

# QSFP28 ER4L

## 100G Ethernet ER4L Transceiver

### DESCRIPTION

The QSFP28 ER4L transceiver is a 100 Gbit/s pluggable module for bi-directional serial optical 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 center wavelengths of 1295.56nm, 1300.05nm, 1304.58nm and 1309.14nm and multiplexed onto singlemode 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 standards and Digital Diagnostic functions are available through an I2C interface. QSFP28-ER4L complies with IEEE 802.3 and 100Gbase-ER4L.

### APPLICATIONS

- 100GBASE-ER4L

### FEATURES

- Up to 30 km transmission on singlemode fiber, 40km with FEC
- Hot-Pluggable QSFP28 footprint
- Duplex LC Optical interface
- QSFP28 MSA compatible
- Digital Diagnostics Monitoring interface
- Single 3.3 V power supply
- Power dissipation < 4.5 W
- RoHS-6 compliant (lead-free)
- Case operating temperature: 0°C to 70°C



### 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.	SM/MM Fiber	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
QSFP28-ER4L	SM	1296-1309 nm	-2.5 to 4.5	-20.5 to -7	18

Optical power values are per channel

### ORDERING INFORMATION

Part no.	Description
QSFP28-ER4L	QSFP28, 100GBASE-ER4L, 4x25.8 Gbps, 30km, 1310nm, 18dB, SM