

Data Sheet

Emulex LPe16000 / LPe16002 Fibre Channel card

LPe16000 dual port / LPe16002 single port 16 Gbit PCIe 3.0 Host Bus Adapters

Fibre Channel Host Bus Adapters (HBA) enable data exchange over large distances and extend your existing server system by including communication interfaces using high-speed communication technology.

All connections are redundant and hot-pluggable. The combination of hardware and software exemplifies the high-performance quality of communication.

The number of system restarts is reduced thanks to optimized software and extended error check functions help improve the integrity of your company's information.

LPe16000 / LPe16002 Fibre Channel card

The new 16 Gb/s Fibre Channel Host Bus Adapter (HBA) for the PRIMERGY server is an optimal Fibre Channel HBA for virtualized, cloud and mission critical deployments. The Fibre Channel HBA LPe16000/16002 takes performance to a new level with PCIe 3.0 support, data integrity capabilities and cloud scale reliability, and ease of use. Organizations looking to improve performance, protect against data corruption, and simplify operations of FC SANs in cloud or high performance environments can benefit from deploying the LPe16000/16002.

The LightPulse dual- and single-port LPe16000/16002 feature the Emulex bullet-proof driver stack built on a heritage reaching back to the first generation Fibre Channel adapters resulting in rock-solid reliability in 16Gb/s, 8Gb/s and 4Gb/s environments. With almost 1.2 million IOPS, it is ideally suited for Fibre Channel connectivity to solid state disks (SSDs) and new multi-core processors.

The new PCI Express (PCIe) 3.0 LPe16000/16002 16 Gb/s Fibre Channel Host Bus Adapter (HBA) provides outstanding input/output operations per second (IOPS) performance plus lightning fast response times and 4x better IOPS performance per watt making it the clear choice for the toughest virtualized, cloud and mission critical deployments.



| Main Features | Benefits |
|--|---|
| <ul style="list-style-type: none"> ■ Support for 16 Gb/s, 8 Gb/s & 4 Gb/s Fibre Channel devices ■ Comprehensive virtualization capabilities with support for N_Port ID Virtualization (NPIV) and Virtual Fabric ■ BlockGuard® ready - ensures end-to-end data integrity ■ Easy deployment of new firmware with minimal server reboots ■ Efficient centralized administration of Emulex HBAs via powerful management tools | <ul style="list-style-type: none"> ■ Provides superior performance for the enterprise ■ Integrates seamlessly into existing SANs ■ Supports IT server consolidation and energy conservation initiatives ■ Assures data availability and data integrity ■ Improves IT staff productivity through simplified deployment and management |

Technical details

Technical details

| | |
|---------------------------------|---|
| Controller Silicon | Emulex XE201 |
| Controller type | Fibre Channel Host Bus Adapter |
| Connector type | LC-style |
| Number of ports | 1 2 |
| Data transfer rate up to | 16 Gbit/s |
| Auto Negotiation support | Yes |
| Bus interface | PCIe x8 |
| Bus type | PCIe 3.0 |
| Bus transfer rate | 8GT/s |
| LEDs | 2 LEDs per port (yellow and green) |
| Standards | <ul style="list-style-type: none"> > Current ANSI/IETF Standards: FC-PI-4; FC-PI-5; FC-FS-2 with amendment 1; FC-AL-2 with amendments 1 and 2; FC-LS-2; FC-GS-6; FC-DA; FC-SP-2; FCP-4; FC-MJS; FC-SB-4; FC-SP; SPC-4; SBC-3; SSC-3; RFC4338 > Legacy ANSI/IETF standards: FC-PH; FC-PH-2; FC-PH-3; FC-PI; FC-PI-2; FC-FS; FC-AL; FC-GS-2/3/4/5; FCP; FCP-2; FC-SB-2; FC-FLA; FC-HBA; FC-PLDA; FC-TAPE; FC-MI; SPC-3; SBC-2; SSC-2; RFC2625 > PCIe base spec 3.0 > PCIe card electromechanical spec 3.0 > Fibre Channel class 2 and 3 > PHP hot plug-hot swap |
| Technology | Optics: 16 Gb/s short wave lasers with LC type connectors Auto-negotiation between 4 Gb/s, 8 Gb/s or 16 Gb/s FC link speeds |
| Supported cable length | <p>Operating at 16Gb</p> <ul style="list-style-type: none"> - OM4 (Multi-Mode 50/125µm, 4700 MHz*km) 125m - OM3 (Multi-Mode 50/125µm, 2000 MHz*km) 100m - OM2 (Multi-Mode 50/125µm, 500 MHz*km) 35m <p>Operating at 8Gb</p> <ul style="list-style-type: none"> - OM4 (Multi-Mode 50/125µm, 4700 MHz*km) 190m - OM3 (Multi-Mode 50/125µm, 2000 MHz*km) 150m - OM2 (Multi-Mode 50/125µm, 500 MHz*km) 50m |
| FC Controller notes | the controller is equivalent to the original Emulex HBA LightPulse LPe16000B the controller is equivalent to the original Emulex HBA LightPulse LPe16002B |

| Order code | Product Name | Formfactor | Number of ports |
|-------------------|--------------------|-------------------|-----------------|
| S26361-F4994-E1 | PFC EP LPe16000 | low profile (MD2) | 1 |
| S26361-F4994-E201 | PFC EP LPe16000 LP | low profile (MD2) | 1 |
| S26361-F4994-F202 | PFC EP LPe16002 LP | low profile (MD2) | 2 |
| S26361-F4994-E2 | PFC EP LPe16002 | low profile (MD2) | 2 |

Environmental

| | |
|------------------------------------|---|
| Power consumption | single: typical 9.3W; max 11.6 W dual: typical 11.1W; max 13.3 W |
| Temperature (Operating) | 0 - 55 °C |
| Temperature (Not Operating) | -40 - 70 °C |

Compliance

| | |
|-------------------------|---|
| Compliance notes | According to the corresponding system |
| Compliance link | http://sp.ts.fujitsu.com/sites/certificates/ |

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu LPe16000 / LPe16002 Fibre Channel card, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu LPe16000 / LPe16002 Fibre Channel card, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. www.fujitsu.com/fts

Fujitsu green policy innovation

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Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>



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FUJITSU LIMITED

Website: www.fujitsu.com
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