

# 40Gb/s QSFP+ Active Optical Cable



MC2206310-xxx

The Mellanox® QSFP+ Active Optical Cable (AOC) contains four fiber optic transceivers per end, each operating at data rates of up to 10.325Gb/s. This integrated cable solution provides reliable transport for aggregate data rates of up to 40Gb/s Virtual Port Interconnect (VPI). This SFF-8685 compliant cable can be used for either Ethernet or InfiniBand link protocols.

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	3.63	V
Data input voltage	-0.3	V <sub>cc</sub> +0.3	V
Control input voltage	-0.3	V <sub>cc</sub> +0.3	V
Storage temperature	-10	75	°C

Table 2 - Operational Specifications

Parameter	Minimum	Typical	Maximum	Units
Supply voltage (V <sub>cc</sub> )	3.15	3.3	3.45	V
Power consumption	---	0.8	1	W
Supply noise tolerance	66	---	---	mV
Operating case temperature	0	---	70	°C
Operating relative humidity	0	---	85	%

Table 3 - Cable Mechanical Specifications

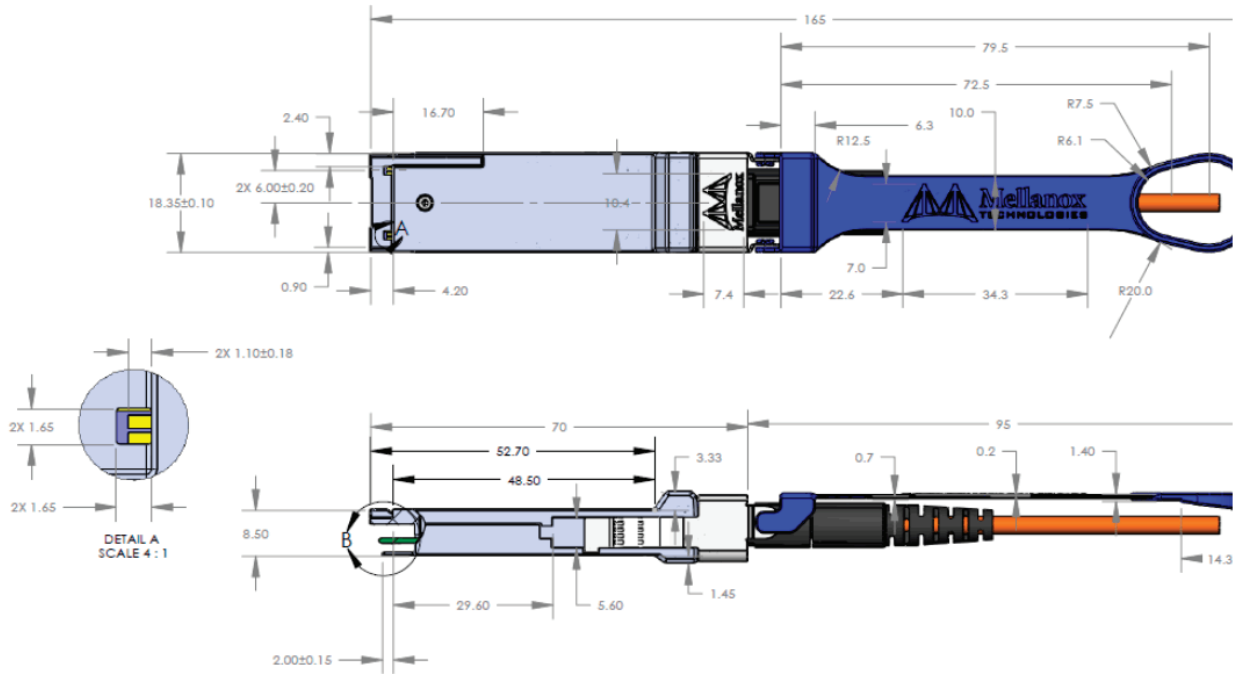
Parameter	Value	Units
Diameter	3.3	mm
Minimum bend radius	25	mm
Faceplate to outer-radius	75	mm
Length tolerance	Length < 5m: +300mm /-0 5m < Length < 50m: +500mm /-0 50m < Length: +1000mm /-0	m
Cable color	Length < 30m: (OM2) Orange Length > 30m: (OM3) Aqua	m

Note 1. See Figure 1 for the cable length definition.

## HIGHLIGHTS

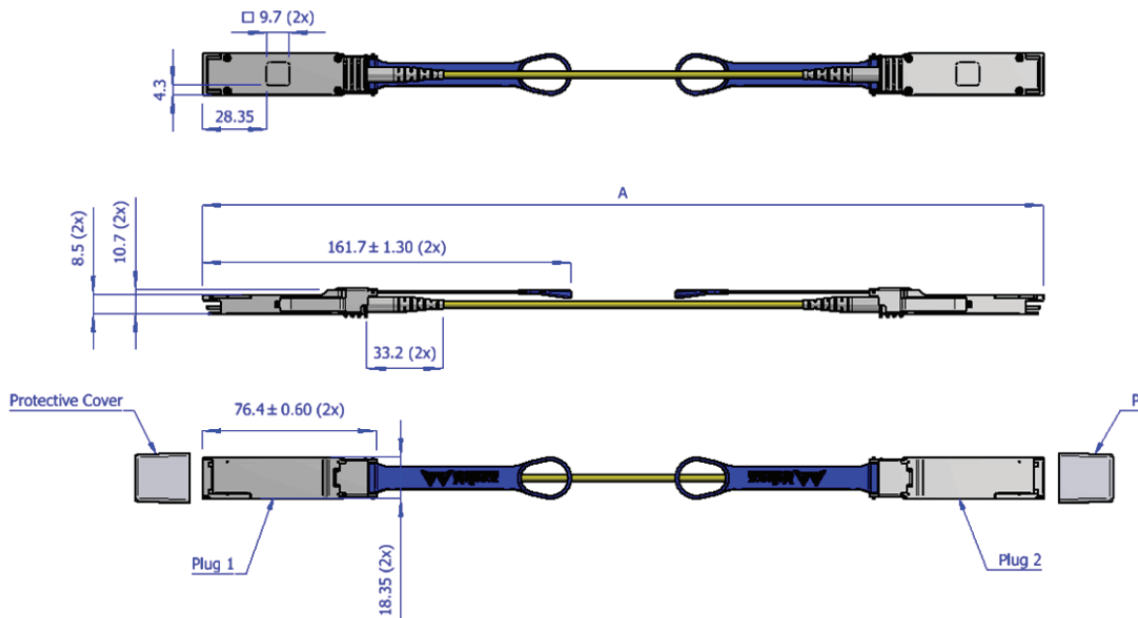
- Up to 40Gb/s data rate
- 0.8W typical power consumption
- SFF-8685 compliant
- Operating case temperature of 0-70°C
- 3.3V power supply
- BER better than 1E-15
- Hot pluggable
- Class 1 laser safety
- Up to 100 meters in length
- Standard multimode fiber
- RoHS compliant
- Plenum rated (OFNP)

