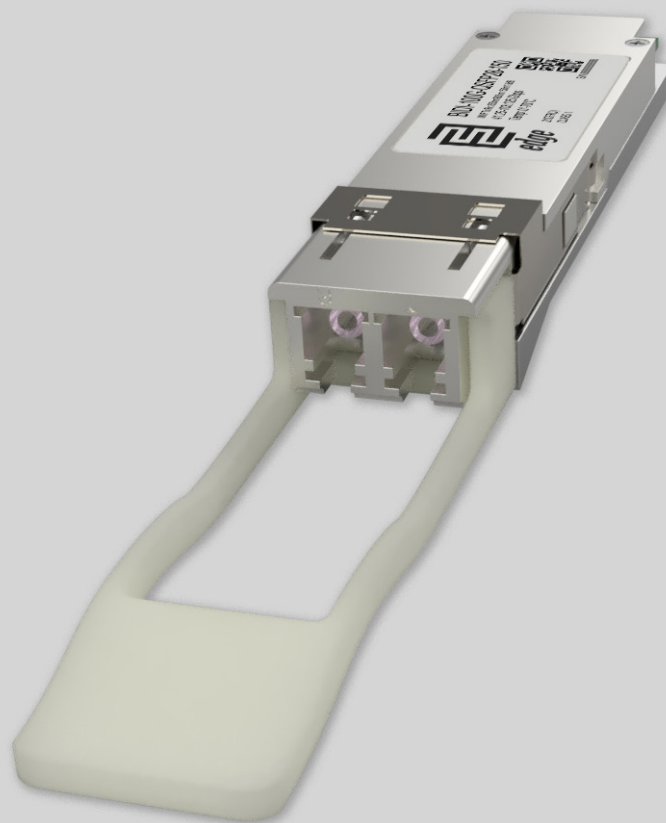


Key Highlights:

- **Type:** 100GBASE SR-BiDi QSFP28 and 40GBASE SR-BiDi QSFP
- **Compatibility:** Multi-Vendor MSA Compatible
- **Tx/Rx Wavelength:** 850 nm. / 900 nm.
- **Laser:** VSCSEL Laser
- **Fiber Type:** Multi-Mode Fiber (MMF)
- **Connectors:** Double LC
- **Optical Budget:** 1.9dB
- **Max. Distance:** 150m(OM5), 100m(OM4), 70m(OM3)
- **Data Rate:** 41.25-103.125 Gbps
- **FEC Forward Error Correction:** Supported
- **DDM/DOM:** Supported
- **Power Consumption:** $\leq 3.5W$
- **Temperature:** Standard 0° - 70°C



Optical Transceiver : BIDI-100G-QSFP28-150

Product Description:

BIDI-100G-QSFP28-150 is Multi-Vendor MSA Compatible 100GBASE SR-BiDi QSFP28 (Quad Small Form-Factor Pluggable 28) Transceiver, operating over pair of multi-mode optical fiber providing two optical communication lanes. Module has minimum guaranteed optical budget of 1.9 dB which in most cases is enough to reach 150 meters distance over OM5 multi-mode optical cable. However, distance is just indicative parameter calculated for comfort of identification. Eventually we calculate distance taking in account minimal optical budget and average attenuation of optical cabling in industry. BIDI-100G-QSFP28-150 uses VSCSEL laser transmitters and PIN Photodiode. Transceiver integrates four electrical data lanes in each direction at 25Gbps (NRZ modulation), which are converted to 2x50Gbps PAM4 modulation lines giving an aggregated bandwidth of 100Gbps per line. Module support DDM/DOM optical diagnostics, which provide diagnostic information about the present operating conditions. Additionally module supports FEC (Forward Error Correction) function which will help receiving side detect and correct bit errors and improve the overall quality of the link. BIDI-100G-QSFP28-150 operates in Standard 0°-70°C temperature range and has double LC connectors.



100GBASE SR-BiDi QSFP28 support 41.25-103.125 Gbps data rate and such applications as 100G Ethernet (103.125Gbps) and 40G Ethernet (41.25Gbps). BIDI-100G-QSFP28-150 optical transceiver is designed for Data Center Applications and provides benefit to migrate from 10G to 100G data rates between switches and servers without the need to replace optical fiber infrastructure in the Datacenter.

Transceiver is CE/RoHS certified and it is Compliant with product safety standards. BIDI-100G-QSFP28-150 Transceiver is fully compliant to QSFP28 Multi Source Agreement (MSA), IEEE 802.3bm. Consequently compliance to above standards guarantees that module is compatible and works with majority of networking equipment, where is not implemented special algorithm for protection against third party modules. However – our technical team has accumulated deep expertise in custom-encoded firmwares for 100GBASE SR-BiDi QSFP28 transceiver in order to make it work in almost any brand equipment. We will be glad to know your requirements.

Product Specification:

General parameter	Value
Media Type:	Multi-Mode Fiber (MMF)
Connectors:	Double LC
TX Wavelength:	Ch1:850nm; Ch2:900nm
RX Wavelength:	Ch1:900nm; Ch2:850nm
Minimum Optical Budget:	1.9dB
Maximum Distance:	150m(OM5) / 100m(OM4) / 70m (OM3)
Supported Data Rate:	41.25-103.125 Gbps
Data Rate:	4x 25Gbps
Modulation:	NRZ
Supported Applications:	100G Ethernet (103.125Gbps), 40G Ethernet (41.25Gbps)
Digital Diagnostic Monitoring (DDM):	Supported
Optical Clock And Data Recovery (CDR):	Supported
Forward Error Correction (FEC):	Supported
Operating Temperature Range:	Standard 0°- 70°C
Storage Temperature Range:	- 40° to 85°C
Relative Humidity (Non-Condensation):	0 to 85%
Power Consumption:	≤ 3.5W



