

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.

The cards offer at least one Ethernet interface which is designed for the respective network types and network architectures. The bus interface links the network card with the server.

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"> ■ Intel® 82599 10 Gigabit Ethernet Controller ■ Low-profile PCB ■ Load balancing on multiple CPUs ■ Time Sync (IEEE 1588, 802.1as) ■ Intel® PROSet utility for Microsoft Windows Device Manager 	<ul style="list-style-type: none"> ■ Industry-leading, energy-efficient design for next-generation 10 Gigabit performance and multi-core processors ■ Enables higher bandwidth and throughput from standard and low-profile PCIe slots and servers ■ 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 ■ 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 ■ Provides point-and-click management of individual adapters, advanced adapter features, connection teaming, and virtual local area network (VLAN) configuration

Technical details

Technical details

Controller Silicon	Intel® 82599 10 Gigabit Ethernet Controller
Controller type	Ethernet Ctrl.
Connector type	SFP+
Operating system	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
Data transfer rate(s)	10 Gbit/s
Bus interface	PCIe 2.0 x8
Bus transfer rate	5GT/s
LEDs	LINK (solid) and ACTIVITY (blinking) LINK SPEED (green = 10G)
Network protocol and standards compatibility	IEEE 802.1p Class of Service IEEE 802.1q VLAN IEEE 802.1Qaz Enhanced Transmission Selection (ETS) IEEE 802.1Qbb Priority Flow Control (PFC) IEEE 802.3ad LACP IEEE 802.3ae 10Gbit Ethernet IEEE 802.1as Timing and Synchronization IEEE 802.3x Flow Control IEEE 1588 Precision Time Protocol IPv4, IPv6 and mixed IPv4/IPv6 network protocols
Interrupt Levels	MSI-X; INTA; MSI
WoL	Yes
WoL comment	supported in Modular LAN slot in dedecated PRIMERGY server
Virtualization	VMDq (64 queues per port) SR-IOV ready (64 virtual function per port) VMBL (Virtual Maschine Load Balancing) VLAN support with VLAN tag insertion, stripping and packet filtering for up to 4096 VLAN tags
Teaming	by OS driver
Switch fault tolerance (SFT)	Yes
Adapter fault tolerance (AFT)	Yes
Adaptive load balancing (ALB)	Yes
Remote boot support	PXE 2.0
iSCSI support	Yes
Additional features	multiplexed management LAN supported in Modular LAN slot in dedecated PRIMERGY server
Offloading	TX/RX IP, TCP & UDP checksum offload (IPv4, IPv6) capabilities IPv6 segmentation capability extended to new standard type
Add on / Component name	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
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-0JXE51	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-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-F4571-E500	Ethernet 10 Gbit/s	SFP+ Twinax Cable / passive	SFP+ / 3m or 5m
S26361-F4571-L101	Ethernet 10 Gbit/s	SFP+ Twinax Cable / passive	SFP+ / 1m
S26361-F4571-L103	Ethernet 10 Gbit/s	SFP+ Twinax Cable / passive	SFP+ / 3m
S26361-F4571-L105	Ethernet 10 Gbit/s	SFP+ Twinax Cable / passive	SFP+ / 5m
S26361-F4571-L107	Ethernet 10 Gbit/s	SFP+ Twinax Cable / active	SFP+ / 7m
S26361-F4571-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-0JXE51 / 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
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Power consumption

Temperature (operating)	0 - 55 °C
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Storage temperature	-40 - 70 °C
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Compliance

Compliance notes	According to the corresponding system
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Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates
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More information

Fujitsu OPTIMIZATION 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/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY 10Gb Network Controller, 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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