



Telecom



FTTx



DWDM



Data Center

400G QSFP-DD SR8 100m CL400GQDDSR8

Product Features

- Hot-pluggable QSFP-DD form factor
- Case temperature range of 0°C to +70°C
- Maximum link length of 100m on OM4 fiber with FEC
- +3.3V single power supply
- Power dissipation < 9W
- Support DDM function
- Operating case temp: Commercial: 0°C to +70 °C
- MPO-16 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
Data Rate, each lane		26.5625±100ppm			GBd	
Center Wavelength	λ_C	840	850	860	nm	
RMS Spectral width	$\Delta\lambda$	-	-	0.6	nm	
Average Launch Power, each lane		-6.5	-	4.0	dBm	
Outer Optical Modulation Amplitude (OMA _{outer}), each lane	TOMA	-4.5	-	3	dBm	1
Launch Power in OMA _{outer} minus TDECQ, each lane	TOMA	-5.9	-	-	dBm	
Transmitter and Dispersion Eye Closure for PAM4 (TDECQ), each lane	TDECQ	-	-	4.5	dB	
Average Output Power (Laser Turn off)	TOFF	-	-	-30	dBm	
Extinction Ratio, each lane	ER	3	-	-	dB	
Transmitter transition time, each lane	-	-	-	34	ps	
Optical Return Loss Tolerance	ORL	-	-	12	dB	

Note 1. Even if the TDECQ < 1.4 dB, the OMA_{outer} (min) must exceed this value.

Table 2 – Receiver Optical Specifications

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Data Rate, each lane		26.5625±100ppm			GBd	
Center Wavelength	λ_C	840	850	860	nm	
Damage Threshold, each lane	PIN	5	-	-	dBm	
Average Receive Power, each lane	AOPR	-8.4	-	4.0	dBm	
Receive Power (OMA _{outer}), each lane	OMAR	-	-	3	dBm	



Receiver Sensitivity (OMAouter), each lane	SOMA	-	-	max(-6.5, SECQ-7.9)	dBm	1
LOS Assert	LOSA	-30	-	-10	dBm	
LOS De-Assert	LOSD	-	-	-9	dBm	
LOS Hysteresis	LOSH	0.5	-	-	dB	

Note 1. Bit Error Ratio < 2.4x10⁻⁴, Pattern PRBS31Q.

Ordering Information

Table 3 - Ordering Information

Part No.	Application	Data Rate	Laser Source	Fiber Type
CL400GQDDSR8	400GBASE-SR8	400GB Ethernet	VCSEL	Multi-Mode Fiber

CONTACT:

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