

40 GB/s QSFP+ LM4 Transceivers



Product Introduction

The RTX320-450 40Gigabit QSFP+ LM4 Transceiver is designed for fiber-communication based on optical-electrical technology, which is an integrated module containing a micro-optic component and semiconductor material. The product has 4 channels per transceiver with data rates maximum 10G per channel (40G max per QSFP+ module). The Transceiver is compliant with SFF-8436, IEEE802.3ba.

Features

- Up to 10.5Gb/s data rate per channel
- Distance up to 150m@OM3, 160m @OM4 MMF, 2Km@SMF
- 4×10G CWDM DFB transmitter
- LC duplex connector
- Low power consumption <3.5W
- 0°C to 70°C operating temperature range
- Compliant with RoHS6

Applications

- 40G Ethernet with MMF and SMF

Standards

- MSA SFF-8436
- IEEE802.3ba

Specifications

Parameter	Symbol	Unit	Min	Typ	Max	Notes
Transmitter(per Lane)						
Signaling Speed		GBd		10.3125		
Center wavelength		nm	1264.5	1271	1277.5	
			1284.5	1291	1297.5	
			1304.5	1311	1317.5	
			1324.5	1331	1337.5	
Average Launch Power per Lane	TXP _x	dBm	-3.0		4.0	MMF
			-7.0		2.3	SMF
Side Mode Suppression Ratio	SMSR	dB	30			
Optical Extinction Ratio	ER	dB	3.5			
Optical Return Loss Tolerance	ORL	dB			12	
Average launch power of OFF transmitter		dBm			-30	
Relative Intensity Noise	RIN	dB/Hz			-128	
Transmitter Eye mask definition{X1, X2, X3,Y1, Y2,Y3}			{0.25, 0.4, 0.45, 0.25, 0.28,0.4}			
Receiver(per Lane)						
Signaling Speed		GBd		10.3125		
Center wavelength		nm	1264.5	1271	1277.5	
			1284.5	1291	1297.5	
			1304.5	1311	1317.5	
			1324.5	1331	1337.5	
Damage Threshold	Pmax	dBm	5.5			
Average Receive Power	RXP _x		-13.7		2.5	SMF
						SMF
Receive Sensitivity(OMA)	RXsen	dBm			-11.5	SMF
Stressed Receive Sensitivity(OMA)	SRS	dBm			-9.6	SMF
LOS De-Assert	LOS _D	dBm			-16	
LOS Assert	LOS _A	dBm	-30			
LOS Hysteresis	LOS _H	dB	0.5			

Ordering Information

Part No.	Specifications									Application
	Package	Data rate(Gb/s)	Laser	Optical Power (dBm)	Detector	Sensitivity (OMA) dBm	Top	Reach (km)	Other	
RTXM320-45	QSFP+	4	CWD	-3.0~4.0@MMF	PIN	-11.5	0~70°C	3	RoH	40G
0			M DFB	-7.0~2.3@SMF		per lane		2Km@SM	S	bE
				Per lane				F		