

40 GB/s QSFP+ LM4 光模块



产品介绍

RTXM320-450 是一款 QSFP+封装的 40GE 光收发模块，采用微光模块和半导体技术制作而成。该模块具备 4 个独立的通道，每个通道速率可达 10G，模块符合 SFF-8436 和 IEEE802.3ba 标准。

产品特性

- 单通道速率：最大可达 10.5Gb/s
- 传输距离：150m@OM3, 160m @OM4 MMF, 2Km@SMF
- 采用 4×10G CWDM DFB 发射
- 双 LC 连接器
- 功耗<3.5W
- 工作温度 0℃ to 70℃
- 符合 RoHS6

应用场景

- 40G 以太网，单多模均可

符合标准

- MSA SFF-8436
- IEEE802.3ba

主要参数

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	TXPx	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	RXPx		-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			

订购信息

Part No.	Specifications									Applica tion
	Package	Data rate(Gb/s)	Laser	Optical Power (dBm)	Detector	Sensitivity (OMA) dBm	Top	Reach (km)	Other	
RTXM320-45 0	QSFP+	4	CWD M DFB	-3.0~4.0@MMF -7.0~2.3@SMF Per lane	PIN	-11.5 per lane	0~70 °C	150m@OM 3 2Km@SM	RoH S	40G bE

电接口定义

Parameter	Symbol	Unit	Min	Typ	Max	Note
Supply Voltage	VccI,VccTx, VccRx	V	-0.5		+4.0	
Supply Current	Icc	A			1.1	
Transmitter(per lane)						
Single ended input voltage	VinT	V	-0.3		4.0	
Differential Data Input Swing	Vin,pp	mVpp	150		1000	
J2 Jitter Tolerance	Jt2	UI	0.17			
J9 Jitter Tolerance	Jt9	UI	0.29			
Data Dependent Pulse Width Shrinkage	DDPWS	UI	0.07			
Eye mask {X1,X2, Y1,Y2}		UI mV	0.11,0.31 95,350			
Receiver(per lane)						
Single ended output voltage tolerance		V	-0.3		4.0	
Differential Data output Swing	Vout,pp	mVpp	300		850	
Output transition time,20% to 80%		ps	28			
J2 Jitter Tolerance	Jt2	UI	0.17			
J9 Jitter Tolerance	Jt9	UI	0.29			
Eye mask {X1,X2, Y1,Y2}		UI mV	0.11,0.31 95,350			