## Mechanical Schematics (Option 1)



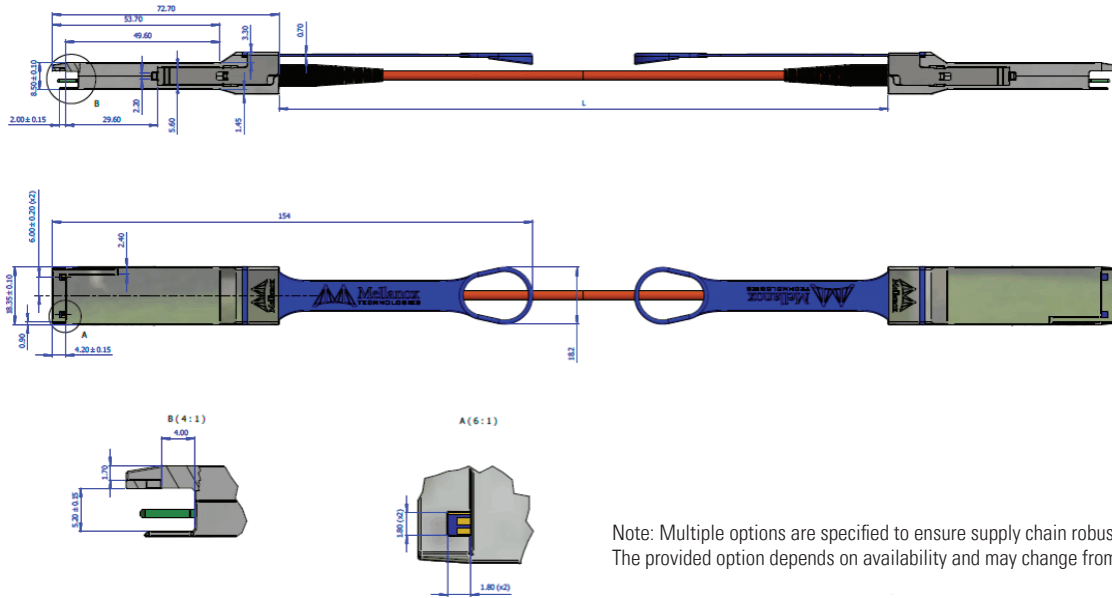
Note: Multiple options are specified to ensure supply chain robustness. The provided option depends on availability and may change from shipment to shipment.

## Mechanical Schematics (Option 2)



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 3)



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

Figure 1. Cable Length

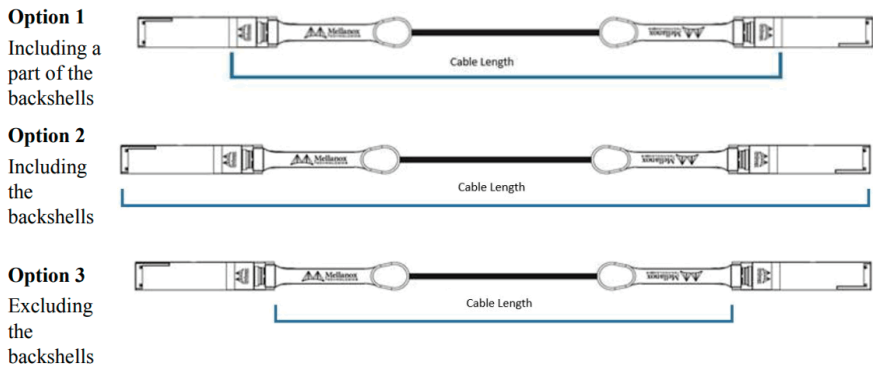


Table 4 - Part Numbers and Descriptions

OPN	Description
MC2206310-003	Mellanox® active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 3m
MC2206310-005	Mellanox® active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 5m
MC2206310-010	Mellanox® active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 10m
MC2206310-015	Mellanox® active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 15m
MC2206310-020	Mellanox® active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 20m
MC2206310-030	Mellanox® active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 30m
MC2206310-050	Mellanox® active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 50m
MC2206310-100	Mellanox® active fiber cable, IB QDR/FDR10, 40Gb/s, QSFP, 100m

## Warranty Information

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



350 Oakmead Parkway, Suite 100, Sunnyvale, CA 94085  
 Tel: 408-970-3400 • Fax: 408-970-3403  
[www.mellanox.com](http://www.mellanox.com)