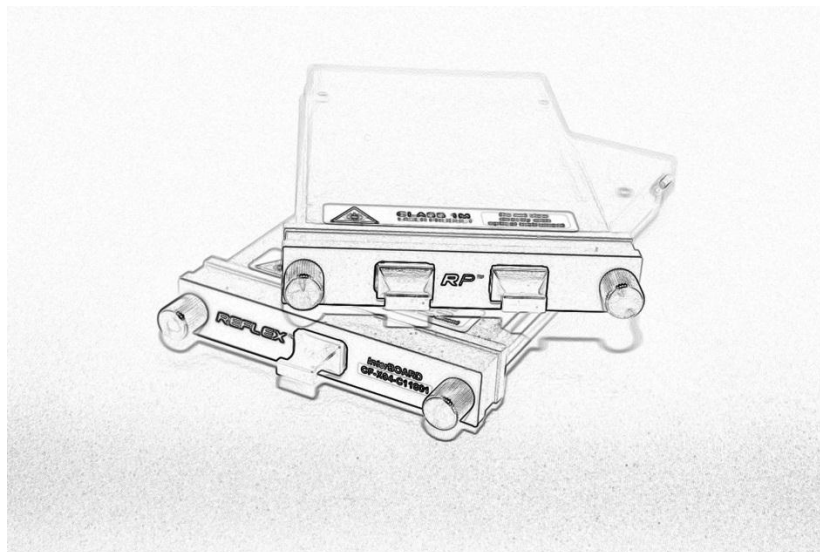


REFLEXPHOTONICS

The Light on Board™ Company

BRIEF

PRODUCT BRIEF - Dual 40G Ethernet CFP Transceiver Module,



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The Reflex Dual 40G Ethernet transceiver, combined with the Reflex 100G Ethernet CFP transceiver, opens up new interconnect possibilities in the data center.



CF-X08-C11801-01

Product Summary

The Reflex Dual 40G CFP transceiver offers 2 independent 40G Ethernet links in one CFP slot. The Reflex CFP transceiver has two MPO ports which connect to industry standard 12-fiber multi-mode fiber cable. Both MPO ports can be connected to equipment with 40GBASE-SR4 QSFP transceivers. All transmit and receive lanes are capable of up to 11.2 Gbps operation for an aggregate bandwidth of >44 Gbps over 100 meters of optical fiber.

The CFP modules have been designed to meet the harshest external operating conditions including temperature, humidity and EMI interference using Reflex Photonics' next generation, LightABLE™ packaging technology.

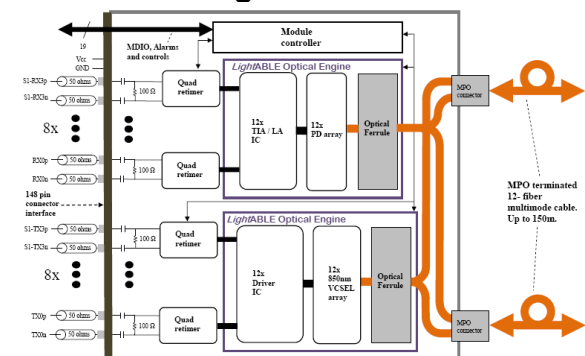
Applications:

- Data center aggregation and core router links
- Test equipment

Specification and Feature Highlights:

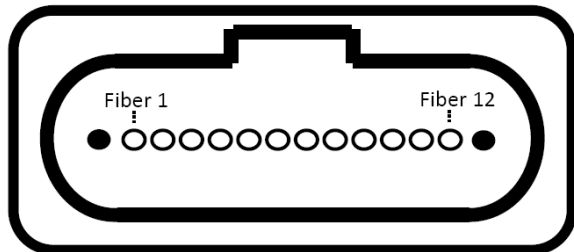
- Compliant to IEEE 802.3ba specification for 40GBASE-SR4 links
- CFP MSA compliant; can be plugged into same slot as 40GBASE-LR4, 100GBASE-SR10, or 100GBASE-LR4 CFP modules
- MDIO digital diagnostic and control; compliant to CFP MSA Management Interface Specification, Draft 1.4.
- 40G QSFP inter-operable
- Aggregate Bandwidth of >40 Gbps per port
- 2 x 4 independent full-duplex channels
- TX and RX CDR retiming
- Up to 11.2 Gbps per channel, supports OTU3
- Independent channel timing
- Next Generation, LightABLE™ VCSEL/PD array optical sub-assembly technology
- Single +3.3V power supply through 148 pin electrical connector
- Power class 1 (<6W typ, <8W max)
- CML compatible electrical I/O
- Capable of over 100m transmission on high bandwidth 50µm multi-mode ribbon cables

Functional Diagram:



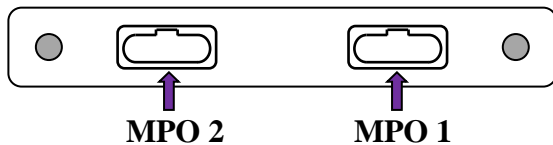
Optical Interface lanes:

The figure and table below show the orientation of the multimode fiber facets of the optical connectors and the lane assignment respectively.



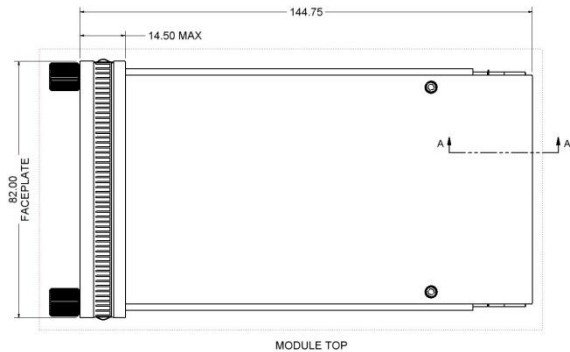
Outside view of one of the two CFP module MPO receptacles

MPO 1 Fiber #	Lane Assignment	MPO 2 Fiber #	Lane Assignment
1	TX0	1	S1-TX0
2	TX1	2	S1-TX1
3	TX2	3	S1-TX2
4	TX3	4	S1-TX3
5	Unused	5	Unused
6	Unused	6	Unused
7	Unused	7	Unused
8	Unused	8	Unused
9	RX3	9	S1-RX3
10	RX2	10	S1-RX2
11	RX1	11	S1-RX1
12	RX0	12	S1-RX0



Front view of CFP showing position of MPO connectors

Mechanical Considerations:



Top view of module

The Reflex Dual 40GBASE-SR4 transceiver is compliant to the CFP MSA mechanical dimensions.

Ordering information:

Part Number	Description
CF-X08-C11801-01	Dual 40G Ethernet, CFP Fiber Optic Transceiver Module (40 Gbps, 10.3 Gbps per channel/RX and TX).
CF-X08-C11901-01	Dual 40G OTU3, CFP Fiber Optic Transceiver Module (40 Gbps, 10.3 and 11.2 Gbps per channel/RX and TX).
CF-X12-C11801-02	100G Ethernet, CFP Fiber Optic Transceiver Module (100 Gbps, 10.3 Gbps per channel/RX and TX).
CF-X12-C11901-02	100G OUT-4, CFP Fiber Optic Transceiver Module (100 Gbps, 10.3 and 11.2 Gbps per channel/RX and TX).

For more information on this or other products: Contact sales at 1-408-501-8886 or by email at sales@reflexphotonics.com

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Document revision history

Rev	Description	Released
1	First Draft	
2		
3	New pictures, new numbering system (TO)	2011 OCT 25