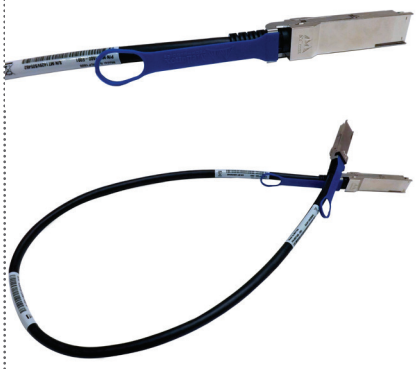
LinkX™ 100Gb/s Passive Copper Cables



Mellanox's LinkX passive copper cables provide robust connections for leading edge 100Gb/s systems. Passive copper cables require no additional power to ensure quality connectivity. The 100Gb/s passive copper cables are fully compliant with SFF-8436 specification and provide connectivity between devices using QSFP28 ports. Mellanox's LinkX 100Gb/s passive copper cables fill the need for short, cost-effective connectivity in the data center.

Mellanox's high-quality solutions provide a power-efficient replacement for active power connectivity such as fiber optic cables for short distances.

Optimizing systems to operate with Mellanox's LinkX 100Gb/s passive copper cables significantly reduces power consumption and EMI emission.

The Low Smoke Zero Halogen (LSZH) design fully complies with the European Union Restriction of Hazardous Substances (RoHS) directive and similar North American safety and environmental standards.

HIGHLIGHTS

- Compliant with SFF-8665
- Compliant with IEEE 802.3bj
- Up to 100Gb/s data rates
- Ultra low crosstalk for improved performance
- Low insertion loss
- BER better than 10^{-15}
- Serial numbers printed on each end
- Tested in an end-to-end system
- RoHS compliant
- Halogen free

Table 1 - Ordering Information

Max Data Rate	Part Number	Description
EDR	MCP1600-E00A	Mellanox® Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 0.5m
	MCP1600-E001	Mellanox® Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 1m
	MCP1600-E01A	Mellanox® Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 1.5m
	MCP1600-E002	Mellanox® Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 2m
	MCP1600-E02A	Mellanox® Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 2.5m
	MCP1600-E003	Mellanox® Passive Copper cable, IB EDR, up to 100Gb/s, QSFP, LSZH, 3m
100GbE	MCP1600-C00A	Mellanox® Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, 0.5m
	MCP1600-C001	Mellanox® Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, 1m
	MCP1600-C01A	Mellanox® Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, 1.5m
	MCP1600-C002	Mellanox® Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, 2m
	MCP1600-C02A	Mellanox® Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, 2.5m
	MCP1600-C003-AM	Mellanox® Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, 3m, 30AWG
	MCP1600-C003	Mellanox® Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, 3m
	MCP1600-C005AM	Mellanox® Passive Copper cable, ETH 100GbE, 100Gb/s, QSFP, PVC, 5m

Table 2 - Operational Specifications

Parameter	Minimum	Typical	Maximum	Units
Supply Voltage (Vcc)	3.135	3.3	3.465	V
Power Consumption	----	---	0.1	W
Operating Case Temperature	0		70	°C
Operating Relative Humidity	5		85	%

Table 3 - Mechanical Specifications

Max Data Rate	AWG	Length	Cable Diameter	Minimum Bend Radius[1]	Length Tolerance
100GbE	30	0.5	6.9±0.3mm (PVC)	Single bend: 34.5mm Repeated bend: 69mm	±25mm
		1			
		1.5			
		2			±50mm
		2.5			
		3			
	28	3	7.4±0.3mm (PVC)	Single bend: 37mm Repeated bend: 74mm	
	26	5	8.4±0.3mm (PVC)	Single bend: 42mm Repeated bend: 84mm	
EDR	30	0.5	7.2±0.3mm (LSZH)	Single bend: 36mm Repeated bend: 72mm	±25mm
		1			
		1.5			
	28	2	7.8±0.3mm (LSZH)	Single bend: 39mm Repeated bend: 78mm	±50mm
	26	2.5	8.8±0.3mm (LSZH)	Single bend: 44mm Repeated bend: 88mm	
		3			

[1] Both the bending radius and the assembly bending radius are for a single time bending.

Figure 1. *Cable Length*

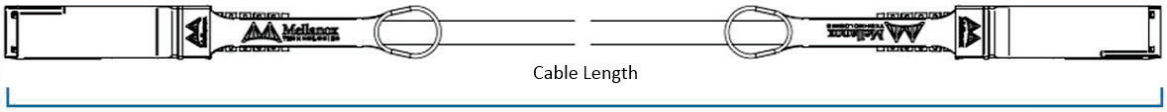
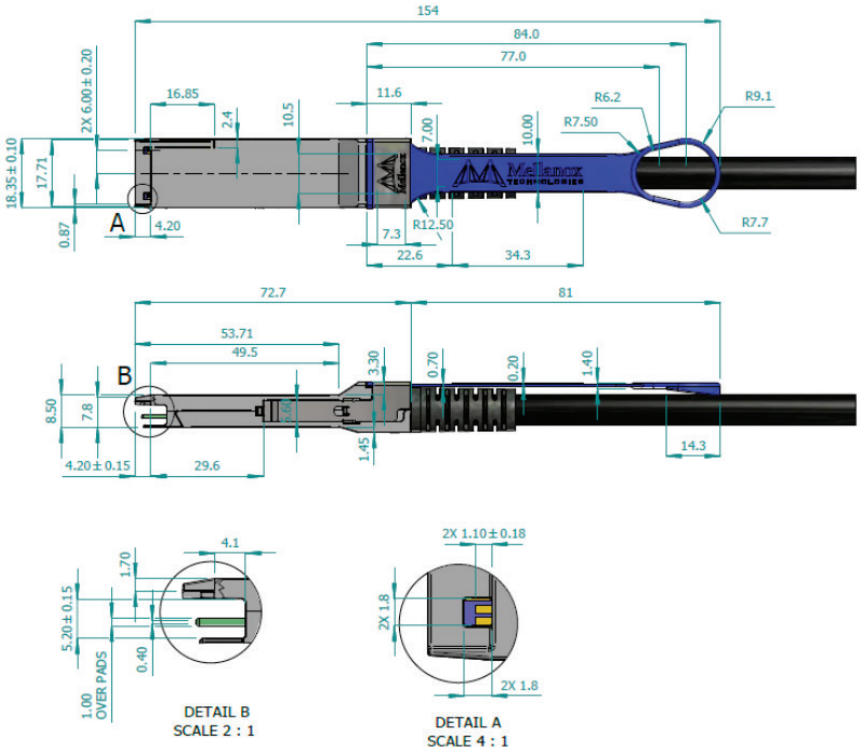


Figure 2. *Mechanical Schematic*



Warranty Information

The Mellanox LinkX 100Gb/s QSFP28 passive copper cables include a 1-year limited hardware warranty, which covers parts repair or replacement.

Additional Information

For more information about Mellanox's LinkX QSFP28 cable solutions, please contact your Mellanox Technologies sales representative or visit: http://www.mellanox.com=>Products=>Cables=>Cables Overview

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