



40Gb/s QSFP+ SMF Optical Transceiver

MC2210511-LR4

The Mellanox® MC2210511-LR4 is a single mode module with four coarse wavelength division multiplexed (CWDM) channels, pluggable, QSFP+ optical transceiver, designed for use in 40Gb/s applications. This module incorporates CWDM DFB lasers and high sensitivity PIN receivers providing superior performance for 40GbE Ethernet applications up to 10km links and is compliant to optical interface with IEEE 802.3ba 40GBASE-LR4 and to SFF-8685. The transceiver operates over single mode fiber, using a nominal wavelength of 1310nm, and is SFF-8636 compliant.

Rigorous production testing ensures the best out-of-the-box installation experience, performance, and durability.

Table 1 - Absolute Maximum Ratings

Parameter	Minimum	Maximum	Units
Supply voltage	-0.5	3.6	V
Data input voltage	-0.3	V _{cc} +0.3	V _{pp}
Control input voltage	-0.3	V _{cc} +0.3	V
Damage threshold, per lane	3.4	--	dBm
Storage temperature	-40	85	°C

Table 2 - Operational Specifications

Parameter	Minimum	Typical	Maximum	Units
Supply voltage (V _{cc})	3.1	3.3	3.47	V
Power consumption	---	---	Option 1: 2.8 Option 2: 3.5	W
Supply noise rejection	---	---	50	mV _{pp}
Operating case temperature	0	---	70	°C
Operating relative humidity	Option 1: 5 Option 2: 0	---	Option 1: 95 Option 2: 85	%

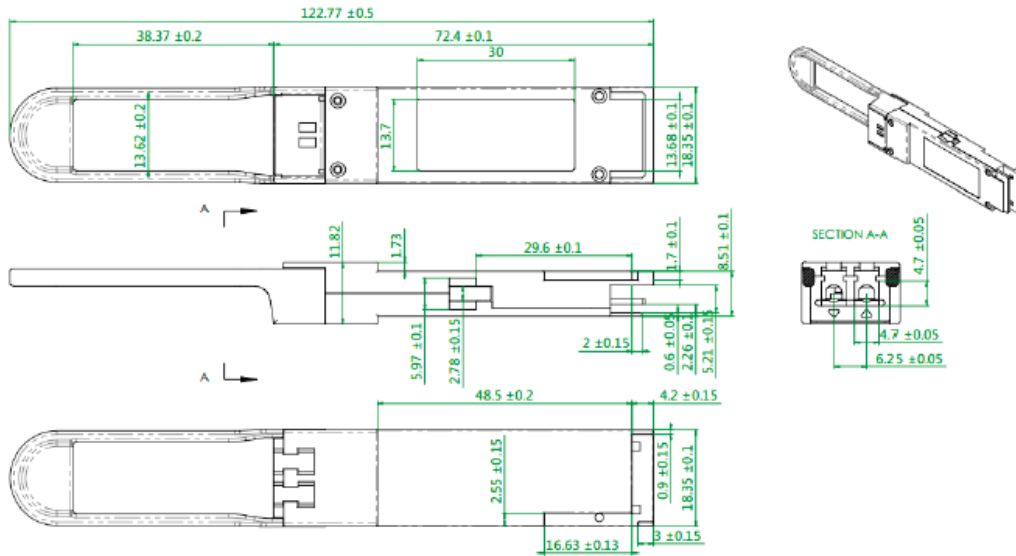
Note. Multiple options are specified to ensure supply chain robustness. The provided option depends on availability and may change from shipment to shipment.



HIGHLIGHTS

- Up to 40Gb/s
- Single 3.3V supply voltage
- Less than 2.8W power consumption
- SFF-8685 compliant
- Operating case temperature of 0-70°C
- 3.3V power supply
- BER better than 1E-15
- Hot pluggable
- Class 1 laser safety
- Maximum link length of 10km on single-mode fiber (SMF)
- CWDM DFB laser and PIN receiver
- Duplex LC receptacles
- Digital diagnostic monitoring (DDM)
- RoHS compliant
- IEEE 802.3ba 40GBASE-LR4 compliant
- SFF-8636 compliant I²C management interface

Mechanical Schematics (Option 1)



Note: Multiple options are specified to ensure supply chain robustness. The provided option depends on availability and may change from shipment to shipment.

Mechanical Schematics (Option 2)

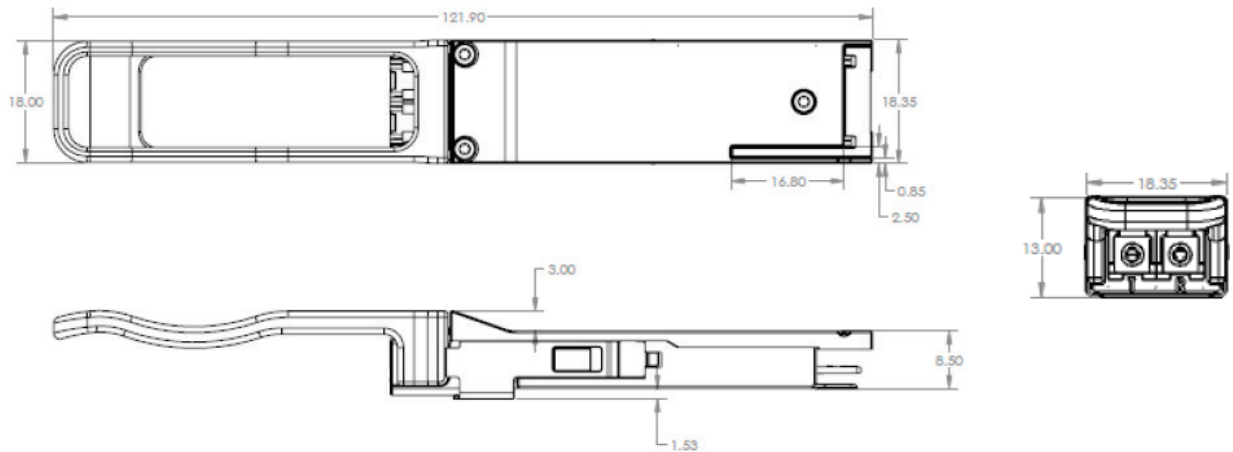


Table 3 - Part Number and Description

OPN	Description
MC2210511-LR4	Mellanox® optical module, 40Gb/s, QSFP, LC-LC, 1310nm, LR4 up to 10km

Warranty Information

Mellanox LinkX optical transceivers include a 1-year limited hardware warranty, which covers parts repair or replacement.