

## DATA SHEET

# 100G QSFP28 PSM4 TRANSCEIVER

## DESCRIPTION

The 100G QSFP28 PSM4 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 are QSFP+ specifications compliant. The optical interface uses MPO connector. The transceiver proven circuit to provide reliable long life, high performance, and consistent service.



## KEY 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

## APPLICATIONS

- 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

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### 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			3.5	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.	Typ.	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.	Typ.	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



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## ORDERING INFORMATION

Jabil Part Number	Package	Rate	Reach	Other info
JPQ81CLRCC000LR4	QSFP28	100G	10Km	DDM/RoHS

## CONTACT INFORMATION

**For additional information and evaluation samples order, please contact:**

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