

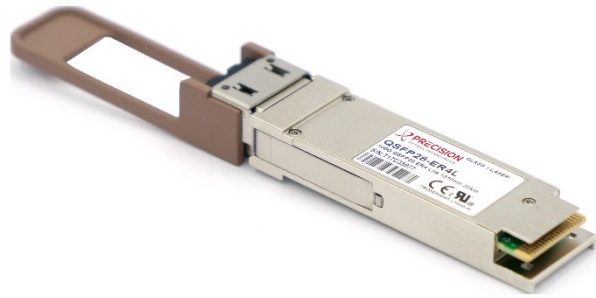
PRE-QSFP28-ER4L(I)

QSFP28, ER4L, LWDM, 100G, 25/40km, SMF/LC



Product Features:

- LWDM EML Laser Transmitters
- APD Receivers
- SMF Transmission Medium
- Duplex LC Connector
- Digital Diagnostic Monitoring (DDM)
- C and I-Temp Available
- <5.5W Power Consumption
- 40km Transmission with KR4 FEC



Product Applications:

- Data Centers
- Backhaul Networks
- 100GBASE-ER4 Ethernet
- 4WDM-40
- IEEE 802.3bm
- RoHS
- Class 1 Laser

General Specifications:

Parameter	Min	Typical	Max	Unit
Case Operating Temperature (C-Temp)	0	-	70	°C
Case Operating Temperature (I-Temp)	-40	-	85	°C
Power Consumption (C-Temp)	-	-	5.0	W
Power Consumption (I-Temp)	-	-	5.5	
Power Supply Voltage	3.14	3.3	3.46	V
Operating Humidity	15	-	85	%
Storage Temperature	-40	-	85	°C
Transmission Distance (FEC)	-	-	40	km
Transmission Distance (W/o FEC)	-	25	30	km
Data Rate (Total)	-	-	103.125	Gbps
Data Rate (Per Lane)	-	-	25.78125	Gbps

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Optical Characteristics: Transmitter

Parameter	Min	Typical	Max	Unit
Center Wavelength 1	1294.53	1295.56	1296.59	nm
Center Wavelength 2	1299.02	1300.05	1301.09	nm
Center Wavelength 3	1303.54	1304.58	1305.63	nm
Center Wavelength 4	1308.09	1309.14	1310.19	nm
Average Transmit Power (Per Lane)	-2.5	-	6.5	dBm
Transmit Power (Per Lane, OMA)	0.5	-	6.5	dBm
Side Mode Suppression Ratio	30	-	-	dB
Dispersion Penalty (Per Lane)	-	-	3.0	dB
Extinction Ratio	4.5	-	-	dB
Transmitter OFF Output Power	-	-	-30	dBm

Optical Characteristics: Receiver

Parameter	Min	Typical	Max	Unit
Receiver Wavelength 1	1294.53	1295.56	1296.59	nm
Receiver Wavelength 2	1299.02	1300.05	1301.09	nm
Receiver Wavelength 3	1303.54	1304.58	1305.63	nm
Receiver Wavelength 4	1308.09	1309.14	1310.19	nm
Damage Threshold (Per Lane)	-2.5	-	-	dBm
Average Receive Power (Per Lane w/o FEC)	-16.5 ¹	-	-	dBm
Average Receive Power (Per Lane w/ FEC)	-20.5 ¹	-	-3.5	dBm
Receiver Sensitivity (Per Lane, OMA)	-	-	-18.5 ²	dBm
Receiver Overload (Per Lane, OMA)	-3.5	-	-	dBm

Note 1: Value is informative and not the principal indicator of signal strength

Note 2: PRBS231-1 @25.78Gbps, BER \leq 5E-5 (FEC Correctable)

Product Ordering Information

Part Number	Description
PRE-QSFP28-ER4L	QSFP28, ER4L, LWDM, 100G, 25/40km, SMF/LC, C-Temp, DDM
PRE-QSFP28-ER4LI	QSFP28, ER4L, LWDM, 100G, 25/40km, SMF/LC, I-Temp, DDM