



SWITCH BLADE

M3601Q

32-port 40Gb/s InfiniBand Switch Blade

The InfiniScale® IV M3601Q 40Gb/s InfiniBand Blade Switch I/O Module for PowerEdge M-Series provides a high bandwidth, low latency fabric for Enterprise Data Center and High-Performance Computing environments. Based on the fourth generation InfiniScale IV InfiniBand switch device, the I/O module delivers up to 40Gb/s full bisectional bandwidth per port. When used in conjunction with ConnectX® InfiniBand dual port mezzanine I/O cards, clustered data bases, parallelized applications and transactional services applications will achieve significant performance improvements resulting in reduced completion time and lower cost per operation.

Sustained Network Performance

The M3601Q is a fully non-blocking chassis switch that maximizes I/O utilization in between server blades or between server and storage. Forty Gb/s of bandwidth is available to each node regardless of the traffic on any other port. QoS per port for high priority traffic ensures the best performance for mission critical applications. Whether used for parallel computation or as a converged fabric, the M3601Q provides the industry's best traffic carrying capacity.

High Availability

The M3601Q delivers director-class availability required for mission-critical applications environments. When fully populated the PowerEdge I/O M1000e chassis can support up to two M3601Q switch blades for maximum server throughput and redundancy. The switch blade is hot-swappable, enabling expansion without server interruption.

Easy Management

The M3601Q is easily managed through any IBTA compliant subnet manager. Mellanox recommends installing and running on each server blade the Mellanox OpenFabrics software stack. Any server can then run the subnet manager along with the switch management tools. 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.



M3601Q 32-port InfiniBand Switch for Dell PowerEdge M1000e-series Blade Enclosures

BENEFITS

- Industry-leading server switch blade in performance and power
- Full cross-sectional bandwidth from server blades to fabric
- Reliable transport
- I/O consolidation
- Virtualization acceleration

KEY FEATURES

- 2.56Tb/s switching capacity
- Adaptive routing
- Congestion control
- Quality of Service enforcement
- Hot pluggable

SPECIFICATIONS**INFINIBAND**

- IBTA Specification 1.2 compliant
- Integrated subnet manager agent
- Hardware-based congestion control
- Adaptive routing
- Fine grained end-to-end QoS
- 2.56Tb/s total switching bandwidth
- 256 to 4Kbyte MTU
- 9 virtual lanes: 8 data + 1 management
- 48K entry linear forwarding data base

MANAGEMENT

- Supports OpenSM or third-party subnet managers
- Port mirroring
- Diagnostic and debug tools

HARDWARE**INFINIBAND SWITCH**

- 32 ports (16 internal, 16 external)
- up to 40Gb/s per port
- Fully non-blocking architecture

CONNECTORS AND CABLING

- QSFP connectors
- Passive copper cable
- Optical media adapter and active cable support

INDICATORS

- Per port status LEDs: Link, Activity
- System status LEDs: System status, power

DIMENSIONS (H x W x D)

- 10.73 x 2.32 x 10.04 inches

MAXIMUM POWER CONSUMPTION

- 125W
 - Dissipated power: 85W
 - Power through connector: 2W per port

COMPLIANCE**SAFETY**

- US/Canada: cTUVus
- EU: IEC60950
- International: CB

EMC (EMISSIONS)

- USA: FCC, Class A
- Canada: ICES, Class A
- EU: CE Mark (EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3)
- Japan: VCCI, Class A
- Korea: RRL (MIC), Class A
- Australia/New Zealand: C-Tick 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

OPERATING CONDITIONS

- Operating temperature: 0 to 40° C
- Humidity: 10-90% non-condensing



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Visit <http://www.dell.com> for more information.



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