C-LIGHT®

Color Light Communication - Faster · Smarter · Brighter

Telecom FTTx DWDM Data Center

100G/40G QSFP 10km LR4 Transceivers

CLQ100/40GLR4

FEATURES

- 4 Independent LAN-WDM channels
- Low Power Consumption <4.5W
- Wide Operating Temperature(0°C~70°C)
- Maximum link length of 10km via Single Mode Fiber (SMF)

APPLICATIONS

- 100G/40GBASE LR4 Ethernet
- High performance computing, data com and sever data links
- High speed access

Functional Characteristics (Optical)

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

TRANSMITTER CHARACTERISTICS

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Signaling rate, each lane (range)	GBb				25.78125	GBb
Center Wavelength	λ0		1294.53		1296.59	nm
Center Wavelength	λ1		1299.02		1301.09	nm
Center Wavelength	λ2		1303.54		1305.63	nm
Center Wavelength	λ3		1308.09		1310.19	nm
Side-mode suppression ratio	SMSR		30			dB
Total average launch power					10.5	dBm
Average launch power, each lane	Pf		-4.3		4.5	dBm
Optical Modulation Amplitude (OMA), each lane	TxOMA		-1.3		4.5	dBm
Transmitter and Dispersion Penalty	TDP				2.2	dB
Average launch power of OFF transmitter, each lane					-30	dBm
Extinction ratio	ER		4			dB
Optical return loss tolerance					20	dB
Transmitter reflectance					-12	dB

RECEIVER CHARACTERISTICS

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Signaling rate, each lane (range)	GBb			25.78125		GBb
Center Wavelength	λ0		1294.53		1296.59	nm
Center Wavelength	λ1		1299.02		1301.09	nm
Center Wavelength	λ2		1303.54		1305.63	nm
Center Wavelength	λ3		1308.09		1310.19	nm

Damage threshold			5.5			dBm
Average power at receiver input, each lane			-10.6		4.5	dBm
Receive power, each lane (OMA)					4.5	dBm
Return Loss	RL		-26			dB
Receiver sensitivity (OMA) @100G	SOMA	BER@10 e-12			-8.6	dBm
Receiver sensitivity (OMA) @40G	SOMA	BER@10 e-12			-14	dBm
LOS Assert	LOSA		-24			dBm
LOS De-Assert	LOSD				-16	dBm
LOS Hysteresis			0.5			dB

*If you want to use this module in 100G or 40G working status, EEPROM P0 page should be edit to correct 100G or 40G information in advance.

ORDERING INFORMATION

Part Number	Product Description			
CLQ100/40GLR4	100G/40Gbps QSFP LR4,10Km, 0℃~+70℃			

CONTACT:

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