

# R1508

**8x M.2 Port to PCIe 4.0x16 NVMe HBA**



## **Quick Installation Guide**

**V1.00**

## **System Requirements**

### **PC Requirements**

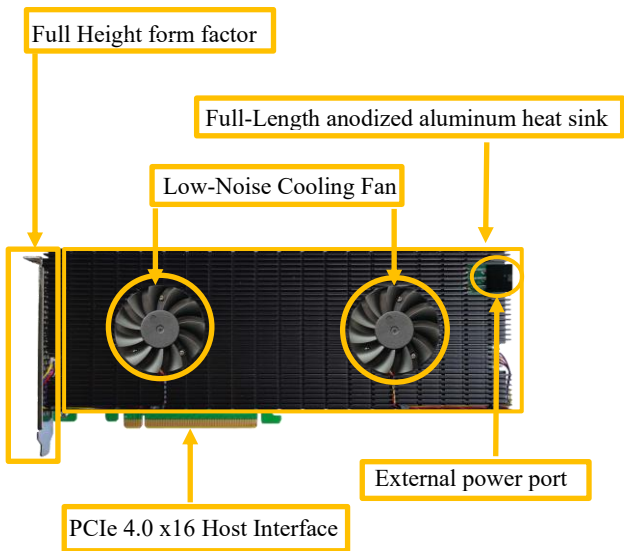
- System with a free PCIe 4.0 x16 slot
- Windows 11 and 10, Windows Server 2019 and 2022
- Linux kernel 3.10 and later
- macOS 10.13 and later
- FreeBSD 12.1 and later

### **R1508 Kit Content**

- R1508 Controller Card
- Quick Installation Guide

# R1508 Hardware

## Front View



## R1508 Hardware Installation:

Step 1. On the rear of the R1508, remove the six screws that secure the unit's heat sink to the PCB.



Step 2. Carefully remove the 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.



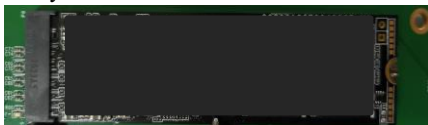
Step 4. These 8 screws are used to install the NVMe SSD's.



Step 5. Please remove these screws from each of the M.2 slots.

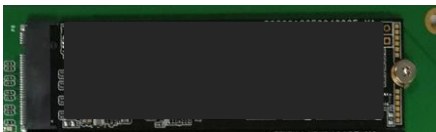


Step 6. Gently insert the SSD into the slot.



**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 4 to 6 to install the remaining SSDs.

The following example shows eight Gen4 SSDs installed into Ports 1-8:



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

**Note:** Make sure each SSD is carefully aligned and fastened to the SSD7540 using the supplied screws. Loosely attached SSDs may not be detected by the R1508 or host system.

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 R1508, refasten the 6 screws that were removed in step 1.

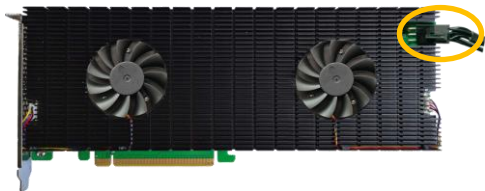


**Note:** Make sure the aluminum cover is properly aligned with the controller board (PCB), and that it makes full contact with the thermal pad, before refastening it to the R1508. If the cover is improperly installed, the fan and thermal pad will be unable to sufficiently cool the NVMe SSD's and controller componentry, which may result in damage to the SSD's or controller hardware, performance loss, unstable I/O, and the loss of data.



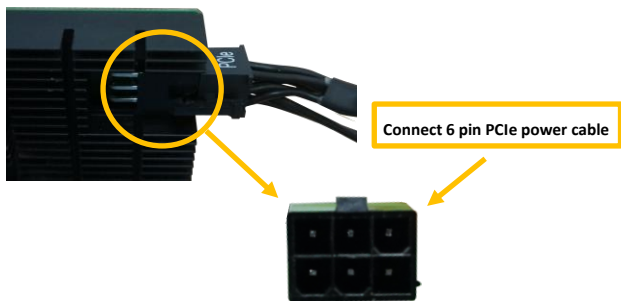
## Step 11. Power up the SSD external power supply

**Note:** *If the external power supply is not powered on, the SSDs may drop offline or remain undetected, which could lead to data loss.*



R1508 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 R1508 does not require the external power cord when used with Mac Pro 2019.*



**Note:** Please be sure to connect NVMe before using the product to reduce the occurrence of unnecessary errors!

## Resources

We recommend visiting the R1508 Product Page for the latest document.

### Document Downloads:

<https://www.highpoint-tech.com/ssd/series-r1500-fan-overview.html>

## Customer Support

If you encounter any problems while utilizing the R1508, 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>