

## 100G QSFP28 SR4 Transceiver

### Features

- Up to 70m using OM3 MMF and 100m using OM4 MMF
- Operating case temperature: 0~70°C
- Maximum Power consumption less than 3W
- 4 channels 850nm VCSEL array
- 4 channels PIN photo-detector array
- Single channel rate up to 25 Gbps
- Internal CDR on both Transmitter and Receiver channels
- DDM function implemented
- Hot pluggable QSFP28 form factor
- Single 1x12 MPO receptacle optical interface
- Single +3.3V power supply



### Applications

- 100GBASE-SR4 100G Ethernet
- Data Center Interconnect
- Enterprise networking

### Compliances

- Compliant with QSFP28MSA
- Compliant with IEEE802.3bm
- Compliant with SFF-8665, SFF-8679, SFF-8636
- Compliant with RoHS-6

## Description

The transceiver is a four-channel, pluggable, parallel, fiber-optic QSFP28 SR4 for 100-Gigabit Ethernet. This transceiver is a high-performance module for short-range multi-lane data communication and interconnect applications. It integrates four data lanes in each direction with 100Gbps bandwidth. Each lane can operate at 25Gbps up to 70m using OM3 fiber or 100m using OM4 fiber. These modules are designed to operate over multimode fiber systems using a nominal wavelength of 850nm. The optical interface uses 12-fiber MTP/MPO connector. The transceiver proven circuit to provide reliable long life, high performance, and consistent service.

## Environmental Specifications

Parameter	Min.	Typ.	Max.	Unit
Operation Temperature	0	+25	+70	°C
Storage Temperature	-40	-----	+85	°C
Operation Humidity*	5	-----	85	%
Storage Humidity	5	-----	85	%

(\*) not condensing

## Operating Specifications

Parameter	Min.	Typ.	Max.	Unit
Supply Voltage	3.1	+3.3	+3.5	V
Power Dissipation			3	W
Total Data Rate		103.125		Gb/s
Data Rate (Each lane)		25.78		Gb/s
Transmission Distance			70-100	m

## Optical Specifications

### Transmitter:

Parameter	Min.	Typ.	Max.	Unit
Bit Rate (each Lane)	25.78 +/- 100ppm			Gb/s
Wavelength	840	850	860	nm
Average Launch Power (each lane)	-8.5		2.5	dBm
Transmitter OMA (each lane)	-6.4		3	dBm
Extinction Ratio (ER)	3			dB

### Receiver:

Parameter	Min.	Typ.	Max.	Unit
Bit Rate (each Lane)	25.78 +/- 100ppm			Gb/s
Wavelength	840	850	860	nm
Receiver Sensitivity (unstressed, each lane)			-10.2	dBm
Receiver Sensitivity (stressed, each lane)			-5.2	dBm
Receiver Reflectance			-12	dBm
LOSA	-30			dBm
LOSD			-7.5	dBm
Hysteresis	0.5			dB

## Ordering information

Jabil Part Number	Package	Rate	Reach	Other info
JPQ81CS1MOC000SR4	QSFP28	100G	70-100m	DDM/RoHS

## Contact information

For additional information and evaluation samples order, please contact:

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