

Key Features

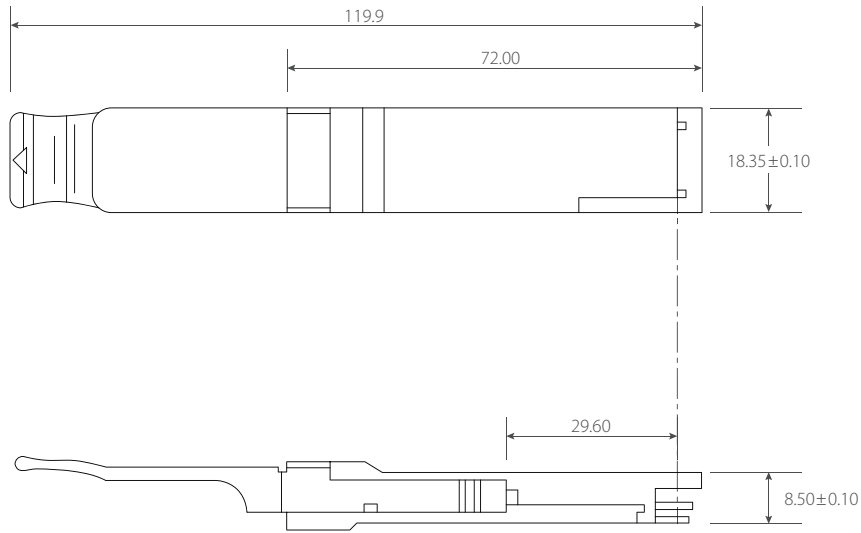
- Hot pluggable electrical interface QSFP28 MSA form factor
- QSFP footprint (Quad small form factor pluggable)
- Low power dissipation < 4.5W
- 0°C to 70°C operating case temperature
- Single 3.3V power supply
- 4x25Gb/s transmitter
- 4x25G retimed electrical interface
- Duplex LC receptacles
- I2C management interface
- Supports 103.1Gbps aggregate bit rate
- Compliant to IEEE 802.3ba 100GBASE-LR4
- RoHS6 compliant
- Up to 10 km reach for G.652 SMF
- Transmitter: cooled 4x25 Gbps LAN WDM DFB TOSA (1295.56, 1300.05, 1304.58, 1309.14nm)

Applications

- 100GBASE-LR4 Ethernet links
- Data Center interconnects
- Client-side 100G telecom connections



Dimensions



Unit: mm

Absolute Maximum Ratings

	Symbol	Min.	Max.
Power Supply Voltage	Vcc	-0.5V	3.6V
Storage Temperature	Tst	-20°C	85°C
Relative Humidity	RH	5%	85%

Operating Conditions

	Symbol	Min.	Typ.	Max.
Power Supply Voltage	Vcc	3.13V	3.3V	3.46V
Operating Case Temperature	Tca	0°C	-	70°C
Module Power Dissipation	P	-	-	4W

Electrical Specifications

	Symbol	Min.	Typ.	Max.
Operating Data Rate/Lane	DR		25.78125Gbps	
LP Mode/Reset/ModselL	VIL	0.3V	-	0.8V
LP Mode/Reset/ModselL	VIH	2V	-	Vcc+0.3V
ModPrsL/IntL	VOL	0V	-	0.4V
ModPrsL/IntL	VOH	Vcc-0.5V	-	Vcc+0.3V

Optical Specifications – Transmitter	Symbol	Min.	Typ.	Max.
Operating Data Rate	DR		25.78125	
Total Average Launch Power	Pt	-	-	10.5
Average Output Power/Lane	Po	-4.3dBm	-	+4.5dBm
Disabled Output Optical Power	PO_OFF	-	-	-30
Optical Modulation Amplitude/Lane	Poma	-1.3dBm	-	4.5dBm
Transmitter Dispersion Penalty/Lane	TDP	-	-	2.2dBm
Extinction Ratio	ER	4dB	-	-
Side Mode Suppression	SMSR	30dB	-	-
Output Eye Mask Definition {X1, X2, X3; Y1, Y2, Y3}	{0.25,0.4,0.45,0.35,0.28,0.4}			
Transmitter Reflectance	RT	-	-	-12dB
Center Wavelength*	L0	1294.53nm	1295.56nm	1296.59nm
	L1	1299.02nm	1300.05nm	1301.09nm
	L2	1303.54nm	1304.58nm	1305.63nm
	L3	1308.09nm	1309.14nm	1310.19nm

* IEEE 802.3 LWDM 1294-1310nm

Optical Specifications – Receiver	Symbol	Min.	Typ.	Max.
Receiver Saturation (OMA)/Lane	Rmax	2.5dBm	-	-
Damage Threshold/Lane	DTH	3.5dBm	-	-
Average Receiver Sensitivity/Lane	Rsens	-	-	-10.6dBm
Receiver Sensitivity (OMA)/Lane		-	-	-8.6dBm
LOS Assert	LOSA	-24dBm	-	-12.5dBm
LOS De-Assert	LOSD	-	-	-11dBm
LOS Hysteresis		-	1.5dB	-
Stressed Receiver Sensitivity in OMA/Lane		-	-	-6.8dBm
Receiver Reflectance	RR	-	-	-26.0dB

