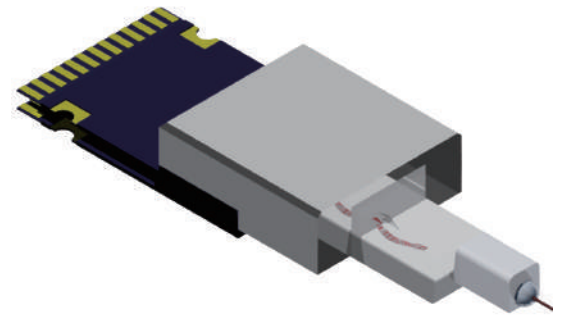


Highly Compact 400G PAM4 TOSA

Summary

NEON Photonics' 400G PAM4 TOSA is designed for 400 Gigabit Ethernet interface, QSFP-DD MSA over single mode fiber 2km. The specifications are compliant with the 400G-FR4 Technical Specification of 100G Lambda MSA. Its key differentiator is a highly compact optical and electrical design technology.



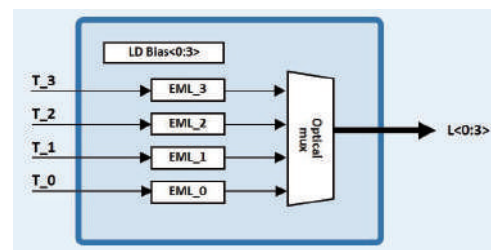
Key Features

- 100G x 4ch PAM4 optical I/F
- 100G x 4ch PAM4 electrical single ended I/F
- Lens-less optical coupling technology
- Compact package technology
- QSFP-DD compatible
- Cost competitiveness
- Capacity(multi-channel) scalability
- Availability to user defined design
- W x L x H = 7.1 x 7.8 x 3 mm³

Application

- Datacenter (400G FR-4)
- Optical connectivity

Block Diagram



Specification

TX Parameter	Unit	Specification
PAM4 Signaling rate, each lane (range)	GBd	53.125 ± 100 ppm
Lane wavelengths (range)	nm	1284.5 to 1297.5
		1304.5 to 1317.5
		1324.5 to 1337.5
Average launch power, each lane (min)	dBm	-3.3
Transmitter and dispersion penalty eye closure for PAM4 (TDECQ), each lane (max)	dB	3.4
Extinction ratio (min)	dB	3.5
RIN _{17,1} OMA (max)	dB/Hz	-136
Optical return loss tolerance (max)	dB	17.1

*Available for customized specification