Mellanox®
TECHNOLOGIES

MTS3600

36-port 20 and 40Gb/s InfiniBand Switch System

MTS3600 switch system provides the highest-performing fabric solution by delivering high-bandwidth and low-latency to Enterprise Data Centers, High-Performance Computing and Embedded environments.

MTS 3600

World Class Density and Scalability

Built with Mellanox's 4th generation InfiniScale® InfiniBand switch device, the MTS3600 provides up to 40Gb/s full bisectional bandwidth per port. This stand-alone switch is an ideal choice for top-of-rack leaf connectivity or for building small to medium sized clusters. The MTS3600 is designed to carry converged LAN and SAN traffic with the combination of assured bandwidth and granular Quality of Service (QoS).

Sustained Network Performance

The MTS3600 enables efficient computing with features such as static routing, adaptive routing, and congestion management. These features ensure the maximum effective fabric bandwidth by eliminating congestion hot spots. Whether used for parallel computation or as a converged fabric, the MTS3600 switches provides the industry's best traffic-carrying capacity.

In situations where switching contention is unavoidable, such as many-to-one traffic patterns, the MTS3600 supports IBTA 1.2 congestion control mechanisms. The switch systems work in conjunction with ConnectX® InfiniBand Adapters family to restrict the traffic causing congestion, ensuring high-bandwidth and low-latency to all other flows.

High Availability

Redundant and hot swappable power supplies and fans provide high availability for both High-Performance Computing and Enterprise Data Center applications. Status LEDs for fans and power supply units are placed on both sides of the system for easy status identification.

Easy Management

The MTS3600 systems are easily managed through any IBTA compliant subnet manager. Port configuration and data paths can be set up automatically or customized to meet the needs of the application. Firmware can be updated in-band for simple network maintenance.

Mellanox Advantage

Mellanox is the leading supplier of industry standard InfiniBand adapters and switch products. Our products have been deployed in clusters scaling to thousands of nodes and are being deployed end-to-end in data centers and Top500 systems around the world.

HIGHLIGHTS

BENEFITS
– Industry-leading switch platform in performance, power, and density
– Wirespeed InfiniBand switch platform up to 40Gb/s per port
– High-bandwidth, low-latency fabric for compute-intensive applications

KEY FEATURES
– 36 QDR (40Gb/s) ports in a 1U switch
– 2.88Tb/s switching capacity
– Adaptive routing
– Congestion control
– Quality of Service enforcement
– Redundant power supplies and fan drawers

MANAGEMENT
– Supports Open SM or third-party subnet managers
– Diagnostic and debug tools

HARDWARE

INFINIBAND SWITCH
– 36 QSFP non blocking ports with aggregate throughput up to 2.88Tb/s
– Port-to-port latency < 100 ns
– IBTA 1.2 compliant
– 9 Virtual lanes: 8 data + 1 management
– Adaptive routing
– Congestion control
– Port mirroring
– 48K entry linear forwarding data base

CONNECTORS AND CABLING
– QSFP connectors
– Passive/Active copper or fiber cables
– Active copper and fiber cables
– Fiber media adapters

INDICATORS
– Per port status LEDs: Link, Activity
– System status LEDs:
  System, fans, power supplies

DIMENSIONS AND WEIGHT
– 1.73H x 17.5W x 23.8D inches
– 22 lbs (1 power supply)
– 24.5 lbs (2 power supplies)

POWER SUPPLY
– Dual redundant slots
– Hot plug operation
– Input range: 90-264VAC
– Frequency: 47-63Hz, single phase AC

MAXIMUM POWER CONSUMPTION
– 316W (MTS3600R-1UNC)
  • *Dissipated power: 190W*
  • *Power through QSFP: 126W*
– 326W (MTS3600Q-1UNC)
  • *Dissipated power: 200W*
  • *Power through QSFP: 126W*

COMPLIANCE

SAFETY
– US/Canada: cTUVus
– EU: IEC60950
– International: CB

EMC (EMISSIONS)
– USA: FCC, Class A
– Canada: ICES, Class A
– EU: EN55022, Class A
– EU: EN55024, Class A
– EU: EN61000-3-2, Class A
– EU: EN61000-3-3, Class A
– Japan: VCCI, Class A

ENVIRONMENTAL
– EU: IEC 60068-2-64: Random Vibration
– EU: IEC 60068-2-29: Shocks, Type I / II
– EU: IEC 60068-2-32: Fall Test

ACOUSTIC
– ISO 7779
– ETS 300 753

OPERATING CONDITIONS
– Operating temperature: 10 to 45° C
– Humidity: 10-90% non-condensing

OTHERS
– RoHS-5 compliant
– Rack-mountable, 1U
– 1-year warranty

Ordering Part Number	Description
MTS3600R-1UNC	InfiniScale® IV DDR InfiniBand Switch, 36 QSFP ports, 1 power supply, unmanaged, RoHS R5, Rail Kit, Standard Depth
MTS3600Q-1UNC	InfiniScale® IV QDR InfiniBand Switch, 36 QSFP ports, 1 power supply, unmanaged, RoHS R5, Rail Kit, Standard Depth
MTS3600Q-1BNC	InfiniScale® IV QDR InfiniBand Switch, 36 QSFP ports, 1 power supply, managed, RoHS R5, Rail Kit, Standard Depth Includes Chassis Management and 108 node subnet manager.

Also available through Mellanox Certified Resellers and Distributors

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350 Oakmead Parkway, Suite 100, Sunnyvale, CA 94085
Tel: 408-970-3400 • Fax: 408-970-3403
www.mellanox.com