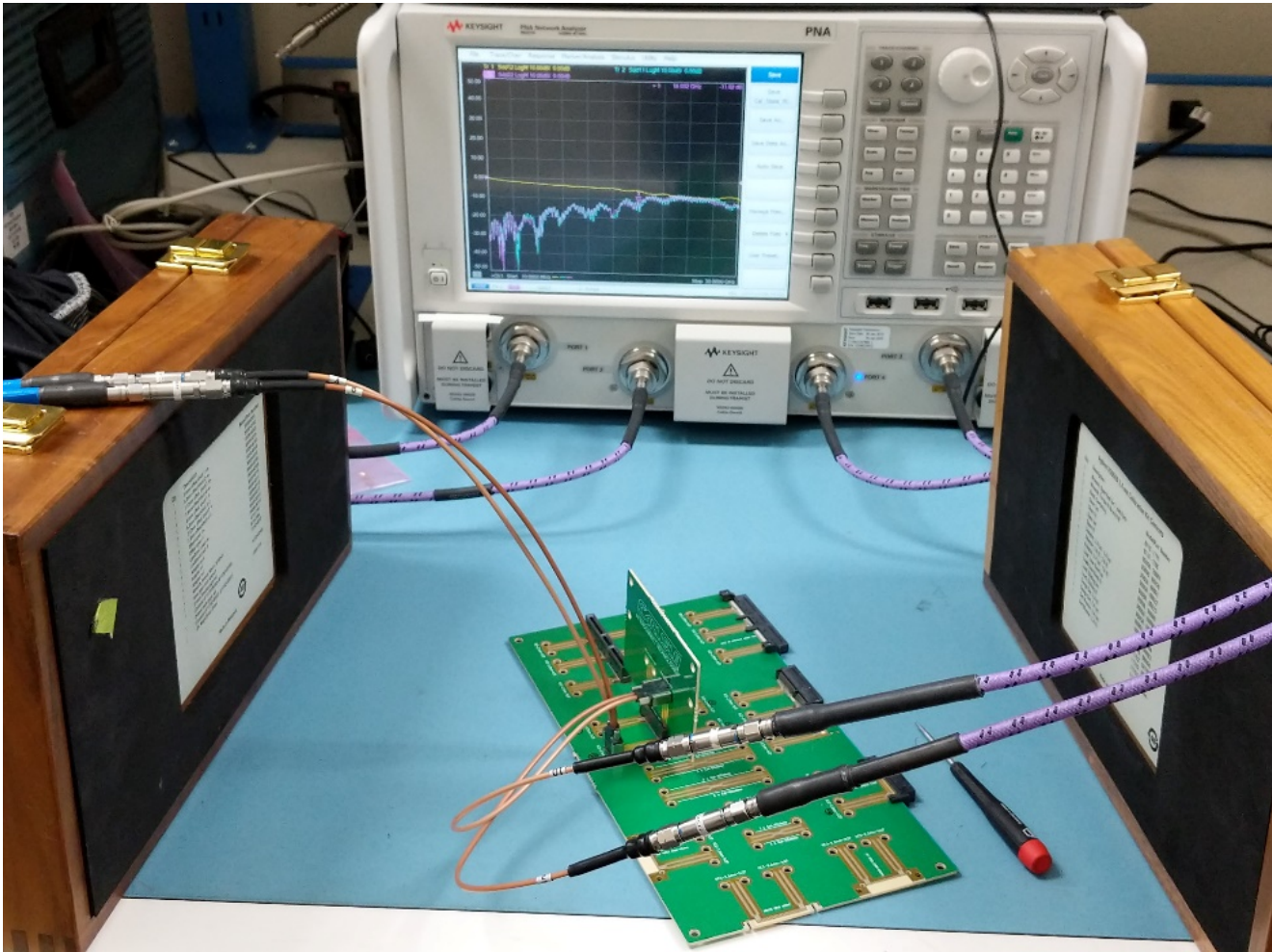
Revised June 2020

# Test & Measurement Performance Report



<b>Revision</b> 1	<b>ECN Information:</b> EC No.: N/A DATE: 03/31/2020	<b>Title:</b> CarlisleIT Card Edge Connectors: Vertical Mount & Edge Mount	<b>Document Number:</b> TM99-0022-00	<b>Sheet</b> 1 of 7
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## SI Performance Summary (Attenuation & Reflections, Differential)



