

# 100G QSFP28 SR4 100m

100G Eth, QSFP28, SR4, 100m, MPO, 850nm, MM

## CPQ-CE-SR-CDF02

### OVERVIEW

The CPQ-CE-SR-CDF02 is a four-channel multimode QSFP28 transceiver designed for 100 Gigabit Ethernet and high-speed interconnect applications. Each channel uses an 850nm VCSEL transmitter and a PIN photodiode receiver and supports 25.78Gbps which provides an aggregated 103.125Gbps full duplex link.

The module supports up to 70 meters on OM3 multimode fiber and up to 100 meters on OM4 fiber. It follows the QSFP28 Multi-Source Agreement and supports Digital Diagnostics Monitoring. The transceiver operates from a single 3.3V supply and integrates an MPO optical interface for parallel transmission.

The product is suitable for 40GBASE-SR4, 100GBASE-SR4 systems, server to server connectivity, high performance computing clusters and short reach connections between switches, routers or transport equipment.

### KEY SPECIFICATIONS

- 100G QSFP28 transceiver with MPO connector
- Four lane 850nm VCSEL transmitters and PIN receiver array
- Supports 25.78Gbps per lane for 100Gbps aggregate data rate
- Up to 70m on OM3 MMF and 100m on OM4 MMF
- Power consumption less than 2.5W
- Temp operating conditions: Commercial (0°C to +70°C)

## TECHNICAL DATA

Parameter	Value	Parameter	Value
Form Factor	QSFP28	<b>Transmitter Data:</b>	
Transmission Media	MM (MPO)	Tx Power	-8.4 to 2.4dBm <sup>3)</sup>
Typical Reach	100m	Tx Amplitude, OMA	-6.4 to 3dBm
Nominal Wavelength	850nm	Tx Wavelength	840-860nm
Data Rate Support	103.125Gbps <sup>1)</sup> 25.78125Gbps <sup>2)</sup>	Extinction Ratio	≥ 3.0dB
Protocol Support	40GbE-LAN 100GbE-LAN	<b>Receiver Data:</b>	
Power Consumption	<2.5W	Rx Sensitivity	-10.3dBm <sup>3) 4)</sup>
Operating Temperature	0°C to 70°C	Rx Sensitivity, OMA	-5.6dBm <sup>3)</sup>
Storage Temperature	-40°C to 85°C	Rx Overload, max	2.4dBm <sup>3) 4)</sup>
DDM	Yes	Rx Wavelength	840-860nm
		LOS Assert	-30dBm
		LOS De-assert	-13dBm
		LOS Hysteresis	0.5dBm

<sup>1)</sup> Aggregated line rate 100GbE

<sup>2)</sup> Line rate per 25.78Gbps lane

<sup>3)</sup> Average Power, per lane

<sup>4)</sup> Per 25.78125Gbps lane. Measured with PRBS31(2<sup>31</sup>-1) @ BER 5E-5

### 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	-0.3V to 3.6V	Relative Humidity	85%
Storage Temp	-40°C to 85°C	Max Rx Optical Power	3.4dBm

## ORDERING INFORMATION

Ordering Code	Description
CPQ-CE-SR-CDF02	100G QSFP28, SR4, 100m, MPO, 850nm, MM, 0 to 70C

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