

40G QSFP LR4 optical transceiver with DDM function



This product is designed for fiber-communication based on optical-electrical technology. The product has 4 channels per transceiver with data rates maximum 10G per channel. The QSFP contains a duplex LC connector for the optical interface and a 38-pin connector for the electrical interface. It could be used at key locations in optical networks like 40G Ethernet.

Features

- Up to 10.5Gb/s data rate per channel
- Distance up to 10km over a SMF
- 1310nm range Un-cooled DFB-LD Transmitter with optical MUX
- nPPI(4x10G) Electrical Interface
- Single +3.3V power supply
- DDM function implemented
- 2 Wire Serial Interface for module management
- Maximum power dissipation<3.5W
- International Class 1 laser safety certified
- Operating temperature range: 0°C ~ +70°C
- Compliant with RoHS6

Applications

- 40GBASE-LR4 Ethernet

Standards

- Compliant with QSFP+ MSA(SFF-8436 v3.4)
- Compliant with SFF-8472 v10.2
- Compliant with IEEE 802.3ba

Ordering Information

Part No	Specification								
	Package	Data rate	Laser	Power	Detector	Sensitivity	Temp	Reach	Other
RTXM320-400	QSFP+	41.25G	1310nm DFB	-7 ~ 2.3dBm	PIN	-11.5dBm	0~70°C	10km	DDM, RoHS

Specifications

(tested under recommended operating conditions, unless otherwise noted)

Parameter	Symbol	Unit	Value		
			Min	Typ	Max
Transmitter(per Lane)					
Lane Wavelength (range)		nm		1271,1291, 1311,1331	
Total Average Launch Power		dBm			8.3
Average Launch Power per Lane	TXPx	dBm	-7		2.3
Transmit OMA per Lane	TxOMA	dBm	-4		3.5
Optical Extinction Ratio	ER	dB	3.5		
Average launch power of OFF transmitter, per lane		dBm			-30
Relative Intensity Noise	RIN	dB/Hz			-128
Receiver(per Lane)					
Damage Threshold	DT	dBm	3.3		
Average Launch Power per Lane	RXPx	dBm	-13.7		2.3
Receive Power(OMA) per Lane	RxOMA	dBm			3.5
Receiver sensitivity (OMA), each lane (max)		dBm			-11.5
Stressed Receive Sensitivity(OMA) per lane	SRS	dBm			-9.6
Receiver reflectance	Rfl	dB			-26
LOS De-Assert	LOSD	dBm			-15.5
LOS Assert	LOSA	dBm	-30		-16

Absolute Maximum Ratings