1.25Gbps/10.31Gbps/25.78Gbps auto-adapting SFP+ 10km Transceiver

CLSP1G10G25GLR

Product Features:

- Supports 1G/10G/25G auto-adapting;
- Up to 10km 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 1.2 W;
- Compliant to IEEE 802.3cc Draft3.0, SFF-8472, SFF-8402 and SFF-8432;
- Bit error rate 10^-12 and Failure rate < 700FITs
- Operate case temperature 0°C~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	Notes
Center Wavelength	λ0	1290	1310	1330	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	35	-	-	dB	
Extinction Ratio	ER	4.5	-	-	dB	
Transmitter and dispersion penalty (TDP)	TDP	-	-	2.7	dB	
Optical Return Loss Tolerance	ORLT	-	-	20	dB	

Table 2 – Receiver Optical Specifications

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes
Center Wavelength	λ0	1295	1310	1325	nm	
Receiver sensitivity (OMA) @25G		-	-	-11.3	dBm	5
Stress sensitivity (OMA) @25G		-	-	-8.8	dBm	6
Receiver sensitivity (OMA) @10G		-	-	-14	dBm	
Stress sensitivity (OMA) @10G		-	-	-11.5	dBm	
Receiver sensitivity (OMA) @1G		-	-	-22	dBm	
Stress sensitivity (OMA) @1G		-	-	-18	dBm	
Receiver Overload	PIN-OL	4	-	-	dBm	
Reflectance	Ref	-	-	-12	dB	

LOS Assert per lane	LOSA	-30	-	-	dBm	
LOS De-assert	LOSD	-	-	-17	dBm	
LOS Hysteresis	LOSH	0.5	-	4	dB	

Ordering Information

Table 3 - Ordering Information

Part No.	Data Rate	Laser	Fiber Type	Distance	Optical Interface	Temp	DDMI
CLSP1G10G25GLR	25.78Gbps 10.31Gbps 1.25Gbps	1310nm DFB	SMF	10KM	LC	0~70 °C	Y

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