

PRE-QSFP28-LR4(I)

QSFP28, LR4, LWDM, 100G, 10km, SMF/LC



Product Features:

- **LWDM Wavelengths**
- **SMF Transmission Medium**
- **LC/UPC Connector**
- **Digital Diagnostic Monitoring (DDM)**
- **C and I-Temp Available**
- **100Gbps Maximum Data Rate**
- **<3.5W Option Available**



Product Applications:

- **100GBASE-LR4 Ethernet**
- **Backhaul Networks**
- **Enterprise Networks**

Standards:

- **SFF-8665/8638**
- **IEEE 802.3ba/bm**
- **RoHS**

General Specifications:

Parameter	Min	Typical	Max	Unit
Case Operating Temperature (C-Temp)	0	-	70	oC
Case Operating Temperature (I-Temp)	-40	-	85	oC
Power Consumption (C-Temp)	-	-	3.5	W
Power Consumption (I-Temp)	-	-	4.5	W
Power Supply Voltage	3.14	3.3	3.47	V
Storage Humidity	5	-	95	%
Storage Temperature	-40	-	85	oC
Transmission Distance	-	-	10	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
Total Launch Power (Avg)	-	-	10.5	dBm
Transmit Power per Lane (Avg)	-4.3	-	4.5	dBm
Transmit Power per Lane (OMA)	-1.3	-	4.5	dBm
Side Mode Suppression Ratio	30	-	-	dB
Extinction Ratio (GE)	4	-	-	dB
Spectral Width	-	-	1	nm
Dispersion Penalty	-	-	2.2	dB
Power (OMA) Minus TDP per Lane	-2.3	-	-	dBm
ORL Tolerance	-	-	20	dB
Relative Intensity Noise	-	-	-130	dB/Hz
Transmitter OFF Power per Lane	-	-	-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
Receive Power per Lane (Avg)	-10.6	-	4.5	dBm
Receiver Sensitivity per Lane (OMA)	-	-	-8.6	dBm
Receive Power per Lane (OMA)	-	-	4.5	dBm
Damage Threshold per Lane	5.5	-	-	dBm

Product Ordering Information

Part Number	Description
PRE-QSFP28-LR4	QSFP28, LR4, LWDM, 100G, 10km, SMF/LC, C-Temp
PRE-QSFP28-LR4I	QSFP28, LR4, LWDM, 100G, 10km, SMF/LC, I-Temp

r2_09182025