

PRE-QSFP28-LR1

QSFP28, LR, 1310nm, 100G, 10km, SMF/LC



Product Features:

- Single Wavelength PAM4
- EML Transmitters
- PIN Receivers
- 1310nm Wavelengths
- SMF Transmission Medium
- LC/UPC Connector
- Digital Diagnostic Monitoring (DDM)
- C-Temp Rated
- 100Gbps Maximum Data Rate
- <3.5W Power Consumption

Product Applications:

- 100GBASE-LR Ethernet
- Datacenter
- Switch/Router Interconnections

Standards:

- SFF-8636
- IEEE 802.3cd
- 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	-	-	10	km
PAM4 Signaling Rate	-	53.125	-	GBd
Data Rate (Per Lane)	-	25.78125	-	Gbps

PRE-QSFP28-LR1

QSFP28, LR, 1310nm, 100G, 10km, SMF/LC



Optical Characteristics: Transmitter

Parameter	Min	Typical	Max	Unit
Center Wavelength	1304.5	1310	1317.5	nm
Average Launch Power	-1.9	-	4.8	dBm
Outer Optical Modulation Amplitude	-	-	5.0	dBm
Side Mode Suppression Ratio	30	-	-	dB
Extinction Ratio	3.5	-	-	dB
Transmitter and Dispersion Penalty Eye Closure for PAM4 (TDECQ)	-	-	3.4	dB
Transmitter Eye Closure for PAM4 (TECQ)	-	-	3.4	dB
TDECQ - TECQ	-	-	2.5	nm
Optical Return Loss Tolerance	-	-	15.6	dB
Relative Intensity Noise (OMA)	-	-	-136	dB/Hz
Average Transmitter OFF Power	-	-	-15	dBm

Optical Characteristics: Receiver

Parameter	Min	Typical	Max	Unit
Receive Power per Lane (Avg)	-8.2	-	4.8	dBm
Receive Power (OMA _{outer})	-	-	5	dBm
Receiver Reflectance	-	-	-26	dB
Damage Threshold	5.8	-	-	dBm
Stressed Receiver Sensitivity (OMA _{outer})	-	-	-4.1	dBm
Stressed Eye Closure for PAM4 (SECQ)	-	-	3.4	dB
LOS Assert	-30	-	-	dBm
LOS of De-Assert	-	-	-8	dBm
LOS Hysteresis	0.5	-	-	dB

Product Ordering Information

Part Number	Description
PRE-QSFP28-LR1	QSFP28, LR, 1310nm, 100G, 10km, SMF/LC, C-Temp