100G QSFP28 Single Lamda 40km
CL100GQSFPER1

Product Features:

- Supports 100GBASE-ER1
- Lane signaling rate 106.25Gb/s with PAM4
- Up to 40km transmission on SMF
- EML laser and APD receiver
- 4x25.78Gb/s with NRZ electrical interface (CAUI-4)
- High speed I/O electrical interface
- I2C interface with integrated Digital Diagnostic monitoring
- QSFP28 MSA package with simplex LC connector
- Single +3.3V power supply
- Maximum power consumption 4.5 W
- Operating case temperature: 0 to +70 °C
- Compliant to IEEE 802.3bm,100G Lambda MSA
- Compliant to SFF-8636&SFF-8679 standard
- Complies with EU Directive 2015/863/EU
- Application
- 100GBASE-ER1-40

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	CW	1290	1310	1330	nm	
Average Launch Power	PTX	1.7	-	7.1	dBm	1
Outer Optical Modulation Amplitude	OMA	4.7	-	7.9	dBm	TDECQ＜1.4
		3.3+TDECQ	-			TDECQ＞1.4
Transmitter and dispersion eye closure for PAM4 (TDECQ) (max)	TDECQ	-	-	3.9	dBm	
|TDECQ-TECQ|		-	-	2.7	dB	
Average Output Power (Laser Turn off)	PoUT-OFF	-	-	-15	dBm	
Side Mode Suppression Ratio	SMSR	30	-	-	dB	
Extinction Ratio	ER	5	-	-	dB	

Table 2 – Receiver Optical Specifications

Parameter	Symbol	Min.	Typical	Max.	Unit	Notes

Center Wavelength	CW	1290	1310	1330	nm	
Damage threshold	Pdamage	-2.4	-	-	dBm	2
Average Rx Power	PRx	-16	-	-3.4	dBm	3
Receive power_OMA	POMA	-	-	-2.6	dBm	
Receiver sensitivity_OMAouter	SEN _OMA	-	-	-13.8	dBm	TECQ≤1.44
		-	-	-15.2+TECQ	dBm	1.4≤TECQ≤3.9
Los Assert	LosA	-26	-	-	dBm	
Los De-Assert	LosDA	-	-	-17	dBm	
Los Hysteresis	LosH	0.5	-	-	dB	

Ordering Information

Table 3 - Ordering Information

Part No.	Data Rate	Laser	Fiber Type	Distance	Optical Interface	Temp.	DDMI
CL100GQSFPER1	106.25Gbps	1310nm	SMF	40km	LC	0~70C	Y

CONTACT:

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