

40G QSFP+ L2 20km

40G Eth, QSFP+, L2, 20km, LC, 1310nm, SM

CPQ-10E-L2-CDF02

OVERVIEW

The CPQ-10E-L2-CDF02 is a single mode QSFP+ transceiver designed for 40GBASE-LR4, InfiniBand QDR, data center interconnects and campus backbone links.

The transceiver converts 4x 10 Gbps flows into four CWDM channels in the 1300nm band up to 20 km over a Single Mode (SM) fiber. It supports line rate up to 11.3Gbps which provides an aggregated full duplex 40Gbps link.

KEY SPECIFICATIONS

- 40G QSFP+ transceiver with duplex LC connector
- Supports 10.3125Gbps to 11.3Gbps per lane for 40Gbps total data rate
- Up to 20km transmission distance over single mode fiber
- Typical power dissipation up to 3.5W
- Operating temperature: Commercial (0°C to +70°C)
- Digital Diagnostics Monitoring supported
- Compliant with QSFP+ MSA and IEEE 802.3ba

TECHNICAL DATA

Parameter	Value	Parameter	Value
Form Factor	QSFP+	Transmitter Data:	
Transmission Media	SM (LC)	Tx Power	-3 to +4dBm ³⁾
Typical Reach	20km	Tx Wavelength	1264.5-1277.5nm 1284.5-1297.5nm 1304.5-1317.5nm 1324.5-1337.5nm
Nominal Wavelength	1271/1291/1311/1331nm	Extinction Ratio	≥ 3.5dB
Data Rate Support	10.3125/11.3 Gbps ¹⁾ 40 Gbps ²⁾	Receiver Data:	
Protocol Support	40GbE, 40GbE-WAN	Rx Sensitivity	-13.7dBm ^{2) 3) 4)}
Power Consumption	<3.5W	Rx Overload, max	2.3dBm ^{2) 3) 4)}
Operating Temperature	0°C to 70°C	Rx Wavelength	1264.5-1277.5nm 1284.5-1297.5nm 1304.5-1317.5nm 1324.5-1337.5nm
Storage Temperature	-40°C to 85°C	LOS De-assert	-15dBm
DDM	Yes	LOS Assert	-30dBm
		LOS Hysteresis	0.5dB

¹⁾ Line data rate per 10.31Gbps lane

²⁾ Aggregated data rate 40GbE

³⁾ Average Power, per lane

⁴⁾ At 10.3125Gbps, BER less than 10⁻¹², with a 231-1 PRBS

Safety/Regulatory Compliance

- Class 1 laser safe
- RoHS Compliance

ABSOLUTE MAX RATING

Exceeding these limits can cause permanent damage to the transceiver

Parameter	Value	Parameter	Value
Supply Voltage	-0.5V to 4.5V	Relative Humidity	85%
Storage Temp	-40°C to 85°C	Max Rx Optical Power	3.3dBm

ORDERING INFORMATION

Ordering Code	Description
CPQ-10E-L2-CDF02	40G QSFP+, L2, 20km, LC, 1310nm, SM, 0 to 70C

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