



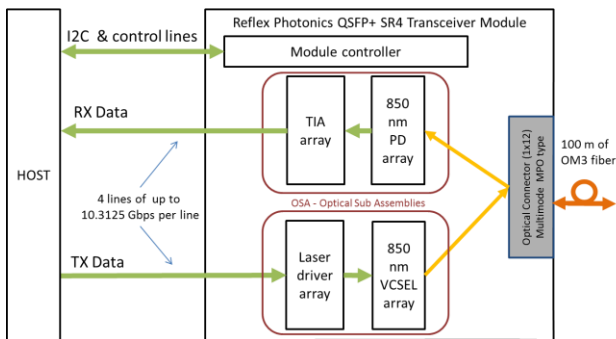
**QS-X04-C01801-02 QSFP+ SR4**

**Product Summary**

The Quad Small Form-Factor Pluggable (QSFP+) transceiver is a highly integrated 4-channel optical module that provides increased port density and lower system cost. The QSFP+ full-duplex optical modules offer 4 independent transmit and 4 receive channels, each capable of up to 10.3125 Gbps operation for an aggregate bandwidth of 41.25 Gbps over 100 meters of optical fiber\*.

The QSFP+ transceiver modules have been designed to meet the harshest external operating conditions including temperature, humidity and EMI interference. The modules offer low BER and many features, accessible via a two-wire serial interface.

\* Actual link distance depends on fiber type and data rate



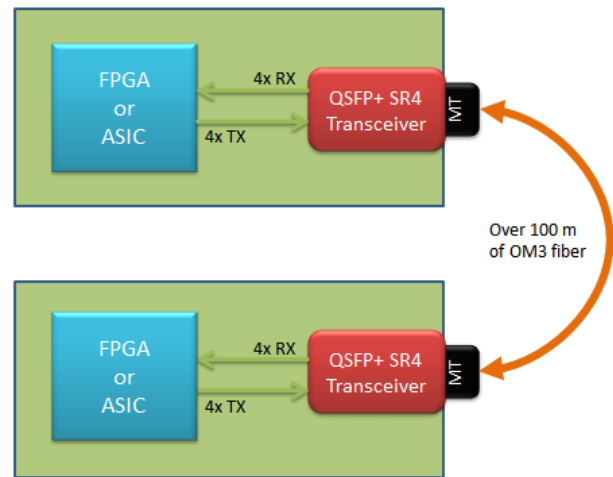
**QSFP+ SR4 Transceiver Block Diagram**

**Specifications and Features Highlights**

- Aggregate Bandwidth of 41.25 Gbps
- Up to 10.3125 Gbps per channel bandwidth
- 4 Independent full-duplex channels
- MTP/MPO optical connector
- Single +3.3V power supply
- CML compatible electrical I/O
- 50µm multi-mode ribbon fibers supported
- Over 100 meter transmission on OM3 MMF
- Operating case temperature: 0 to 70°C
- Digital diagnostic capabilities
- Low power level (max 1.5 W)
- QSFP+ MSA compliant

**Applications**

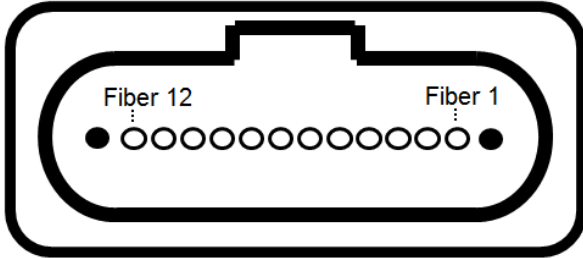
- High-performance computing clusters
- Data center backbone
- Ethernet switches
- High-speed servers
- SAN, Routers, hubs, load balancer



**QSFP+ SR4 Transceiver Application example**

**Optical Interface Lanes**

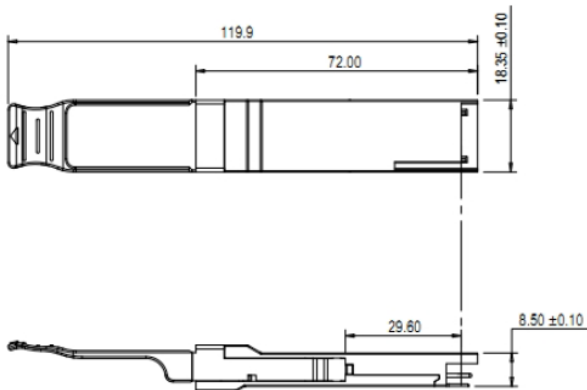
The figure and table below show the orientation of the multi-mode fiber facets of the optical connector and the lane assignment respectively.



Outside view of the QSFP+ SR4 module MPO receptacle

MPO Fiber #	Lane Assignment	MPO Fiber #	Lane Assignment
1	RX0	7	Unused
2	RX1	8	Unused
3	RX2	9	TX3
4	RX3	10	TX2
5	Unused	11	TX1
6	Unused	12	TX0

**Mechanical Considerations**



**Compliance**

Description	Specification
Safety	Laser Class 1M product EN 60950-1/A12: 2011 EN 60825-1: 2007
EMC	EN 55022: 2010 EN:55024:2010
RoHS	2002/95/EC
General information only; details are in data spec	

**Ordering information**

Part Number	Description
QS-X04-C01801-02	40G Ethernet, QSFP+ SR4 Fiber Optic Transceiver Module (10.3 Gbps per channel/RX and TX).

For more information on this or other products:

Contact sales at  
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 or by email at [sales@reflexphotonics.com](mailto:sales@reflexphotonics.com)

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*Note: Document revision history is present in separate document.*