25Gbps SFP+ 20km Transceiver
CLSFP25GLR20

Product Features:

- Supports 25GBASE-LR (25Gb/s)
- Lane bit rate 25.78 Gb/s
- Up to 20km transmission on SMF
- DFB 1310nm laser and PIN receiver
- High speed I/O electrical interface (25GAUI)
- I2C interface with integrated Digital Diagnostic monitoring
- SFP28 MSA package with duplex LC connector
- Single +3.3V power supply; maximum power consumption 1.5W
- Compliant to IEEE 802.3cc, SFF-8402 and SFF-8432
- Bit error rate 10^-12 and failure rate < 700 FITs
- Operating case temperature 0°C to 70°C
- Class 1 Laser

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	λ0	1295	1310	1325	nm	
Average Launch Power	PTX_LANE	-5	-	2	dBm	1,2
Spectral Width (-20dB)	σ	-	-	1	dBm	3
Average Output Power (Laser Turn off)	Pout-OFF	-	-	-30	dBm	
Side Mode Suppression Ratio	SMSR	30	-	-	dB	
Extinction Ratio	ER	3.5	-	-	dB	
Transmitter and dispersion penalty (TDP)	TDP	-	-	2.7	dB	
Optical Return Loss Tolerance	ORLT	-	-	20	dB	

Note 1:Class 1 Laser Safety per FDA/CDRH and EN (IEC) 60825 regulations.
Note 2: High Bandwidth Mode. Class 1 Laser Safety per FDA/CDRH and EN (IEC) 60825 regulations..
Note 3: 20dB spectral width.
Note 4: Equivalent extinction ratio specification for Fibre Channel. Allows smaller ER at higher average power.

Table 2 – Receiver Optical Specifications

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Center Wavelength	λ0	1295	1310	1325	nm	
Receiver sensitivity (OMA)	-	-	-	-11.3	dBm	5

Stressed sensitivity (OMA)	-	-	-	-8.8	dBm	6
Receiver Overload	PIN-OL	2	-	-	dBm	
Receiver Reflectance	Ref	-	-	-12	dB	
LOS Assert per lane	LOSA	-30	-	-	dBm	
LOS De-assert	LOSD	-	-	-17	dBm	
LOS Hysteresis	LOSH	0.5	-	4	dB	

Note 1: At 5E-5 BER, KR4 FEC
Note 2: Per IEEE802.3cc

Ordering Information

Table 3 - Ordering Information

Part No.	Application	Data Rate	Laser Source	Fiber Type
CLSFP25GLR20	25GBASE-LR	25.78 Gb/s	1310nm DFB	SMF, 20km, LC

CONTACT:

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