CFP2-100G-LR4

100G Ethernet LR4 Transceiver

DESCRIPTION

The CFP2 LR4 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 to 27.95 Gbps in order to provide an aggregated signaling rate from 103.125 Gbps to 111.81 Gbps. The four lanes are launched with center wavelengths of 1296 nm, 1300 nm, 1305 nm and 1309 nm 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 compliant with IEEE 802.3-2012 Clause 88 100GBASE-LR4 and ITU-T G.959.1-2012-02, and OIF2010.404.08 CEI-28G-VSR electrical specifications. The MDIO management interface complies with IEEE 802.3-2012 Clause 45 standard. The transceiver complies with CFP MSA CFP2 Hardware Specification Rev. 1.0, CFP MSA Management Interface Specification Rev. 2.4, and OIF CEI-28G-VSR standards.

APPLICATIONS

- 100GBASE-LR4

FEATURES

- Up to 10 km transmission on singlemode fiber
- Hot-Pluggable CFP2 footprint
- Duplex LC Optical interface
- CFP2 MSA compatible
- Digital Diagnostics Monitoring interface
- Single 3.3 V power supply
- Power Class 3 (< 6 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]
CFP2-100G-LR4	SM	1296-1309 nm	-4.3 to 4.5	-10.6 to 4.5	6.3

Optical power values are per channel

ORDERING INFORMATION

Part no.	Description
CFP2-100G-LR4	CFP2, 100Gbase-LR4, 4x25.8Gbps, 1310nm, DDM, 10km, 6.3dB, SM