

400GbE to 2x200GbE (QSFP-DD to 2xQSFP56) Direct Attach Copper Splitter Cable

MCP7H60-W0xxRyy

Mellanox® MCP7H60-W0xxRyy DAC splitter cables are a high speed, cost-effective 400GbE QSFP-DD to 2x200GbE QSFP56 Ethernet connectivity solution, designed to meet the growing needs for higher bandwidth in data centers.

MCP7H60-W0xxRyy cables provide connectivity between systems with a QSFP-DD port on one side and up to two different QSFP56 ports on the other side (8x to two 4x). Each of the ports 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	Minimum	Maximum	Units
Supply voltage	-0.3	3.6	V
Data input voltage	-0.3	3.6	V
Control input voltage	-0.3	3.6	V
Storage temperature	-40	85	°C

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 - Electrical Specifications

Parameter	Minimum	Typical	Maximum	Units
Characteristic impedance	90	100	110	Ω
Time propagation delay (informative)	---	---	4.5	ns/m

Note: Minimum insertion loss for up to 1m cable length is 6dB @ 12.89GHz.



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HIGHLIGHTS

- 400GbE to 2x200GbE data rate
- SFF-8636 compliant I²C management interface
- Operating case temperature 0-70°C
- BER (Bit Error Rate) better than 1E-15 with Mellanox end-to-end interconnect
- Hot pluggable
- RoHS compliant
- LSZH (Low Smoke Zero Halogen) jacket
- LF (Lead Free) HF (Halogen Free) PCB

Table 4 - Cable Mechanical Specifications

Ordering Part No.	Length Tolerance	AWG	Single Cable Diameter	Minimum Bend Radius	Cable Color & Pulltab Color
MCP7H60-W001R30	1m ± 0.025mm	30	4.5 ± 0.2mm (LSZH)	Single bend: 21mm Assembly/repeated bend: 45mm	Black
MCP7H60-W01AR30	1.5m ± 0.025mm				
MCP7H60-W002R26	2m ± 0.050mm	26	5.8 +0.3/-0.1 mm	Single bend: 29mm Assembly/repeated bend: 58mm	
MCP7H60-W02AR26	2.5m ± 0.050mm				
MCP7H60-W003R26	3m ± 0.050mm				

Note: The minimum assembly bending radius (close to the connector) is 10x the cable's outer diameter. The repeated bend (far from the connector) is also 10x the cable's outer diameter. The single bend (far from the connector) is 5x the cable's outer diameter.

Figure 1. Assembly Bending Radius

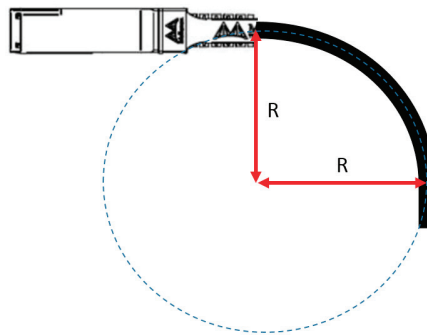
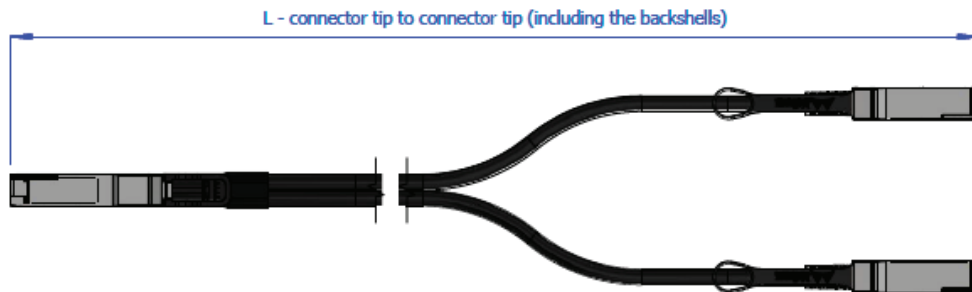


Figure 2. Cable Length



Mechanical Schematics

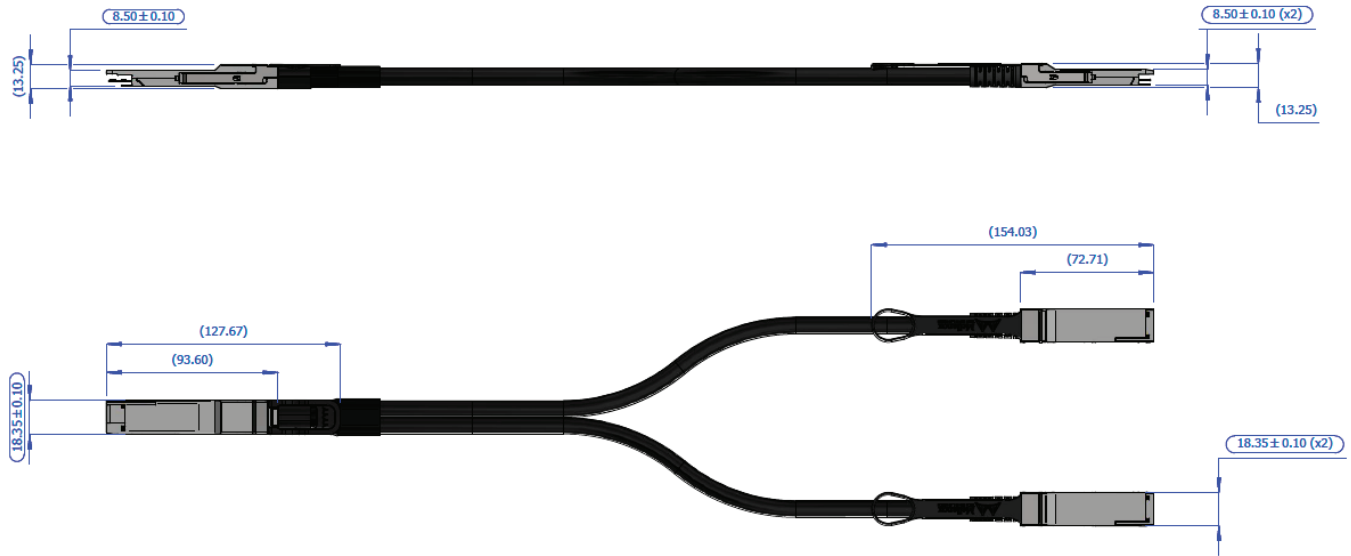


Table 5 - Part Numbers and Descriptions

Part Number	Description
MCP7H60-W001R30	Mellanox® DAC splitter cable, 400GbE, 400Gb/s to 2x200Gb/s, QSFP-DD to 2xQSFP56, 1m, 30AWG
MCP7H60-W01AR30	Mellanox® DAC splitter cable, 400GbE, 400Gb/s to 2x200Gb/s, QSFP-DD to 2xQSFP56, 1.5m, 30AWG
MCP7H60-W002R26	Mellanox® DAC splitter cable, 400GbE, 400Gb/s to 2x200Gb/s, QSFP-DD to 2xQSFP56, 2m, 26AWG
MCP7H60-W02AR26	Mellanox® DAC splitter cable, 400GbE, 400Gb/s to 2x200Gb/s, QSFP-DD to 2xQSFP56, 2.5m, 26AWG
MCP7H60-W003R26	Mellanox® DAC splitter cable, 400GbE, 400Gb/s to 2x200Gb/s, QSFP-DD to 2xQSFP56, 3m, 26AWG

Notes: xx = reach; yy = wire gauge

Raw cables are provided from different sources to ensure supply chain robustness.

Warranty Information

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



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