**Revision**  
**1**

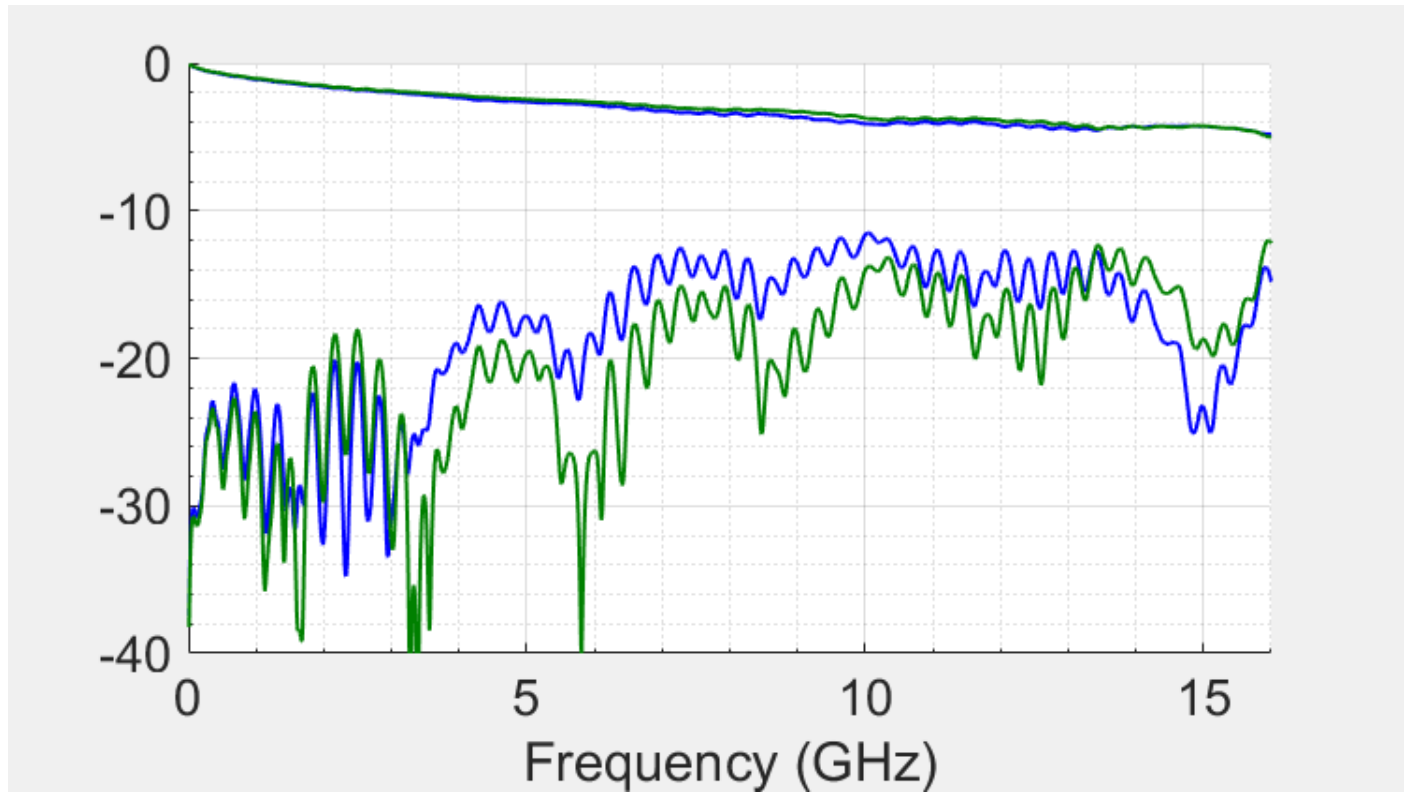
**ECN Information:**  
EC No.: N/A  
DATE: 03/31/2020

**Title:**  
CarlisleIT Card Edge Connectors:  
Vertical Mount & Edge Mount

**Document Number:**  
TM99-0022-00

**Sheet**  
**2 of 7**

## SI Report



- Edge Mount
- Vertical Mount

*\* For further details regarding testing, setup, and configurations please see the rest of the report.*

