

100Gb/s to 2x50GbE (QSFP28 to 2xQSFP28) Direct Attach Copper Splitter Cable

MCP7H00-Gxxx

Mellanox® MCP7H00 passive, copper, splitter cable is a high speed, cost-effective, 100GbE to 2x50GbE, Ethernet connectivity solution designed to meet the growing needs for higher bandwidth in data centers.

MCP7H00 cables are compliant with SFF-8665 QSFP28 specifications and provide connectivity between systems using a QSFP28 port one side and two QSFP28 ports on the other. MCP7H00 connects the data signals from each of the 2 dual copper pairs on the single QSFP28 (pairs 1&2, 3&4) end to the dual copper pair of each of the QSFP28 (pair 1&2) ends on the multiport side. Each QSFP28 cage comprises an EEPROM providing product information, which can be read by the host system.

Mellanox's unique, quality, passive, copper, cable solutions provide power-efficient connectivity for short distance interconnects. They enable higher port bandwidth, density and configurability at a low cost and reduced power requirement in the data centers.

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

Table 1 - Absolute Maximum Ratings

Parameter	Min	Max	Units
Supply voltage	-0.3	3.6	V
Data input voltage	-0.3	3.6	V
Control input voltage	-0.3	3.6	V

Table 2 - Operational Specifications

Parameter	Min	Typical	Max	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 - Electrical Specifications

Parameter	Min	Typical	Max	Units
Characteristic impedance	90	100	110	Ω
Time delay (informative)	--	--	4.5	ns/m



HIGHLIGHTS

- 100GbE to 2x50GbE data rate
- SFF-8665 compliant QSFP28
- Operating case temperature of 0-70°C
- Single 3.3V supply voltage
- BER better than 1E-15
- Hot pluggable
- RoHS compliant

Table 4 - Cable Mechanical Specifications

OPN	AWG	Length (m)	Single Cable Diameter	Minimum Bend Radius ¹	Length Tolerance
MCP7H00-G001	30	1	5.6±0.2mm (PVC)	Single bend: 28mm Repeated bend: 56mm	±25mm
MCP7H00-G01A		1.5			
MCP7H00-G002		2			±50mm
MCP7H00-G02A		2.5			
MCP7H00-G003	28	3	6.1±0.3mm (PVC)	Single bend: 31mm Repeated bend: 61mm	

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

Note 2. See Figure 1 for the cable length definition.

Table 5 - Part Numbers and Descriptions

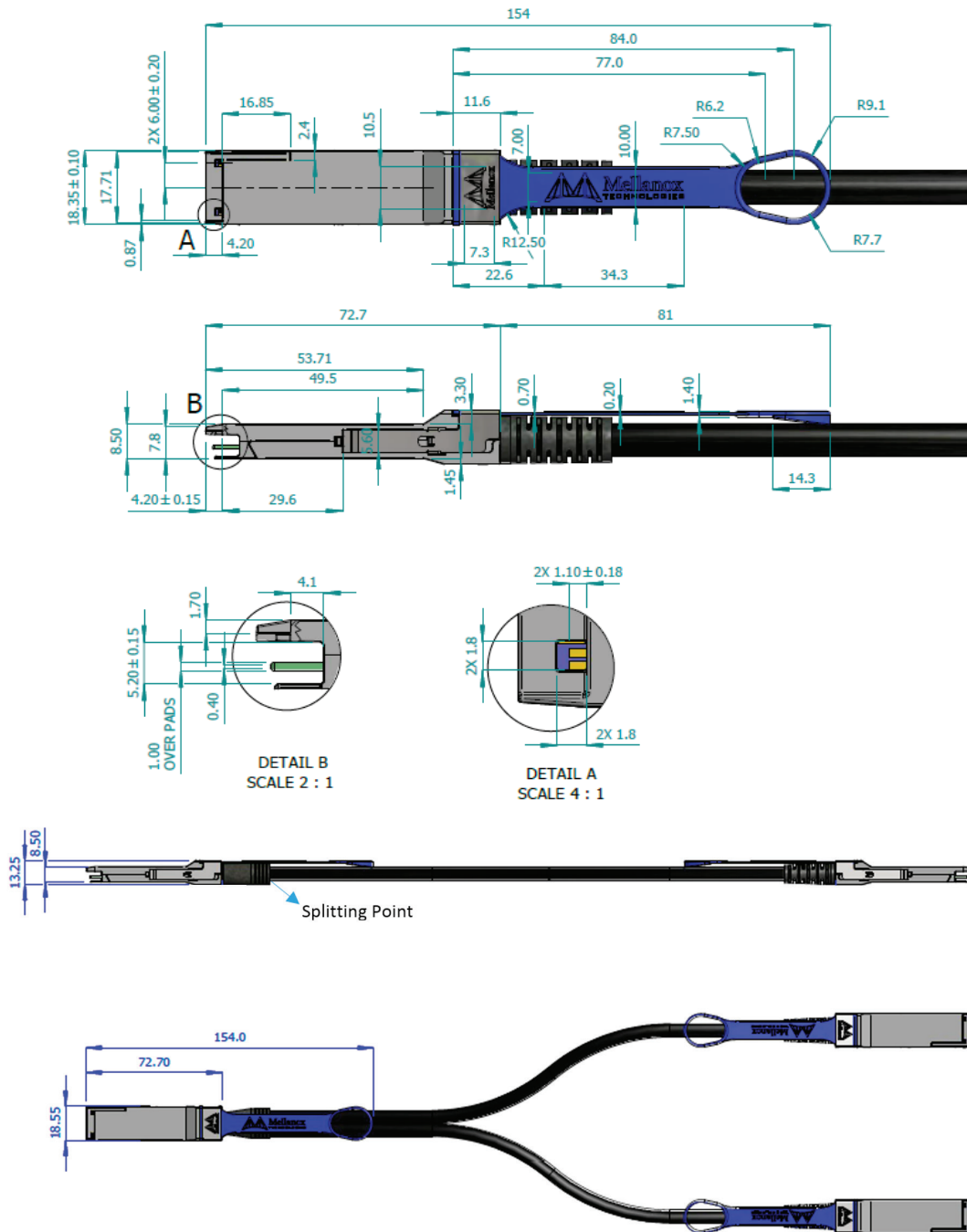
Part Number	Description
MCP7H00-G001	Mellanox® passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 1m, 30AWG
MCP7H00-G01A	Mellanox® passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 1.5m, 30AWG
MCP7H00-G002	Mellanox® passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2m, 30AWG
MCP7H00-G02A	Mellanox® passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 2.5m, 30AWG
MCP7H00-G003	Mellanox® passive copper hybrid cable, ETH 100Gb/s to 2x50Gb/s, QSFP28 to 2xQSFP28, 3m, 28AWG

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

Figure 1. Cable Length Definition



Mechanical Schematics



Warranty Information

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



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