

PRE-QSFP28-50G-LR

QSFP28, LR, 1310nm, 50G, 10km, SMF/LC



Product Features:

- Single Wavelength PAM4
- 1310nm Wavelength
- SMF Transmission Medium
- LC/UPC Connector
- Digital Diagnostic Monitoring (DDM)
- C-Temp Rated
- 50Gbps Maximum Data Rate
- <3.5W Power Consumption



Product Applications:

- 50GBASE-LR Ethernet
- Metro Ethernet
- Switch/Router Interconnections

Standards:

- SFF-8636/8665
- IEEE 802.3 50GAUI-2
- RoHS

General Specifications:

Parameter	Min	Typical	Max	Unit
Case Operating Temperature	0	-	70	°C
Power Consumption	-	-	3.5	W
Power Supply Voltage	3.14	3.3	3.47	V
Storage Humidity	5	-	85	%
Storage Temperature	-40	-	85	°C
Transmission Distance ¹	-	-	10	km
Data Rate (Per Lane)	-	26.5625	-	GBaud/s

Note 1: With KP4 FEC on Host

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Optical Characteristics: Transmitter

Parameter	Min	Typical	Max	Unit
Center Wavelength	1304.5	1311	1317.5	nm
Average Launch Power	-4.5	-	4.2	dBm
Outer Optical Modulation Amplitude	-1.5	-	4.0	dBm
Side Mode Suppression Ratio	30	-	-	dB
Extinction Ratio	3.5	-	-	dB
Transmitter and Dispersion Penalty Eye Closure for PAM4 (TDECQ) ¹	-	-	3.2	dB
Launch Power in OMA _{outer} minus TDECQ	-2.9	-	-	dBm
Spectral Width	-	-	1	nm
Optical Return Loss Tolerance	-	-	15.6	dB
Relative Intensity Noise (OMA)	-	-	-132	dB/Hz
Average Transmitter OFF Power	-	-	-30	dBm

Note 1: Measured with a PRBS2¹⁵-1 test pattern @53.125Gbps, 10km fiber

Optical Characteristics: Receiver

Parameter	Min	Typical	Max	Unit
Receiver Wavelength	1304.5	1311	1317.5	nm
Average Receive Power	-10.8	-	4.2	dBm
Receive Power (OMA _{outer})	-	-	4	dBm
Receiver Sensitivity (OMA _{outer})	-	-	Max (-8.4; SECQ – 9.8)	dBm
Receiver Reflectance	-	-	-26	dB
Damage Threshold	5.2	-	-	dBm
Stressed Receiver Sensitivity (OMA _{outer} , SECQ 3.2)	-	-	-6.6	dBm
LOS Assert	-30	-	-	dBm
LOS De-Assert	-	-	-11	dBm
LOS Hysteresis	0.5	-	-	dB

Product Ordering Information

Part Number	Description
PRE-QSFP28-50G-LR	QSFP28, LR, 1310nm, 50G, 10km, SMF/LC, PAM4, C-Temp, DDM