

Generations Ahead

**PCI-X and PCI EXPRESS
SMB FIBRE CHANNEL HBAs**

Turn-key installation, simplified management, low-cost HBAs for SMB users

Simple installation and management with optimized performance make the Emulex LightPulse LP101 and LPe111 Host Bus Adapters (HBAs) the ideal solution for small and medium-sized businesses (SMBs). The 2Gb/s PCI-X LP101 and 4Gb/s PCI Express LPe111 have a wizard-directed installation and intuitive management tool designed for SMB users without Storage Area Network (SAN) expertise.



Designed for first-time SAN users

The LP101 and LPe111 include SMB AutoPilot Installer®, a wizard that steps through the complete HBA installation for Windows with just a few mouse clicks. In addition, Emulex AutoPilot Manager™ provides a simple Windows and Linux management tool for the LP101 and LPe111 that is tailored specifically for SMB users. Users can easily monitor and perform any necessary maintenance, including updating firmware.

KEY BENEFITS

- ⦿ Low-cost HBAs optimized for today's SMB SAN environments
- ⦿ First-time users can install an HBA in a matter of minutes without any SAN expertise
- ⦿ SAN performance and scalability without any complexity
- ⦿ Robust interoperability ensured by testing with best-in-class switches and arrays from select storage partners

KEY FEATURES

- ⦿ 2Gb/s (LP101) and 4Gb/s (LPe111) Fibre Channel link with auto speed negotiation
- ⦿ PCI-X (LP101) and PCI Express (LPe111)
- ⦿ SMB AutoPilot Installer simplifies the HBA installation process to a few mouse clicks
- ⦿ AutoPilot Manager provides a single management console for all installed SMB HBAs
- ⦿ Common driver model eases management and enables upgrades independent of firmware
- ⦿ Microsoft Simple SAN components

Specifications

(Specifications apply to both the LP101 and LPe111 unless otherwise noted.)

Standards

- ANSI Fibre Channel
 - FC-PH-3, FC-PI-2, FC-FS, FC-AL-2, FC-GS-4, FC-FLA, FC-PLDA, FC-TAPE, FCP-2
- Fibre Channel class 2 and 3
- PHP hot plug - hot swap
- **LP101:** PCI-X 1.0a and PCI 2.3
- **LPe111:** PCI Express base spec 1.0a
- PCI Express card electromechanical spec 1.0a

Architecture

- Single-channel
- Up to 16 total port logins available
- **LP101:** 2Gb/s or 1Gb/s FC Link speeds automatically detected
- **LPe111:** 4Gb/s, 2Gb/s or 1Gb/s FC Link speeds automatically detected

Comprehensive OS Support

- Windows, Linux

Hardware Environments

- x86 and x64 processor families

Optical

- Data rates
 - **LP101:** 1.0625 and 2.125Gb/s auto-detected
 - **LPe111:** 1.0625, 2.125 and 4.25Gb/s auto-detected
- Optics
 - Short wave lasers with LC type connector
- Cable
 - 50/125µm, up to 300 meters at 2Gb/s; 150 meters at 4Gb/s
 - 62.5/125µm, up to 150 meters at 2Gb/s; 70 meters at 4Gb/s

Physical Dimensions

- Short, low-profile MD2 form factor card
- 167.64mm x 64.42mm (6.60" x 2.54")
- Standard bracket (low profile available)

Power & Environmental Requirements

- Volts
 - **LP101:** +3.3 and +5V
 - **LPe111:** +3.3
- Operating temperature
 - **LP101:** 5° to 45°C (41° to 113°F)
 - **LPe111:** 0° to 55°C (32° to 131°F)
- Airflow required
 - **LP101:** 100 lf/m
 - **LPe111:** Natural Convection
- 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) and EN60825
- UL recognized to UL 60950-1
- CUR recognized to CSA22.2, No. 60950-1-03
- TUV certified to EN60950
- **LP101**
 - FCC rules, Part 15, Class A
 - ICES-003, Class A
 - EMC Directive 2004/108/EEC (CE Mark)
 - EN55022, Class A
 - EN55024
 - Australian EMC Framework (C-Tick Mark)
 - AS/NZS CISPR22, Class A
 - VCCI, Class A
 - MIC (Korea), Class A
 - BSMI (Taiwan), Class A
- **LPe111**
 - FCC rules, Part 15, Class B
 - ICES-003, Class B
 - EMC Directive 2004/108/EEC (CE Mark)
 - EN55022, Class B
 - EN55024
 - Australian EMC Framework (C-Tick Mark)
 - AS/NZS CISPR22, Class B
 - VCCI, Class B
 - MIC (Korea), Class B
 - BSMI (Taiwan), Class B

Ordering Information

- Available from select storage partners

Software Features

- The Emulex feature-rich AutoPilot software suite speeds and simplifies device management, while reducing administration costs and protecting your IT investment.
- For administrators of smaller Storage Area Networks (SANs), Emulex AutoPilot Installer and AutoPilot Manager simplify the installation and management of HBAs for small and medium businesses and departmental SANs. Packaged with the Emulex LightPulse SMB HBAs and delivered by our OEM partners, Emulex AutoPilot Installer enables HBA installation with just a few mouse clicks, while AutoPilot Manager provides an easy-to-use interface for HBA management and maintenance. When combined with right-sized switches and arrays from our storage partners, the performance and reliability of SANs can be realized with a minimum of complexity.

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. This report is the property of Emulex Corporation and may not be duplicated without permission from the Company.



08-853 · 2/08