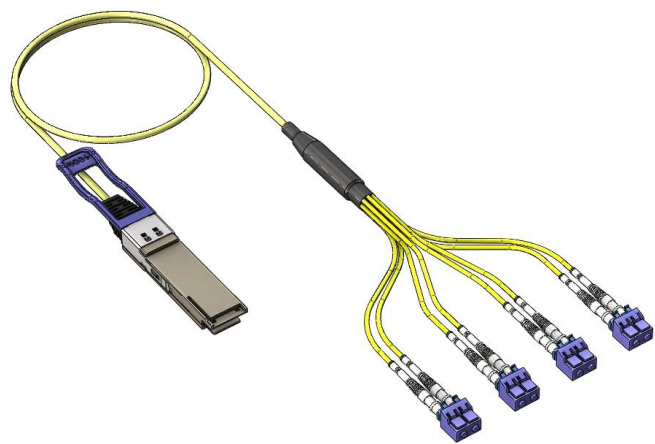


100G PSM4 QSFP28 光收发模块



产品简介

光迅科技的 100G QSFP28 PSM4 模块能够满足数据中心 500 米的互联需求。每个模块提供了 4 对光发送/接收通道，工作速率为 25Gbps。模块的发送端集成了 4 只波长为 1310nm 的直接调制 DFB 激光器及相应的激光器驱动芯片，接收端包含了 4 路集成 PIN 探测器芯片，支持 8 根单模光纤点对点传输，光接口为并行 4 路双相 LC 连接器，模块符合 QSFP+ 协议标准。

特征

- 1310nm 直接调制 DFB 激光器
- 每通道速率为 25.8Gbps
- 4 路光发送/接收通道集成
- 内置激光器驱动芯片
- 功耗小于 3.5W
- 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

标准

- QSFP28:SFF-8665,SFF-8679, SFF-8636
- IEEE802.3bm
- 100G PSM4 Specifications Rev. 2.0

规格

Parameter	Symbol	Unit	Value		
			Min	Typ	Max

Transmitter					
Signaling rate		Gbit/s		25.78125	
Center wavelength	λ	nm	1300	1310	1320
Sde mode suppression ration	SMSR	dB	30	-	-
Operating link reach		m		-	2000m
Average Launch Power, per Lane	TXPx	dBm	-9.4	-	2.0
Optical Extinction Ratio	ER	dB	3.5	-	-
Transmitter and dispersion penalty,each lane	TDP	dB	-	-	2.9
Total average launch power	-	dBm	-	-	8
Transmitter reflectance	-	dB	-	-	-12
Average launch power of OFF transmitter, per lane	-	dBm	-	-	-30
Relative Intensity Noise	RIN	dB/H z		-	-128
Receiver					
Center wavelength	λ	nm	1300	-	1320
Damage Threshold	DT	dBm	4	-	
Average receiver Power per Lane	RXPx	dBm	-12.66	-	2
Receive Power(OMA) per Lane	RxOMA	dBm	-	-	2.2
Receiver sensitivity(OMA) per lane ¹	-	dBm	-	-	-11.5
Stressed Receive Sensitivity(OMA) per lane ¹	SRS	dBm	-	-	-8.79
Receiver reflectance		dBm	-	-	-26

Note: 1 At TP2. 2 PRBS²³¹-1 and BER<5E-5

订购信息

Part No.	Specifications									Application
	Package	Datarate (Gb/s)	Laser	Optical Power (dBm)	Detector	Sensitivity (OMA) dBm	Top	Reach (m)	Other	
RTXM420-440	QSFP28	4*25.78	DFB	-9.4~2.0	PIN	-11.5	0~70℃	2000	DDM	100G PSM4

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			1000
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