FUJITSU

Data Sheet FUJITSU PFC QLE2690 / QLE2692 Fibre Channel Adapters

QLE2690 single port / QLE2692 dual 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 FUJITSU server systems 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.

PFC QLE2690 / QLE2692 Fibre Channel Adapters

The enhanced Gen5 16 Gb/s Fibre Channel Host Bus Adapters (HBA) QLE2690 and QLE2692 for the PRIMERGY & PRIMEQUEST servers are ideal for virtualized environments and transaction intensive applications. The adapters support the latest PCIe 3.0 standard for lower cooling and power costs. In addition, QLogic StorFusion technology delivers streamlined provisioning, guaranteed quality of service (QoS), and improved resiliency while addressing the needs of IT organizations that require reliability, integrated management, and guaranteed network performance.

The adapters are backward compatible with existing 4Gb and 8Gb Fibre Channel infrastructure, leveraging existing SAN investments. QLogic's

ain Features

Enhanced Gen 5 solution offers higher perport performance (~650K IOPS) with low power consumption. The isolated port architecture ensures reliable and consistent performance. QLogics "QConverge Console™" provides a simplified and flexible management oppurtunity, including the support of third-party management tools, like a vCenter™ plugin for VMware®.

Another point of cost reduction is the QLogic's "StarPower™" technology to gain the maximum power efficiency. This feature will ensure that the PCle host bus link uses the minimal number of PCle lanes, while continuing to maintain the highest level of Fibre channel performance.

Upto 1.3 million IOPS are optimally prepared for Fibre Channel connectivity to solid state disks (SSDs) and new multi-core processors for best storage application performance in virtualized and non-virtualized deployments.



| main reactives | Benefici |
|---|---|
| Support for 1 or 2 port 16 Gb/s Fibre Channel devices High performance throughput QLoigc STORFUSION TECHNOLOGY Over 1.3 million IOPS | Provide up to high performance 32 Gb/s aggregate bandwidth 16Gbps full-duplex line rate per port (maximum) Highest level of reliabilty Low latency in high transaction intensive applications and virtualized environments |
| Using the fewest PCI Express [®] lanes in PCIe Gen3 environments | Decreased power and cooling costs |
| | |

Technical details

Technical details

| Controller type | Fibre Channel Host Bus Adapter | | | |
|--------------------------------|---|---|-------------------------|-------------------|
| Connector type | LC-style | | | |
| 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 | 1 | | | |
| | 2 | | | |
| Data transfer rate(s) | 4 Gbit/s; 8 Gbit/s; 16 Gbit/s | | | |
| Auto Negotiation support | Yes | | | |
| Bus interface | PCIe 3.0 x8 | | | |
| Bus transfer rate | 8GT/s | | | |
| LEDs | 3 LEDs per port (amber, green and am | ber) indecating port speed | | |
| Standards | Throughput > 16Gb/sec full-duplex line rate per por Logins > Support for 2048 concurrent logins at Port Virtualization > NPIV (N_Port ID Virtualization) Compliance > SCSI-3 Fibre Channel Protocol (SCSI-F(> Fibre Channel Tape (FC-TAPE) Profile > SCSI Fibre Channel Protocol-2 (FCP-2) > Second Generation FC Generic Service | nd 2048 active exchanges CP) | ion FC Generic Services | (FC-GS-3) |
| Technology | Optics: 16 Gb/s short wave lasers with I | _C type connectors | | |
| Data transfer rate up to | 16 Gbit/s | | | |
| Supported cable length | Operating at 16Gb - OM4 (Multi-Mode 50/125µm, 4700 M - OM3 (Multi-Mode 50/125µm, 2000 M - OM2 (Multi-Mode 50/125µm, 500 M Operating at 8Gb - OM4 (Multi-Mode 50/125µm, 4700 M - OM3 (Multi-Mode 50/125µm, 2000 M - OM2 (Multi-Mode 50/125µm, 500 M - OM2 (Multi-Mode 50/125µm) - OM2 (M - OM2 (Multi-Mode 50/125µm) - OM2 (M - OM2 (M | HZ*km) 100m Hz*km) 35m HZ*km) 190m HZ*km) 150m | | |
| FC Controller notes | The controllers are equivalent to the or | iginal QLogic 269x series | | |
| Order code | Product name (vendor) | Height of bracket | Number of ports | Related product |
| MC-0JFCD1 | QLE2690 | Low Profile (LP) | 1 | PRIMEQUEST Server |
| MC-0JFCD2 | QLE2690 | Full Height (FH) | 1 | PRIMEQUEST Server |
| MC-0JFCE1 | QLE2692 | Low Profile (LP) | 2 | PRIMEQUEST Server |
| MC-0JFCE2 | QLE2692 | Full Height (FH) | 2 | PRIMEQUEST Server |
| MCX0JFCD1 | QLE2690 | Full Height / Low Profile | 1 | PRIMEQUEST Server |
| MCX0JFCE1 | QLE2692 | Full Height / Low Profile | 2 | PRIMEQUEST Server |
| 526361-F5580-E1 | QLE2690 | Full Height (FH) | 1 | PRIMERGY Server |
| 526361-F5580-E201 | QLE2690 | Low Profile (LP) | 1 | PRIMERGY Server |
| 526361-F5580-E202 | QLE2692 | Low Profile (LP) | 2 | PRIMERGY Server |
| 526361-F5580-E2 | QLE2692 | Full Height (FH) | 2 | PRIMERGY Server |
| 526361-F5580-L501 | QLE2690 | Full Height / Low Profile | 1 | PRIMERGY Server |
| S26361-F5580-L502 | QLE2692 | Full Height / Low Profile | 2 | PRIMERGY Server |
| Environment | | | | |
| Power consumption | QLE2690 10,7W (max) 8,6W (typ) | | | |

| Environment | |
|-------------------------|--|
| Temperature (operating) | 0 - 55 °C |
| Storage temperature | -20 - 70 °C |
| Compliance | |
| 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 PFC QLE2690 / QLE2692 Fibre Channel Adapters, 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 PFC QLE2690 / QLE2692 Fibre Channel Adapters, 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

All rights reserved, including intellectual property rights. Designations may be trademarks and/or copyrights of the respective owner, the use of which by third parties for their own purposes may infringe the rights of such owner. For further information see http:// www.fujitsu.com/fts/resources/navigation/ terms-of-use.html Copyright 2019 FUJITSU LIMITED

Disclaimer

Technical data is subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective owner, the use of which by third parties for their own purposes may infringe the rights of such owner.

Contact Fujitsu Limited Website: www.fujitsu.com/primergy 2019-08-01 WW-EN All rights reserved, including intellectual property rights. Designations may be trademarks and/or copyrights of the respective owner, the use of which by third parties for their own purposes may infringe the rights of such owner. For further information see http://www.fujitsu.com/fts/resources/navigation/terms-of-use.html Copyright 2019 FUJITSU LIMITED