

# 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

Enhanced Gen 5 solution offers higher per-port 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 opportunity, 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 PCIe host bus link uses the minimal number of PCIe 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 Features	Benefits
<ul style="list-style-type: none"> <li>Support for 1 or 2 port 16 Gb/s Fibre Channel devices</li> <li>High performance throughput</li> <li>QLogic STORFUSION TECHNOLOGY</li> <li>Over 1.3 million IOPS</li> </ul>	<ul style="list-style-type: none"> <li>Provide up to high performance 32 Gb/s aggregate bandwidth</li> <li>16Gbps full-duplex line rate per port (maximum)</li> <li>Highest level of reliability</li> <li>Low latency in high transaction intensive applications and virtualized environments</li> <li>Decreased power and cooling costs</li> </ul>
<ul style="list-style-type: none"> <li>Using the fewest PCI Express® lanes in PCIe Gen3 environments</li> </ul>	

# Technical details

## Technical details

<b>Controller type</b>	Fibre Channel Host Bus Adapter
<b>Connector type</b>	LC-style
<b>Operating system pre-installed</b>	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.
<b>Released drivers list link</b>	<a href="http://support.ts.fujitsu.com/Download/Index.asp">http://support.ts.fujitsu.com/Download/Index.asp</a>
<b>Number of ports</b>	1 2
<b>Data transfer rate(s)</b>	4 Gbit/s; 8 Gbit/s; 16 Gbit/s
<b>Auto Negotiation support</b>	Yes
<b>Bus interface</b>	PCIe 3.0 x8
<b>Bus transfer rate</b>	8GT/s
<b>LEDs</b>	3 LEDs per port (amber, green and amber) indicating port speed
<b>Standards</b>	Throughput > 16Gb/sec full-duplex line rate per port Logins > Support for 2048 concurrent logins and 2048 active exchanges Port Virtualization > NPIV (N_Port ID Virtualization) Compliance > SCSI-3 Fibre Channel Protocol (SCSI-FCP) > Fibre Channel Tape (FC-TAPE) Profile > SCSI Fibre Channel Protocol-2 (FCP-2) > Second Generation FC Generic Services (FC-GS-2) and Third Generation FC Generic Services (FC-GS-3)
<b>Technology</b>	Optics: 16 Gb/s short wave lasers with LC type connectors
<b>Data transfer rate up to</b>	16 Gbit/s
<b>Supported cable length</b>	Operating at 16Gb - 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 Operating at 8Gb - 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
<b>FC Controller notes</b>	The controllers are equivalent to the original 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
S26361-F5580-E1	QLE2690	Full Height (FH)	1	PRIMERGY Server
S26361-F5580-E201	QLE2690	Low Profile (LP)	1	PRIMERGY Server
S26361-F5580-E202	QLE2692	Low Profile (LP)	2	PRIMERGY Server
S26361-F5580-E2	QLE2692	Full Height (FH)	2	PRIMERGY Server
S26361-F5580-L501	QLE2690	Full Height / Low Profile	1	PRIMERGY Server
S26361-F5580-L502	QLE2692	Full Height / Low Profile	2	PRIMERGY Server

## Environment

<b>Power consumption</b>	QLE2690 10,7W (max) 8,6W (typ) QLE2692 11,5W (max) 9,3W (typ)
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**Environment**

Temperature (operating) 0 - 55 °C

Storage temperature -20 - 70 °C

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**Compliance**

Compliance notes According to the corresponding system

Compliance link <https://sp.ts.fujitsu.com/sites/certificates>

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# 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/](http://www.fujitsu.com/global/products/computing/)

### Software

[www.fujitsu.com/software/](http://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](http://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>



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