TS-QSFP-LR4 40Gb/s QSFP+ LR4 Optical Transceiver

Product Features

- Compliant with 40G EthernetI EEE802.3ba and 40GBASE-LR4 Standard
- QSFP+ MSA compliant
- Compliant with QDR/DDR Infiniband data rates
- Up to 11.2Gb/s data rate per wavelength
- 4 CWDM lanes MUX/DEMUX design
- 10 to 30km transmission on single mode fiber (SMF)
- Operating case temperature: 0 to 70℃
- Maximum power consumption 2.5W
- LC duplex connector
- RoHS compliant

Applications

- 40GBASE-LR4 Ethernet Links
- InfinibandQDRandDDR interconnects

Client-side 40G Telecom connections

Ordering Information

Part Number	Description
TS-QSFP-LR4	QSFP+ LR4 10km optical transceiver with full real-time digital diagnostic monitoring and pull tab
TS-QSFP-20	QSFP+ LR4 20km optical transceiver with full real-time digital diagnostic monitoring and pull tab
TS-QSFP-30	QSFP+ LR4 30km optical transceiver with full real-time digital diagnostic monitoring and pull tab

Regulatory Compliance

Feature	Standard	Performance
Electromagnetic Interference (EMI)	FCC Part 15 Class B EN 55022:2010, Class B	Compatible with standards
Electromagnetic susceptibility (EMS)	EN 55024:2010	Compatible with standards
Laser Eye Safety	FDA 21CFR 1040.10 and 1040.11 EN60950, EN (IEC) 60825-1,2	Compatible with Class I laser product

Functional Description

This product converts the 4-channel 10Gb/s electrical input data into CWDM optical signals (light), by a driven 4-wavelength Distributed Feedback Laser (DFB) array. The light is combined by the MUX parts as a 40Gb/s data, propagating out of the transmitter module from the SMF. The receiver module accepts the 40Gb/s CWDM optical signals input, and de-multiplexes it into 4 individual 10Gb/s channels with different wavelength. Each wavelength light is collected by a discrete photo diode, and then outputted as electric data after amplified first by a TIA and a post amplifier.

Block Diagram of Transceiver