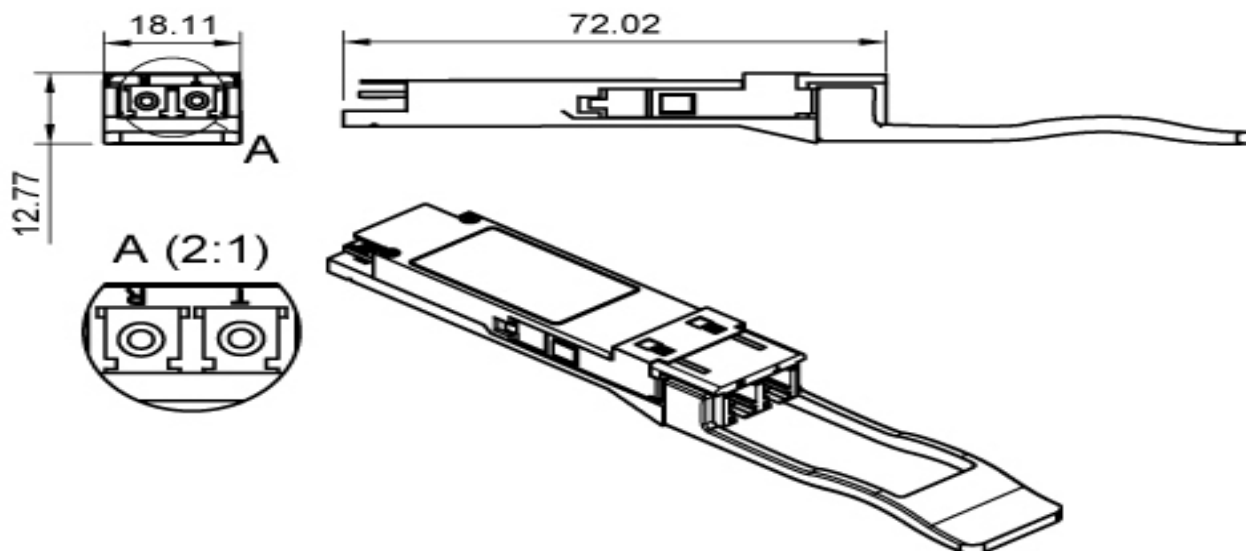
General parameter	Value
Power Supply Voltage Typical:	+ 3.3V
Power Supply Voltage Range:	-3.135 to 3.465V
Chipset:	Avago
Compliance:	QSFP28 MSA, IEEE 802.3bm, 100GBASE SR-BiDi , SFF-8419, SFF-8636, CE, RoHS-6, Class 1 FDA, IEC60825-1 Laser Safety Compliant

Transmitter Parameters:	Value
Transmitter Type:	VSCEL Laser
Tx Wavelength Bandwidth:	36nm (Ch1:832-868nm and Ch2: 882-918nm)
Transmit Power Per Lane (Min)	-6 dBm (100G) / -4 dBm (40G)

Receiver Parameters:	Value
Receiver Type:	PIN Photodiode
Rx Wavelength Bandwidth:	36nm (Ch1:832-868nm and Ch2: 882-918nm)
Average Receiver Sensitivity (Min) Each Lane:	-7.9 dBm (100G) / -6 dBm (40G)
Receiver Overload:	+4 dBm (100G) / +5 dBm (40G)



Mechanical Dimensions:



Compatibility:

EDGE Optical transceivers can be provided with custom-encoded firmware, in order to provide compatibility with more than 100 vendor brands in data and telecom communications industry:

MS - General MSA
AD - ADVA
AE - Advantech
AL - Alcatel (Nokia)
AT - Allied Telesis
AR - Arista
AS - Arris
AV - Avaya
BC - Barracuda
BR - Broadcom
QL - Cavium (Qlogic)
CR - Ceragon
CP - Checkpoint
CH - Chelsio
CN - Ciena
CI - Cisco
LI - Cisco (Linksys)
CE - Comnet
CO - Coriant
DH - Dahua
DC - DCN
DL - Dell & Force10
DK - D-Link

DZ - DZS(Dasan-Zhone)
EI - ECI
EC - EdgeCore
EW - EdgeWare
EL - Eltex
EM - EMC2
EN - Enterasys
ER - Ericsson
EF - EXFO
EX - Extreme Networks
F5 - F5 Networks
FI - Finisar
FO - Fortinet
FU - Fujitsu
H3 - H3C
HI - Hirschmann
HU - Huawei
IB - IBM
IF - Infinera
IN - Intel
IX - Ixia
JU - Juniper Networks
KM - KeyMile

KY - KyLand
LN - Lenovo
ML - Mellanox
ME - Meraki (Cisco)
MT - MikroTik
MO - Moxa
MR - MRV
NC - NEC
NG - Netgear
NK - Nokia
NT - Nortel
NS - NSN
OR - Oracle
PA - Palo Alto Network
PL - Planet
QC - QCT(Quanta)
QN - QNAP
RD - RAD
RW - RadWare
RC - Raisecom
RK - Ruckus
RU - Ruijie Networks
SG - Samsung

SV - Sandvine
SC - Silicom
SF - SolarFlare
SW - Sonicwall
SM - Supermicro
SY - Synology
TC - Telco Systems
TP - TP-LINK
TN - Trendnet
UN - Ubiquiti Networks
VX - VeEx
WG - WatchGuard
WS - Waystream
WT - Westermo
ZT - ZTE
ZX - Zyxel
HP - HP
AG - Avago
OC - Oclaro
EU - Emulex
TM - Transmode
AU - HP Aruba
XX - Other



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. Warranty does not cover damage caused by improper deployment, misuse and accidents.

