

PRE-O800-2FR4

OSFP800, 2x400G-FR4, 1310nm, 800G, 2km, SMF/Dual LC



Product Features:

- EML Transmitters
- PIN Receivers
- Up to 2km on Single Mode Fiber
- 2xLC/UPC Optical Connector
- <14.5W Power Consumption
- Commercial Temperature Rated
- Digital Diagnostic Monitoring (DDM)
- Versatile Diagnostic Monitoring (VDM)



Product Applications:

- 2x400GBASE-FR4 Ethernet
- 8x100GBASE-FR1 Ethernet
- Switch & Router Connections
- Data Center Applications

Standards:

- OSFP MSA
- CMIS
- RoHS
- Class 1 Laser

General Specifications:

Parameter	Min	Typical	Max	Unit	Note
Case Operating Temperature	0	-	70	°C	
Power Supply Voltage	3.135	3.3	3.465	V	
Maximum Power Dissipation	-	-	14.5	W	
Relative Humidity	5	-	95	%	
Storage Temperature	-40	-	85	°C	
Transmission Distance	-	-	2	km	1
Data Rate (Total)	-	850	-	Gbps	2
Signaling Rate, per Lane	-	53.125	-	GBd	

Notes:

1 - Total aggregate bit rate

2 - Per lane electrical signalling rate with PAM4 modulation

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Optical Characteristics: Transmitter

Parameter	Min	Typical	Max	Unit
Transmitter Wavelength L0, L4	1264.5	1271	1277.5	nm
Transmitter Wavelength L1, L5	1284.5	1291	1297.5	nm
Transmitter Wavelength L2, L6	1304.5	1311	1317.5	nm
Transmitter Wavelength L3, L7	1324.5	1331	1337.5	nm
Total Average Launch Power	-	-	10.4	dBm
Average Launch Power, each lane	-3.2	-	4.4	dBm
Outer Optical Modulation Amplitude, per lane for TDECQ<1.4 dB	-0.2	-	3.7	dBm
Outer Optical Modulation Amplitude, per lane for 1.4 dB≤TDECQ≤3.4 dB	-1.6+TDECQ	-	3.7	dBm
Transmitter and Dispersion Eye Closure for PAM4	-	-	3.4	dB
Transmitter and Dispersion Eye Closure for PAM4	-	-	3.4	dB
Transmitter Eye Closure for PAM4, per Lane	-	-	2.5	dB
TDECQ - TECQ	-	-	-16	dBm
Average Launch Power of OFF transmitter, per lane	30	-	-	dB
Side Mode Suppression Ratio	-	-	-136	dB/Hz
Relative Intensity Noise (OMA)	3.5	-	-	dB
Extinction Ratio	-	-	17.1	dB
Optical Return Loss Tolerance	-	-	-26	dBm
Transmitter Reflectance				

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Optical Characteristics: Receiver

Parameter	Min	Typical	Max	Unit
Receiver Wavelength L0, L4	1264.5	1271	1277.5	nm
Receiver Wavelength L1, L5	1284.5	1291	1297.5	nm
Receiver Wavelength L2, L6	1304.5	1311	1317.5	nm
Receiver Wavelength L3, L7	1324.5	1331	1337.5	nm
Damage Threshold, each lane	5.4	-	-	dBm
Average Receive Power per lane	-7.2	-	4.4	dBm
Receive Power (OMAOUTER) per lane	-	-	3.7	dBm
Receiver Reflectance	-	-	-26	dB
Receiver sensitivity (OMAouter), per lane for TECQ<1.4 dB	-	-	-4.6	dB
Receiver sensitivity (OMAouter), per lane for 1.4 dB≤TECQ≤3.4 dB	-	-	-6+TECQ	dB
Stressed Receiver Sensitivity	-	-	-2.6	dBm

Product Ordering Information

Part Number	Description
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