

Q100G-BX80-32

QSFP28 100G BiDi | 80 km | Single-fiber SMF

1. Product overview

QSFP28 bidirectional optical transceiver for 100G Ethernet over a single strand of single-mode fiber, with up to 80 km reach and Simplex LC connectivity. Four LAN-WDM wavelengths are used per direction. The source requires a complementary module or interface with inverse TX and RX wavelength sets.

2. Key features

- Up to 80 km over single-mode fiber; single-fiber BiDi
- Hot-pluggable QSFP28 form factor
- EML transmitter; SOA + PIN receiver
- Four LAN-WDM wavelengths per direction
- DDM/DOM supported via I2C
- Single 3.3 V supply

3. Applications

100G Ethernet; data center interconnects; metro and access networks; storage area networks; long-reach single-fiber links.

4. Technical data

Parameter	Specification
Form factor	QSFP28
Data rate	100 Gb/s
Fiber / connector	SMF / Simplex LC
Maximum reach	80 km
Fiber configuration	Single strand; bidirectional TX and RX
Installation	Hot-pluggable / hot-swappable
DDM / DOM	Supported
Wavelength configuration	Four LAN-WDM wavelengths per direction
Operating voltage	3.3 V

5. Recommended operating conditions

Parameter	Specification
Operating temperature	0 to +70°C
Supply voltage	3.3 V

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6. Optical characteristics

Parameter	Specification
TX wavelength 1 (Technical info)	1295.56 nm
TX wavelength 2 (Technical info)	1300.05 nm
TX wavelength 3 (Technical info)	1304.58 nm
TX wavelength 4 (Technical info)	1309.14 nm
RX wavelength 1 (Technical info)	1273.54 nm
RX wavelength 2 (Technical info)	1277.89 nm
RX wavelength 3 (Technical info)	1282.26 nm
RX wavelength 4 (Technical info)	1286.66 nm
Title wavelength description	L4 TX 1310 / L4 RX 1280 nm
Transmitter type	EML
Receiver type	SOA + PIN
Transmit output power	+1.0 to +7.0 dBm
Receiver sensitivity	< -27 dBm
Receiver overload	-7 dBm

7. Digital diagnostics and management

DOM/DDM supported through I2C in accordance with QSFP28 MSA; real-time operating parameters are available. The source names temperature, voltage, TX power and RX power.

8. Safety and regulatory

QSFP28 MSA; 100G bidirectional LAN-WDM; 100GBASE-BX, ZR4 class. Laser safety classification and additional regulatory certifications are not specified.

9. Ordering information

Parameter	Specification
GLOBALfiber product number	Q100G-BX80-32
Product description	QSFP28 100G BiDi, 80 km, single-mode fiber, Simplex LC
Coding options	Check Point, NVIDIA(ETH), Arista, Ciena, Cisco, Dell, Extreme, Fortinet, Generic, Huawei, Infinera, Intel, Juniper, Nokia Networks