**Revision**  
**1**

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TM99-0022-00

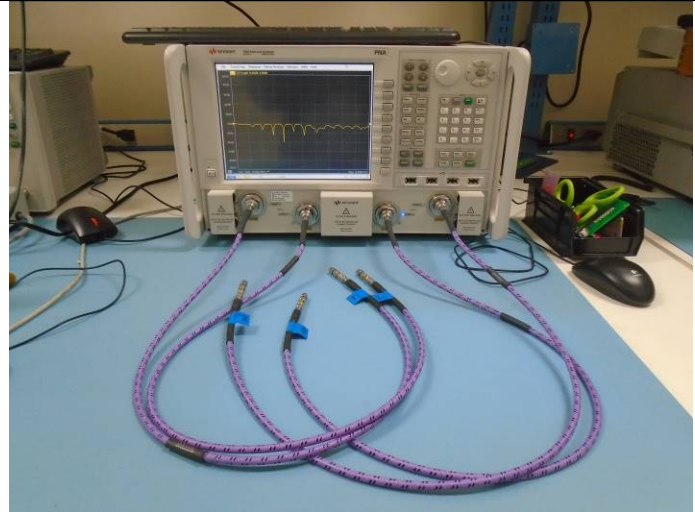
**Sheet**  
**3 of 7**



## 1.0 TEST SETUP & DUT (Equipment, fixtures & methods)

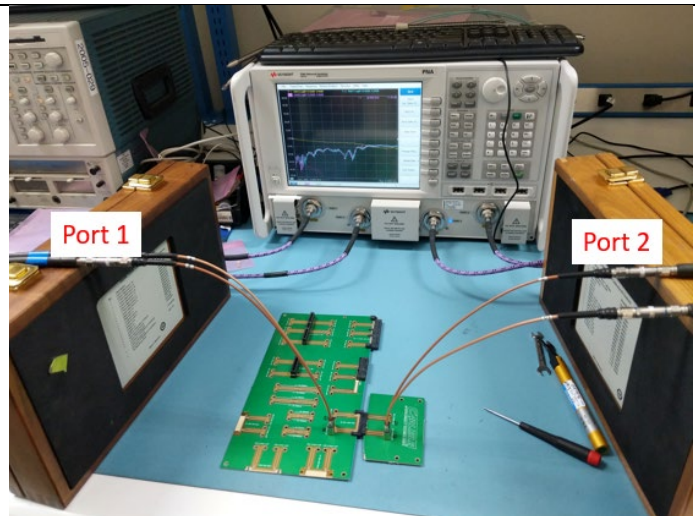
Test Method: All data measured from test PCB shown below and an N5227A PNA network analyzer

- Calibration was performed up to the 1.85 mm SMA adapters using calibration 85058B
- Data was swept from 10 MHz to 16 GHz for 3,000 points
- Data averaging was turned off
- Data is not de-embedded and includes the traces and cable of either end of the connector assembly



### Assembly Description

- Port 1: PCB
- Port 2: Paddle Card



### Testing Samples

- 2 Channels

2 THRU Measurements: One for vertical mount, one for edge mount

**Revision**  
**1**

**ECN Information:**  
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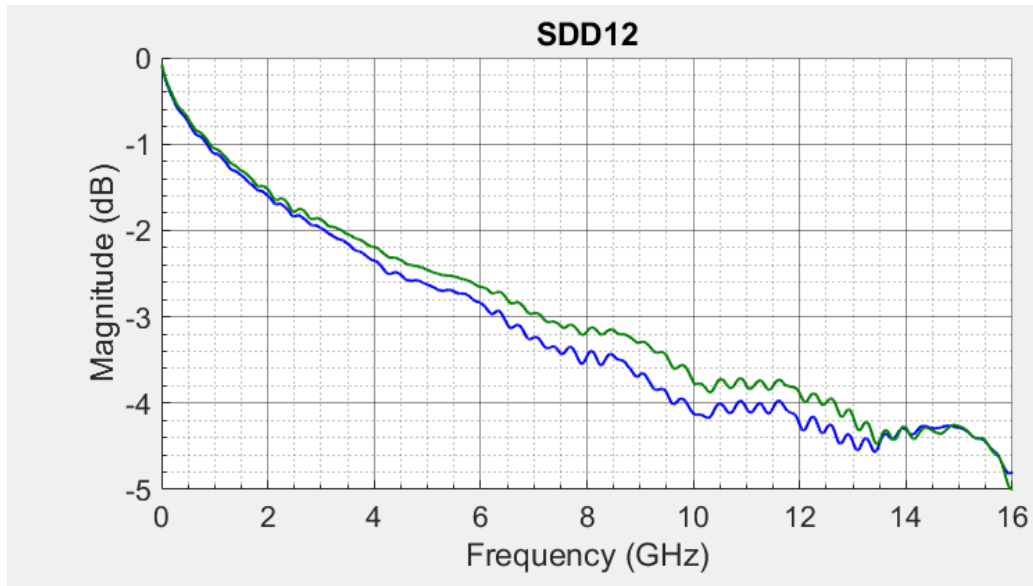
**Title:**  
CarlisleIT Card Edge Connectors: Vertical Mount & Edge Mount

