

R-VPX EVOLUTION SERIES

HIGH SPEED



Amphenol introduces R-VPX Evolution Module capable of 16+Gbps data rate transfer performance.

Evolution is specifically designed to support the latest high-speed protocols while still meeting open VPX requirements. Evolution meets the performance requirements of VITA 46 & 47. Evolution is designed to be intermateable with existing VITA 46 backplane connectors and still achieve 16Gbps of performance. This connector system is optimized for speed and ruggedized to handle harsh environment requirements in military applications across the board.

FEATURES AND BENEFITS

Supports High Speed Protocols

- PCIe Gen 4
- 1000BASE-KX
- 10GBASE-KX4
- 100GBASE-KR4
- Infiniband SDR, DDR, and QDR
- Serial RapidIO 12.5 Gbaud
- Passed VITA 72 vibration level testing with BER monitoring



SI PERFORMANCE

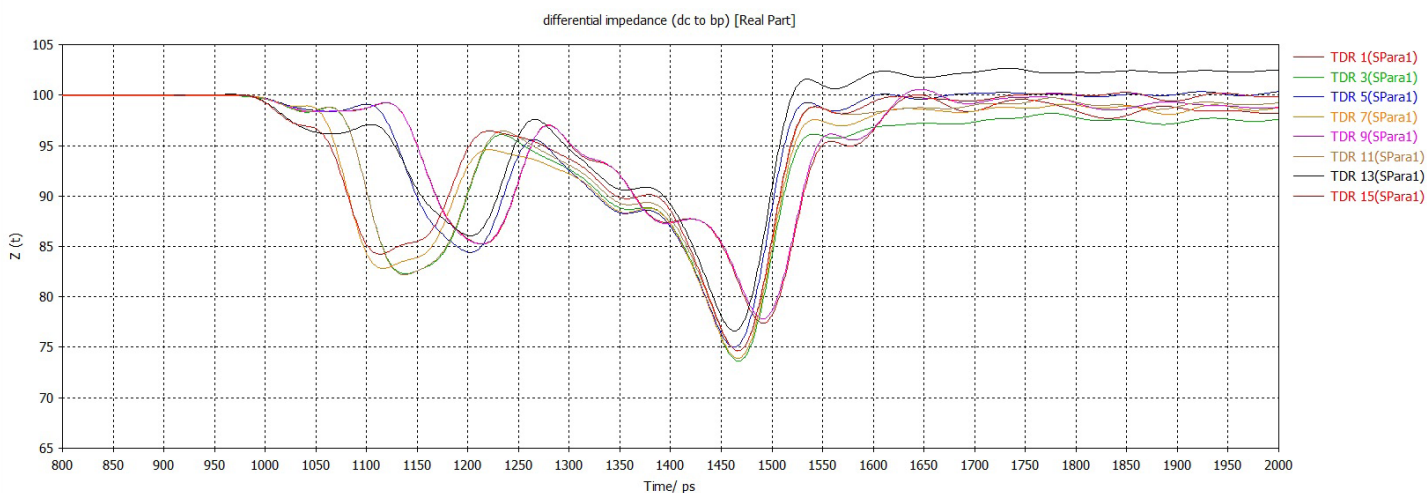
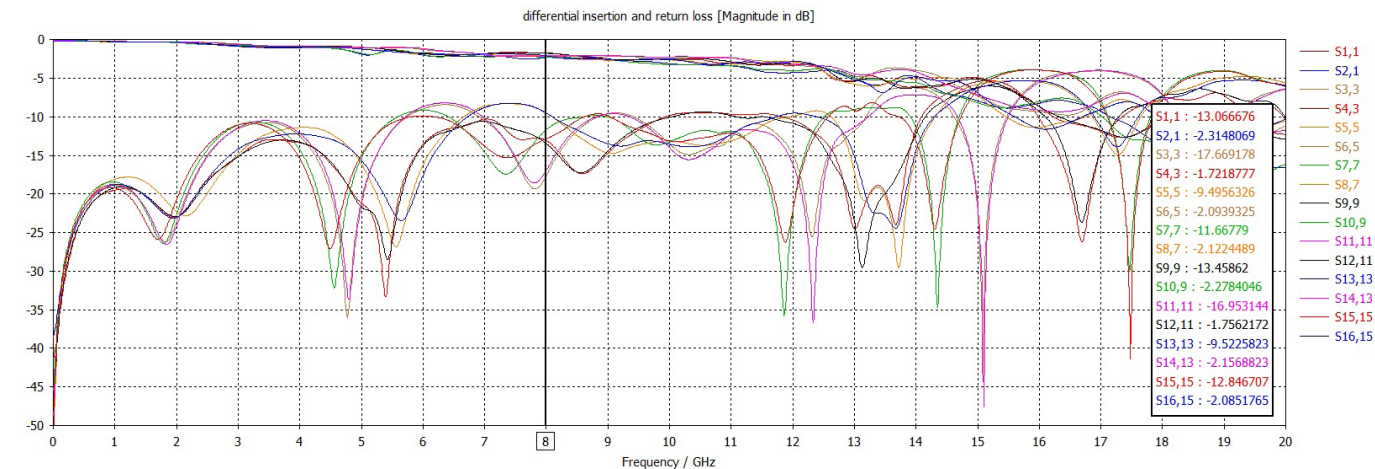
Connector SI performance

