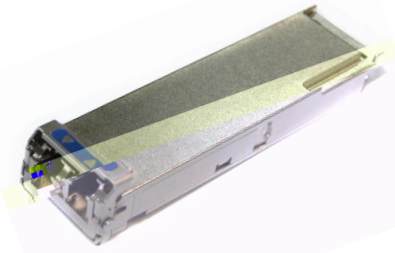


QSFP28 CLR4 Transceiver



to meet the requirements of optical fiber interface for 2km reach over duplex SMF in data centers. It is a cost-effective, low power CWDM optical transceiver with high port densities and compact size. Each transceiver incorporates four direct modulated lasers with driver ICs, four PIN diodes with TIAs, and two Mux/De-Mux blocks in a highly integrated CWDM configuration.

Specifications

| Parameter | Symbol | Unit | Value | | |
|---|--------|--------|------------------|-----|--------|
| | | | Min | Typ | Max |
| Tx | | | | | |
| Center wavelength | | nm | 1264.5 | | 1277.5 |
| | | | 1284.5 | | 1297.5 |
| | | | 1304.5 | | 1317.5 |
| | | | 1324.5 | | 1337.5 |
| Signaling rate, per lane | | Gbit/s | 25.78125± 100ppm | | |
| Operating link reach | | km | 0.002 | | 2 |
| Optical modulation amplitude, per lane ¹ | OMA | dBm | -4 | | 2.5 |
| Optical extinction ratio | ER | dB | 3.5 | | |
| Transmitter reflectance | | dB | | | -12 |
| Relative intensity noise | RIN | dB/Hz | | | -130 |
| Rx (per Lane) | | | | | |
| Center wavelength | | nm | Same as Tx | | |
| Signaling rate, per lane | | Gbit/s | Same as Tx | | |
| Damage threshold | DT | dBm | 3.5 | | |
| Average launch power, per lane | | dBm | -10 | | 2.3 |
| Receive Sensitivity(OMA) per lane ² | | dBm | | | -8.5 |
| LOS De-Assert (OMA) | LOSD | dBm | -30 | | -17 |
| LOS Assert (OMA) | LOSA | dBm | | | -16 |
| Receiver reflectance | | dB | | | -26 |

Note: 1 At TP2. 2 PRBS2³¹-1 and BER<1E-12

Features

- Single channel rate up to 25.8Gbps
- Transmission distance up to 2km
- Compliant with QSFP+ MSA
- 4 CWDM uncooled DML lasers
- Duplex LC connectors
- Single +3.3V power supply
- Low power consumption less than 3.5W
- Operating temperature range: 0 ~ +70
- Compliant with RoHS6

Standards

- Compliant with SFF-8636
- Compliant with IEEE Std 802.3bm
- Compliant with SFF-8665 ,SFF-8661 and SFF-8679

Ordering Information

| Part No | Specification | | | | | | | | |
|-------------|---------------|-------------------|-------|------------|----------|-----------------|------|-------|-----------|
| | Package | Maximum Data rate | Laser | Power | Detector | OMA Sensitivity | Temp | Reach | Other |
| RTXM420-430 | QSFP28 | 4*25.78Gbps | DFB | -4~ 2.5dBm | PIN | -8.5dBm | 0~70 | 2km | DDM, RoHS |