**Document Number:**  
TM99-0022-00

**Sheet**  
**4 of 7**

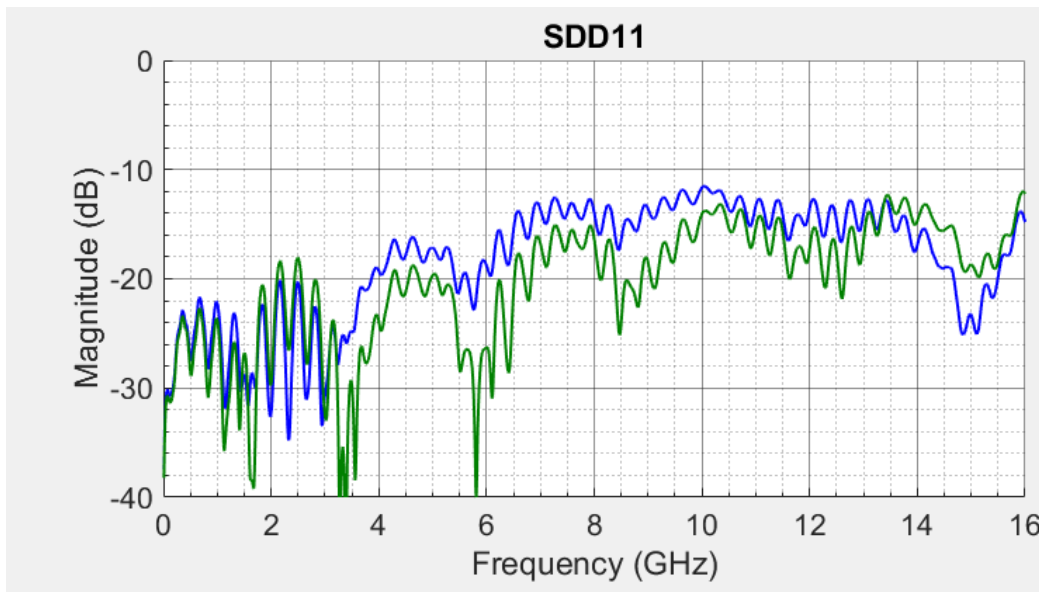
## 2.0 SIGNAL INTEGRITY RESULTS

### Insertion Loss (SDD12), Sample 1



■ Edge Mount    ■ Vertical Mount

### Return Loss (SDD11), Sample 1



■ Edge Mount    ■ Vertical Mount

**Revision**  
**1**

**ECN Information:**  
EC No.: N/A  
DATE: 03/31/2020

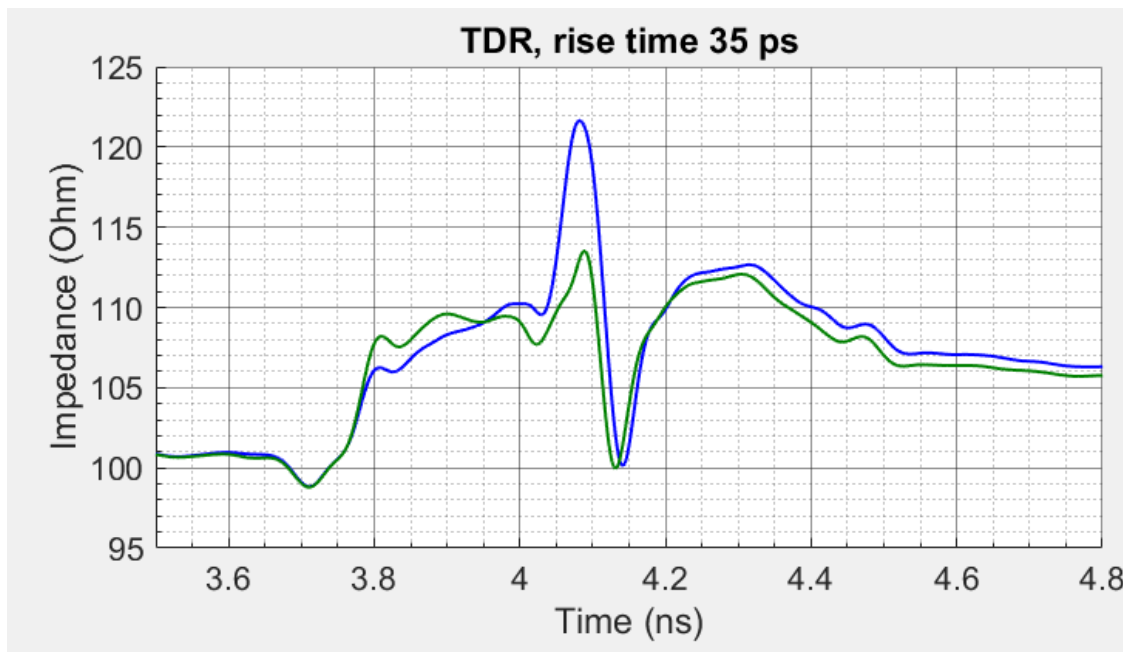
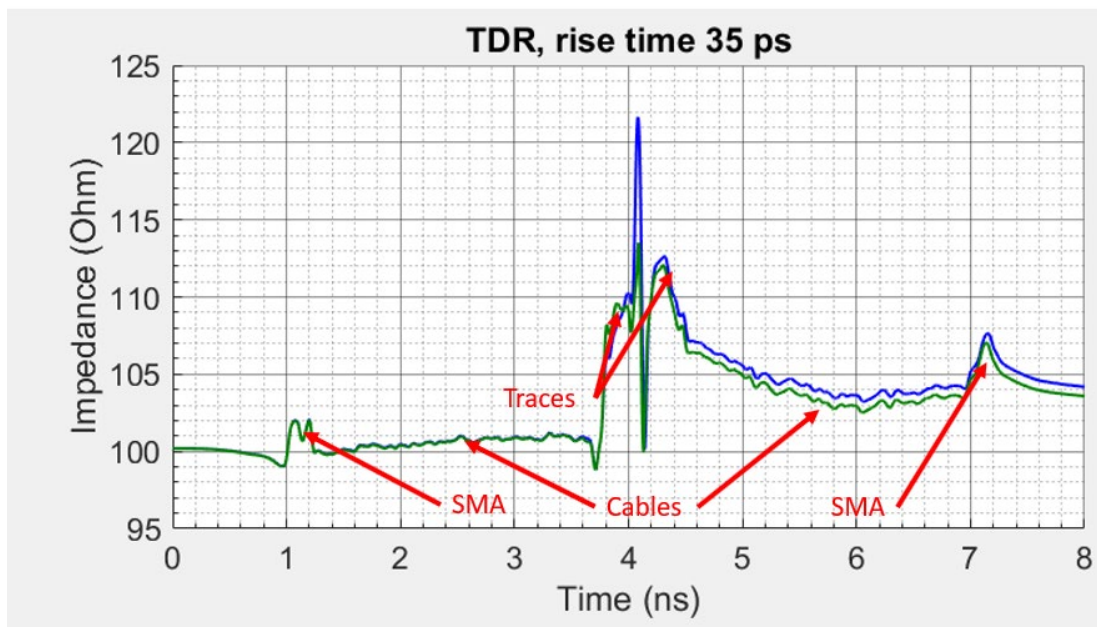
**Title:**  
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Vertical Mount & Edge Mount

**Document Number:**  
TM99-0022-00

**Sheet**  
**5 of 7**

## 2.0 SIGNAL INTEGRITY RESULTS CONT'D.

### Differential TDR



■ Edge Mount    ■ Vertical Mount

**Revision**  
**1**

**ECN Information:**  
EC No.: N/A  
DATE: 03/31/2020

**Title:**  
CarlisleIT Card Edge Connectors: Vertical  
Mount & Edge Mount

**Document Number:**  
TM99-0022-00

**Sheet**  
**6 of 7**

### 3.0 APPENDIX

**S-Parameter Touchstone files used:**

1. BM\_EM\_Rev1\_Pos\_2\_HC2\_11InAss\_DigitalMixedBrd1\_Rev0\_P1PCB\_P2Paddlepcb\_100819.s4p
2. BM\_VM\_Rev1\_Pos\_2\_HC2\_11InAss\_DigitalMixedBrd1\_Rev0\_P1PCB\_P2Paddlepcb\_100819.s4p

<b>Revision</b> <b>1</b>	<b>ECN Information:</b> EC No.: N/A DATE: 03/31/2020	<b>Title:</b> CarlisleIT Card Edge Connectors: Vertical Mount & Edge Mount	<b>Document Number:</b> TM99-0022-00	<b>Sheet</b> <b>7 of 7</b>
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**Find out more:**

[CarlisleIT.com/prod-info/card-edge-connectors/](http://CarlisleIT.com/prod-info/card-edge-connectors/)

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