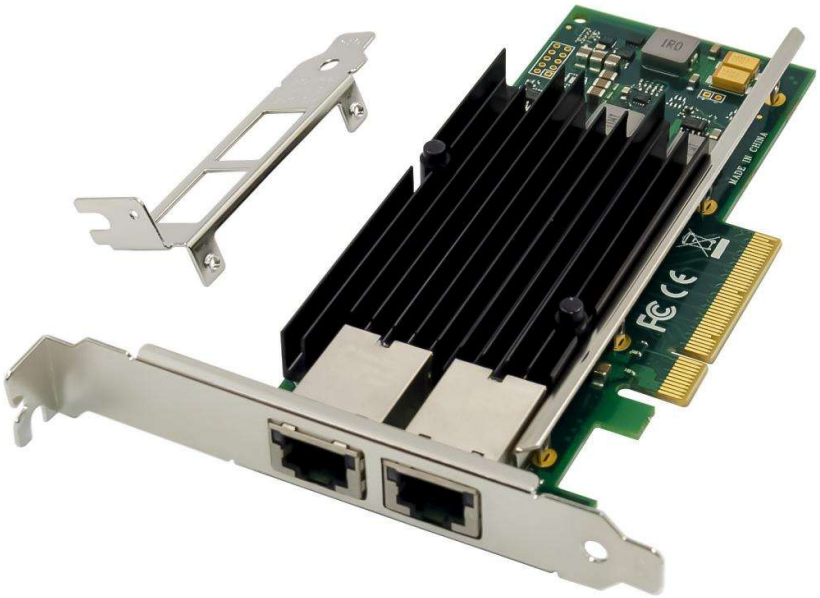
PCIe X8 Intel X540 Dual-RJ45 10G Server Converged NIC



P/N.: MC-PCIEX8-X540-T2-D

USER Manual

EN ver2.0

Overview

X540BT2 is PCI-e 10Gbps Dual RJ45 Port Ethernet Network Card , based on INTEL X540 Chipset, which is used by many OEMs as a single chip solution for LAN on Motherboard (LOM) to deliver 10 Gigabit Ethernet(10 GbE) on the latest server platforms. 10GBASE-T converged network adapter simplifies migration to 10 GbE, provides iSCSI, FCoE, Virtualization, and Flexible Port Partitioning.

Features

Low cost, low power, 10 Gigabit Ethernet (10GbE) performance for the entire data center

Standard CAT-6a cabling with RJ45 connectors

Backward compatibility with existing 1000Base-T networks simplifies the transition to 10GbE

Flexible I/O virtualization for port partitioning and quality of service (QoS) of up to 64 virtual ports

Unified networking delivering LAN, iSCSI, and FCoE in one low cost CNA

Industry first dual-port 10GBase-T adapter with single-chip solution with integrated MAC + PHY

Reliable and proven 10 Gigabit Ethernet technology from Intel corporation

Network / Transport Protocol: TCP/IP, UDP/IP, IPSec, iSCS

Features Link Aggregation Control Protocol (LACP)

Compliant Standards: IEEE 802.1Q, IEEE 802.1p, IEEE 802.3ad (LACP)

Dual Port 10GbE adapters

PCI Express v2.1,5.0 GT/s, x8 lanes

PXE、iSCSI 、FCoE boot

Standard CAT-6a Cabling with RJ45 Connectors

Compatibility with Existing 1000BASE-T Networks Simplifies the Transition to 10GbE

Network Virtualization

IEEE 802.3an/ab and 10G Ethernet Specification Compliance

Low Profile and Full-Height bracket

Package content

- 1 x X540 PCIe Network card
- 1 x User's Manual
- 1 x CD
- 1 x Low profile bracket
- ~~Accessories~~

System Requirements

- FreeBSD, Linux , VMWare ESXi, Win7/ Win-server2012/ Win-server2008/ Win8/Win8.1/Win-server2016/win10
- One available PCI Express x1 slot

Cabling Requirements:

Intel 10 Gigabit adapters

- For 10GBASE-T on Category 6,Category6a,or Category 7 wiring, twisted 4-pair copper:
- Category 6 wiring supports 55 meters max.
- Category 6a wiring supports 100 meters max.
- Category 7 wiring supports up to 100 meters

Intel 1 Gigabit adapters

- For 1000BASE-T or 100BASE-TX.use Category 5 or Category5e wiring, twisted 4-pair copper:
- Make sure you use Category 5 cabling that complies with the TIA-568 wiring specification For more information on this specification.
- Length is 100 meters max.
- Category 3 wiring supports only 10Mbps

CAUTION: If using less than 4-pair cabling, you must manually configure the speed and duplex setting of the adapter and the link partner. In addition,with2-and3-pair cabling the adapter can only achieve speeds of up

to 100Mbps

- For 100BASE-TX.use Category 5 wiring.
- For10BASE-T.use Category 3 or 5wiring

Hardware installation

1. Turn off the computer and unplug the power cord
2. Remove the computer cover and the adapter slot cover from the slot that matches your adapter
3. Insert the adapter edge connector into the slot and secure the bracket to the chassis
4. Replace the computer cover ,then plug in the power cord
5. Power on the computer

Install Drivers and software

Windows○R Operating Systems

You must have administrative rights to the operating system to install the drivers.

1. insert the CD driver bound with Intel network driver into your CD-ROM drive(also you can download the latest drivers from support website):
2. if the Found New Hardware Wizard screen is displayed, click **Cancel**
3. start the autorun located in the software package, the autorun may automatically start after you have extracted files.
4. Click **install Drivers and Software**
5. Follow the instructions in the install wizard to finish it

Installing Linux Drivers from Source Code

1. Download and expand the base driver tar file.
2. Compile the driver module
3. Install the module using the modprobe command
4. Assign an IP address using the ifconfig command

Support

More information and settings, please refer to the Intel Adapter User Guides or you can contact us.

Specification

Controller	Intel X540BT2
Transmission Rate	10000Mbps
Network Standard Physical Layer Interfaces	Cat-6A 10G up to 100m， Cat-6 10G up to 55m Cat-5E/Cat-6/Cat-6A 1G/100M up to 100m
Jumbo Frame Support	Up to 9.5 KB
Operating Temperature	0℃ to 55℃(32°F to 131°F)
Network Virtualization	VMDq, PCI-SIG SR-IOV, Intel VT-c
LED Indicators	10Gb/s: Green and Green blinking, 1000Mbps/100Mbps: Green and Orange blinking
Power Supply	PCI Express +12V±8% / +3.3V±9%
SYSTEM SUPPORT	Windows Server 2008 R2 / 2012 / 2012 R2 / 2016 R2
	Windows 7 / 8 / 8.1 / 10
	FreeBSD 11.0 or later
	Linux SLES 11 / 12 or later
	Linux Stable Kernel version 2.6.x/3.x/4.x or later
	VMware ESX/ESXi 5.x/6.x or later

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Reliable Connectivity