Data rate: 16Gb/s per pair

Return loss: >14 dB up to 8 GHz

Next (worst-case pair): >30 dB up to 8GHz

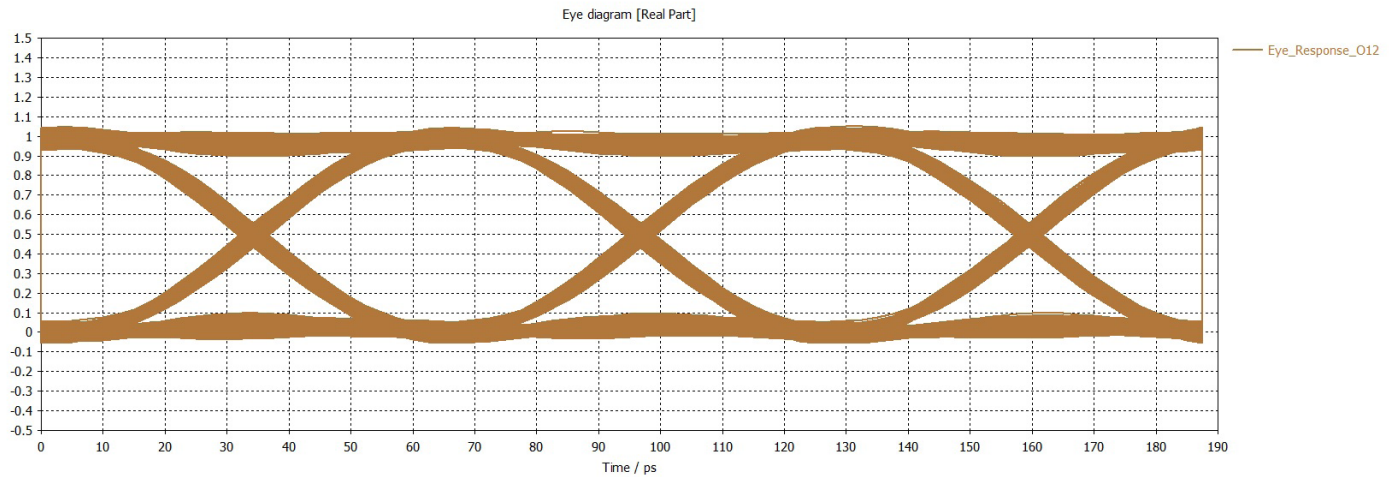
Reference from daughter card footprint to backplane footprint.



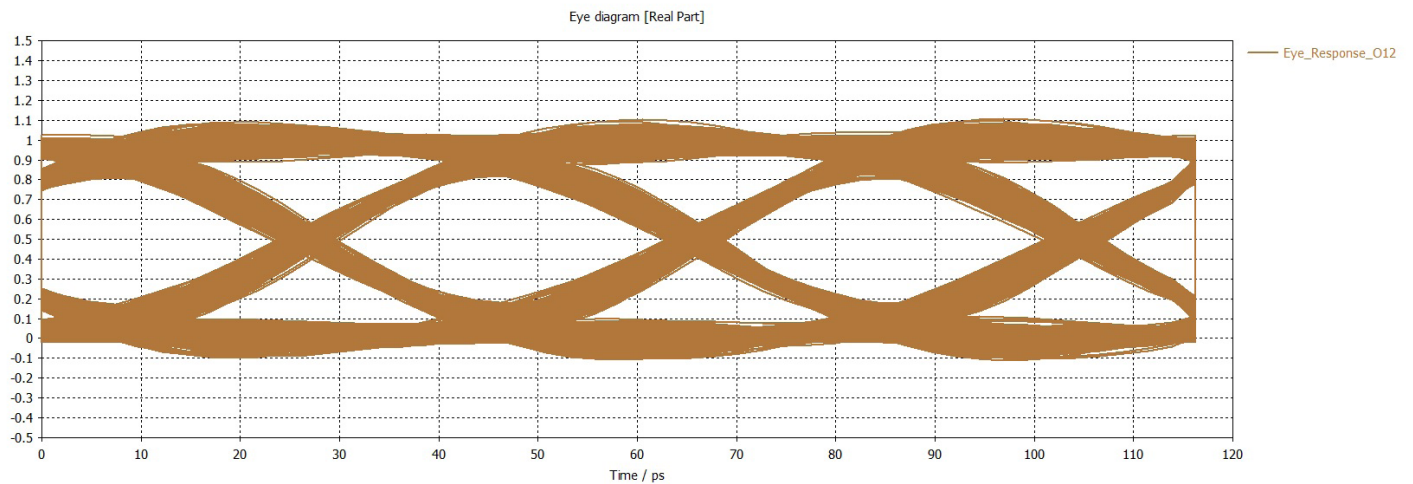
EYE PATTERN

Eye patterns referenced from pair D7/E7 on daughtercard footprint to pair E7/F7 on backplane footprint. Worst-case victim pair to aggressor pairs crosstalk assumed.

