

# Data Sheet

## FUJITSU PRIMERGY 10Gb Network Controller

D2755 SFP+ dual port 10 Gbit PCIe x8

Ethernet cards enable data exchange between all the devices connected in a local network (LAN). A networked IT infrastructure that functions well is of great significance when managing and controlling critical business processes in a company. The wide range of complex information transported across the network relies on fast and reliable data processing by the network cards.



### PRIMERGY 10Gb Network Controller

The new Fujitsu Ethernet D2755 Server Adapter is the most flexible and scalable Ethernet adapter for today's demanding data center environments. The Fujitsu Ethernet D2755 Server Adapter addresses the demanding needs of the next-generation data center by providing unmatched features for virtualization, flexibility for LAN and SAN networking, and proven, reliable performance.

| Main Features   | Benefits  |
|---|---|
| <ul style="list-style-type: none"> <li>■ Intel® 82599 10 Gigabit Ethernet Controller</li> <li>■ Low-profile PCB</li> <li>■ Load balancing on multiple CPUs</li> <li>■ Time Sync (IEEE 1588, 802.1as)</li> <li>■ Intel® PROSet utility for Microsoft Windows Device Manager</li> </ul> | <ul style="list-style-type: none"> <li>■ Industry-leading, energy-efficient design for next-generation 10 Gigabit performance and multi-core processors</li> <li>■ Enables higher bandwidth and throughput from standard and low-profile PCIe slots and servers</li> <li>■ Increases performance on multi-processor systems by efficiently balancing network loads across CPU cores when used with Receive-Side Scaling (RSS) from Microsoft or Scalable I/O on Linux</li> <li>■ Lets networked Ethernet equipment synchronize internal clocks according to a network master clock; endpoint can then acquire an accurate estimate of the master time by compensating for link</li> <li>■ Provides point-and-click management of individual adapters, advanced adapter features, connection teaming, and virtual local area network (VLAN) configuration</li> </ul> |

# Technical details

## Technical details

|   |   |
|---|---|
| <b>Controller Silicon</b>                           | Intel® 82599 10 Gigabit Ethernet Controller   |
| <b>Controller type</b>                              | Ethernet Ctrl.  |
| <b>Connector type</b>                               | SFP+  |
| <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>                              | 2   |
| <b>Data transfer rate(s)</b>                        | 1 Gbit/s; 10 Gbit/s<br>10 Gbit/s  |
| <b>Auto Negotiation support</b>                     | Yes   |
| <b>Bus interface</b>                                | PCIe 2.0 x8   |
| <b>Bus transfer rate</b>                            | 5GT/s   |
| <b>LEDs</b>   | LINK (solid) and ACTIVITY (blinking) LINK SPEED (green = 10G)   |
| <b>Network protocol and standards compatibility</b> | IEEE 802.1p Class of Service<br>IEEE 802.1q VLAN<br>IEEE 802.1Qaz Enhanced Transmission Selection (ETS)<br>IEEE 802.1Qbb Priority Flow Control (PFC)<br>IEEE 802.3ad LACP<br>IEEE 802.3ae 10Gbit Ethernet<br>IEEE 802.1as Timing and Synchronization<br>IEEE 802.3x Flow Control<br>IEEE 1588 Precision Time Protocol<br>IPv4, IPv6 and mixed IPv4/IPv6 network protocols |
| <b>Interrupt Levels</b>                             | MSI-X; INTA; MSI  |
| <b>WoL</b>  | Yes   |
| <b>WoL comment</b>                                  | supported in Modular LAN slot in dedecated PRIMERGY server  |
| <b>Virtualization</b>                               | VMDq (64 queues per port)<br>SR-IOV ready (64 virtual function per port)<br>VMBL (Virtual Maschine Load Balancing)<br>VLAN support with VLAN tag insertion, stripping and packet filtering for up to 4096 VLAN tags   |
| <b>Teaming</b>                                      | by OS driver  |
| <b>Switch fault tolerance (SFT)</b>                 | Yes   |
| <b>Adapter fault tolerance (AFT)</b>                | Yes   |
| <b>Adaptive load balancing (ALB)</b>                | Yes   |
| <b>Remote boot support</b>                          | PXE 2.0   |
| <b>iSCSI support</b>                                | Yes   |
| <b>Additional features</b>                          | multiplexed management LAN supported in Modular LAN slot in dedecated PRIMERGY server   |
| <b>Offloading</b>                                   | TX/RX IP, TCP & UDP checksum offload (IPv4, IPv6) capabilities<br>IPv6 segmentation capability extended to new standard type  |
| <b>Add on / Component name</b>                      | Dual 10 Gigabit Ethernet PCIe x8  |

| Order code        | Product Name                            | Height of bracket         | Number of ports | Related product     |
|-------------------|---|---------------------------|-----------------|---------------------|
| MC-0JXE41         | Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+ 1p | Low Profile (LP)          | 2               | PRIMEQUEST Server   |
| MC-0JXE42         | Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+    | Full Height (FH)          | 2               | PRIMEQUEST Server   |
| MCX0JXE41         | Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+ 1p | Low Profile (LP)          | 2               | PRIMEQUEST Server   |
| MCX0JXE42         | Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+    | Full Height (FH)          | 2               | PRIMEQUEST Server   |
| S26361-F3067-E70  | Dual 10 Gigabit Ethernet PCIe x8        | Full Height / Low Profile | 2               | CELSIUS Workstation |
| S26361-F3067-L70  | Dual 10 Gigabit Ethernet PCIe x8        | Full Height / Low Profile | 2               | CELSIUS Workstation |
| S26361-F3629-E202 | Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+ 1p | Low Profile (LP)          | 2               | PRIMERGY Server     |
| S26361-F3629-E2   | Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+    | Full Height (FH)          | 2               | PRIMERGY Server     |

