Hybrid Passive Copper QSFP to SFP+ 10Gb/s Cables Datasheet

Overview

Mellanox's hybrid QSFP to SFP+ passive copper cables are compliant with SFF-8431 and SFF-8436 specifications and provide connectivity between devices using QSFP port on one end to an SFP+ port on the other end. The cables use state-of-the-art signal processing technology to fill the expanding need for cost-effective data center interconnects. Mellanox's unique quality passive copper cable solutions provide a power-efficient replacement for active power connectivity such as fiber optic cables. Optimizing systems to operate with Mellanox's hybrid QSFP to SFP+ passive copper cables significantly reduces power consumption and enlarges the connectivity opportunities of the system. Rigorous cable production testing ensures the best out-of-the-box installation experience, performance and durability.



Table 1 - Cable Specifications and Ordering Information

Maximum Reach @ 10Gb/s (m)	AWG	Part Number
1	30	MCC1V30A-001
2	30	MCC1V30A-002
3	30	MCC1V30A-003
4	24	MCC1V24A-004
5	24	MCC1V24A-005

Table 2 - Absolute Maximum Ratings

Parameter	Range		
Operating Voltage	300V		
Operating Case Temperature	0°C to 70°C		
Storage Ambient Temperature	-10°C to 75°C		

Table 3 - Operating Conditions

Parameter	Minimum	Typical	Maximum	Units
Supply Voltage	3.15	3.3	3.45	V
Data Rate per Lane	1.0		10.5	Gb/s

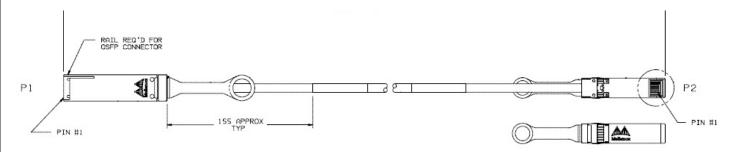
Table 4 - Physical Data

Parameter	Description	30AWG	24AWG	Units
Cable Diameter		4.5	6.5	mm
Bend Radius	Minimum Sustained Bend	25	35	mm

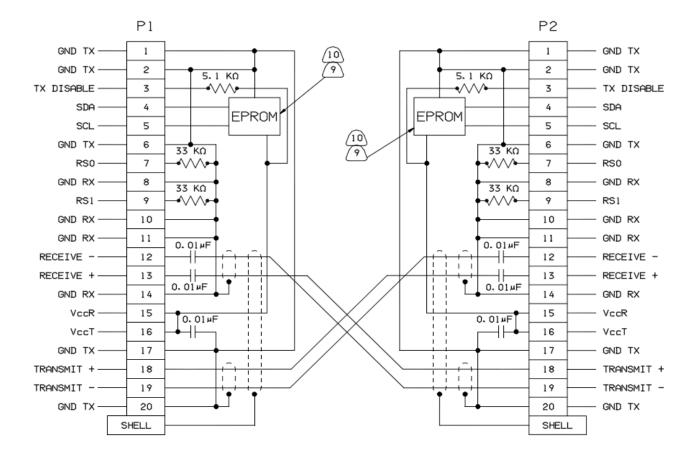
KEY FEATURES

- Compliant to industry standards
 - InfiniBand Architecture specification
 - QSFP MSA SFF-8436
 - SFP+ MSA SFF-8431
- 100% production tested on Mellanox adapters and switches
- Superior signal integrity
- Bit Error Rate (BER) less than 10^{-15}
- $-\operatorname{Low}\operatorname{crosstalk}$
- Low insertion loss
- Matched impedance
- Secure latching mechanism
- Serial numbers printed at each end
- RoHS-5 compliant
- 1-year warranty

Mechanical Information



QSFP/SFP+ Connector Pinout



Warranty Information

The Mellanox hybrid copper cables include a 1-year limited hardware warranty, which covers parts repair or replacement.

Additional Information

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



350 Oakmead Parkway, Sunnyvale, CA 94085 Tel: 408-970-3400 • Fax: 408-970-3403 www.mellanox.com