

400G QSFP112 SR4 50m InfiniBand Version CL400GQ112SR4-IB

Product Features:

- Hot-pluggable QSFP112 form factor
- Maximum link length of 50m on OM4 fiber with FEC
- +3.3V single power supply
- Power dissipation < 9W
- Operating case temp Commercial: 0°C to +70 °C
- MPO-12 APC connector
- RoHS compliant

Functional Characteristics (Optical)

The following tables list the performance specifications for the various functional blocks of the integrated optical transceiver module.

Table 1 – Transmitter Optical Specifications

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Center wavelength	CW	844	850	863	nm	
RMS Spectral Width	SW	-	-	0.6	dBm	
Average Launch Power per Lane	AOP	-4.6	-	4	dBm	
Outer Optical Modulation Amplitude (OMA _{outer}), each lane for max (TECQ, TDECQ) <= 1.8 dB for 1.8 < max (TECQ, TDECQ) <= 4.4 dB	OMA	-2.6 -4.4 + max (TECQ, TDECQ)	-	3.5	dBm	
Transmitter and dispersion eye closure for PAM4 (TDECQ), each lane	TDECQ	-	-	4.4	dB	
Transmitter eye closure for PAM4 (TECQ), each lane	TECQ	-	-	4.4	dBm	
Transmitter power excursion, each lane	TPE	-	-	2.3	dB	
Optical Extinction Ratio	ER	2.5	-	-	dBm	
Transmitter transition time, each lane	Tt	-	-	17	ps	
RIN _{14OMA}				-132	dB/Hz	
Optical Return Loss Tolerance	ORL			14	dB	
Encircled Flux	FLX		>86% at 19 um <30% at 4.5 um			
Average Launch Power of OFF Transmitter, per Lane				-30	dBm	

Table 2 – Receiver Optical Specifications

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Wavelength	W	840	-	948	nm	
Damage Threshold		5	-	-	dBm	
Average Receive Power per Lane	DT	-6.4	-	4	dBm	
Receive power, each lane (OMA _{outer})	RXP _x	-	-	3.5	dBm	
Receiver Reflectance	RxOMA	-	-	-15	dB	
LOS Hysteresis		0.5	1	-	dB	



Telecom



FTTx



DWDM



Data Center

Receiver sensitivity (OMAouter) for max (TECQ, TDECQ) <= 1.8 dB for 1.8 < max (TECQ, TDECQ) <= 4.4 dB	RxSen	-	-	-4.6 -6.4 + TECQ	dBm	
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Ordering Information

Table 3 - Ordering Information

Part No.	Application	Data Rate	Laser Source	Fiber Type
CL400GQ112SR4-IB	400GBASE-SR4	400GB Ethernet InfiniBand	VCSEL	Multi-Mode Fiber

CONTACT:

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