

100G Optical Module



## NT-QSFP28-100G-2km



NT-QSFP28-100G-2km integrates four transmitters and receivers into one module. The central wavelengths of the 4 CWDM channels are 1271, 1291, 1311 and 1331 nm as members of the CWDM wavelength grid defined in ITU-T G.694.2. In the transmitter side, the four lanes of optical data channels are optically multiplexed by the integrated

optical multiplexer. In the receive side, the four lanes of optical data channels are optically de-multiplexed by the integrated optical de-multiplexer. Each data channels is recovered by a PIN photo-detector and trans-impedance amplifier, retimed. The product is designed with form factor, optical/electrical connection and digital diagnostic interface according to the QSFP28 Multi-Source Agreement (MSA) and compliant to CWDM4 MSA. Host FEC is required to support up to 2km fiber transmission.

### **Product Features**

- ✓ Compliant with CWDM4 MSA
- ✓ Supports 103.1Gb/s aggregate bit rate
- ✓ Integrated 4 CWDM lanes MUX/DEMUX
- ✓ Up to 2km transmission on single mode fiber (SMF) with FEC
- ✓ 4x25G electrical interface (OIF CEI-28G-VSR)
- ✓ Duplex LC receptacles
- ✓ Hot pluggable QSFP28 form factor
- ✓ Maximum power consumption 3.5W
- ✓ Operating temperature range: 0°C~+70°C
- ✓ RoHS Compliant
- ✓ DDMI function available with internally calibrated mode
- ✓ I2C management interface

## Applications

- ✓ Data Center Interconnect
- √ 100G CWDM4 applications with FEC
- ✓ Infiniband QDR and DDR interconnects
- ✓ Enterprise networking

#### Standards

- ✓ Compliant with QSFP28 MSA, CWDM4 MSA
- ✓ Compliant with SFF-8636
- ✓ RoHS Compliant



## NT-QSFP28-100G-10km



NT-QSFP28-100G-10km integrates four transmitter and receivers into one module. In the transmitter side, the four lanes of optical data channels are optically multiplexed by the integrated optical multiplexer. In the receive side, the four lanes of optical data channels are optically de-multiplexed by the integrated optical

de-multiplexer. Each data channels are recovered by a PIN photo-detector and trans-impedance amplifier, retimed. The product is designed with form factor, optical/electrical connection and digital diagnostic interface according to the QSFP28 Multi-Source Agreement (MSA) and compliant to IEEE 802.3bm.

#### Product Features

- ✓ Compliant with 100GBASE-LR4
- ✓ Support from 103.125 Gbps~111.81 Gbps
- ✓ Integrated LAN WDM TOSA/ROSA for up to 10 km reach over SMF
- ✓ LC receptacle optical interface compliant
- ✓ No external reference clock
- ✓ Hot-pluggable
- ✓ Power dissipation < 3.5W
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- ✓ Operating case temperature range:
- ✓ Commercial:0°C~+70°C
- ✓ RoHS Compliant
- ✓ DDMI function available with internally calibrated mode

# **Applications**

- ✓ Data Center
- ✓ 100GBASE-LR4 100G Ethernet
- ✓ OTN OTU4 4I1-9D1F

#### Standards

- ✓ Compliant with IEEE 802.3ba,IEEE802.3bm&100G LR4
- ✓ Compliant with SFF-8636
- ✓ RoHS Compliant