

ALLEGRO™ USB-C PCIe

Dual-Port SuperSpeed+ USB 3.1 Gen 2 Charging PCIe 3.0 Adapter Card

Quick Start Guide

You Should Have

The following item should be included in your product package:

- One Allegro USB-C PCIe adapter card
- One low-profile mounting bracket

The following may be required for installation:

- Medium Phillips screwdriver

System Requirements

Allegro USB-C PCIe requires the following in order to operate in your system:

- One available PCI Express slot
- Internet access (for driver download)

Mac Compatibility

- Mac Pro® 3,1 4,1 or 5,1 (Early 2008, Early 2009, or Mid 2010)
- macOS 10.10.5, 10.12.6+; **not compatible with macOS 10.11**
- macOS High Sierra compatible

PC Compatibility

- PC desktop
- Windows® 10, 8.1, 7
- Windows Server 2016, 2012, 2008 (64-bit editions)

Linux Compatibility

- Computer with PCIe slots
- Linux 4.12+ Kernel (LTS version only)

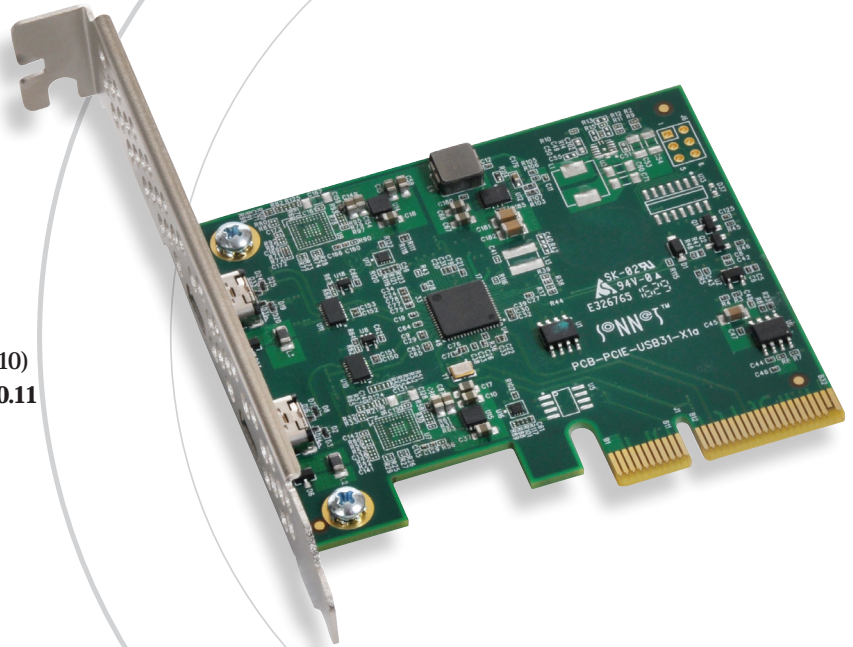
Thunderbolt Compatibility

- Mac or PC via a Thunderbolt 2 or Thunderbolt 3 PCIe card expansion system
- macOS 10.12.6+
- Windows 10 Build 1703 or newer (64-bit edition)

Supported Cables

You may use the following cable types with this product:

- USB-C 10Gbps
- USB-C 5Gbps
- Thunderbolt 3 40Gbps (0.5-meter only); 1-meter and longer Thunderbolt 3 (40Gbps) cables NOT supported
- Thunderbolt 3 20Gbps



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, you must take care to prevent components from being damaged by static electricity. Before opening your computer or removing parts from their packages, always ground yourself first by touching a metal part of the computer, such as a port access cover, and work in an area free of static electricity; avoid carpeted areas. Handle all electronic components by their edges, and avoid touching connector traces and component pins.



Support Note: This document was up to date at the time of printing. However, changes to the hardware or software may have occurred since then. Please check the Sonnet website for the latest documentation.

1. Go to www.sonnettech.com/support/kb/kb.php
2. Click the Computer Cards link.
3. Click the PCIe Cards link.
4. Click the Allegro USB-C PCIe link, and then click the Documentation link.
5. Click the Allegro USB-C PCIe Quick Start Guide [English] link, and then check the Document Version information. If the version listed is later than this document (this is version C), click the Download Now button for the latest version.



Remember to register your product online at <http://registration.sonnettech.com> to be informed of future upgrades and product releases.

Software updates and links are available from the Sonnet Website at www.sonnettech.com. • Online support form available at <http://supportform.sonnettech.com>.

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Hardware Installation Steps—All Users

This section covers the installation of the Allegro USB-C PCIe card into your computer or Thunderbolt-to-PCIe expansion chassis.

1. Shut down your computer or Thunderbolt-to-PCIe expansion chassis, 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 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 the computer or Thunderbolt-to-PCIe expansion chassis.

Driver Information—macOS

The standard drivers that enable the Allegro USB-C PCIe card to work in your computer or Thunderbolt expansion chassis are installed as part of macOS 10.10, and 10.12 and later; the Allegro card is ready to use when you power on your computer.



Support Note for Mac Users: In order for this product to support full USB power delivery capabilities in systems running macOS, you must download and install a Sonnet kernel extension. Go to www.sonnettech.com/support/kb/kb.php and click the Computer Cards link, and then click the PCIe Cards link. Click the Allegro USB-C PCIe link, and then click the driver link. Download and install the USB 3.0 Power Kernel Extension (OS X, macOS).

Driver Information—Windows

The standard drivers that enable the Allegro USB-C PCIe card to work in your computer running Windows are installed automatically. Sonnet recommends you update Windows to the latest version to ensure full support and performance.

Driver Information—Linux

The standard drivers that enable the Allegro USB-C PCIe card to work in your computer running Linux 4.12+ Kernel (LTS version only) are installed automatically. Sonnet recommends you update Linux to the latest version to ensure full support and performance.

Known Limitations and Advice—All Users

USB peripherals have some limitations you should be aware of, and we have listed some additional advice here. Refer to the peripheral manufacturers' Websites for more information.

- USB 3.1 devices come in two varieties, Gen 1, and Gen 2. Gen 1 devices support data transfer speeds up to 5Gbps, while Gen 2 devices (such as this Sonnet adapter card) support data transfer speeds up to 10Gbps.
- The use of USB-C to USB 3.0 cables is supported, but data transfer speeds are limited to the speeds supported by the device.
- The Allegro USB-C PCIe card does not support Thunderbolt 3 peripheral devices, even though they use the same connector. If the peripheral device has the Thunderbolt icon (⚡) next to the port, or on the connector of an attached cable, it will not work with the Sonnet card.
- Many peripherals require additional drivers and application software to operate or have full functionality. Software should be included with the device, or available to download from the manufacturer's Website. Check the peripheral's user's manual for information about necessary software.
- Always "eject", "stop", "unplug", or "put away" any drive (hard drive, SSD, etc.) before disconnecting it from its cable or the Sonnet card.
- Always "eject" any memory card before removing it from the card reader, or disconnecting the card reader (with the card inserted in it) from its cable or the Sonnet card.
- Disconnecting drives while they are transferring or receiving data, may result in damage to the file(s) being transferred or cause your system to hang.
- Although many peripherals may draw power directly from the Sonnet card, other devices require an external power source. Remember to use external power supplies when necessary.
- Linux supports only 5Gbps transfer rates as of 4.12.13 Kernel.
- At the time of this writing, macOS erroneously reports a 5Gbps connection when connected at 10Gbps.
- The Allegro USB-C PCIe card is not compatible with Thunderbolt 1 PCIe card expansion systems.