

SSD7180/SSD7184

NVMe U.2 RAID Controller



SSD7180



SSD7184

Quick Installation Guide

V1.01

SSD7180/SSD7184 Quick Installation Guide (QIG)

This guide includes hardware descriptions of the SSD7180 and SSD7184 NVMe RAID controllers, explains how to safely install NVMe SSD's into each card, and provides a list of certified cable accessories available for this product series.

The Resource section includes links for additional installation guides, compatibility lists and software updates.

SSD7180 Kit Content

- SSD7180 Controller Card
- Quick Installation Guide

SSD7184 Kit Content

- SSD7184 Controller Card
- Quick Installation Guide

Data RAID Prerequisites

Data arrays are used exclusively for storage – they cannot be used to boot a system.

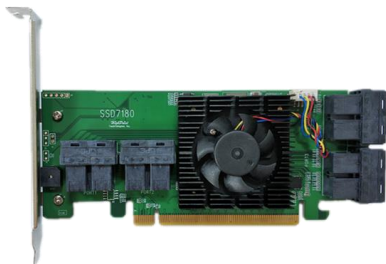
1. SSD7180 requires 8x **SFF-8643 to U.2 SFF-8639** cables to connect to NVMe U.2.
 - **SFF-8643 to U.2 SFF-8639** purchase link:
<https://estore-highpoint-tech.com/collections/cable-accessories/products/usb-c31-1ma>
2. SSD7184 requires 4x **SFF-8643 to U.2 SFF-8639** cables and

1x RS6540S and 2x **SFF-8644** connect to NVMe U.2.

- **SFF-8643 to U.2 SFF-8639** purchase link:
<https://estore-highpoint-tech.com/collections/cable-accessories/products/usb-c31-1ma>
 - **RS6540S** purchase link:
<https://estore-highpoint-tech.com/collections/nvme-raid-enclosures/products/RS6540S-4-bay-u-2-nvme-raid-storage-enclosure>
 - **SFF-8644** purchase link:
<https://estore-highpoint-tech.com/products/8644-8644-210?variant=31476574388270>
3. You must have at least one NVMe SSD installed into the SSD7180/SSD7184 controller.
 4. The SSD7180/SSD7184 must be installed into a PCIe 3.0 or 4.0 x16 lanes.
 5. Operating system:
 - Windows 10 / Windows 2016 / Windows 2019
 - A Linux Distribution with Kernel 3.10 and later
 - macOS 10.13 and later

SSD7180 Hardware

Front View



SSD7184 Hardware

Front View



RS6540S Panel Layout-Front View



Disk Present LED:

Solid Blue

Disk Active LED:

Flash Blue

Disk Fail LED:

Solid Red

Enclosure Power LED:

Solid Blue

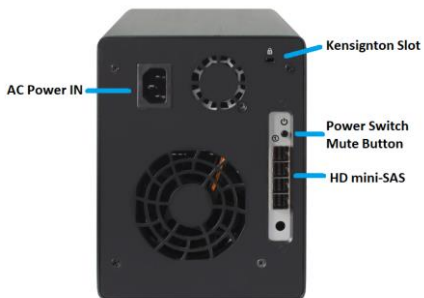
Temperature Warning LED:

Solid Yellow

Fan/Temperature Fail LED:

Solid Red

RS6540S Panel Layout-Rear View

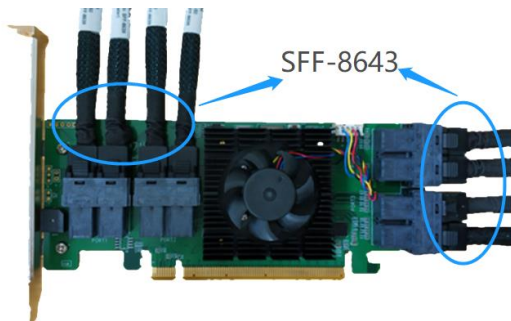


U.2 Disk Tray



SSD7180 Hardware Installation

1. The SSD7180 was designed for use with SFF-8643 to U.2 SFF-8639 cables that have 15-pin SATA power connectors. Each of the SSD7180's eight device ports accepts an SFF-8643 cable connection.



2. Shown above is a SFF-8643 to U.2 SFF-8639 cable with a 15-pin SATA power connector. The SFF-8639 port should be connected to

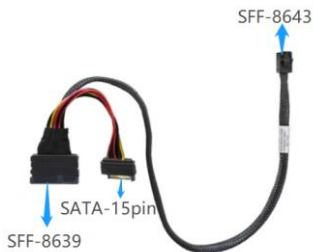
the NVMe SSD's U.2 port. The 15 pin SATA power connector should be connected to the system's power supply.

3. Insert the SSD7180 card into one of the motherboard's open PCI-E 3.0 x16 or PCI-E 4.0x16 slots.
4. The SSD7180's eight device ports are ordered sequentially; from left to right, and bottom to top:



SSD7184 Hardware Installation

1. The SSD7184 provides 4 SFF-8643 connectors on the right-side of the PCB. Each of these ports was designed for use with SFF-8643 to U.2 SFF-8639 cables that have 15-pin SATA power connectors.



2. Each cable's SFF-8639 port should be connected to the NVMe SSD's U.2 port. The 15 pin SATA power connector should be connected to the system's power supply.

3. The SSD7184's two external ports are located on the bracket side of the PCB. Each port accepts an SFF-8644 to SFF-8644 cable:



4. The second SFF-8644 port of each cable should be connected to the RS6540S as illustrated below (a to a, and b to b):
the connection method is as follows:



5. Insert the SSD7184 card into one of the motherboard's open PCIe x16 3.0 or PCIe x16 4.0 slots.

6. The SSD7184's eight device ports are ordered sequentially;



SSD7184



RS6540S

Optional Certified Cable Accessories

SSD7180 & SSD7184 (Internal)

8643-8643-0350



SFF-8643 NVMe Host to SFF-8643 NVMe HD-Mini-SAS Device (U.2) cable

Length: 13.78" (35cm)

8643-8639-50



SFF-8643 to SFF-8639 NVMe HD-Mini-SAS Device (U.2) cable, with Power Connector

Length: 19" (50cm)

OLX4-8643-061



SFF-8643 NVMe Host to Oculink backplane cable

Length: 23.62" (60cm)

SSD7184 (External – for use with RS6540S)

8644-8644-210



SFF-8644 to SFF-8644 cable

Length: 39.37” (1M)

Resources

A variety of manuals, guides and FAQ's are available for the SSD7180/SSD7184 RAID controller.

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

Software Download:

SSD7180 Driver, WebGUI, Installation Guide

https://highpoint-tech.com/USA_new/series-ssd7180-download.htm

SSD7184 Driver, WebGUI, Installation Guide

https://highpoint-tech.com/USA_new/series-ssd7184-download.htm

Other Reference Information:

Motherboard & NVMe SSD Compatibility List

SSD7180 User Guide – How To Set Up & Monitor RAID Array

https://highpoint-tech.com/USA_new/series-ssd7180-resource.htm

SSD7184 User Guide – How To Set Up & Monitor RAID Array

https://highpoint-tech.com/USA_new/series-ssd7184-resource.htm

FAQ & Troubleshooting:

https://highpoint-tech.com/USA_new/support-faq-nvme.htm

Customer Support

If you encounter any problems while utilizing the SSD7180/SSD7184 drive, or have any questions about this or any other HighPoint Technologies, Inc. product, feel free to contact our Customer Support Department.

Web Support: <http://www.highpoint-tech.com/websupport/>

HighPoint Technologies, Inc. websites:
<http://www.highpoint-tech.com>

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