

# Data Sheet

## Intel® X540-T2 2x 10GBase-T LAN Adapter

X540-T2 2x 10GBase-T PCIe x8 card

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.



### X540-T2 2x 10GBase-T LAN Adapter

The X540-T2 adapter hosts Intel's latest Ethernet silicon, which uses a single chip solution for "LAN on Motherboard" (LOM) to deliver 10 Gigabit Ethernet (10 GbE) on the latest server platforms. 10GBase-T simplifies the transition to 10 GbE and it can be deployed anywhere in your data center.

Its flexible range - from 1 to 100 meters - supports the latest network architectures. With lower cost and power, 10GBase-T is ready for broad deployment. 10GBase-T is an option for every rack and tower server in the data center. Waiting for a low-cost 10 GbE copper solution to deploy 10 GbE to all the corners of a data center is now over. The adapter provides bandwidth-intensive applications with highly affordable 10 GbE network performance and cost-effective RJ-45 connectivity.

Main Features	Benefits
<ul style="list-style-type: none"> <li>■ Intel® Ethernet adapter X540-T2</li> <li>■ Low-profile</li> </ul>	<ul style="list-style-type: none"> <li>■ Industry's first integrated MAC+PHY reducing cost and power</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>■ Enables widespread deployment</li> <li>■ Guaranties lossless delivery, congestion notification, priority-based flow control and priority groups</li> </ul>
<ul style="list-style-type: none"> <li>■ Load balancing on multiple CPUs</li> </ul>	
<ul style="list-style-type: none"> <li>■ Support for most Network Operating Systems (NOS)</li> <li>■ DCB (Data Center Bridging) enhancements</li> </ul>	

# Technical details

## Technical details

<b>Controller Silicon</b>	Intel® Ethernet Controller X540
<b>Controller type</b>	Ethernet Ctrl.
<b>Connector type</b>	RJ45
<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>	10 Gbit/s; 1 Gbit/s; 100 MBit/s
<b>Auto Negotiation support</b>	Yes
<b>Bus interface</b>	PCIe 2.1 x8
<b>Bus transfer rate</b>	5GT/s
<b>Network protocol and standards compatibility</b>	IEEE 802.1p IEEE 802.1q VLAN IEEE 802.3ad LACP IEEE 802.3 2005 flow control support
<b>HW Virtualization</b>	PCI-SIG SR-IOV with up to 64 virtual functions per port for Linux, VMware, Windows (for Windows Server 2012 only)
<b>Interrupt Levels</b>	INTA; MSI; MSI-X
<b>WoL</b>	No
<b>Virtualization</b>	VMDQ (Virtual Machine Device Queues) up to 64 pueues per port VMLB (Virtual Maschine Load Balancing) VIOM (Fujitsu Virtual IO Manager)
<b>Teaming</b>	all teaming functions provided by the OS
<b>Remote boot support</b>	iSCSI ; PXE
<b>iSCSI support</b>	Yes
<b>Offloading</b>	Tx/Rx IP, SCTP, TCP and UDP checksum offloading (IPv4 & IPv6) TX TCP segmentation offload (IPv4 & IPv6) Receive/Transmit Side Scaling for Windows and Scalable I/O for Linux (IPv4, IPV6, TCP/UDP)

Order code	Product Name	Height of bracket	Number of ports	Related product
MC-0JXE31	Eth Ctrl 2x10GBase-T PCIe x8 X540-T2	Low Profile (LP)	2	PRIMEQUEST Server
MC-0JXE32	Eth Ctrl 2x10GBase-T PCIe x8 X540-T2	Full Height (FH)	2	PRIMEQUEST Server
MCX0JXE31	Eth Ctrl 2x10GBase-T PCIe x8 X540-T2	Low Profile (LP)	2	PRIMEQUEST Server
MCX0JXE32	Eth Ctrl 2x10GBase-T PCIe x8 X540-T2	Full Height (FH)	2	PRIMEQUEST Server
S26361-F3752-E202	Eth Ctrl 2x10GBase-T PCIe x8 X540-T2 LP	Low Profile (LP)	2	PRIMERGY Server
S26361-F3752-E2	Eth Ctrl 2x10GBase-T PCIe x8 X540-T2	Full Height (FH)	2	PRIMERGY Server
S26361-F3752-L502	Eth Ctrl 2x10GBase-T PCIe x8 X540-T2	Full Height / Low Profile	2	PRIMERGY Server

## Supported Interface Modules / Cables

Description optional cable	10GBASE-T
	- 100m on Cat 6A or Cat 7
	- 55m on Cat 6 (compliant to TSB-155)
	1000BASE-T
100BASE-T	- 100m on Cat 5e, Cat 6, Cat 6A or CAT 7
	- 100m on Cat 5e, Cat 6, Cat 6A or CAT 7

## Environment

<b>Power consumption</b>	6.6 W / 100Mbps 9.5 W / 1Gbps 17.4 W / 10Gbps
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## Compliance

<b>Europe</b>	CE
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### Compliance

USA/Canada	FCC Class B UL
Japan	VCCI
South Korea	KCC
Australia/New Zealand	C-Tick
Taiwan	BSMI
Compliance notes	According to the corresponding system
Compliance link	<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 X540-T2 2x 10GBase-T LAN Adapter, 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 X540-T2 2x 10GBase-T LAN Adapter, 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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