

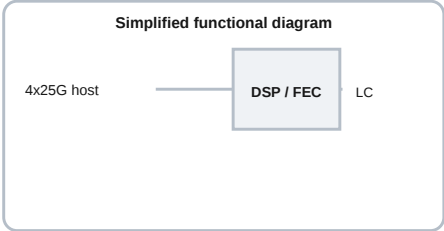
QSFP28-LR-SL-Cxx

QSFP28, 100GbE-LR, Single Lambda CWDM

10km, 4.7dB, SM, LC

1. Product overview

Single-lambda 100G QSFP28 transceiver for 10 km links over single-mode fiber. The source offers CWDM center wavelengths of 1271, 1291, 1311 or 1331 nm and uses a 4x25G electrical host interface with a 50 Gbaud optical lane.



2. Key features

- 100G Lambda MSA 100G-LR specification compliant
- 1271/1291/1311/1331 nm CWDM variants
- Up to 10 km over SMF with FEC
- 4x25G OIF CEI-28G-VSR electrical interface
- Duplex LC connector
- Power dissipation <4.5 W; integrated DDM

3. Applications

- Data Center Interconnect
- 100G Ethernet

4. Technical data

Parameter	Value	Parameter	Value
Technology	100G single-lambda CWDM	Media	SMF, duplex LC
Reach	10 km	Wavelengths	1271/1291/1311/1331 nm
Optical signaling	50 Gbaud PAM4 class	Host	4x25G NRZ
Budget	4.7 dB	Power	4.5 W max

5. Recommended operating conditions

Parameter	Value
Operating case temperature	0 to +70 °C
Supply voltage	3.135 / 3.3 / 3.465 V
Power dissipation	4.5 W max
Relative humidity	5 to 85 %

QSFP28-LR-SL-Cxx

6. Optical characteristics

Parameter	Specification
OPTICAL CHARACTERISTICS	
Transmitter	
Signaling Speed	53.125 Gbaud
Modulation Format PAM4	
Optical Center Wavelength λ_c	6.5 λ_c λ_c +6.5 nm
Side-Mode Suppression Ratio SMSR	30 dB
Extinction Ratio ER	3.5 dB
Transmit OMA TxOMA	0.7 4.7 dBm
Transmit Average TxAVG	-1.4 4.5 dBm 1
Launch Power In OMAouter Minus TDECQ	-0.7 dBm 2
Launch Power In OMAouter Minus TDECQ	-0.6 dBm 3
Transmitter And Dispersion Eye Closure TDECQ	3.4 dB
Optical Return Loss Tolerance	15.6 dB 4
Receiver	
Damage Threshold	5.5 dBm
Receive Power (OMAouter) RxOMA	4.7 dBm
Average Receive Power RxAVG	-7.7 4.5 dBm
Receiver Sensitivity (OMAouter) SenOMA Max(	-6.1,SECQ-7.5) dBm 5
Receiver Reflectance	-26 dB
LOS Assert LOSA	-15 dBm
LOS De-assert LOSD	-12 dBm
LOS Hysteresis	0.5 dB

7. Digital diagnostics and management

Parameter	Specification
Management interface	2-wire serial / I2C through QSFP28 management interface
Digital diagnostics	Temperature, supply voltage, TX bias/power and RX power where implemented
Module controls	ModSelL, ResetL, LPMode, ModPrsL and IntL as applicable
Form factor	Hot-pluggable QSFP28, 38-pin host interface

8. Safety and regulatory

RoHS compliance and normal ESD handling precautions apply. Where stated in the source specification, the optical module is a Class 1 laser product and must be handled in accordance with applicable laser-safety requirements.

9. Ordering information

Ordering number	Product description
Q100G-LR-SL-Cxx	QSFP28, 100GbE-LR, Single Lambda CWDM; 10km, 4.7dB, SM

10. General notes

Specifications in this two-page summary are condensed from the supplied GLOBALfiber source data sheet. Values and terminology are retained from the source; no external specifications have been substituted.