Mellanox QSFP28 to SFP28 Adapter

MAM1Q00A-QSA28

Mellanox's QSFP28 to SFP28 adapter (QSA28) enables smooth, cost effective connections between a single lane transceiver/cable and a quad-lane port. The QSA28 provides the option to connect an SFP28 transceiver or cable to a QSFP28 port of an Nx100 Gb/s switch or network card. For example an SFP28-based cable can be connected to Mellanox's 100GbE ConnectX-4 adapter and to the 32x100GbE SN2700 Ethernet switch.

The QSA28 conforms to SFF-8402 for the SFP28 side and to SFF-8665 for QSFP28 standards and is thoroughly tested to meet strict quality requirements. The adapter has a QSFP28 form factor with a receptacle for an SFP28 transceiver/AOC/DAC connector. The QSA28 provides a solution for integrating systems using different vendors' equipment, is vendor agnostic and provides a direct path to the SFP unit's memory. The QSA28 interoperates with all major optical modules and direct attached copper cable vendors.

Its design assures minimum loss on the conversion path between the QSFP28 cage and the SFP28 receptacle. The RF (high speed data) channel of the SFP28 receptacle is connected to lane 1 of the QSFP28 connector. The three remaining RF channels on the QSFP28 connector are not connected. The QSA28 is qualified for 10GbE SFP+ and 1GbE SFP transceivers meeting the Small Form Factor Pluggable (SFP) Transceiver Multi-source Agreement (MSA).The QSA28 is a Mellanox registered US patent 7-934-959.

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 - Operation Module Information

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

Table 3 - Electrical Module Specifications

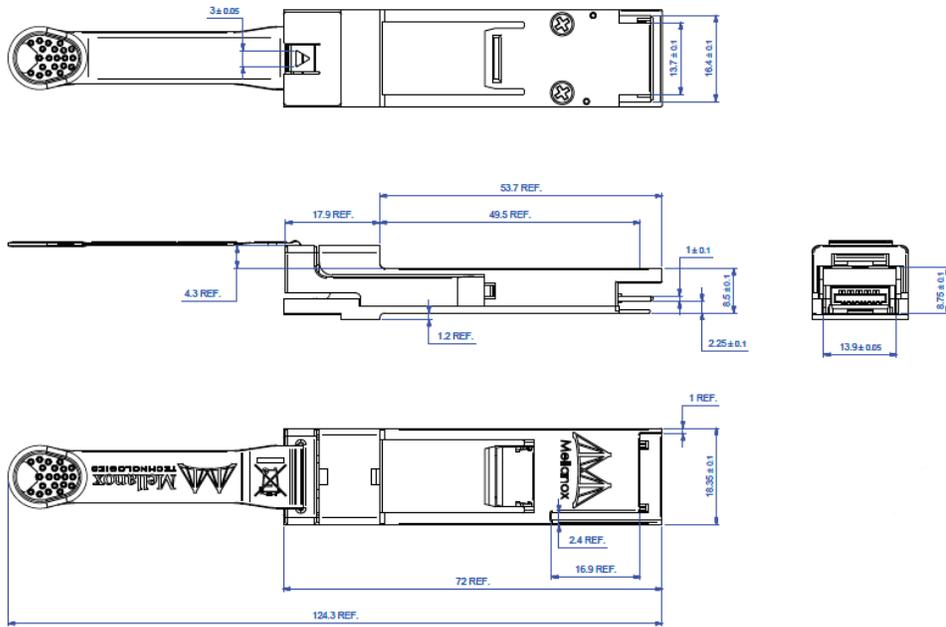| Parameter (per lane)	Minimum	Typical	Maximum	Units
Characteristic Impedance	90	100	110	Ω

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HIGHLIGHTS

– Industry-leading price and performance
– Trouble-free installation and network bring-up
– Compliant to industry standards
  • QSFP28 MSA SFF-8665
  • SFP28 MSA SFF-8402
– Low insertion loss
– Registered US patent 7-934-959
– Matched impedance
– Secure latching mechanism
– Built-in EEPROM for product identification
– RoHS-6 compliant

† For illustration only. Actual products may vary.

Table 4 - Part Numbers and Description

OPN	Description
MAM1Q00A-QSA28	Mellanox® cable module, ETH 25GbE, 100Gb/s to 25Gb/s, QSFP28 to SFP28

Mechanical Schematics

Figure 1. *Module Schematic*

Warranty Information

The Mellanox QSA28 Adapter includes a 1-year limited hardware warranty, which covers parts repair or replacement.

Additional Information

For more information about Mellanox modules please contact your Mellanox Technologies sales representative or visit: www.mellanox.com => Interconnect => Ethernet Products