



10Gb/s SFP+ 850nm Transceivers

RTXM228-551

Features

- *Compliant to SFP+ MSA*
- *Fully RoHS Compliant*
- *All metal housing for superior EMI performance*
- *IPF compliant mechanics SFF-8432*
- *Operating data rate 8.5-10.5Gb/s*
- *850nm VCSEL Laser*
- *High sensitivity PIN photodiode and TIA*
- *LC duplex connector*
- *Hot pluggable 20pin connector*
- *Low power consumption <1.0W*
- *0°C to 70°C operating wide temperature range*
- *Single +3.3V±5% power supply*
- *Digital Monitoring SFF-8472 Rev 10 compliant*
- *Real time monitoring of:*
 - *Transmitted optical power*
 - *Received optical power*
 - *Laser bias current*
 - *Temperature*
 - *Supply voltage*

Application

- 8.5/10.5 Gb/s Fiber Channel
- 10GBASE-SR

Standards

- FC-PI-4 Rev 7.00
- 10GFC Rev 4.0
- IEEE 802.3ae 10GBASE-SR
- SFF-8431 Rev 3
- SFF-8472 Rev 10

Descriptions

The RTXM228-551 850nm VCSEL 10Gigabit Transceiver is designed to transmit and receive serial optical data links up from 8.5 Gb/s to 10.51875 data rate over multimode fiber. The Transceiver is compliant with FC-PI-4, 10G FC, IEEE 802.3ae, SFF-8432, and applicable portions of SFF-8431. The transmitter converts serial CML electrical data into serial optical data. An open collector compatible Transmit Disable (Tx_Dis) is provided. When TX_DIS is asserted High, Transmitter is turned off. The receiver converts serial optical data into serial CML electrical data. An open collector compatible Loss of Signal is provided. The RX_LOS signal indicates insufficient optical power for reliable signal reception at the receiver. Digital diagnostics functions are available via a 2-wire serial interface, as specified in SFF-8472.

Block diagram

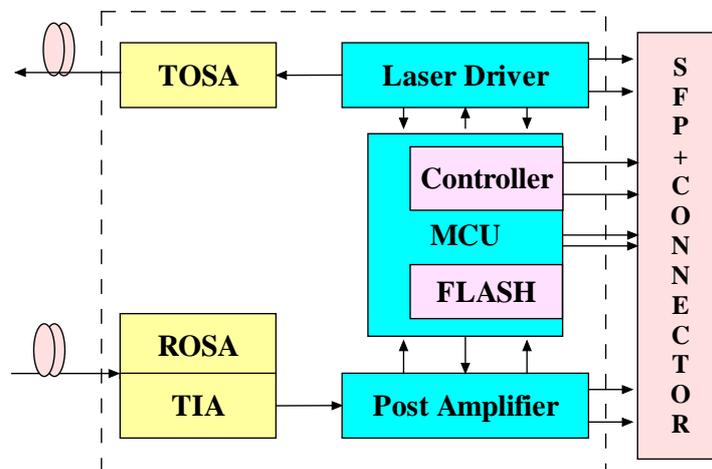


Figure 1 Transceiver functional diagram

Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max
Storage Temperature Range	Ts	°C	-40	85
Relative Humidity	RH	%	0	95
Supply Voltage	V _{CC}	V	-0.3	4.0