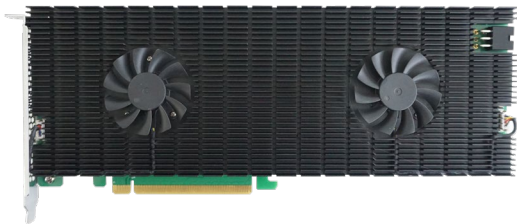*HighPoint*
Technologies, Inc.

SSD7140A

8x M.2 Port to PCIe 3.0x16 NVMe RAID Controller

Quick Installation Guide

V1.01

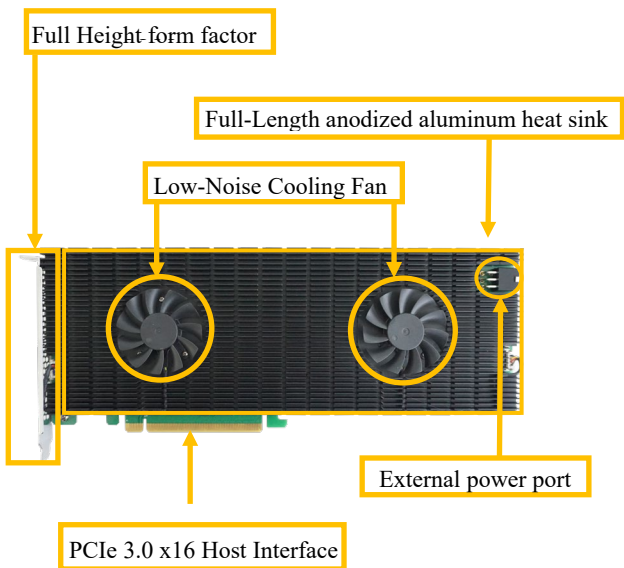## System Requirements

PC Requirements

- System with a free PCIe3.0 (or 4.0) x16 slot

- Windows 11, 10 / Server 2022, 2019, 2016, 2012R2 / Microsoft Hyper-V

- RHEL / Debian/Ubuntu/Fedora/Proxmox/Xenserver**/** Rocky Linux (Linux kernel 3.10 and later)

- Arch Linux (Kernel 5.17.5 and above)

- macOS 10.13.6 ~ macOS 13.x

SSD7140 Kit Content

- SSD7140A Controller Card
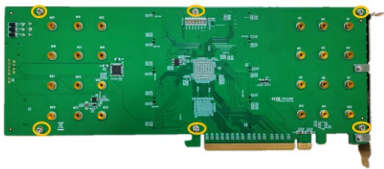
- Quick Installation Guide

SSD7140A Hardware

Front View

Full Height form factor

Full-Length anodized aluminum heat sink

Low-Noise Cooling Fan

External power port

PCIe 3.0 x16 Host Interface

Hardware Installation

Step 1. On the rear of the SSD7140A, remove the six screws that secure the unit's heat sink to the PCB.

Step 2. Carefully remove fan's power cable from the right-side of the heatsink as shown below, then carefully flip the heatsink to the left (like turning a page from a book).

Note: Take care when moving the heatsink to prevent damaging the left fan's power cable.
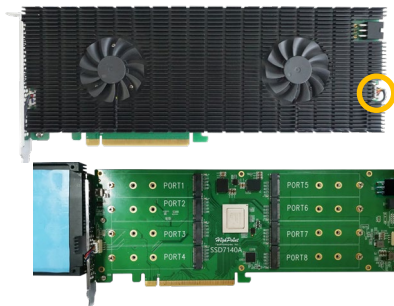
Step 3. After removing the casing, carefully turn it over to view the thermal pad. The blue films must be removed from the pad before reinstalling the panel. These films protect the pad from damage and foreign objects prior to installation, however, they will also prevent the thermal pad from conducting the heat away from the NVMe SSD's if we don't remove it.

Step 4. These 8 screws are used to install the NVMe SSD's.
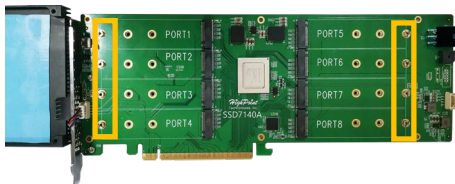
Step 5. Please remove these screws from each of the M.2 slots.
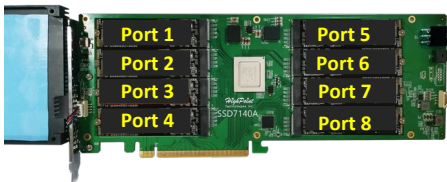
Step 6. Gently insert the SSD into the slot.

