PRESTO[™] 10Gbe 10GBASe-T Dual-Port 10 Gigabit Ethernet PCI Express[®] Card

Quick Start Guide

You Should Have

The following items should be included in your product package:

- Presto 10GbE 10GBASE-T adapter card
- Low-profile PCIe bracket
- QSG

The following items may be required for installation:

Medium Phillips screwdriver

Computer Compatibility

- Mac Pro[®] 3,1, 4,1, 5,1 or 7,1 (2019)
- PC desktop or server
- Xserve 3,1

OS Compatibility

- OS X[®]/macOS[®] 10.8.5+
- 64-bit editions of Windows® 11, 10; Server 2022, 2019, 2016
- Linux[®] RHEL 8.5/8.4; SLES 15 SP3, 12 SP5; Ubuntu 20.04 LTS, 18.04 LTS
- FreeBSD 13.0/12.3

Thunderbolt[™] Compatibility

• Mac (Intel[®] or M1) or PC via a Thunderbolt to PCIe Card **Expansion System**

System Requirements

The Presto 10GbE 10GBASE-T card requires the following to operate:

• One or two Cat 6 or Cat 6A cables

Driver Information—Mac and Windows

The drivers that enable the Presto 10GbE 10GBASE-T card to work with Mac and Windows computers must be downloaded from Sonnet's website; instructions follow.

Driver and Configuration Information—Linux

The drivers that enable the Presto 10GbE 10GBASE-T card to work with Linux are installed as part of the Linux Kernel 5.0 and later. For earlier versions, please go to https://www.sonnettech. com/support/kb/kb.php, navigate to and click the Presto 10GbE 10GBASE-T PCIe Card link. Locate and click the Presto 10GbE 10GBASE-T link, and then click the Driver link. Locate, download, and install the appropriate drivers.

The steps necessary to configure the Sonnet card with your computer may vary based on the version of Linux running. Sonnet recommends using whatever method or tools you would normally use for configuring any onboard ports.

Contacting Customer Service

Before contacting Customer Service, please check the Sonnet website (www.sonnettech.com) for the latest updates and files. Email requests generally receive the fastest responses, and are usually processed within a 24-hour period during normal business hours, excluding holidays. When you contact Customer Service, please have the following information available:

- Product name
- Computer model
- OS version
- A System Report (macOS), or a Microsoft System Information MSINFO32 (Windows) report (Windows), along with a description of the issue(s) you are encountering with your device

If further assistance is needed, please contact Sonnet Customer Service at:

E-mail: support@sonnettech.com Tel: 1-949-472-2772 (Monday–Friday, 9 a.m.–5 p.m. Pacific Time, excluding holidays)

Japan Customers

Contact Sonnet Customer Service Japan at: E-mail: jp.support@sonnettech.com



Support Notes: We recommend you make a backup of important information on your system's current hard drive(s) prior to installing new hardware or software.

When handling computer products, take care to prevent components from being damaged by static electricity; avoid working in carpeted areas. Handle expansion cards only by their edges and avoid touching connector traces and component pins. Also, avoid touching components inside your computer.



Support Note: This document was up to date at the time of printing. Please check the Sonnet website for the latest documentation.

- 1. Go to www.sonnettech.com/support/kb/kb.php
- 2. Navigate to and click the Presto 10GbE 10GBASE-T PCIe Card link.
- 3. Click the Manual link.
- 4. Click the Presto 10GbE 10GBASE-T PCIe Card Quick Start Guide [English] link, and then check the Document Version information. If the version listed is later than this document (revision G), click the Download Now button for the latest version.

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Installation Steps for Mac Users

The following section covers installation and configuration steps for the Presto card in a Mac computer or Thunderbolt to PCIe card expansion system connected to a Mac. If you are installing the Presto card into a Windows PC, skip to the next page.

Card Installation Steps

- 1. Shut down your computer or Thunderbolt to PCIe card expansion system and disconnect it from its power source, and then open it to access the expansion card area (PCIe slots); refer to the user's manual for specific information.
- 2. Locate an available PCI Express (PCIe) slot and remove its access cover.
- 3. Remove the Sonnet card from its packaging, and then install it into the card slot; make sure the card is firmly seated and secured.
- 4. Close your computer or expansion system, and then reconnect it to its power source. If the card is installed in an expansion system, also connect the Thunderbolt cable between the Thunderbolt ports on the system and computer.

Support Note: Unless your setup requires connection redundancy or link aggregation (and your switch or storage system supports those features), connecting the Presto 10GbE 10GBASE-T card to a switch or storage system requires only a single cable.

- 5. Connect Cat 6 or Cat 6A cables between the ports on the Presto card and the ports on the switch or device.
- **6.** Turn on your computer; depending on the computer and operating system used:
 - If you installed the card into a Mac Pro (Mid 2012), Mac Pro (Mid 2010), Mac Pro (Early 2009), or Mac Pro (Early 2008), or, into a Thunderbolt to PCIe card expansion system, proceed to Driver Download and Installation Steps.
 - If you installed the card into a pre-2008 Mac Pro, Expansion Slot Utility should open automatically. If it does not open by itself, you must do so manually (Expansion Slot Utility is located in the /System/Library/CoreServices folder). Select the configuration appropriate for your setup (your Sonnet card is an x4 card, and should be assigned at least an x4 slot), and then click Quit if the default configuration was appropriate, or click Save and Restart if you changed the configuration. Proceed to the next section.

Driver Download and Installation Steps

- 1. Launch a web browser and go to www.sonnettech.com/ support/kb/kb.php
- 2. Navigate to and click the Presto 10GbE 10GBASE-T PCIe Card link.