| Order code        | Product Name                                  | Height of bracket         | Number of ports | Related product |
|-------------------|---|---------------------------|-----------------|-----------------|
| S26361-F3629-E702 | Upgrade-Kit to 2x Gbit and 2x 10Gbit in-build | Matching to system        | 2               | PRIMERGY Server |
| S26361-F3629-L502 | Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+          | Full Height / Low Profile | 2               | PRIMERGY Server |

**Supported Interface Modules / Cables**

| Order code        | Application                   | Type / mode                | Connector / cable Length |
|-------------------|-------------------------------|----------------------------|--------------------------|
| MC-OJXE51         | Ethernet 10 Gbit/s            | SFP+ / MMF (SWL)           | LC-style / up to 300m    |
| MCX0JXE51         | Ethernet 10 Gbit/s            | SFP+ / MMF (SWL)           | LC-style / up to 300m    |
| S26361-F3986-E3   | Ethernet 10 Gbit/s            | SFP+ / MMF (SWL)           | LC-style / up to 400m    |
| S26361-F3986-L3   | Ethernet 10 Gbit/s            | SFP+ / MMF (SWL)           | LC-style / up to 400m    |
| S26361-F3986-E4   | Ethernet 10 Gbit/s            | SFP+ / SMF (LWL)           | LC-style / up to 10km    |
| S26361-F3986-L4   | Ethernet 10 Gbit/s            | SFP+ / SMF (LWL)           | LC-style / up to 10Km    |
| S26361-F3986-E5   | Ethernet 10 Gbit/s ; 1 Gbit/s | SFP+ / MMF (SWL)           | LC-style / up to 400m    |
| S26361-F3986-L5   | Ethernet 10 Gbit/s ; 1 Gbit/s | SFP+ / MMF (SWL)           | LC-style / up to 400m    |
| S26361-F3986-E6   | Ethernet 10 Gbit/s ; 1 Gbit/s | SFP+ / SMF (LWL)           | LC-style / up to 10km    |
| S26361-F3986-L6   | Ethernet 10 Gbit/s ; 1 Gbit/s | SFP+ / SMF (LWL)           | LC-style / up to 10km    |
| S26361-F3989-E600 | Ethernet 10 Gbit/s            | SFP+ Twinax Cable / active | SFP+ / 2m or 5m          |
| S26361-F3989-L102 | Ethernet 10 Gbit/s            | SFP+ Twinax Cable / active | SFP+ / 2m                |
| S26361-F3989-L105 | Ethernet 10 Gbit/s            | SFP+ Twinax Cable / active | SFP+ / 5m                |
| S26361-F3989-L110 | Ethernet 10 Gbit/s            | SFP+ Twinax Cable / active | SFP+ / 10m               |
| S26361-F3873-E500 | Ethernet 10 Gbit/s            | SFP+ Twinax Cable / active | SFP+ / 3m or 5m          |
| S26361-F3873-L501 | Ethernet 10 Gbit/s            | SFP+ Twinax Cable / active | SFP+ / 1m                |
| S26361-F3873-L503 | Ethernet 10 Gbit/s            | SFP+ Twinax Cable / active | SFP+ / 3m                |
| S26361-F3873-L505 | Ethernet 10 Gbit/s            | SFP+ Twinax Cable / active | SFP+ / 5m                |

Interface Module notes  
 Only Fujitsu certified modules are supported  
 Order codes starting with "S26361-F3873" are Brocade branded cables, required for connections to Brocade switches  
 Order codes starting with "S26361-F4571" are Cisco branded cables, required for connections to Cisco switches

Description optional cable  
 10Gbit/s transceiver module for MMF (S26361-F3986-E3 / -L3 and MC-OJXE51 / MCX0JXE51):  
 - OM1 (Multi Mode Fiber 62.5/125µm, 200 MHz\*km) up to 33m  
 - OM2 (Multi Mode Fiber 50.0/125µm, 500 MHz\*km) up to 82m  
 - OM3 (Multi Mode Fiber 50.0/125µm, 2000 MHz\*km) up to 300m  
 - OM4 (Multi Mode Fiber 50.0/125µm, 4700 MHz\*km) up to 400m  
 10Gbit/s transceiver module for SMF (S26361-F3986-E4 / -L4):  
 - OS1 (Single Mode Fiber 9µm) up to 10km

**Environment**

**Power consumption**  
 Dual Port 10GBase-SR typ. 10 W, max. 10.7 W  
 Dual Port SFP+ Twinax typ. 7.9 W, max. 8.6 W

**Power consumption**

**Temperature (operating)** 0 - 55 °C

**Storage temperature** -40 - 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 PRIMERGY 10Gb Network Controller, 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 PRIMERGY 10Gb Network Controller, 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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