

BIDI-100G-Q28-SL10A

Optical Transceivers



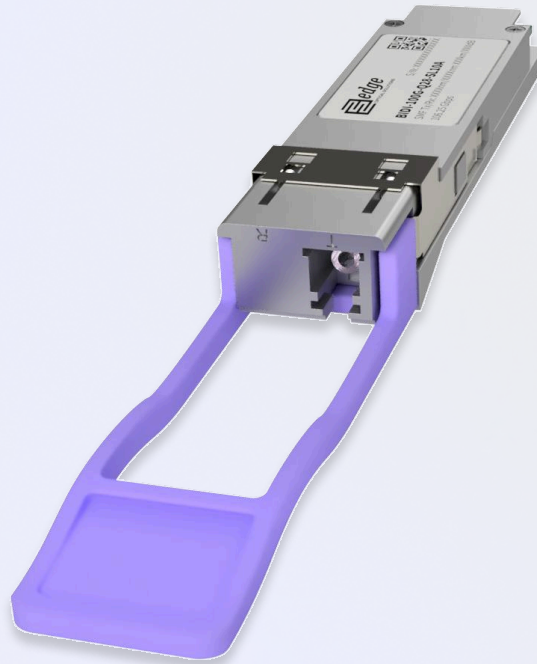
$\lambda = \text{Tx:1271/ Rx:1331 nm}$



Fiber Type: OS2 Fiber



Single LC



OB 5.1dB (OMA)



Max 10 km



FEC



PC ≤ 4.5W

Product description

BIDI-100G-Q28-SL10A is a A side 100G BIDI LR1 Multi-Vendor MSA Compatible Bidirectional QSFP28 (Quad Small Form-Factor Pluggable 28) Transceiver designed for operation over Single-Mode Fiber (SMF). BIDI 100G LR1 QSFP28 has a built in BIDI 100G PAM4 (Pulse Amplitude Modulation 4-level) DSP (Digital Signal Processor) based gearbox used to convert four electrical interface lanes 4x25Gbps (CAUI-4) NRZ to one 50Gbaud (100Gbps) PAM4 signal lane. FEC (Forward Error Correction) block is also integrated in the DSP unit. 100G BIDI LR1 PAM4 A side module has a minimum guaranteed optical budget of 5.1dB (OMA) and 6.1 (AVG), which in most cases is enough to reach 10km over OS2 single-mode fiber. AVG shows the value calculated from Average receive power (min). Average receive power is only informative and not the actual signal strength indicator. OMA shows the value calculated from Receiver Sensitivity. Receiver Sensitivity parameter shows the actual power. A value below this value does not ensure compliance, but value above this ensures signal stability. Module supports DDM/DOM optical diagnostics, operates in the standard 0°-70°C temperature range and has a Single LC optical connector.

Product Specification:

Media Type:	Single-Mode Fiber (SMF)
Connectors:	Single LC
TX Wavelength:	1271 nm
RX Wavelength:	1331 nm
Minimum Optical Budget:	5.1dB (OMA), 6.1 dB (AVG) ¹
Maximum Distance:	10 km
Supported Data Rate:	106.25 Gbps

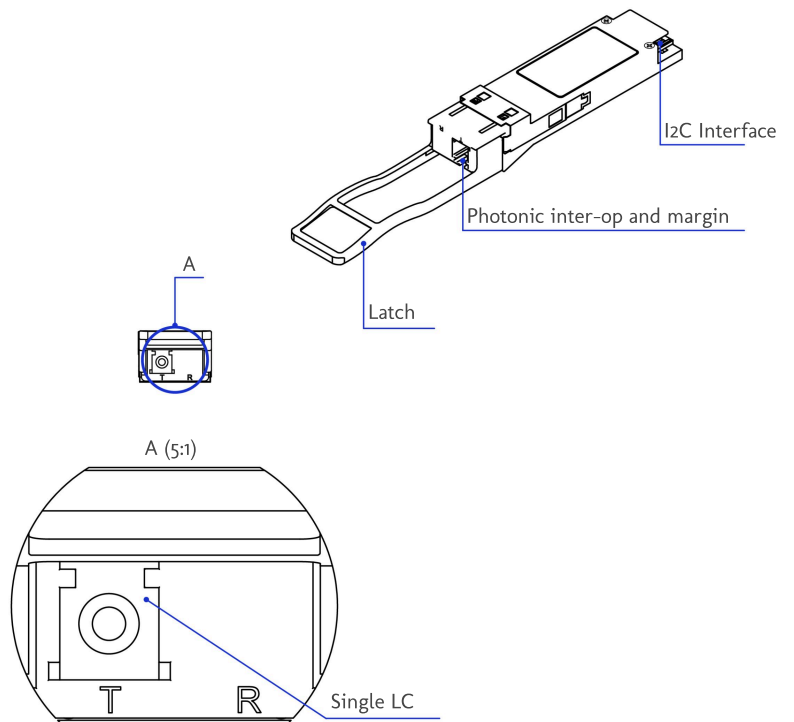
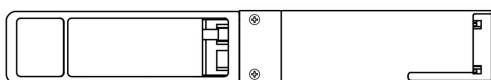
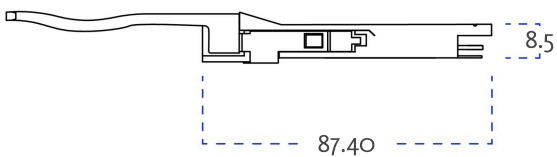
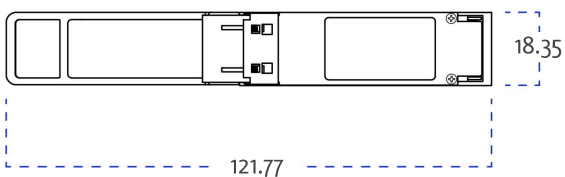
¹ AVG shows the value calculated from Average receive power (min). Average receive power is only informative and not the actual signal strength indicator. OMA shows the value calculated from Receiver Sensitivity. Receiver Sensitivity parameter shows the actual power. A value below this value does not ensure compliance, but value above this ensures signal stability.

Product Specification:

Supported Applications:	100G Ethernet (106.25 Gbps)
DDM/DOM:	Supported
Forward Error Correction (FEC):	Built-in FEC
Transmitter Type:	EML Laser
Tx Wavelength Bandwidth:	13 nm
Average Launch Power (Min) Each Lane:	-1.4 dBm
Average Launch Power (Max) Each Lane:	4.5 dBm
Extinction Ratio (Min):	3.5 dB
Receiver Type:	PIN photodiode
Rx Wavelength Bandwidth:	13 nm
Avg Receiver Sensitivity(Min)Each Lane:	-7.5 dBm
Avg Receiver Sensitivity(Max)Each Lane:	4.5 dBm
Receiver Sensitivity:	-6.5 dBm
Receiver Overload:	5.5 dBm
Temperature Range:	Standard 0°-70°C
Storage Temperature:	-40° to 85°C
Power Consumption:	≤4.5W
Power:	3.3V
Compliance:	QSFP28 MSA, 100G Lambda MSA 100G-LR1, IEEE 802.3cu, CE, RoHS

Mechanical Dimensions

*The dimensions are given in millimetres [mm]



Warranty

EDGE Optic's provides a limited warranty for **sixty (60) months** from Purchaser's receipt of the Equipment represented in this data sheet against defective design or workmanship.



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