



Intel X540-T2 Dual Port 10GBaseT Adapter for IBM System x delivers next-generation networking features

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At a glance

The Intel™ X540-T2 Dual Port 10GBaseT Adapter for IBM® System x® offers:

- 10 Gigabit Ethernet (10GbE) performance for the entire datacenter
- Standard CAT-6a and CAT-5e cabling with RJ45 connectors
- Backward compatibility with existing 1000BASE-T networks to simplify the transition to 10GbE
- Flexible I/O virtualization for port partitioning and Quality of Service (QoS) of up to 32 virtual ports
- The industry's first dual-port 10GBASE-T adapter offering a single-chip solution with integrated MAC + PHY
- Reliable and proven 10 Gigabit Ethernet technology from Intel Corporation

Overview

Features of the Intel X540-T2 Dual Port 10GBaseT Adapter for IBM System x include:

- PCI Express® 2.0 Gen 2 x8 for both 2.5 GT/s and 5 GT/s
- Standard PCIe low-profile card form factor
- Adapter mounted with a 3U bracket
- A loose 2U bracket also available in the option package
- 2 x 10Gb BASE-T (RJ45) connector ports
- Intel Virtual Technology (VT) with I/OAT and VMDq
- One-year limited warranty
- 10Gb Ethernet 802.3ae compliance
- Support for:
 - IPv4/IPv6, MSI/MSI-X, GSO, TSO, LRO, and RSS
 - Jumbo Frames
 - Both UEFI and legacy PXE boot
 - TCP/IP/UDP checksum offload (TCO)
 - Large Receive Offload (LRO) and Receive Sides Scaling (RSS)
 - VLAN and 802.1Q vLAN tagging
 - PXE boot for both legacy and UEFI for IPv4

- iSCSI and iSCSI boot as a software iSCSI initiator
- IEEE 802.1Q VLAN Tags
- IEEE 802.1p Priority Encoding
- Quality of Service (QoS)

Key prerequisites

For prerequisites, see the System x ServerProven® Plan at

<http://www-03.ibm.com/systems/info/x86servers/serverproven/compat/us/xseries/lan/matrix.html>

Planned availability date

May 31, 2012

Description

Intel X540-T2 Dual Port 10GBaseT Adapter for IBM System x

The adapter has the following features:

- PCI Express 2.0 Gen 2 x8 for both 2.5 GT/s and 5 GT/s
- Standard PCIe low-profile card form factor
- Adapter mounted with a 3U bracket
- A loose 2U bracket also available in the option package
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Product number

Options:

Description

Part
number

Intel X540-T2 Dual Port 10GBaseT
Adapter for IBM System x

49Y7970

Publications

None

Services

Global Technology Services

IBM services include business consulting, outsourcing, hosting services, applications, and other technology management.

These services help you learn about, plan, install, manage, or optimize your IT infrastructure to be an on-demand business. They can help you integrate your high-speed networks, storage systems, application servers, wireless protocols, and an array of platforms, middleware, and communications software for IBM and many non-IBM offerings. IBM is your one-stop shop for IT support needs.

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Select your country, and then select the product as the category.

Technical information

Specified operating environment

Physical specifications

Environmental requirements

- Operating temperature: 0° to +55°C
- Storage temperature: -20° to +65°C
- Shipping conditions: -20° to +70°C
- Air flow requirement (LFPM): 45 minimum
- Wet bulb (maximum): 27°C
- Relative humidity (operating/nonoperating): 10% to 90%
- Relative humidity (shipping): 5% to 95%, no condensation
- Relative humidity (storage): 5% to 80%
- Maximum dew point (operating): 21 degrees C
- Maximum operating altitude: 7,000 feet or 2,134 meters
- Vibration and shock: IEC 68, FCC Part 68.302, NSTA, 1A
- Electrostatic/electromagnetic susceptibility: IEC 801-2, -3, -4, and -5

Standards

Agency Approvals

- EN55022

- EN55024
- EN60950 / CE
- EN 61000-3-2
- EN 61000-3-3
- ICES-003, Issue-004
- IEC 950 CB Scheme
- FCC 47 CFR Part 15 Class A
- UL 1950
- CSA C22.2 950-95
- VCCI
- AS/NZS CISPR 22 / C-tick
- RRL for KC
- BSMI
- UL 94-/V

Software requirements

The following network operating systems have been tested for compatibility with the Intel X540-T2 Dual Port 10GBaseT Adapter for IBM System x.

Network operating systems

- Microsoft™
 - Windows™ Server 2008 x86 (all versions)
 - Windows Server 2008 x64 (all versions)
 - Windows Server 2008 R2 x64 (all versions)
 - Windows PE 3.1 and 2.1 x86 / x64
- Linux™
 - RHEL5 for x86, x64
 - RHEL6 for x86, x64
 - SLES10 for x86, x64
 - SLES11 for x86, x64

Note: For information on additional support, certification, and versions of network operating systems, visit

<http://www.ibm.com/servers/eserver/serverproven/compat/us/>

IBM makes no representation or warranty regarding third-party products, including those designated as ServerProven.

Planning information

Cable orders

None

Security, auditability, and control

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

Global Technology Services

Contact your IBM representative for the list of selected services available in your country, either as standard or customized offerings, for the efficient installation, implementation, and/or integration of this product.

Terms and conditions

Warranty period

One year

This option assumes the same warranty or maintenance terms as the machine in which it is installed for the remainder of the warranty or maintenance period for such machine.

IBM Hourly Service Rate Classification

Two

Customer setup

Yes

Machine code

No

All other terms and conditions are the same as those applicable to the IBM machine type in which the feature is installed.

Pricing

For all local charges, contact your IBM representative.

Announcement countries

All European, Middle Eastern, and African countries.

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