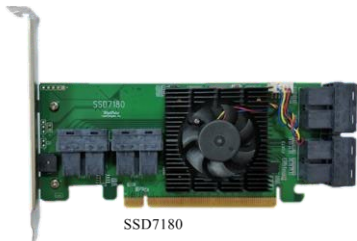


SSD7180/SSD7184

NVMe U.2 RAID Controller



SSD7180



SSD7184

Quick Installation Guide

V1.04

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 accessories available for this product series.

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

SSD7180 Kit Contents

- SSD7180 Controller Card
- Quick Installation Guide

SSD7184 Kit Contents

- 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. You must have at least one NVMe SSD installed into the SSD7180/SSD7184 controller.
2. The SSD7180/SSD7184 must be installed into a PCIe 3.0 or 4.0 slot with x16 lanes.
3. Operating system:
 - 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)

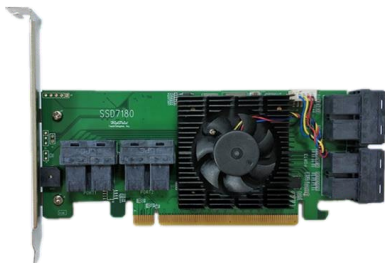
Required Accessories

Certified NVMe cable and enclosure accessories are available directly from HighPoint and our authorized resellers. For more information, please contact our Sales Department (sales@highpoint-tech.com).

1. **8643-8639-50** SFF-8643 to U.2 SFF-8639 cables are required to host internal U.2 NVMe SSD configurations. The SSD7180 can support 8 and the SSD7184 can support 4.
2. The SSD7184 requires two **8644-8644-210** SFF-8644 to SFF-8644 cables in order to support external U.2 NVMe SSD's via the **RocketStor 6540S**.
3. The **RocketStor 6540S** (RS6540S) is a 4-Bay NVMe U.2 enclosure designed for use with the SSD7184.

SSD7180 Hardware

Front View



SSD7184 Hardware

Front View

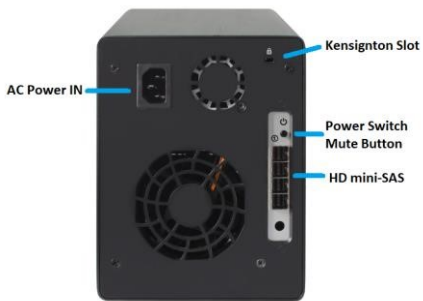


RS6540S Panel Layout-Front View

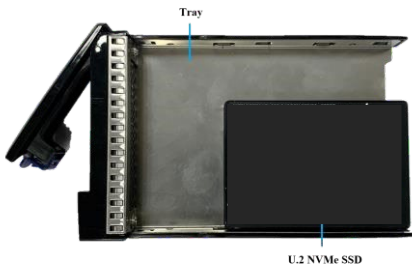


Disk Present LED:	Solid Blue
Disk Active LED:	Flash Blue
Disk Fail LED:	Solid Red
Enclosure Power LED:	Solid Blue
Temperature Warning LED:	Solid Yellow
Fan/Temperature Fail LED:	Solid Red

RS6540S Panel Layout-Rear View

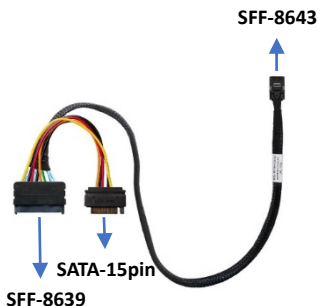
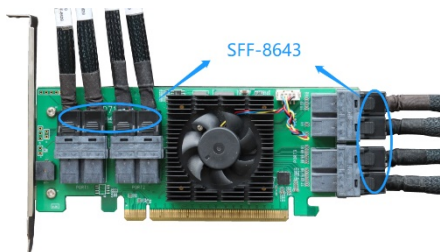


U.2 Disk Tray



SSD7180 Hardware Installation

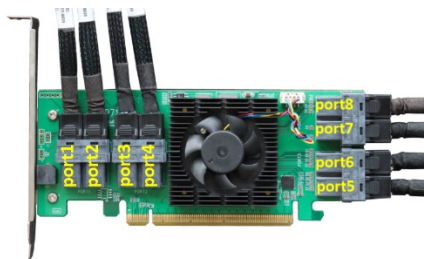
1. The SSD7180 was designed for use with SFF-8643 to U.2 SFF-8639 cables that have 15-pin SATA power connectors. Each of the SSD7180's eight device ports accepts an SFF-8643 cable connection.



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.

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

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

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

Optional Certified Cable & Enclosure 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 the RS6540S)

8644-8644-210



SFF-8644 to SFF-8644 cable

Length: 39.37” (1M)

Enclosure (External – for use with the SSD7184)

RS6540S



4-Bay U.2 NVMe Enclosure

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.

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

<https://www.highpoint-tech.com/gen3-nvme-u2-non-bootable>

Certified Accessories:

<https://www.highpoint-tech.com/nvme-accessories>

FAQ & Troubleshooting:

[FAQ - HighPoint Technologies, Inc. \(helpjuice.com\)](https://www.highpoint-tech.com/helpjuice.com)

Customer Support

If you encounter any problems while utilizing the SSD7180/SSD7184 NVMe RAID controllers, or have any questions about HighPoint Technologies, Inc. products & solutions, 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>