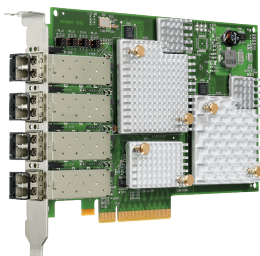# EMULEX®

CONNECTIVITY

LightPulse®
LPe12004-IBM

IBM FC5729 Quad-channel 8Gb Fibre Channel Adapter · IBM Part No. 74Y3467

UNPARALLELED MANAGEABILITY, RELIABILITY, PERFORMANCE AND EASE OF DEPLOYMENT

Streamlined installation and management, unrivaled scalability, and industry-leading virtualization support make the quad-channel IBM FC5729 8Gb Fibre Channel (8GFC) host bus adapters (HBA) ideal solutions for enterprise, mixed-OS and virtual server environments.

Proven Design, Architecture and Interface

Emulex LightPulse HBAs' highly integrated processor design minimized onboard components to improve host performance and efficiency. Advanced error-checking features ensure the integrity of block data as it traverses the SAN. Emulex's firmware-based architecture enables feature and performance upgrades without costly hardware changes. The unique Service Level Interface (SLI™) allows use of a common driver across all models of Emulex HBAs on a given OS platform. Installation and management facilities are designed to minimize server reboots and further simplify deployment.

Powerful Management Software for Maximum Data Center Efficiency

The Emulex OneCommand® Manager enterprise-class management application has gained broad market acceptance with over 12 million Fibre Channel and FCoE ports managed to date.

OneCommand Manager features a multiprotocol, cross-platform architecture that provides centralized management of all Emulex adapters. This enables IT administrators to manage network connectivity with one tool for maximum efficiency. The unique OneCommand Manager plug-in for VMware vCenter™ enables adapters to be managed directly within the VMware environment, further simplifying the management process.

Key Benefits

- Provides superior performance for the enterprise
- Integrates seamlessly into existing SANs
- Delivers quad-channel connectivity for 8GFC target applications
- Provides Fibre Channel connectivity for slot constrained server environments
- Supports IT server consolidation and energy conservation initiatives
- Allows application of SAN best practices, tools and processes with virtual server deployments
- Assures data availability and data integrity
- Improves IT staff productivity through simplified deployment and management

Key Features

- Support for Message Signaled Interrupts eXtended (MSI-X), improves host utilization and enhances application performance
- Support for 8GFC, 4GFC and 2GFC devices
- Comprehensive virtualization capabilities with support for N_Port ID Virtualization (NPIV) and Virtual Fabric
- Host to Fabric FC-SP authentication
- BlockGuard® ready—ensures end-to-end data integrity
- Common driver model allows a single driver to support all Emulex HBAs on a given OS
- Easy deployment of new firmware with minimal server reboots
- Efficient centralized administration of Emulex HBAs via powerful management tools
- PCIe 2.0 bus compliant, with PCIe 1.0 backward compatibility supported

IBM

EMULEX CONNECTED

LightPulse LPe12004-IBM

IBM FC5729 Quad-channel 8Gb Fibre Channel Adapter · IBM Part No. 74Y3467

SPECIFICATIONS

Standards

· ANSI Fibre Channel: FC-PI-4, FC-FS-2,
  FC-FS-2/AM1, FC-LS, FC-AL-2, FC-GS-6, FC-FLA,
  FC-PLDA, FC-TAPE, FC-DA, FCP through FCP-4,
  SBC-3, FC-SP, FC-HBA and SMI-S v1.1
· PCI Express base spec 2.0
· PCI Express card electromechanical spec 2.0
· Fibre Channel class 2 and 3
· PHP hot plug-hot swap

Architecture

· Quad-channel
· 8GFC, 4GFC or 2GFC Link speeds
  automatically detected
· Integrated data buffer and code space memory

Comprehensive OS Support

· Windows, Linux, NetWare,
  Solaris (except DR), VMware
· Additional support is available from
  OEMs and partners

Hardware Environments

· PowerPC,® SPARC,® x86, x64 and
  Intel® Itanium® 64-bit processor family
  Optical
· Data rates: 2.125, 4.25 and 8.5Gb/s
  (auto-detected)
· Optics: Short wave lasers with LC type connector
· Cable: Operating at 8Gb/s
  - 50/125µm (500MHz*km BW)-up to 50m
  - 50/125µm (2000MHz*km BW)-up to 150m

Physical Dimensions

· PCI full-height, half-length form factor card
· 111.15mm x 167.64mm (4.376" x 6.600")
· Standard bracket

Power & Environmental Requirements

· Volts: +3.3, +12
· Operating temperature: 0° to 55° C (32° to 131° F)
· Storage temperature: -40° to 70° C (-40° to 158° F)
· Relative humidity: 5% to 95% non-condensing,
  23° C wet bulb

Agency Approvals

North America:
  - FCC Class A
  - UL/CSA Recognized
Europe:
  - CE Mark
  - EU RoHS compliant
  - TUV Bauart Certified
Japan:
  - VCCI Class A
Taiwan:
  - BSMI Class A
Korea:
  - MSIP (formally KCC/MIC) Class A
China:
  - China RoHS Compliant

(Please refer to the product page on
www.emulex.com for further details)

Ordering Information

· The IBM FC5729 is available from IBM.
  To order, use part number 74Y3467

Additional Features

Performance features
· Doubling the maximum Fibre Channel link rate
  from 4Gb/s to 8Gb/s and enhanced virtualization
  capabilities help support IT "Green" initiatives
· Frame-level Multiplexing and out-of-order frame
  reassembly increases link efficiency and maximizes
  HBA performance.

Data protection features
· End-to-end data protection with hardware parity,
  CRC, ECC and other advanced error checking
  and correcting algorithms ensure data is safe from
  corruption.

Deployment and management features
· Universal Boot capability allows the appropriate
  boot environment to be automatically selected for
  any given hardware.
· Boot from SAN capability reduces system
  management costs and increases uptime.
· Detailed real-time event logging and tracing enables
  quick diagnosis of SAN problems.

· Beaconing feature flashes the HBA LEDs,
  simplifying their identification within server racks.
· Environmental monitoring feature helps to optimize
  SAN availability.

Management Features

· The Emulex AutoPilot Installer automates the HBA
  installation process and significantly reduces time to
  deployment and administrative costs. Automated
  installation and configuration of driver and management
  tools simplifies deployment of multiple adapters within
  Windows environments. A single installation of driver
  and management application eliminates multiple
  reboots and ensures that each component is installed
  correctly and the HBA is ready to use.

· The Emulex OneCommand™ Manager application
  enables centralized discovery, monitoring,
  reporting, and administration of Emulex HBAs
  and UCNAs on local and remote hosts. Powerful
  automation capabilities facilitate remote driver
  parameter, firmware and boot code upgrades.
  Advanced diagnostic features such as adapter port
  beaconing and adapter statistics help to optimize
  management and network performance while the
  environmental monitoring feature helps to maintain
  optimum host to fabric connections. In addition
  to the GUI interface, management functions can
  also be performed via a scriptable Command Line
  Interface (CLI) as well as a web browser. With
  in-band and out-of-band management capabilities,
  Emulex provides data center administrators with the
  greatest level of management flexibility.

· Emulex's management instrumentation complies to
  Open Management Standards, such as SMI-S and
  common HBA API support, which enables seamless
  upward integration into enterprise storage and
  server management solutions.

EMULEX®

www.emulex.com