Uncompromising Integrity

Achieve full performance from your network equipment
Supporting Data Rates up to 56Gb/s

Mellanox cables are a cost-effective solution for connecting high-bandwidth fabrics, extending the benefits of Mellanox’s high-performance InfiniBand and 10/40/56 Gigabit Ethernet adapters and switches throughout the network. In addition to meeting or exceeding IBTA and IEEE standards, Mellanox certified cables are 100% tested on Mellanox equipment to ensure optimal signal integrity and the best end-to-end performance.

With Mellanox cables you will experience trouble-free installation and long-term operation.

COMMITMENT TO QUALITY

Mellanox Technologies’ commitment to quality extends across every employee and into every aspect of our business including semiconductor, system, cable, and software design and manufacturing. The overarching goal is to supply our customers with the best solutions and guarantee their satisfaction.
Mellanox cables are available with a wide range of connector types, complying with the different protocols in the market. CX4, QSFP+ or SFP+ cable solutions provide highest flexibility for network installations.

**VALUE PROPOSITION**

- Maximize performance by leveraging high speed expertise innovative interconnect solutions
- Comprehensive portfolio to address all needs
- Second to none qualification process
- Cluster level testing for best BER 10E-15
- Interoperability testing - Mellanox and competitors’ platforms
- Flexible supply chain to ensure availability and cost
- High volume manufacturing experience
Mellanox Copper Cables
Mellanox passive copper cables provide robust connections and require no power from the attached networking equipment. Mellanox active copper cables are a thinner alternative to the passive cables, and are available in a variety of lengths.

Hybrid Copper Cables
Hybrid cables connect network equipment with different connector types. Hybrid split out cables enable the connection of 40 GbE QSFP ports to multiple 10GbE ports using SFP+ type connector. Hybrid cables also enable Mellanox’s Virtual Protocol Interconnect® (VPI) adapters and 40GbE ports to connect to 10GbE ports with either CX4 or SFP+ connectors.
**Mellanox Optical Cables**
Mellanox optical solutions provide long range scalability for all topologies and utilize innovative optical technologies to enable extremely high signal integrity and reliability. Mellanox QSFP+ Optical modules use MPO-MPO connectors while the SFP+ optical modules support LC-LC fiber connections.

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**Quad to Serial Small Form Factor Pluggable (QSA) Adapter**
The Quad to Single Small Form Factor Pluggable Adapter (QSFP+ to SFP+ adapter or QSA) is the world’s first solution for the QSFP+ to SFP+ conversion challenge. The QSA enables smooth, cost-effective, connections between 40GbE ports using contemporary QSFP+ ports and 1 or 10GbE networks using existing SFP or SFP+ based cabling. Mellanox QSA conforms to the SFF-8431 SFP+ and SFF-8436 QSFP+ connector standards.

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**Mellanox Modules**
Mellanox optical solutions provide short, medium and long range scalability for all topologies, utilizing innovative optical technologies to enable extremely high signal integrity and reliability. Rigorous production testing ensures best out-of-the-box installation experience, performance and durability.

Mellanox QSFP SR4 module uses MTP/MPO connector type to connect an OM3/OM4 fiber cable.

Mellanox QSFP LR4 module uses LC-LC connector type to connect a fiber cable.

Mellanox SFP/ SFP+ optical modules use LC-LC connector type to connect a single mode or multimode fiber cable.
### FEATURE SUMMARY

- Compliant to industry standards
  - InfiniBand Architecture specification
  - IEEE 802.3 10GBASE-CX4
  - IEEE 802.3 10GBASE-SR and LR
  - IEEE 802.3ba 40Gig Ethernet
  - 10GSPF+Cu
  - QSFP+ MSA SFF-8436
  - SFP+ MSA SFF-8431
- 100% production tested on Mellanox adapters and switches
- Superior signal integrity
- Bit Error Rate (BER) better than 10^-15
- Low crosstalk
- Low insertion loss
- Matched impedance
- Secure latching mechanism
- Serial numbers printed at each end
- RoHS-6 compliant
- 1-year warranty

### QSA KEY FEATURES

- Compliant to industry standards
  - QSFP+ MSA SFF-8436
  - SFP+ MSA SFF-8431
- Superior signal integrity
- Low crosstalk
- Low insertion loss
- Matched impedance
- Secure latching mechanism
- RoHS-6 compliant
- 1-year warranty