



# 100G QSFP28 PSM4 Transceiver

#### Features

- Up to 500m reach
- Operating case temperature: 0~70°C
- Maximum Power consumption less than 3.5W
- Integrated 4-channel Tx and Rx
- Uncooled 1310nm DFB Laser
- 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



- 100GBASE-PSM4 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 designed to meet the requirements of optical fiber interface for 500m reach over eight single mode fiber in large data centers. The optical module offers 4 independent transmit and receive channels, each capable of 25Gbps operation. Mechanical dimensions, connectors and the footprint of this product is QSFP+ specifications compliant. The optical interface uses MPO connector. The transceiver proven circuit to provide reliable long life, high performance, and consistent service.

### **Environmental Specifications**

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

<sup>(\*)</sup> not condensing

### **Operating Specifications**

Parameter	Min.	Тур.	Max.	Unit
Supply Voltage	3.1	+3.3	+3.5	V
Power Dissipation			3.5	W
Total Data Rate		103.125		Gb/s
Data Rate (Each lane)		25.781		Gb/s
Transmission Distance			500	m







# **Optical Specifications**

### Transmitter:

Parameter	Min.	Тур.	Max.	Unit
Bit Rate (each Lane)	25.781 +/- 100ppm			Gb/s
Wavelength	1295	1310	1355	nm
Average Launch Power (each lane)	-6		2	dBm
Transmitter OMA (each lane)			2	dBm
Extinction Ratio (ER)	3.5			dB

#### Receiver:

Parameter	Min.	Тур.	Max.	Unit
Bit Rate (each Lane)	25.781 +/- 100ppm			Gb/s
Wavelength	1295	1310	1355	nm
Receiver Sensitivity (unstressed, each lane)			-9	dBm
Receiver Reflectance			-26	dBm
LOSA	-18			dBm
LOSD			-15	dBm
Hysteresis	0.5		3	dB

## Ordering information

Jabil Part Number	Package	Rate	Reach	Other info
JPQ81CS3MOC000PSM	QSFP28	100G	500m	DDM/RoHS

### Contact information

For additional information and evaluation samples order, please contact:

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