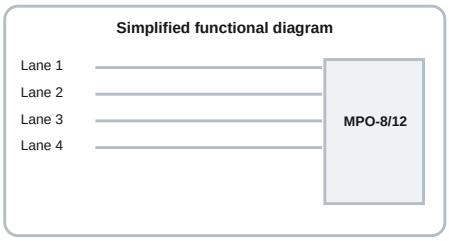
QSFP28-SR4-100G

QSFP28, 100GbE-SR4, 4x25.8 Gbps, 100m

850nm, 2dB, MM, MPO-8/12

1. Product overview

Parallel 100GBASE-SR4 QSFP28 optical transceiver with four 25.78125 Gb/s multimode lanes. The source specification states 70 m on OM3 and 100 m on OM4 fiber with FEC.



2. Key features

- IEEE 802.3bm and SFF-8665 compliant
- 4 parallel 25.78125 Gb/s NRZ lanes
- 850 nm VCSEL technology
- MPO-12 optical interface
- 70 m on OM3 / 100 m on OM4
- 2.5 W maximum power; hot-pluggable

3. Applications

- 100GBASE-SR4 Ethernet links
- Data centers

4. Technical data

Parameter	Value	Parameter	Value
Technology	100G QSFP28 SR4	Media	MMF, MPO-8/12
Reach	70 m OM3 / 100 m OM4	Wavelength	850 nm
Host lanes	4x25.78125 Gb/s	Budget	2 dB headline
Power	2.5 W max	DDM	QSFP28 management

5. Recommended operating conditions

Parameter	Value
Case temperature	0 to +70 °C
Supply voltage	3.14 to 3.46 V
Power consumption	2.5 W max
Signaling rate / lane	25.78125 Gb/s

QSFP28-SR4-100G

6. Optical characteristics

Parameter	Specification
Signaling Rate, each lane	25.78125±100 ppm Gbps
Center Wavelength Range	840 850 860 nm
Modulation Format NRZ	
Average launch Power per lane	-8.4 2.4 dBm
RMS spectral width	0.6 nm
Optical Modulation Amplitude , each lane	-6.4 3.0 dBm
Average Launch Power per Lane @ TX Off State	-30.0 dBm
Table	2. Operating Conditions
TRANSMITTER OPTICAL SPECIFICATIONS	
Table	3- Transmitter Optical Specifications
Launch Power in OMA minus TDEC, each Lane	-7.3 dBm
Transmitter and Dispersion Eye Closure, each Lane	4.3 dB
Extinction Ratio	2.0 dB
Optical Return Loss Tolerance	12 dB
Transmitter Eye mask definition {X1, X2, X3, Y1,Y2,Y3} {	0.3,0.38,0.45,0.35,0.41,0.5}
RECEIVER OPTICAL SPECIFICATIONS	

Parameter	Specification
Table	4- Receiver Optical Specifications
Lane Wavelength Range	840 850 860 nm
Damage Threshold	3.4 dBm
Average Receive Power, each lane	-10.3 2.4 dBm
Receiver Power. each lane (OMA)	3.0 dBm
Receiver Reflectance	-12.0 dB
Stressed Receiver Sensitivity (OMA), each lane	-5.2 dBm
Stressed Conditions for Stress Receiver Sensitivity	
Stressed Eye Closure	4.3 dB
Stressed Eye J2 Jitter	0.39 UI
Stressed Eye J4 Jitter	0.53 UI
OMA of each aggressor lane	3 dBm
Stressed Receiver Eye Mask Definition {X1, X2, X3, Y1, Y2, Y3} (	0.28,0.5,0.5,0.33,0.33,0.4}
RX_LOS_Assert Min/Max	-30.0 dBm
RX_LOS_De-Assert Min/Max	-12.0 dBm
RX_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-SR4	QSFP28, 100GbE-SR4, 4x25.8 Gbps, 100m; 850nm, 2dB, MM, MPO-8/12

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.

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