

40G QSFP+ SR4 100m

40G Eth, QSFP+, SR4, 100m, MPO, 850nm, MM

CPQ-10E-SR-CDF02

OVERVIEW

The CPQ-10E-SR-CDF02 is a multimode QSFP+ transceiver designed for 40 Gigabit Ethernet and InfiniBand applications. It uses four parallel channels with 850nm VCSEL transmitters and PIN photodiode array receivers. Each lane supports 10.3125Gbps data rate and the module provides an aggregate 40Gbps full duplex link.

The transceiver supports up to 100 meters on OM3 fiber and up to 150 meters on OM4 fiber. It follows the QSFP+ Multi-Source Agreement and supports Digital Diagnostics Monitoring according to SFF-8472. The module operates from a single 3.3V power supply and integrates an MPO connector for parallel optical connectivity.

The product is available in Commercial (0°C to +70°C) operating temperature range which makes it suitable for data centers, high performance computing and short reach backbone applications.

KEY SPECIFICATIONS

- 40G QSFP+ transceiver with MPO connector
- Four lane parallel 850nm VCSEL transmitters and PIN receiver arrays
- Supports 10.3125Gbps per lane for 40Gbps aggregate data rate
- Up to 100m reach on OM3 MMF and 150m on OM4 MMF
- Less than 1.5W power consumption
- Temp operating conditions: Commercial (0°C to +70°C)

TECHNICAL DATA

Parameter	Value	Parameter	Value
Form Factor	QSFP+	Transmitter Data:	
Transmission Media	MMF (MPO)	Tx Power	-7.6 to +2.4dBm ³⁾
Typical Reach	100m	Tx Wavelength	840-860nm
Nominal Wavelength	850nm	Extinction Ratio	≥3dB
Data Rate Support	10.3125Gbps ¹⁾ 40Gbps ²⁾	Receiver Data:	
Protocol Support	40GbE	Rx Sensitivity	-9.5dBm ³⁾
Power Consumption	<1.5W	Rx Overload, max	2.4dBm
Operating Temperature	0°C to 70°C	Rx Wavelength	840-860nm
Storage Temperature	-40°C to 85°C	LOS Assert	-30dBm
DDM	Yes	LOS De-assert	-12dBm
		LOS Hysteresis	0.5dB

¹⁾ Line rate per 10.31Gbps lane

²⁾ Aggregated data rate 40GbE

³⁾ Average Power, per lane

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	3.4dBm

ORDERING INFORMATION

Ordering Code	Description
CPQ-10E-SR-CDF02	40G QSFP+, SR4, 100m, MPO, 850nm, MM, 0 to 70C

All information contained in this document is subject to change without prior notice at the sole discretion of CloudPhotonix. The company warrants the performance of its products solely in accordance with the current published specifications and applicable warranty terms. CloudPhotonix makes no other warranties, express or implied, including but not limited to any implied warranties of merchantability, fitness for a particular purpose, or non-infringement of third-party rights. For the most current certification and compliance information, please contact CloudPhotonix directly.

CONTACT INFORMATION

Email: sales@cloudphotonix.com

Phone: +91-1203116709, +91-1203116718

CloudPhotonix India Pvt. Ltd.

Block A-51, Sector 67

Noida – 201301, Uttar Pradesh, India