

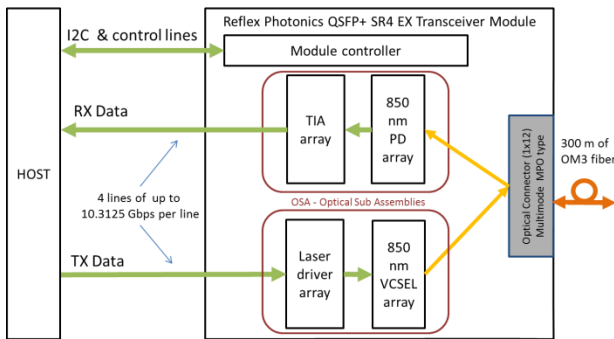
QE-X04-C01801-02 QSFP+ eSR4 EX Range

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 10.3 Gbps operation for an aggregate bandwidth of 41.25 Gbps over 300 meters of optical fiber*.

The QSFP+ transceiver modules offer low BER and many features, accessible via a two-wire serial interface.

* Actual link distance depends on fiber type and data rate



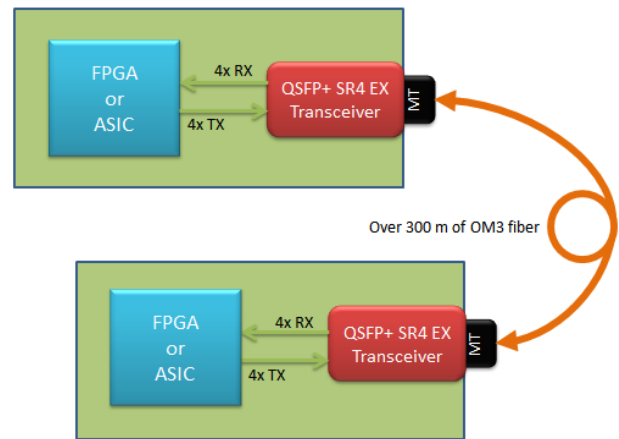
QSFP+ eSR4 EX Range Transceiver Block Diagram

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 300 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

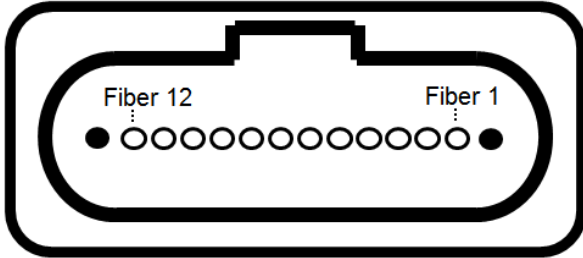
- **High-performance computing clusters**
- **Data center backbone**
- **Ethernet switches**
- **High-speed servers**
- **SAN, Routers, hubs, load balancer**



QSFP+ eSR4 EX Range Transceiver Application example

Optical Interface Lanes

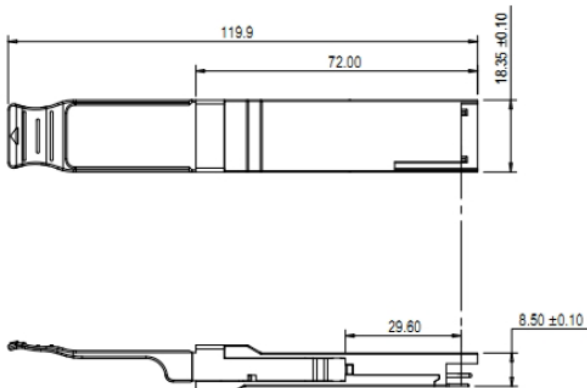
The figure and table below show the orientation of the multi-mode fiber facets of the optical connector and the lane assignment respectively.



Outside view of the QSFP+ eSR4 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 1 product 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
QE-X04-C01801-02	40G Ethernet, QSFP+ eSR4 Extended Distance Range up to 300 m Fiber Optic Transceiver Module (10.3 Gbps per channel/RX and TX).

For more information on this or other products:
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 or by email at sales@reflexphotonics.com

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Note: Document revision history is present in separate document.