

LightPulse® LP9002L

MAJOR FEATURES

- simultaneous full duplex 2Gb/s Fibre Channel delivers up to 400MB/s
- automatic speed negotiation
- full fabric support using F_Port and FL_Port connections
- onboard hardware context cache for superior fabric performance
- support for concurrent multiple protocols (SCSI, IP)
- full support for both FC service Class 2 and 3
- support for FC-Tape (FCP-2) devices
- end-to-end parity protection for high data integrity
- buffered data architecture to support up to 50km cabling at full 2Gb/s bandwidth
- robust suite of software including IP and storage protocols under Windows Server 2003, Windows 2000, Windows NT, HP-UX, Linux, NetWare, Solaris and AIX
- optical small form factor (LC) interface short-wave optics
- 32/64 bit and 33/66 MHz PCI support
- supports common HBA API Management Interface (FC-MI Annex A)
- supports Fibre Channel fabric boot



www.emulex.com

PCI Host Bus Adapter

The LightPulse® LP9002L Fibre Channel PCI host adapter provides support for 2Gb/s Fibre Channel data rates, delivering the industry's highest performance. The LP9002L features automatic speed negotiation capability which allows complete compatibility with existing 1Gb/s Fibre Channel SANs, while allowing seamless upgrades to higher speed 2Gb/s SANs.

The LP9002L provides the flexibility and broad interoperability needed for complex highly scalable SANs. The LP9002L provides a unique combination of features, including fabric support using F_Port and FL_Port connections, full-duplex data transfers, high data integrity features, support for all Fibre Channel topologies, and support for service class 2 and 3.

The LP9002L also features sophisticated hardware that provides superior performance in storage area networks, delivering low latency and high throughput in fabric and clustered environments.

LightPulse® LP9002L

STANDARDS

FC-PH 1, 2, 3:

Fibre Channel physical and signaling interface standards

FC-PI:

Fibre Channel physical interface

FC-MJS:

Fibre Channel methodologies for Jitter specification

FCP:

Fibre Channel protocol for SCSI standard

PCI:

Local bus specification version 2.2

ARCHITECTURE

Emulex Centaur ASIC technology up to 66MHz PCI bus master DMA

2Gb/s or 1Gb/s FC Link

2MB FLASH memory

1MB code RAM

256KB buffer RAM

SOFTWARE ENVIRONMENTS

Windows Server 2003

Windows 2000

Windows NT

HP-UX

Linux

NetWare

Solaris

AIX

HARDWARE ENVIRONMENTS

x86, SPARC and PowerPC PCI hardware platforms
3.3 or 5v signaling

OPTICAL

Data rates: 1.0625/2.125Gb/s

Optics:

short-wave single-mode lasers

Cable:

9/125µm single-mode fiber

50/125µm multi-mode fiber

62.5/125µm multi-mode fiber

Connector: LC

Distance:

(1Gb/s)

500 meters (1640') 50/125 µm fiber

300 meters (984') 62.5/125 µm fiber

(2Gb/s)

300 meters (984') 50/125 µm fiber

150 meters (492') 62.5/125 µm fiber

PHYSICAL DIMENSIONS

Short, low profile MD2 form factor

Low profile or standard bracket

167.64mm x 64.41mm (6.60" x 2.54")

POWER REQUIREMENTS

Volts: +3.3 VDC (± 5%)

Power: 7.2 watts typical (9.3w max)

ENVIRONMENTAL CONDITIONS

Operating temperature:

0° to 45°C (32° to 113°F)

Airflow required:

100 lf/m

Storage temperature:

-40° to 70°C (-40° to 158°F)

Relative humidity:

5% to 95% non-condensing

AGENCY APPROVALS

Class 1 Laser Product per DHHS 21CFR (J) & EN60825

UL recognized to UL 1950

CUR recognized to CSA22.2, No. 950

TUV certified to EN60950

FCC rules, Part 15, Class A

ICES-003, Class A

EMC Directive 89/336/EEC (CE Mark)

- EN55022, Class A

- EN55024

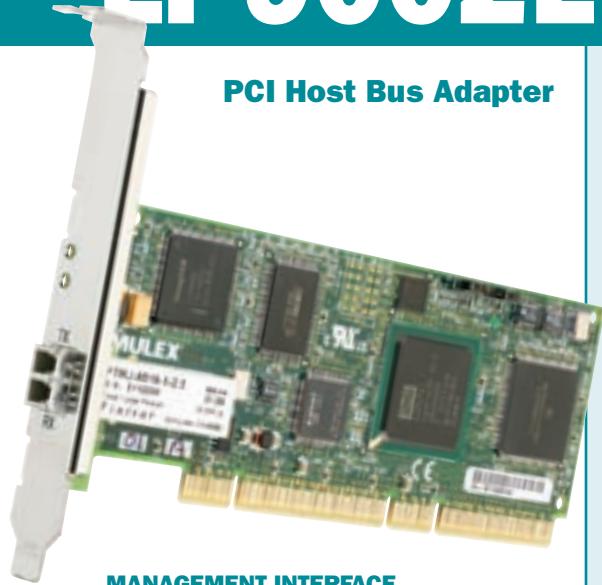
Australian EMC Framework (C-Tick Mark)

- AS/NZS 3548, Class A

VCCI, Class A

DRIVER SUPPORT

The LightPulse® LP9002L is complemented by a rich suite of software support including storage protocol (SCSI), network protocol (IP) as well as concurrent multi-protocol (SCSI & IP) operation, enabling advanced Storage Area Network (SAN) implementations in Windows Server 2003, Windows 2000, Windows NT, HP-UX, Linux, NetWare, Solaris and AIX environments. All drivers are also fully compatible with the entire line of Emulex LightPulse Fibre Channel HBAs.



PCI Host Bus Adapter

MANAGEMENT INTERFACE

Emulex HBAs also support the common HBA API Management Interface (FC-MI Annex A). This provides the ability to monitor, discover, and control the fabric from a management application.

The management API allows the HBA to provide a common and consistent view of a Fibre Channel SAN which will significantly reduce the total cost of ownership for customers.

ORDERING INFORMATION

LP9002L-F2

embedded multi-mode optic interface (LC)

05-158 11/04

This document refers to various companies and products by their trade names. In most, if not all cases, their respective companies claim these designations as trademarks or registered trademarks. This information is provided for reference only. Although this information is believed to be accurate and reliable at the time of publication, Emulex assumes no responsibility for errors or omissions. Emulex reserves the right to make changes or corrections without notice.

www.emulex.com