

56Gb/s Active Optical Cables

Overview

Mellanox active optical cables are a cost-effective solution for high bandwidth fabrics, extending the benefits of Mellanox’s high-performance InfiniBand FDR and 40GbE adapters and switches. Mellanox QSFP+ cable is an assembly of 4 full-duplex lanes, where each lane is capable of transmitting data at rates up to 14Gb/s per direction, providing an aggregated rate of 56Gb/s. Mellanox Certified cables are 100% tested on Mellanox equipment to ensure interoperability and the best end to end performance. Mellanox active optical cables are designed to create the smallest environmental footprint, and complying with class-1 QSFP+ power consumption requirement.

Mellanox optical solutions provide short, medium and long range scalability for all topologies, utilizing innovative optical technologies to enable extremely high signal integrity and reliability. Rigorous cable production testing ensures best out-of-the-box installation experience, performance and durability.

Table 1 - Cable Specifications and Ordering Information

Max. Reach [m]	Max Power Consumption [W] ¹	Length Tolerance [m]	Part Number
3	1.5	+0.3	MC2207310-003 or MC2207312-003
5	1.5	+0.5	MC2207310 - 005 or MC2207312-005
10	1.5	+0.5	MC2207310-010 or MC2207312-010
15	1.5	+0.5	MC2207310-015 or MC2207312-003
20	1.5	+0.5	MC2207310-020 or MC2207312-020
30	1.5	+0.5	MC2207310-030 or MC2207312-030
50	1.5	+1.0	MC2207310-050 or MC2207312-050
100	1.5	+1.0	MC2207310-100 or MC2207312-100
200	1.5	+1.0	MC2207312-200
300	1.5	+1.0	MC2207312-300

Table 2 - Operating Conditions

Parameter	Minimum	Typical	Maximum	Units
Supply Voltage				
MC2207310	3.15	3.3	3.45	
MC2207312	3.13	3.3	3.46	
Data Rate per Lane	2.5		14.0	Gb/s
Input Voltage	-0.3		3.6	V
Humidity (RH)	5		85	%
Assembly 90° Bend Radii	30			mm
Bulk Bend Radii				mm
MC2207310	30			
MC2207312	25			
Operating Case Temperature	0°C		70°C	



MC2207312



MC2207310

HIGHLIGHTS

- Low power consumption
- Compliant with SFF-8436
- Compliant with IEEE 802.3ba
- Ultra low crosstalk for improved performance
- Low insertion loss
- BER Better than 10⁻¹⁵
- Serial numbers printed on each end
- RoHS 6 Compliant
- Using Laser Class 1

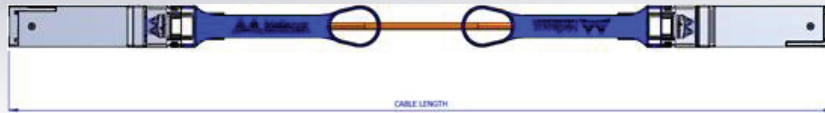


Figure 2. Mechanical Drawings and Information

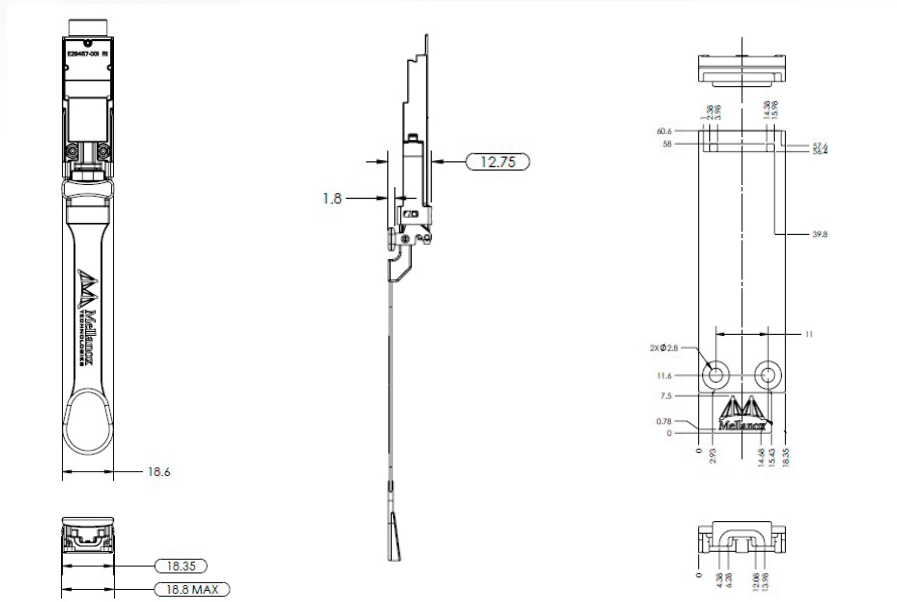


Figure 3 MC2207310 Mechanical Drawings and Information

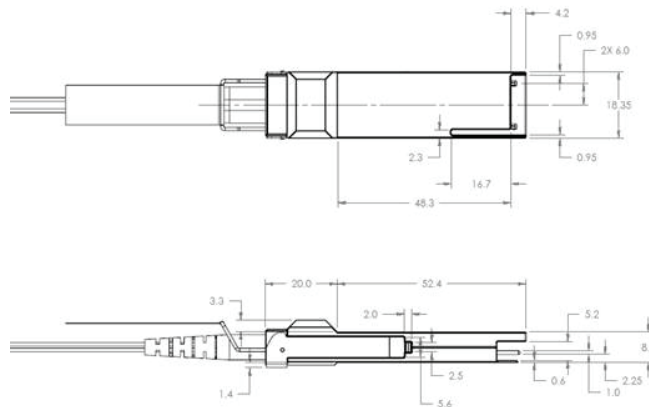


Figure 4 MC227312 Mechanical Drawings and Information

Warranty Information

The Mellanox fiber optic 56G QSFP+ cables include a 1 year limited hardware warranty, which covers parts repair or replacement.

Additional Information

For more information about Mellanox QSFP+ cable solutions, please contact your Mellanox Technologies sales representative or visit: <http://www.mellanox.com=>Products=>Cables=>Cables Overview>



350 Oakmead Parkway, Suite 100, Sunnyvale, CA 94085
 Tel: 408-970-3400 • Fax: 408-970-3403
www.mellanox.com