

100Gbps QSFP28 SR4 Transceiver CL100GQSFP28SR4

Product Features:

- 4 x 25.78125Gbps electrical interface
- MTP/MPO optical connector
- QSFP28 MSA compliant
- Four independent full-duplex channels
- 103.125Gbps aggregate bit rate
- Digital Diagnostic Monitoring
- Link length of 70m over OM3 Multi-mode Fiber or 100m over OM4 Multi-mode Fiber
- Single +3.3V power supply
- Operating case temperature from 0°C~70°C
- Low power consumption < 2.5W
- RoHS-6 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 Lane 0	λ_0	1267	1270	1273	nm	
Center Wavelength Lane 1	λ_1	1287	1290	1293	nm	
Center Wavelength Lane 2	λ_2	1307	1310	1313	nm	
Center Wavelength Lane 3	λ_3	1327	1330	1333	nm	
Total Launch Power, 100GE	PALL	-	-	10.5	dBm	
Average Launch Power per Lane, 100GE	PTX_LANE	-4.3	-	4.5	dBm	
OMA per Lane, 100GE	OMA	-1.3	-	4.5	dBm	
Difference in launch power between lanes	PTX_DELTA_LANE	-	-	3.6	dB	
Total Launch Output Power, OTU4	PALL	-	-	10.5	dBm	
Average Launch Power per Lane, OTU4	PTX_LANE	-4.3	-	4.5	dBm	
Average Output Power (Laser Turn off)	P0UT-OFF	-	-	-30	dBm	
Side Mode Suppression Ratio	SMSR	30	-	-	dB	
Extinction Ratio, 100GE	ER	4	-	-	dB	



Transmitter and Dispersion Penalty per lane	TDP	-	-	2.2	dB	
Optical Return Loss Tolerance	ORLT	-	-	20	dB	
Optical Eye Mask, 100GE	Compliant with IEEE 802.3ba					
Optical Eye Mask, OTU4	Compliant with ITU-T G.695					

Table 2 – Receiver Optical Specifications

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Center Wavelength Lane 0	λ_0	1267	1270	1273	nm	
Center Wavelength Lane 1	λ_1	1287	1290	1293	nm	
Center Wavelength Lane 2	λ_2	1307	1310	1313	nm	
Center Wavelength Lane 3	λ_3	1327	1330	1333	nm	
Average Rx Power per Lane, 100GE	PRX_LANE	-10.6		4.5	dBm	
OMA Sensitivity per Lane, 100GE	POMA_LANE	-	-	-10	dBm	
Average Rx Power per Lane, OTU4	PRX_AVE_LANE	-10		4.5	dBm	
Sensitivity per Lane, OTU4	P_OMA_LANE	-	-	-8	dBm	
Receiver Overload	PIN-OL	4.5	-	-	dBm	
Reflectance	Ref	-	-	-26	dB	
LOS Assert per lane	LOSA	-24	-	-	dBm	
LOS De-assert	LOSD	-	-	-12	dBm	
LOS Hysteresis	LOSH	0.5	-	4.0	dB	

Ordering Information

Table 3 - Ordering Information

Part Number	Product Description
CL100GQSFPSR4	100Gbps, Ethernet, QSFP28 SR4, 100m, 0C~+70C

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