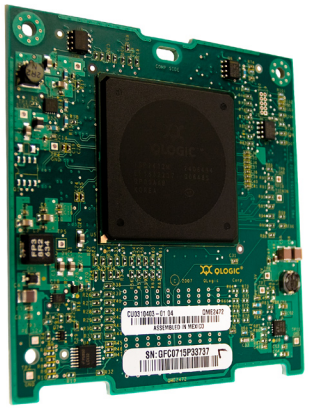
QLOGIC®

SANblade® QME2472

Dual Port 4-Gbps Fibre Channel (FC) HBA for Dell PowerEdge® M600 and M605 Blade Servers



High Performance

- 300,000 IOPS (150,000 IOPS per port) delivers high I/O transfer rates for storage applications
- Intelligent interleaved DMA (iiDMA) ensures maximum utilization of data links
- Out-of-Order Frame Reassembly (OoOFR) reduces congestion and retransmissions

Superior Scalability

- Multi-ID and N_Port virtualization ready. Allows physical ports to be part of multiple logical ports
- Virtual fabric (VSAN) ready. Allows physical ports to be part of multiple logical networks
- Comprehensive Operating System (OS) driver support including Windows®, Linux®, and VMware®

Enhanced Reliability

- Overlapping protection domains for continuous protection of internal data paths

QME2472 Host Bus Adapter. The QME2472 enables 4-Gbps Fibre Channel in Dell PowerEdge blade servers. The QME2472 not only delivers unprecedented levels of performance and availability, but also intelligent networking features specific to enterprise class data centers.

Enterprise Class Features. The QME2472 delivers unmatched performance by leveraging a single ASIC design, combining a unique hardware architecture to deliver over 300,000 IOPS, nearly 1600 MBps overall throughput, and support for PCI Express x4 bus speeds. More importantly, the QME2472 HBA provides new intelligent storage networking features that redefine the enterprise class HBA, providing increased data protection, advanced frame routing, and enterprise-wide management capabilities.

Simplified Setup. Point-and-click installation and configuration wizards simplify the HBA setup process. Storage administrators can quickly deploy HBAs across a SAN using QLogic SANsurfer HBA management tools and device utilities. The QME2472 is also fully compliant with industry standard Application Programming Interfaces (APIs), including SNIA HBA API and SMI-S. This compatibility allows administrators to manage QLogic HBAs using third-party software applications.

Comprehensive Operating System Support. QME2472 drivers exist for all operating systems supported by Dell PowerEdge blade servers. A single driver strategy per OS allows storage administrators to easily deploy and manage HBAs in heterogeneous SAN configurations. In addition, QLogic's unique unified driver model, which bundles the firmware with the driver, eliminates any potential interoperability issues between the driver and firmware and reduces the number of software components to be managed.

Guaranteed Interoperability. Storage partner certifications, combined with agency and regulatory testing, ensures all products meet world compliance hardware and software specifications. All HBAs are tested extensively with third-party hardware, along with multiple software applications, to ensure best-in-class SAN interoperability and compatibility. You can be confident purchasing QLogic HBAs to meet your FC storage networking needs.

Host Bus Interface Specifications

Bus interface
- PCI Express x4

Memory
- Integrated 512KB SRAM per port
- 1-MB flash (SPI)
- 2-KB NVRAM (SPI)
- 2-Kb EEPROM (I2C)

Hardware platforms
- Dell PowerEdge M600
- Dell PowerEdge M605

Compliance
- *PCI Express Base Specification,* rev. 1.0a
- *PCI Bus Power Management Interface Specification*, revision 1.1

Fibre Channel Specifications

Data rate
- 4/2/1-Gbps auto-negotiation (4.25/2.125/1.0625-Gbps)

Performance
- 150,000 IOPS per port

Topology
- Point-to-point (N_Port)
- Arbitrated loop (NL_Port)
- Switched fabric (N_Port)

Logins
- Support for F_Port and FL_Port login
- 2,048 concurrent logins and 2,048 active exchanges per port

Protocols
- FCP (SCSI-FCP)
- FC-TAPE (FCP-2)

Compliance
- *SCSI-3 Fibre Channel Protocol (SCSI-FCP)*
- *Fibre Channel Physical and Signaling Interface (FC-PH)*
- *Fibre Channel Physical and Signaling Interface 2nd Generation (FC-PH-2)*
- *Third Generation Fibre Channel Physical and Signaling Interface (FC-PH-3)*
- *Fibre Channel—Arbitrated Loop (FC-AL-2)*
- *Fibre Channel Fabric Loop Attachment Technical Report (FC-FLA)*
- *Fibre Channel—Private Loop Direct Attach Technical Report (FC-PLDA)*
- *Fibre Channel Tape (FC-TAPE) Profile*
- *SCSI Fibre Channel Protocol-2 (FCP-2)*
- *Second Generation FC Generic Services (FC-GS-3)*
- *Third Generation FC Generic Services (FC-GS-3)*
- *Fibre Channel Framing and Signaling (FC-FS)*

Physical Specifications

Ports
- Dual 4-Gbps Fibre Channel

Form factor
- Dell PowerEdge mezzanine card

Environment and Equipment Specifications

Airflow
- No airflow required

Temperature
- Operating: 0°C/32°F to 60°C/140°F
- Storage: -40°C/-40°F to 70°C/158°F

Humidity
- Relative (non-condensing): 5% to 95%
- Storage: 5% to 95%

Power dissipation
- 5.5W (maximum)

Tools and Utilities

Management tools
- SANsurfer FC HBA Manager
- SANsurfer FC HBA Command Line Interface (CLI)

Device utilities
- FLASUTIL for updating:
  - Firmware
  - Boot code
  - HBA parameters

Boot support
- BIOS

APIs
- SNIA HBA API V2
- SMI-S
- FDMI

Operating systems
- Windows Server®
- Linux – Red Hat®
- Linux – SuSE®
- VMware

Ordering Information
- The QME2472 is available directly from Dell. Visit www.dell.com.

QLOGIC

Corporate Headquarters QLogic Corporation 26650 Aliso Viejo Parkway Aliso Viejo, CA 92656 949.389.6000 www.qlogic.com

Europe Headquarters QLogic (UK) LTD. Surrey Technology Centre 40 Occam Road Guildford Surrey GU2 7YG UK +44 (0)1483 295825