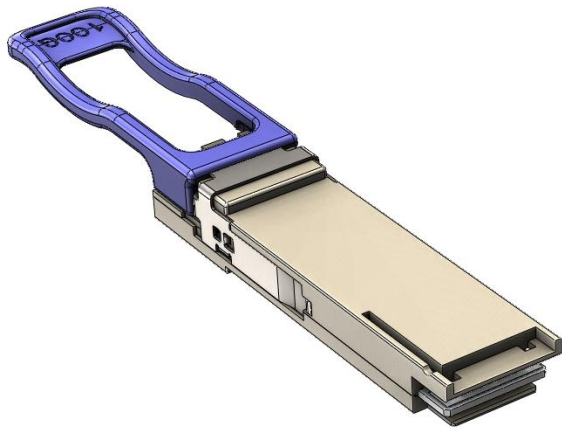


100G LR4 QSFP28 光收发模块



产品简介
光迅科技的 100G QSFP28 LR4 具有低功耗、高端口密度的优点，传输距离能够达到 10 公里。每个模块在发送端集成了 4 只在 1310nm 附近的 LAN-WDM 直接调制 DFB 激光器和光合波器，在接收端包含光解波器、4 只 PIN 探测器和 4 路 TIA 芯片。模块的光接口为双相 LC 连接器，符合 QSFP+ 协议标准。

- 特征**
- 单通道速率达到 25.8Gbps
 - 传输距离为 2 公里
 - 符合 QSFP+ 协议标准
 - LAN-WDM 波长制冷型直接调制 DFB 激光器
 - 双相 LC 连接器
 - 单个 3.3V 供电电源
 - 功耗小于 4.5W
 - 工作壳温为 0-70℃
 - 符合 RoHS6 标准

- 应用**
- 100G 以太网
 - 数据中心光互联
 - 路由器及光传送网应用

- 标准**
- QSFP28:SFF-8665,SFF-8679, SFF-8636
 - IEEE 802.3ba 100GBASE-LR4
 - ITU-T G.959.1 4I1-9D1F

规格

Parameter	Symbol	Unit	Specifications		
			Min	Typ	Max

Tx					
Center wavelength		nm	1294.53	1295.56	1296.59
			1299.02	1300.05	1301.09
			1303.54	1304.58	1305.63
			1308.09	1309.14	1310.19
Signaling rate, per lane		Gbit/s	25.78125±100ppm		
Operating link reach		km		10	
Optical modulation amplitude, per lane	OMA	dBm	-1.3		4.5
Transmitter and dispersion penalty, per lane	TDP	dB			2.2
Optical extinction ratio	ER	dB	4		
Average launch power, per lane		dBm	-4.3		4.5
Average launch power of OFF transmitter, per lane		dBm			-30
Transmitter reflectance		dB			-12
Relative intensity noise	RIN	dB/Hz			-130
Rx					
Center wavelength		nm	Same as Tx		
Signaling rate, per lane		Gbit/s	Same as Tx		
Damage threshold	DT	dBm	5.5		
Average launch power, per lane		dBm	-10.6		4.5
Receive Power(OMA) per lane		dBm			4.5
Receive Sensitivity(OMA) per lane ¹		dBm			-8.6
Receiver reflectance		dB			-26
LOS De-Assert (OMA)	LOSD	dBm	-30		-17
LOS Assert (OMA)	LOSA	dBm			-16

Note: 1 At TP2. 2 PRBS2³¹-1 and BER<1E-12

订购信息

Part No.	Specifications									Application
	Package	Datarate (Gb/s)	Laser	Optical Power (dBm)	Detector	Sensitivity (OMA) dBm	Top	Reach (m)	Other	
RTXM420-450	QSFP28	4*25.78	DFB	-4.3~4.5	PIN	-8.6	0~70 °C	10000	DDM	100G LR4

电口定义

Parameter	Symbol	Unit	Min	Typ	Max
Supply Voltage	V _{CC}	V	3.14	3.3	3.47
Supply Current	I _{cc}	mA			1400
Transmitter					
Input Differential Impedance	R _{IN}	Ω	90	100	100

Single Ended Data Input Swing	V_{IN}	mVp-p	350		800
Transmit Disable Voltage	V_{DIS}	V	2		3.5
Transmit Enable Voltage	V_{EN}	V	-0.3		0.8
Transmit Fault Assert Voltage	V_{FA}	V	2		3.5
Transmit Fault De-Assert Voltage	V_{FDA}	V	-0.3		0.8
Receiver					
Single Ended Data Output Swing	V_{OD}	mVp-p	185		900
LOS Fault	V_{LOSFT}	V	2		3.5
LOS Normal	V_{LOSNR}	V	-0.3		0.8