

QSFP 100G SR4 850nm QSFP28+

100G SR4 850nm 100Mtr QSFP28+

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Variants

100Mtr

Details

General Description:

This product is a parallel 100 GB/s Quad Small Form-factor Pluggable (QSFP28) optical module. It provides increased port density and total system cost savings. An optical fiber ribbon cable with an MTP/MPO connector can be plugged into the QSFP28 module. The cable usually cannot be twisted for proper channel-to-channel alignment. Electrical connection is achieved through an MSA-compliant 38-pin edge-type connector. The module operates on a single +3.3V power supply. LVCMOS/LVTTL global control signals, such as Module Present, Reset, Interrupt, and Low Power Mode, are available with the modules. A 2-wireserial interface is available to send and receive more complex control signals and to receive digital diagnostic information. Individual channels can be addressed and unused channels can be shut down for maximum design flexibility.

Features:

- Hot-pluggable QSFP28 form factor
- Supports 103.1 GB/s aggregate bit rate
- 4x25G electrical interface
- Compliant to IEEE 802.3bm 100GBASE-SR4
- MTP/MPO optical connector
- Up to 100 m OM4 MMF transmission
- Digital diagnostic SFF-8636 compliant
- RoHS-6-compliant and lead-free
- Compliant with QSFP28 MSA
- Single +3.3V power supply
- Maximum power consumption: 2.0W

Case operating temperature: Commercial (exact temperature range not provided)

Applications:

Data Center

Fiber channel

Ethernet switches and router applications

Electrical and optical characteristics:

Parameter	Symbol	Min.	Typ.	Max	Unit	Notes
Power Consumption	P		2.0		W	
Supply Current	I _{cc}		600		mA	
Transmitter Single-ended Input Voltage Tolerance	V _{cc}	-0.3		4.0	V	
Differential Input Voltage Swing	V _{in,pp}	180		1000	mV _{pp}	
Differential Input Impedance	Z _{in}	90	100	110	Ohm	1
Transmit Disable Assert Time			10		us	
Transmit Disable Voltage	V _{dis}	V _{cc} -1.3		V _{cc}	V	
Transmit Enable Voltage	V _{en}	V _{ee}	V _{ee} +0.8		V	2
Transmitter Center Wavelength	λ _C	840	850	860	nm	
Optical Spectral Width	Δλ		0.6		nm	
Average Launch Power each lane	P _{AVG}	-8.4	2.4		dBm	
Optical Extinction Ratio	ER		2		dB	
Transmitter and Dispersion Penalty	TDP		4.3		dB	
Transmitter OFF Output Power	P _{off}		-30		dBm	

Parameter	Symbol	Min.	Typ.	Max	Unit	Notes
Transmitter Eye Mask Compliance						Compliant with IEEE802.3ae
Receiver Center Wavelength	λ_C	840	860		nm	
Receiver Differential Output Voltage Swing	V _{out,pp}	300		850	mV _{pp}	
Differential Output Impedance	Z _{out}	90	100	110	Ohm	3
Data output rise/fall time	T _r /T _f		28		ps	4
LOS Assert Voltage	V _{losH}	V _{cc} -1.3		V _{cc}	V	5
LOS De-assert Voltage	V _{losL}	V _{ee}	V _{ee} +0.8		V	5
Rx Sensitivity per lane	Sen.	-10.3			dBm	1
Input Saturation Power (overload)	P _{sat}		2.4		dBm	
LOS Assert	LOSA		-26		dBm	
LOS De-assert	LOSD		-12		dBm	
LOS Hysteresis	LOSH		0.5		dB	

Here are some related SFP links below:

[SFP 100G LR4 10km QSFP28+:](#)

[SFP 100G BIDI QSFP28 LR1-10Km:](#)

[SFP 100G BIDI QSFP28 LR1-20Km:](#)