

# 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-wire serial 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	Icc		600		mA	
Transmitter Single-ended Input Voltage Tolerance	Vcc	-0.3		4.0	V	
Differential Input Voltage Swing	Vin,pp	180		1000	mVpp	
Differential Input Impedance	Zin	90	100	110	Ohm	1
Transmit Disable Assert Time			10		us	
Transmit Disable Voltage	Vdis	Vcc-1.3		Vcc	V	
Transmit Enable Voltage	Ven	Vee	Vee+0.8		V	2
Transmitter Center Wavelength	?C	840	850	860	nm	
Optical Spectral Width	??		0.6		nm	
Average Launch Power each lane	PAVG	-8.4	2.4		dBm	
Optical Extinction Ratio	ER		2		dB	
Transmitter and Dispersion Penalty	TDP		4.3		dB	
Transmitter OFF Output Power	Poff		-30		dBm	

Parameter	Symbol	Min.	Typ.	Max	Unit	Notes
Transmitter Eye Mask Compliance						Compliant with IEEE802.3ae
Receiver Center Wavelength	?C	840	860		nm	
Receiver Differential Output Voltage Swing	Vout,pp	300		850	mVpp	
Differential Output Impedance	Zout	90	100	110	Ohm	3
Data output rise/fall time	Tr/Tf		28		ps	4
LOS Assert Voltage	VlosH	Vcc-1.3		Vcc	V	5
LOS De-assert Voltage	VlosL	Vee	Vee+0.8		V	5
Rx Sensitivity per lane	Sen.	-10.3			dBm	1
Input Saturation Power (overload)	Psat		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:\*\*](#)