

PRE-QSFP28-ZR4

QSFP28, 1310nm, SMF, 80km, 100Gbps



Product Features:

- EML transmitters
- SOA-PIN receivers for ZR4
- SMF Transmission Medium
- LC-UPC Connector Type
- Digital Diagnostics Monitoring (DDM)



Compliance:

- QSFP28 MSA
 - SFF-8636
 - SFF-8661
 - SFF-8679
- IEEE 802.3bm CAUI-4
- RoHS-6

Applications:

- 100G Ethernet

General Specifications

Parameter	Symbol	Min	Typ	Max	Unit
Case Operating Temperature	T_{op}	0	-	70	°C
Power Consumption	P_w	-	-	6	W
Power Supply Current	I_{cc}	-	-	2000	mA
Power Supply Voltage	V_{cc}	3.14	3.3	3.46	V
Storage Humidity (Commercial)	H_s	15	-	85	%
Storage Temperature	T_s	-40	-	85	°C
Transmission Distance (KR4-FEC)	TD	-	-	80	km
Data Rate (Total)	DR_T	-	-	103.125	Gbps
Data Rate (Per Lane)	DR_{lane}	-	-	25.78125	GBd
Receiver Damage Threshold	P_{max}	5.5	-	-	dBm

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**Optical Characteristics: Transmitter**

Parameter	Symbol	Min	Typ	Max	Unit
Center Wavelength 1	λ_1	1294.53	1295.56	1296.59	nm
Center Wavelength 2	λ_2	1299.02	1300.05	1301.09	nm
Center Wavelength 3	λ_3	1303.54	1304.58	1305.63	nm
Center Wavelength 4	λ_4	1308.09	1309.14	1310.19	nm
Total Average Launch Power (all lanes)	P_{TOT}	8	-	12	dBm
Transmit Power per lane	P_{OUT}	2	-	6.5	dBm
Spectral Width	σ	-	-	1	nm
Side Mode Suppression Ratio	SMSR	30	-	-	dB
Dispersion Penalty per lane	DP	-	-	2.2	dB
Extinction Ratio	ER	6	-	-	dB
Relative Intensity Noise	RIN	-	-	-130	dB/Hz
Transmitter OFF Output Power per lane	P_{OFF}	-	-	-30	dBm

Optical Characteristics: Receiver

Parameter	Symbol	Min	Typ	Max	Unit
Receiver Wavelength 1	λ_1	1294.53	1295.56	1296.59	nm
Receiver Wavelength 2	λ_2	1299.02	1300.05	1301.09	nm
Receiver Wavelength 3	λ_3	1303.54	1304.58	1305.63	nm
Receiver Wavelength 4	λ_4	1308.09	1309.14	1310.19	nm
Input Saturation Power	P_{SAT}	-7	-	-	dBm
Receiver Sensitivity per lane (no FEC)	R	-7	-	-23	dBm
Receiver Sensitivity per lane (KR4-FEC)	R	-7	-	-28	dBm
LOS Assert	LOSA	-40	-	-	dBm
LOS De-Assert	LOSD	-	-	-30	dBm
LOS Hysteresis	LOSH	0.5	-	-	dB

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Product Ordering Information

Part Number	Description
PRE-QSFP28-ZR4	QSFP28, 1310nm, SMF, 80km, 100Gbps, C-Temp