QSFP28 100GBASE-CWDM4 10KM

CL100GQSFPCLR4

Product Features:

- Hot-pluggable QSFP28 form factor
- Supports 103.1Gb/s aggregate bit rate
- Power dissipation < 3.5W
- RoHS-6 compliant
- Commercial case temperature range of 0°C to 70°C
- Single 3.3V power supply
- Maximum link length of 10km on Single Mode Fiber (SMF)
- 4x26Gb/s CWDM Transmitter: 4 channel 1270,1290,1310,1330nm DFB laser
- 4x26G retimed electrical interface
- Duplex LC receptacles
- I2C management interface

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	λ0	1267	1270	1273	nm	
Center Wavelength Lane 1	λ1	1287	1290	1293	nm	
Center Wavelength Lane 2	λ2	1307	1310	1313	nm	
Center Wavelength Lane 3	λ3	1327	1330	1333	nm	
Total Launch Power, 100GE	PALL	-	-	10.5	dBm	1
Average Launch Power per Lane, 100GE	PTX_LANE	-4.3	-	4.5	dBm	1
OMA per Lane, 100GE	OMA	-1.3	-	4.5	dBm	1
Difference in launch power between lanes	PTX_DELTA_LANE	-	-	3.6	dB	
Total Launch Output Power, OTU4	PALL	-	-	TBD	dBm	1
Average Launch Power per Lane, OTU4	PTX_LANE	-	-	TBD	dBm	1
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	2
Optical Return Loss Tolerance	ORLT	-	-	20	dB	
Optical Eye Mask, 100GE	Compliant with IEEE 802.3ba					2
Optical Eye Mask, OTU4	Compliant with ITU-T G.695					2

Table 2 – Receiver Optical Specifications

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Center Wavelength Lane 0	λ0	1267	1270	1273	nm	
Center Wavelength Lane 1	λ1	1287	1290	1293	nm	
Center Wavelength Lane 2	λ2	1307	1310	1313	nm	
Center Wavelength Lane 3	λ3	1327	1330	1333	nm	
Average Rx Power per Lane, 100GE	PRX _LANE	-10.6		4.5	dBm	2
OMA Sensitivity per Lane, 100GE	POMA_LANE	-	-	-8.6	dBm	2
Average Rx Power per Lane, OTU4	PRX_AVE_LANE	TBD		TBD	dBm	3
Sensitivity per Lane, OTU4	P _OMA_LANE	-	-	TBD	dBm	
Receiver Overload	PIN-OL	4.5	-	-	dBm	
Reflectance	Ref	-	-	-26	dB	
LOS Assert per lane	LOSA	TBD	-	-	dBm	
LOS De-assert	LOSD	-	-	TBD	dBm	
LOS Hysteresis	LOSH	0.5	-	4.0	dB	

Notes1: Transmitter consists of 4 lasers operating at 25.78Gb/s each.
Notes2:Minimum value is informative.
Notes3:Hit ratio 5x10-5.
Notes4:Receiver consists of 4 photodetectors operating at 25.78Gb/s each.
Notes5:Minimum value is informative, equals min TxOMA with infinite ER and max channel insertion loss.
Notes6:SRS is measured with vertical eye closure penalty of 1.8 dB max, J2 of 0.30 UI, and J9 of 0.47 UI.
Notes7:Power value and power accuracy are with all channels on.

Ordering Information

Table 3 - Ordering Information

Part Number	Product Description
CL100GQSFPCLR4	100Gbps QSFP28 CWDM4, 2km/10Km, 0℃~+75℃

CONTACT:

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