Simulated at 16Gb/s

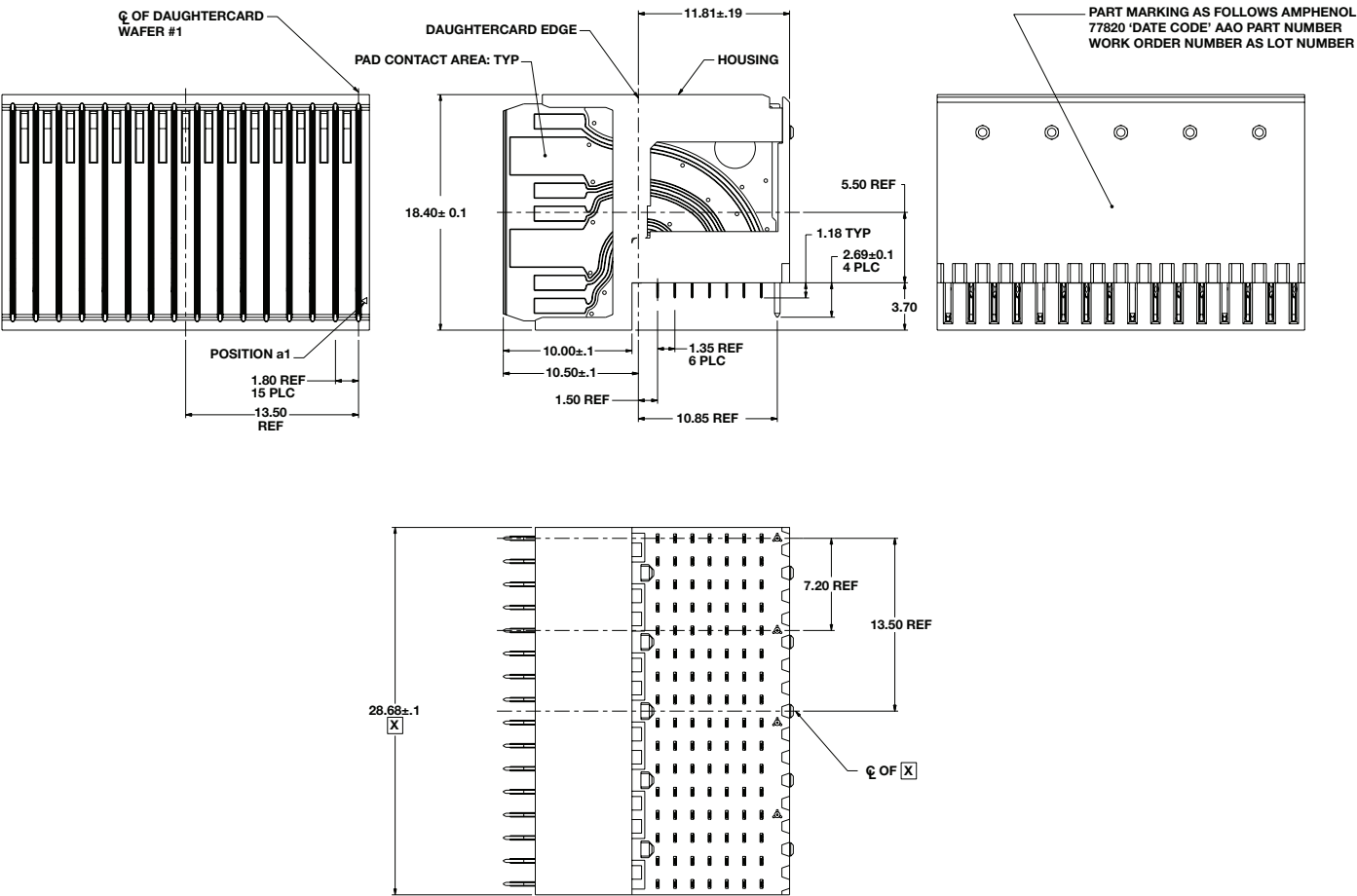


Simulated at 25Gb/s



EVOLUTION SERIES- HIGH SPEED EVOLUTION

DAUGHTER CARD: Right-Angle Plug Assembly, 16 Center



PLATING THICKNESS AND MATERIAL BY PART NUMBER			
Part Number	Gold In Contact Area	Compliant Contact Termination Finish	Nickel Overall
RVPX-PE16DM1	50 µ-Inch min.	Tin	50 µ-Inch Min.
RVPX-PE16DM2		Tin-lead	
RVPX-PE16DC1	30 µ-Inch min.	Tin	
RVPX-PE16DC2		Tin-lead	

40-60 Delaware Avenue
Sidney, NY 13838
amphenol-aerospace.com | amphenolmao.com