> *Note: Please make sure all disks are clean before you insert them into the slot to avoid unexpected situations.*

Step 7. Refasten the screw to secure the SSD.



Repeat Steps 5 to 7 to install the remaining SSDs.

The following example shows eight M.2 NVMe SSDs installed into Ports 1-8:

Step 8. After installing all SSDs, carefully flip the heatsink to the right.

> *Note: Make sure the SSDs are carefully, but securely installed into each M.2 port. Loose connections can cause a variety of stability and performance issues, and may ultimately result in data loss.*

Step 9. Carefully reinsert in the power supply cable of the cooling fan that was removed in step 2.
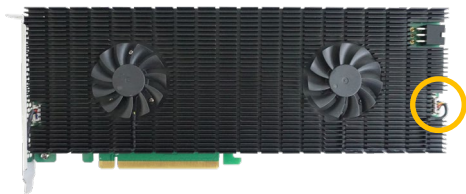

Step 10. On the rear of the SSD7140A, refasten the 6 screws that were removed in step 1.
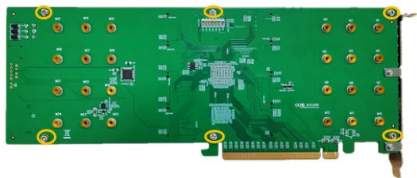
Note：*Make sure the aluminum cover is properly aligned with the controller board (PCB), and that it makes full contact with the thermal pad, before refastening it to the SSD7140A. If the cover is improperly installed, the fan and thermal pad will be unable to sufficiently cool the NVMe SSD's and controller componentry, which may result in damage to the SSD's or controller hardware, performance loss, unstable I/O, and the loss of data.*

Step 11. Power up the SSD external power supply

Note: If the external power supply is not powered on, the SSDs may drop offline or remain undetected, which could lead to data loss.
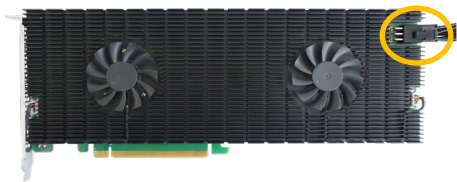
SSD7140A relies on two power sources to support eight SSDs; power supplied through the PCIe bus, and power from the system's PSU via an external 6 pin PCIe power cable. If the

external cable is not connected, there will be insufficient power to support all 8 SSD's; this may cause the SSDs to drop offline.

Note：The SSD7140A does not require the external power cord when used with 2019 Mac pro systems.

Connect 6 pin PCIe power cable
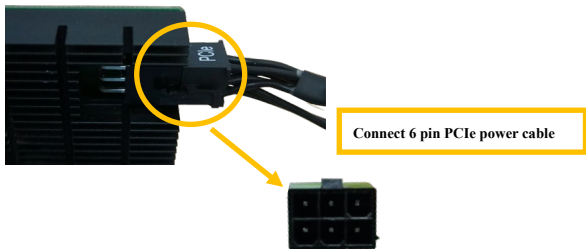
Note: Please be sure to connect NVMe before using the product to reduce the occurrence of unnecessary errors!
Note: Install the driver in the system first and then install the board

Resources

A variety of manuals, guides and FAQ's are available for the SSD7140A RAID controller.

In addition, we recommend visiting the Software Downloads webpage for the latest drivers, management interfaces, and installation guides.

For Software Downloads, Documentation and more information about this product, please visit the following website:

https://www.highpoint-tech.com/gen3-nvme-m2-non-bootable

FAQ & Troubleshooting:

FAQ - HighPoint Technologies, Inc. (helpjuice.com)

Customer Support

If you encounter any problems while utilizing the SSD7140A, or have any questions about this or any other HighPoint Technologies, Inc. product, feel free to contact our Customer Support Department.

Web Support:
https://www.highpoint-tech.com/support-and-services

HighPoint Technologies, Inc. websites:
https://www.highpoint-tech.com