



800G OSFP SR8 100m InfiniBand Version CL800GOSFPSR8

Product Features

- OSFP Serial Optical Interface
 - 8x100G PAM4 retimed 800GAUI-8 electrical interface
 - Dual MPO- 12 APC connector and MPO16 APC connector are provided
 - 8 channel VCSEL arrays and 8 channels PIN photo detector arrays
 - Maximum link length of 60m on OM3 or 100m on OM4
- OSFP MSA Compliant
 - Hot Pluggable OSFP form factor
 - Compliant to OSFP Module Specification Rev 5.0
 - Compliant with CMIS 5.2
- Support Protocol
 - Compliant with IEEE 802.3db
 - Compliant to IEEE 802.3ck
 - InfiniBand Version
- Low Power Consumption
 - Less than 16W in temperature range of 0 to 70°C



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
Data rate per lane		DR		53.125		GBd
Modulation format			PAM4			
Center Wavelength ¹		λ	840	860	868	nm
RMS spectral width		σ			0.6	nm
Average Launch power, each lane		Pavg	-1		4	dBm
Optical Power OMA, each Lane , max		POMA	3.5			dBm
OMA _{outer} , each lane min	max (TECQ, TDECQ) <1.8 dB		max [-2.6 , max(TECQ,TECQ) - 4.4]			dBm
	1.8 < max (TECQ, TDECQ) < 4.4 dB					
Transmitter and dispersion eye closure (TDECQ), each lane		TDECQ			4.4	dB
Transmitter eye closure for PAM4 (TECQ), each lane		TECQ			4.4	dB
Extinction ratio		ER	2.5			dB
Transmitter power excursion, each lane					2.3	dBm
Optical Return Loss Tolerance		ORLT			14	dB
Optical Power for TX DISABLE					-30	dBm
Encircled flux ²			$\geq 86\%$ at 19 μm $\leq 30\%$ at 4.5 μm			



Telecom



FTTx



DWDM



Data Center

Notes 1: Defined according to the performance of the laser used.

Notes 2: Measured into type A1a.2 or type A1a.3, or A1a.4, 50 um fiber, in accordance with IEC 61280-1-4

Table 2 – Receiver Optical Specifications

Parameter		Symbol	Min.	Typical	Max.	Unit
Data rate per lane		BR		53.125		Gbd
Modulation format			PAM4			
Center Wavelength		λ	842	850	948	nm
Damage threshold			5			dBm
Average receive power, each lane			-6.4		4	dBm
Receive power, each lane (OMA _{outer})					3.5	dBm
Receiver reflectance		R _r			-15	dB
Receiver sensitivity, each lane1			RS = max (-4.6 , TECQ - 6.4)			dBm
Stressed receiver sensitivity, each lane					-2	dBm
Rx LOS	Assert		-15			dBm
Rx LOS	De-assert				-7.5	dBm
Rx LOS	Hysteresis		0.5		5	dB

Notes: Receiver sensitivity is informative and is defined for a transmitter with a value of TECQ.

Measured with conformance test signal at TP3 for BER = 2.4E-4 Pre-FEC.

Ordering Information

Table 3 - Ordering Information

Part No.	Temperature Range	Distance	Fiber Type	E/O	O/E	Optical Interface
CL800GOSFPSR8	0 to 70°C	100m	MMF	VCSE850nm	PIN	MPO16

CONTACT:

Email: sales@c-light.com <http://www.c-light.com>