FUJITSU

Data Sheet
FUJITSU Dual port 16 Gbit/s Gen 5 FC Mezzanine Card based on Emulex LPe16002

Simplified networking, maximum performance and increased business agility

To connect your PRIMERGY Blade Server to outside networks and storage, Fujitsu offers a variety of options to support your familiar standards such as Ethernet, Fibre Channel, SAS and InfiniBand. They connect directly to the high performance midplane and guarantees lossless, highly efficient data transfer to and from the Connection Blades. In order to optimally meet your needs, Fujitsu provides a wide range of various Mezzanine Cards starting from 1 and 10 Gbit/s Ethernet, 8 and 16 Gbit/s Fibre Channel, 40 and 56 Gbit/s InfiniBand to 6 Gbit/s SAS with RAID functionality. Even Converged Network Adapters (CNAs) that provide multiple network connections and Fibre Channel over Ethernet (FCoE) as well as iSCSI are part of the portfolio.

Dual port 16 Gbit/s Gen 5 FC Mezzanine Card based on Emulex LPe16002

The PCI Express (PCIe) 3.0 MC-FC162E 16 Gbit/s Gen 5 Fibre Channel Mezzanine Card for PRIMERGY Server Blades provides advanced management functionality which can save days of installing and managing adapters. Outstanding input/output operations per second (IOPS) performance plus fast response times and 4x better IOPS performance per watt than the previous 8 Gibt/s FC generation makes the dual-port Fibre Channel host bus adapters (HBAs) the clear choice for the toughest virtualized, cloud and mission critical deployments. With almost 1.2 million IOPS on a single port, it is ideally suited for FC connectivity to solid state disks (SSDs) and new multi-core processors. The new Fibre Channel

Mezzanine Card is fully functional compatible with the Emulex LPe16002 Host Bus Adapter.

Main Features	Benefits
■ Support for 16 Gb/s Gen 5 Fibre Channel devices	■ Provide superior performance for the enterprise
■ Comprehensive virtualization capabilities with support for N_Port ID Virtualization (NPIV and Virtual Fabric)	■ Integration seamlessly into existing SANs
■ BlockGuard® ready (T10-PI) - ensures end-to-end data integrity	■ Support IT server consolidation and energy conservation initiatives
■ Easy deployment of new firmware with minimal server reboots	■ Assure data availability and data integrity
■ Efficient centralized administration of Emulex HBAs via powerful management tools (OneCommend Management®)	■ Improve IT staff productivity through simplified deployment and management
■ GreenState™ power efficiency–reduces data center power consumption and associated OPEX by delivering up to 4x better IOPS performance/watt	■ Maximum performance–up to 1.2 million IOPS on a single port to support larger server virtualization deployments and scalable cloud initiatives, as well as performance to match new multi-core processors, SSDs and faster PCIe 3.0 server host bus architectures

Technical details

Technical details

Controller type	Fibre Channel Mezzanine Card
Supported system units	PRIMERGY BX400 S1 PRIMERGY BX900 S2
Supported Server Blades	PRIMERGY BX920 S4, BX924 S4
Operating system pre-installed	Information to released operating systems can be found in the server datasheets. Details can be found in the released drivers list on the support portal.
Released drivers list link	http://support.ts.fujitsu.com/Download/Index.asp
Number of ports	2
Bus interface	PCIe 3.0 x8
Bus transfer rate	8GT/s
Interrupt Levels	MSI-X; INTA; MSI
Standards	- 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 - Fibre Channel class 2 and 3

Order code	Product Name	Formfactor
S26361-F4994-E402	PFC EM MC-FC162E 2x16Gb	BX900 Mezzanine
S26361-F4994-L402	PFC EM MC-FC162E 2x16Gb	BX900 Mezzanine

Environment

Power consumption	typical 11.1W; max 13.3 W
Temperature (operating)	0 - 55 ℃
Storage temperature	-40 - 70 ℃

Compliance

Product	The Mezz Card fulfills the same certifications as the Server Blade where it will be installed
Compliance notes	According to the corresponding system
Compliance link	https://sp.ts.fujitsu.com/sites/certificates

More information

Fujitsu products, solutions & services

In addition to Fujitsu with Dual port 16 Gbit/s Gen 5 FC Mezzanine Card based on Emulex LPe16002 , 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/products/computing/

Software

www.fujitsu.com/software/

More information

Learn more about FUJITSU Server Dual port 16 Gbit/s Gen 5 FC Mezzanine Card based on Emulex LPe16002 , please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/primergy

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.
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

Copyrights

Disclaimer