

### **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	Ut	o to	500m	reach
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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.	Тур.	Max.	Unit
Operation Temperature	0	+25	+70	℃
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.	Мах.	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+/- 10	00ppm	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
JPQ81CLRLCC000LR4	QSFP28	100G	10Km	DDM/RoHS

For additional information, visit jabil.com/photonics