



Marvell® QLogic® QME2662

Dual-Port, 16GFC Blade Mezzanine Card for Dell® PowerEdge® Blade Servers



- 3,200MBps per port maximum throughput for high bandwidth storage (SAN) traffic
- Over 1.2 million IOPS reduces latency in high transaction intensive applications and virtualized environments
- Reduced hardware, cabling, and management costs by enabling more applications (virtual machines) to run on a single server and Fibre Channel port
- Decreased power and cooling costs by using the fewest PCI Express[®] lanes in PCIe[®] Gen3 environments
- Overlapping protection domains (OPDs) to ensure a high level of reliability as data moves to and from the PCI bus and Fibre Channel network
- Complete investment protection for legacy 8GFC infrastructure

Overview

The Marvell QLogic 16Gb Fibre Channel (16GFC) QME2662 Adapter boasts industry-leading native Fibre Channel (FC) performance—achieving dual-port, line-rate, 16GFC throughput—at extremely low CPU usage with full hardware offloads. This extreme performance eliminates potential I/O bottlenecks in today's powerful multiprocessor, multicore servers.

In addition, support for powerful virtualization features makes this adapter ideal for virtualized environments that need excellent I/O performance to service growing numbers of virtual machines (VMs).

Leadership, Confidence, and Trust

Marvell is the undisputed leader in Fibre Channel Adapters, with over 20 years of experience and Fibre Channel products that have been qualified by all major server manufacturers in multiple form factors. Marvell owns the most established, proven Fibre Channel stack in the industry with more Fibre Channel ports shipped than any other vendor.

Virtualization Optimized

The QME2662 Adapter supports standards-based virtualization such as N_Port ID virtualization (NPIV). In addition, line-rate 16GFC throughput and unmatched storage performance maximize the number of VMs that each server can support.

Superior Application Performance

The Marvell QLogic QME2662 Adapter consumes fewer CPU cycles to drive storage traffic at line rate across all ports. With support for over 1.2 million I/O transactions per second, this adapter delivers superior storage application performance in virtualized and nonvirtualized environments.

Power Optimized

The QME2662 Adapter provides maximum power efficiency through dynamic power management, which ensures that the PCIe host bus link uses the minimal number of PCIe lanes, regardless of whether the server supports PCIe Gen3, to meet the required Fibre Channel bandwidth. Using fewer PCIe lanes means that this adapter uses less power, while continuing to maintain the highest level of Fibre Channel performance.

Investment Protection

The QME2662 Adapter is backward compatible with existing 8Gb Fibre Channel infrastructure.

The adapter is also compatible with the same Fibre Channel software driver stack that has been tested and validated across all major hardware platforms, all major hypervisors and OSs, and has been battle-hardened in millions of previous installations.

Simplified Management

Marvell's unified management application, QConvergeConsole® (QCC), provides singlepane-of-glass management for the company's broad product line of storage and networking adapters (Fibre Channel, converged networking, NIC, and iSCSI).

In addition, Marvell supports all major APIs, giving the end user the flexibility to manage their Marvell QLogic Fibre Channel adapter portfolio using third-party management tools, including a vCenter[™] plug-in for VMware[®].

Marvell QLogic QME2662 Adapter Product Brief

Host Bus Interface Specifications

Bus Interface

• PCI Express Gen3 x4, Gen2 x8.

Host Interrupts

• INTx and MSI-X

Compliance

- PCI Express Base Specification, rev. 3.0
- PCI Express Card Electromechanical Specification, rev. 2.0
- PCI Bus Power Management Interface Specification, rev. 1.2

Fibre Channel Specifications

Throughput

 16GFC full-duplex line rate per port (maximum)

Logins

• Support for 2,048 concurrent logins and 2,048 active exchanges

Port Virtualization

NPIV

Compliance

- SCSI-3 Fibre Channel Protocol (SCSI-FCP)
- Fibre Channel Tape (FC-TAPE) Profile
- iSCSI Fibre Channel Protocol-2 (FCP-2)
- Second Generation FC Generic Services (FC-GS-2)
- Third Generation FC Generic Services (FC-GS-3)

Tools and Utilities

Management Tools and Device Utilities

 QConvergeConsole: a unified management tool (CLI) for Fibre Channel/Fibre Channel over Ethernet (FCoE), iSCSI, and networking

Boot Support

• BIOS, UEFI

APIs

• SNIA HBA API V2, SMI-S

Platform/Operating System Support

Hardware Platforms

• Dell PowerEdge M630, M640, M830

Operating System Support

 For the latest applicable operating system information, see <u>www.support.dell.com</u>

Physical Specifications

Ports

• Dual-port, 16GFC

Form Factor

• Dell PowerEdge mezzanine adapter

Environment and Equipment Specifications

Temperature

- Operating: 0°C/32°F to 65°C/149°F
- Storage: -20°C/-4°F to 70°C/158°F

Humidity

- Relative (noncondensing): 10% to 90%
- Storage: 5% to 95%

Agency Approvals

Safety

• US, Canada, and Europe

EMI and EMC (Class A)

 US, Canada, Europe, Australia/New Zealand, Japan, Korea

Ordering Information

QME2662

- With server, order SKU# 543-BBBP
- Without server, order SKU# 543-BBCT













To deliver the data infrastructure technology that connects the world, we're building solutions on the most powerful foundation: our partnerships with our customers. Trusted by the world's leading technology companies for 25 years, we move, store, process and secure the world's data with semiconductor solutions designed for our customers' current needs and future ambitions. Through a process of deep collaboration and transparency, we're ultimately changing the way tomorrow's enterprise, cloud, automotive, and carrier architectures transform—for the better.

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