

# Data Sheet

## FUJITSU QLE2670 / QLE2672 Fibre Channel cards

QLE2670 single port / QLE2672 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.

### QLE2670 / QLE2672 Fibre Channel cards

The 16 Gb/s Fibre Channel Host Bus Adapters (HBA) for the PRIMERGY servers are ideal for virtualized environments and transaction intensive applications. The adapters support the newest PCIe 3.0 standard for lower cooling and power costs. Reliability and security of datastreams to and from the PCI bus and Fibre Channel network are ensured through overlapping protection domains (OPDs).

QLogics "QConverge Console™" provides a simplified and flexible management opportunity, including the support of third-party management tools, like a vCenter™ plugin for VMware®.

Through backward compatibility the adapter is designed for smooth integration in 4Gb and 8Gb

Fibre Channel infrastructures. 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.

Over 1.2 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 16 Gb/s, 8 Gb/s &amp; 4 Gb/s Fibre Channel devices</li> <li>■ High performance throughput</li> <li>■ Overlapping protection domains (OPDs)</li> <li>■ Over 1.2 million IOPS</li> </ul>	<ul style="list-style-type: none"> <li>■ Provide superior performance for the enterprise</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 x4; PCIe 2.0 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 > 16Gb7S 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>	4 Gbit/s#8 Gbit/s#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 2600 series

Order code	Product name (vendor)	Height of bracket	Number of ports	Related product
S26361-F5313-E1	QLE2670	Full Height (FH)	1	PRIMERGY Server
S26361-F5313-E201	QLE2670	Low Profile (LP)	1	PRIMERGY Server
S26361-F5313-E202	QLE2672	Low Profile (LP)	2	PRIMERGY Server
S26361-F5313-E2	QLE2672	Full Height (FH)	2	PRIMERGY Server
S26361-F5313-L501	QLE2670	Full Height / Low Profile	1	PRIMERGY Server
S26361-F5313-L502	QLE2672	Full Height / Low Profile	2	PRIMERGY Server

## Environment

<b>Temperature (operating)</b>	0 - 55 °C
<b>Storage temperature</b>	-20 - 70 °C

## Compliance

<b>Compliance notes</b>	According to the corresponding system
<b>Compliance link</b>	<a href="https://sp.ts.fujitsu.com/sites/certificates">https://sp.ts.fujitsu.com/sites/certificates</a>

# More information

## Fujitsu products, solutions & services

In addition to Fujitsu with QLE2670 / QLE2672 Fibre Channel cards, 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 QLE2670 / QLE2672 Fibre Channel cards, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. <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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2019-01-18 WW-EN

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