- **3.** On the Presto 10GbE 10GBASE-T PCIe Card page, click the Driver link, and then click the arrow next to driver software for macOS to display important information. After reading the information, click the Download Now button; the software will be downloaded.
- 4. Double-click the .dmg file; the file will expand and a new window will open.
- **5.** Double-click the Sonnet Twin-10G.pkg file to launch the driver installer. Follow the on-screen instructions, and then click Restart to restart your system and finish the driver installation.

Basic Card Configuration Information

Configure the Presto 10GbE card in the System Preferences Network preferences panel; the card will be identified as a PCI Ethernet card.

Performance Tuning Steps

Listed below are steps required to configure the Presto card for maximum performance.

| A | Support Note: In order to realize any performance |
|--------|---|
| Ŵ | increases, the network switches and server to which the |
| Presto | card is connected must all be configured to have jumbo |
| frames | enabled. |

- 1. Open System Preferences, and then click Network. In the Network System Preferences panel, click one of the Presto card's ports in the left panel, and then click Advanced; a new panel appears.
- 2. In the Advanced panel, click Hardware. From the Configure drop-down menu, select "Manually". In the Speed drop-down menu, leave the setting at 10G... In the Duplex drop-down menu, select "full-duplex" (*not* "full duplex, flow-control"). In the MTU drop-down menu, select "Custom," and then enter "9000" in the box below.
- 3. When you've completed changing the settings, click OK.
- 4. Repeat steps 1-3 for the other port, if necessary.
- **5.** Back in the main Network window, click Apply after you've completed changing the settings.
- 6. If you used existing settings and do not need to combine Ethernet ports (link aggregation), your installation is complete. For additional information on combining Ethernet ports, open a browser and go to support.apple.com; type "network, Ethernet" and "Manage Virtual interfaces" to display various articles.

Installation Steps for Windows Users

The following section covers installation and configuration steps for the Presto card in a Windows computer or a Thunderbolt to PCIe card expansion system connected to a PC.

Card Installation Steps

- 1. Shut down your computer or Thunderbolt to PCIe card expansion system and disconnect it from its power source, and then open it to access the expansion card area (PCIe slots); refer to the user's manual for specific information.
- 2. Locate an available PCI Express (PCIe) slot and remove its access cover.
- **3.** Remove the Sonnet card from its packaging, and then install it into the PCI Express slot; make sure the card is firmly seated and secured.
- **4.** Close your computer or expansion system, and then reconnect it to its power source. If the card is installed in an expansion system, also connect the Thunderbolt cable between the Thunderbolt ports on the system and computer.

Support Note: Unless your setup requires connection redundancy or link aggregation (and your switch or storage system supports those features), connecting the Presto 10GbE 10GBASE-T card to a switch or storage system requires only a single cable.

5. Connect Cat 6 or Cat 6A cables between the ports on the Presto card and the ports on the switch or device.

Driver Download and Installation

This section describes the download and installation of the drivers required to support the Presto 10GbE 10GBASE-T adapter card installed in your Windows computer or Thunderbolt to PCIe card expansion system connected to a PC with Thunderbolt ports.

- 1. Launch a web browser and go to www.sonnettech.com/ support/kb/kb.php
- **2.** Navigate to and click the Presto 10GbE 10GBASE-T PCIe Card link.
- **3.** On the Presto 10GbE 10GBASE-T PCIe Card page, click the Driver link, and then click the Download Now button next to the driver software for Windows link; a new window or tab will open.
- **4.** On the *Intel® Ethernet Adapter Complete Driver Pack* page, locate and click the Download button; an *Intel Software License Agreement window* will open.
- **5.** Read the license agreement, and then click the "I accept the terms in the license agreement" button; the file will start downloading.

- **6.** Locate the .zip file you downloaded, right-click it and select Extract All, and then follow the instructions; the file will expand and a new window will appear.
- 7. In the folder that opened in the new window, locate and double-click Autorun; an *Intel Network Connections* window will open.
- 8. In the *Intel Network Connections* window, click Install Drivers and Software; a pop-up window will appear asking for your permission for the application to make changes to your device. Click Yes; the installer will launch.
- **9.** Follow the on-screen instructions to complete the driver installation.

Basic Card Configuration Information

You may configure the Presto 10GbE 10GBASE-T card's settings using Windows Device Manager. You may locate the device's ports in the Network adapters category, listed as either an Intel Ethernet Controller X540 or X550.

Quick Start Guide for Presto 10GbE 10GBASE-T

Ports and Indicators Information (Card Version 1)

1 - RJ45 (10GBASE-T) Ports

Connect Cat 6 or Cat 6A cables between these ports and the switch's or device's RJ45 ports.

2 - Link Speed Indicators

When a link is established between the Presto card and the switch, these LEDs light to indicate the link speed to the switch: yellow = 10Gb, green = 1Gb, off = 100Mb.

3 - Link/Activity Indicators

These LEDs light up green to indicate a link is established between the Presto card and the switch, and flash green when there is activity between the two.

Ports and Indicators Information (Card Version 2)

1 - RJ45 (10GBASE-T) Ports

Connect Cat 6 or Cat 6A cables between these ports and the switch's or device's RJ45 ports.

2 - Link Speed Indicators

When a link is established between the Presto card and the switch, these LEDs light to indicate the link speed to the switch: green = 10Gb, yellow = 1Gb, off = 100Mb.

3 - Link/Activity Indicators

These LEDs light up green to indicate a link is established between the Presto card and the switch, and flash green when there is activity between the two.

