Emulex LPe1205-HP dual-channel PCI Express 8Gb/s Fibre Channel Host Bus Adapter for HP BladeSystem c-Class

Data sheet

Reliable SAN connectivity: Now and in the Future

The Emulex LPe1205-HP dual port PCI Express Fibre Channel (FC) mezzanine card Host Bus Adapter (HBA) provides high-performance SAN connectivity for the HP BladeSystem c-Class to meet the needs of the most demanding applications. Leveraging eight generations of design, the Emulex LPe1205-HP seamlessly attaches to 2/4/8 Gb/s SAN devices. It provides superior reliability, enhanced security, and scalable management capabilities—making it well-suited for virtual server and enterprise-class applications.

Combining high transfer rates, enhanced I/O processing, and extended interrupt management with Emulex Virtual HBA Technology, LPe1205-HP provides a rich set of features making it ideal for high-transaction database environments. It delivers broad interoperability, enabling easy deployment and nearly continuous availability in a complex, heterogeneous SAN environment. The dual-channel design makes it ideal for mission-critical applications that rely on high-availability connectivity.

In addition, the unique Emulex firmware and driver architecture provide full driver compatibility with all Emulex HBAs. This means that firmware can be upgraded without taking the server offline or requiring system re-boots—giving you outstanding investment protection of end-user hardware and reduced downtime.

Simplified deployment and scalable centralized management enable efficient administration of large enterprise SANs. There are management tools that provide comprehensive control of the HBA from a centralized, cross-platform framework—combining flexible remote-management with more secure access control.

What's more, Emulex HBA solutions are designed to support power efficiency ("Green") initiatives such as the consolidation of physical servers through blade server and virtual server technologies.

The Emulex LPe1205-HP delivers enterprise-class SAN connectivity for the HP BladeSystem c-Class. With outstanding reliability, performance, scalability, and virtualization, it meets the demands of today's leading data centers—providing investment protection for years to come.

Key features and benefits

Outstanding performance

Emulex LPe1205-HP delivers significant benefits to enterprise SANs requiring high performance.

- Superior performance sustains up to 200,000 I/Os per second per channel
- Full duplex data throughput doubles maximum Fibre Channel link rate from 4 Gb/s to 8 Gb/s—with enhanced virtualization capabilities
- Frame-level Multiplexing and out-of-order frame reassembly increase link efficiency and enhance HBA performance
- Message Signaled Interrupts eXtended (MSI-X) vector interrupt management improves application performance, reduces host CPU utilization, and provides greater I/O scalability

Simplified management

Emulex LPe1205-HP offers scalable management tools that provide the ability to manage thousands of HBAs from a single GUI-based management console regardless of the operating system platform.

- Scalable centralized management simplifies deployment, administration, and network diagnostics
- In-band and out-of-band discovery—with cross-platform support for Windows®, Linux®, and VMware connected servers—enable continuous management
- Sophisticated management capabilities allow remote firmware upgrades, advanced diagnostics, and parameter setting to be done in seconds from a single console—anywhere in the SAN

- Browser connectivity option provides unparalleled accessibility from anywhere in the world
- Command Line Interface (CLI) based interface and scripting capability enables enhanced efficiency through automation
- Universal Boot capability automatically selects appropriate boot image
- Boot from SAN capability reduces system management costs and increases uptime

Enhanced SAN reliability, availability, and security

In addition to uncompromising reliability, security is a key feature of the Emulex LPe1205-HP. With FC-SP security compliance, proprietary data is protected from WWN spoofing, host masquerading, and rogue/compromised servers.

- Field-proven, single-chip design reduces components and delivers industry-leading reliability
- Combination of parity, CRC, ECC, and other advanced error checking methods verify the integrity of data blocks, which are passed from the host interface through the HBA
- Comprehensive diagnostic functions, coupled with detailed event logging and tracing provide for fast, efficient SAN troubleshooting

Versatile virtualization

Emulex LPe1205-HP includes comprehensive virtualization capabilities with support for N-Port ID Virtualization (NPIV) and Virtual Fabric. It also fully supports HP Virtual Connect.

- Provides more bandwidth, CPU efficiency, and responsiveness required for large virtual server deployments

Emulex LPe1205-HP 8Gb/s FC HBA

Chipset	Saturn
Data Throughput (per port)	1600 MB/s
IOPs	200k+
Interfaces	PCIe 2.0 (x4) PCIe 1.0 (x8)
Power Usage	6.5W
RoHS	RoHS 6
OS Driver Support (not all inclusive)	Windows Server 2003, Windows Server 2008, Linux, VMware ESX 3.5, and HP-UX
Compatibility	Emulex LPe1205-HP 8Gb FC HBA is compatible with the following HP ProLiant and Integrity server blades: HP ProLiant BL460c G6 Server Blade HP ProLiant BL490c G6 Server Blade HP ProLiant BL280c G6 Server Blade HP ProLiant BL685c G6 Server Blade HP Integrity BL860c Server Blade HP Integrity BL870c Server Blade **Note:** It does not support any of the G5 or earlier server blades
Form factor	Mezzanine card

- Enhances storage management capabilities in a virtual server environment by leveraging NPIV to virtualize the HBA port
- Allows you to make use of SAN management tools and best practices, such as fabric zoning and LUN masking in a virtual server environment
- Supports up to 255 VPorts and improves server consolidation capabilities and asset utilization

Ideal environment

Streamlined installation, centralized management, and virtualization support make the Emulex LPe1205-HP a good choice for mid-sized data centers and departments, remote or branch sites as well as large enterprise data centers.

HP Financial Services

HP Financial Services provides innovative financing and financial asset management programs to help customers cost-effectively acquire, manage, and ultimately retire their HP solutions. For more information on these services, please contact your local HP representative, or visit **www.hp.com/go/hpfinancialservices**

For more information

To learn more about the Emulex LPe1205-HP for BladeSystem c-Class, visit **www.hp.com/go/BLc/8GbHBA/Emulex**

HP Services

HP Care Pack Services for HP BladeSystems offer warranty upgrade service options that help you deliver IT service level commitment to your business. These easy-to-buy, easy-to-use support packages let you choose the implementation and support levels that meet your business requirements, from basic to mission-critical.

Proven data center deployment solutions: Onsite Installation and Startup services for both hardware and software options.

Hardware Support: Increase availability and productivity with integrated rapid-response hardware support options. Choose from 24x7 or 13x5 coverage, depending on your business requirements. This service provides same-day onsite assistance within four hours for service issues that cannot be resolved remotely.

- Hardware support for BladeSystem enclosure: Covers the enclosure, patch panels, HP-supported Ethernet, Fibre Channel and Virtual Connect Interconnects, power enclosure with power supplies, and power distribution.
- Hardware support for ProLiant BL server and storage blade: Covers blade and storage servers, and all HP branded hardware options qualified for the server, purchased at the same time or afterwards, internal to the server.

For more information on these services visit **www.hp.com/services/bladesystemservices**

Technology for better business outcomes

To learn more, visit www.hp.com/go/BLc/8GbHBA/Emulex