

**SSD7500/ 6200 /7000 Series& Motherboard Dell PowerEdge
R510**

Compatibility Report

Last Update:3/23/22

Version: v1.00

Contents

1. Hardware:.....	3
a. HighPoint Product:.....	3
b. Target Device:.....	3
2. Compatibility Status:.....	3
3. Description:.....	3
4. Compatibility Details:.....	3
a. PCIe Host Interface:.....	3
b. Boot RAID Support (NVMe arrays used to boot a system):.....	3
c. Data RAID Support (NVMe arrays used for data storage):.....	4
5. Manufacturer Reference Material.....	4
a. Product Website:.....	4
b. User Guide:.....	4

1. Hardware:

a. HighPoint Product:

NVMe Series does not support this product.

RocketRAID 2700/4500/600 Series can support this product.

b. Host Platform or External Device:

Dell PowerEdge R510

2. Compatibility Status:

Compatible (Boot & Data RAID)

3. Description:

Dell PowerEdge R510 are not capable of supporting HighPoint NVMe RAID controllers. The current motherboards used by Dell PowerEdge R510 utilize the Intel 5500 chipset.

This motherboard support for UEFI and legacy devices.

4. Compatibility Details:

a. PCIe Host Interface:

Dell PowerEdge R510 supports PCIe Gen2, and provides one PCIe 2.0 x16 (x16 electrical) slot.

Support full height.

Expansion Cards and Expansion-Card Risers

Your system supports up to four PCI Express (PCIe) expansion cards installed in connectors on an expansion-card riser.

Depending on the configuration, your system may have either riser 1 or riser 2:

- Expansion-card riser 1 provides three x4 Gen2 PCIe expansion-card slots and one x8 Gen2 PCIe expansion-card slot.
- Expansion-card riser 2 provides one x4 Gen2 PCIe expansion-card slot and one x16 Gen2 PCIe expansion-card slot.

⚠ CAUTION: Expansion cards can only be installed in the slots on the expansion-card riser. Do not attempt to install expansion cards directly into the riser connector on the system board.

Expansion Card Installation Guidelines


- The expansion-card slots support full-height, half-length cards.
- The expansion-card slots are hot-swappable.
- PCI Express Generation 2 expansion cards are supported in all the slots.

Reference: [Hardware Owner's Manual \(dell.com\)](#) (page 122)

b. Boot RAID Support (NVMe arrays used to boot a system):

Dell PowerEdge R510 support for UEFI boot mode.

Entering the UEFI Boot Manager

 **NOTE:** Operating systems must be 64-bit UEFI-compatible (for example, Microsoft® Windows Server® 2008 x 64 version) to be installed from the UEFI boot mode. DOS and 32-bit operating systems can only be installed from the BIOS boot mode.


 **NOTE:** The Boot Mode must be set to UEFI in the System Setup program to access the UEFI Boot Manager.

The UEFI Boot Manager enables you to:

- Add, delete, and arrange boot options
- Access the System Setup program and BIOS-level boot options without rebooting

- 1 Turn on or restart your system.
- 2 Press <F11> after you see the following message:

<F11> = UEFI Boot Manager

 **NOTE:** The system does not respond until the USB keyboard is active. If your operating system begins to load before you press <F11>, allow the system to finish booting, and then restart your system and try again.

[Hardware Owner's Manual \(dell.com\)](#) (page74)

c. Data RAID Support (NVMe arrays used for data storage):

There are no apparent restrictions for data-only storage configurations.

5. Manufacturer Reference Material

a. Product Website:

[Support for PowerEdge R510 | Overview | Dell US](#)

b. User Guide:

[Hardware Owner's Manual \(dell.com\)](#)

6. List of PowerEdge RAID Controller (PERC) types for Dell EMC systems

No recommended product found in the user manual. But We prefer to use products with 2.0 interface, and products with 3.0 interface will be limited.