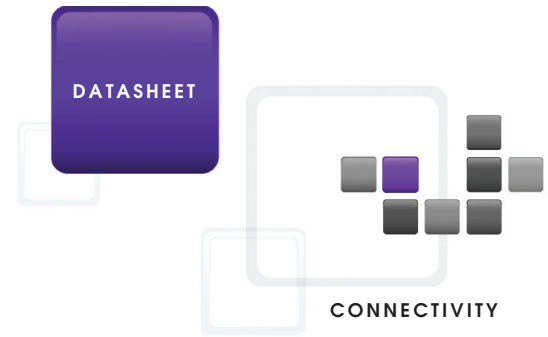


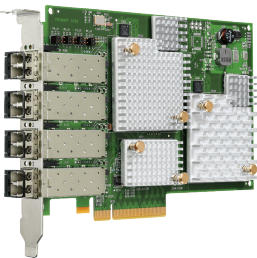


# LightPulse<sup>®</sup> LPe12004-IBM

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<sup>®</sup> 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<sup>®</sup> 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



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## 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](http://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.



[www.emulex.com](http://www.emulex.com)

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