

# 10GB ETHERNET SFP+ ULTRA LOW POWER SR OPTICAL TRANSCEIVER

## OVERVIEW

FCI's TRX10GVP2010C2 10Gb/s Ethernet 850nm Multi Mode SFP+ SR Optical Transceiver is designed for datacenter networking links up to 400m and uses half the power of competitive options.

The TRX10GVP2010C2 is compliant with SFP+ MSA specifications (SFF-8431, SFF-8432, SFF-8472), 10 Gigabit Ethernet specifications (10GBASE-SR/SW), and also 10G Fibre Channel (1200-MX-SN-I). It is RoHS 6/6 compliant per Directive 2002/95/EC and laser class 1 safety compliant per IEC/CDRH.

The TRX10GVP2010C2 is the most power efficient way to transmit optical 10Gb Ethernet traffic in the datacenter.



## FEATURES

- Ultra Low Power Consumption at 0.25W Typical
- Supports Commercial Temperature Range
- Ethernet 10GBASE-SR/SW Compliance
- Fibre Channel 1200-MX-SN-I Compliance
- SFF-8431 SFP+ Electrical MSA Compliance
- SFF-8436 SFP+ Mechanical MSA Compliance
- SFF-8472 SFP+ Diagnostic Interface MSA Compliance
- Data rate transparent from 9.95Gb/s to 11.3Gb/s
- Laser Class 1 IEC / CDRH compliant
- ROHS 6/6 Compliance

## BENEFITS

- Lowers energy cost
- Simplifies thermal management
- Operates over temperature range of 0°C to +70°C (case)
- Ethernet Transmission distance up to 400m (multi mode fibre)
- Interoperable with other 10GBASE-SR/SW compatible transceivers
- Fibre Channel Transmission distance up to 400m (multi mode fibre)
- Electrically interoperable with all SFP+ ports
- Mechanically interoperable with all SFP+ ports
- Supports duplex LC optical connectors
- Allows for connection discovery and signal condition monitoring
- Supports Non-standard protocols in this range of data rates
- Eye-safe laser source
- Does not contain hazardous materials

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## TECHNICAL INFORMATION

### MATERIALS

- Mates with:
  - Board Connector: FCI/PN 10122424 series
- Cage:
  - 1x4 cage configuration– FCI P/N10122382, 10126907 & 10126908 series
  - 1x2 cage configuration– FCI P/N 10127103 & 10127105 series
  - 1x4 cage configuration– FCI P/N 10122388, 10126909 & 10126910 series
- LC Interface: FCI/P/N 10120511–series

### ELECTRICAL PERFORMANCES

- Power Supply Voltage: 3.3V
- Data Rate per Lane: 10Gbps
- Power Consumption: 0.25W (typ.)
- Transmitter Type: 850nm VCSEL laser
- Receiver Type: PIN–diode

### ENVIRONMENTAL

- RoHS 6/6 compliant
- Laser Class 1 / CDRH
- Operating Temperature Range: 0°C to 70°C

### SPECIFICATIONS

- Module meets MSA –Small Form Factors
  - SFF–8431 / Electrical
  - SFF–8432 / Mechanical
  - SFF–8472 / Diagnostic
- Product Specification: GS–12–1278

### APPROVALS AND CERTIFICATIONS

- UL: E251142–191
- TUV: 213137–019
- FDA: 0312716

### PACKAGING

- Individual Blister Package

### SUPPORTED STANDARDS

- 10GBASE–SR per IEEE 802.3
- 10GBASE–SW per IEEE 802.3

### TARGET MARKETS/APPLICATIONS

- Communications
  - Switches
- Data
  - Data Center
  - High Performance Computing
- Industrial

## PART NUMBERS



Application	Standard	Part Number
10G Ethernet LAN	IEEE 802.3ae 10GBASE–SR	TRX10GVP2010C2
10G Ethernet WAN	IEEE 802.3ae 10GBASE–SW	TRX10GVP2010C2
10G Fibre Channel	Fibre Channel 1200–MX–SN–I	TRX10GVP2010C2

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