

# QSFP28-BX20-LWDM BiDi

## 100G Ethernet QSFP28 for single SM fiber

### DESCRIPTION

The QSFP28 LWDM BiDi transceiver is a 100 Gbit/s pluggable module for data communications such as 100GBASE Ethernet. The transceiver operates with four parallel data streams of 25.78 Gbps in order to provide an aggregated signaling rate of 103.125 Gbps. The four lanes are launched with LWDM center wavelengths of 1273.54nm (L2), 1277.89nm (L3), 1282.26nm (L4) and 1286.66nm (L5) in one direction, and 1295.56nm (L7), 1300.05nm (L8), 1304.58nm (L9) and 1309.14nm (L10) in the other direction, multiplexed onto one single mode fiber. On the receive side, the four lanes of optical data streams are de-multiplexed by the transceiver and retimed.

The module is fully compliant with QSFP28 related MSA's described in SFF-8665 and Digital Diagnostic functions are available through an I2C interface. QSFP28-BX20-LWDM complies with IEEE 802.3 and 4WDM MSA.

### APPLICATIONS

- 100GBASE-4WDM
- Data center

### FEATURES

- Up to 20 km transmission on one singlemode fiber with RS-FEC
- Hot-Pluggable QSFP footprint
- Simplex LC interface for single fiber operation
- QSFP28 MSA compatible
- LWDM wavelengths: L2-L5 & L7-L10
- Digital Diagnostic monitoring interface
- Operating Case Temperature: Standard: 0°C to 70°C
- Power dissipation < 4.5 W



### LASER SAFETY

This transceiver is a Class 1 laser product. It complies with IEC-60825 and FDA 21 CFR 1040.10 and 1040.11. The transceiver must be operated within the specified temperature and voltage limits. The optical ports of the module need to be terminated with an optical connector or a dust plug.

### OPTICAL PARAMETERS

Part no.	Fiber type	Wavelength [nm] TX / RX	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
QSFP28-BX20-LWDML	SM	1273.54-1286.66 / 1295.56-1309.14	-4.5 to 4.5	-14.5 to 4.5	10
QSFP28-BX20-LWDMH	SM	1295.56-1309.14 / 1273.54-1286.66	-4.5 to 4.5	-14.5 to 4.5	10

### ORDERING INFORMATION

Part no.	Description
QSFP28-BX20-LWDML	QSFP28, BiDi, 100GBASE-4WDM, 20 km, LWDM Tx L2-L5/Rx L7-L10, 10dB, SM
QSFP28-BX20-LWDMH	QSFP28, BiDi, 100GBASE-4WDM, 20 km, LWDM Tx L7-L10/Rx L2-L5, 10dB, SM