

**SSD7500/ 6200 /7000 Series& Motherboard Dell PowerEdge
R320**

Compatibility Report

Last Update:3/25/22

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:

SSD7500/ 6200 /7000 Series

b. Host Platform or External Device:

Dell PowerEdge R320

2. Compatibility Status:

Compatible (Boot & Data RAID)

3. Description:

Dell PowerEdge R320 are capable of supporting HighPoint SSD7500/ 6200 /7000 NVMe RAID controllers. SSD7000/6200 series can run out of full performance, but the SSD7500 series Can't get the maximum performance, only the performance of PCIe3.0.

The current motherboards used by Dell PowerEdge R320 utilize the Intel C600 Chipset.

The motherboard's BIOS includes UEFI support, and provides option ROM settings for UEFI and legacy devices.

4. Compatibility Details:

a. PCIe Host Interface:

Dell PowerEdge R320 supports PCIe Gen3, and provides one PCIe 3.0 x16 (x16 electrical) slots. Support full height.

Your system supports two PCI Express expansion cards.

The following PCI Express Generation 2 and 3 expansion cards are supported.

Table 2. Supported Expansion Cards


Riser	PCIe Slot	Generation	Height	Length	Link Width	Slot Width
1	1	2	Low Profile	Half Length	x4	x8
2	2	3	Standard Height	Half Length	x16	x16

Reference: [Dell PowerEdge R320 Systems Owner's Manual](#) (page57)

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

Dell PowerEdge R320 can support bootable NVMe arrays. The BIOS appears to provide UEFI option ROM support.

Slot Disablement Allows you to enable or disable available PCIe slots on your system. The **Slot Disablement** feature controls the configuration of PCIe cards installed in the specified slot.

 **CAUTION: Slot disablement must be used only when the installed peripheral card is preventing booting into the Operating System or causing delays in system startup. If the slot is disabled, both the Option ROM and UEFI driver are disabled.**

[Dell PowerEdge R320 Systems Owner's Manual](#) (page26)

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:

[PowerEdge R320 rack server details | Dell USA](#)

b. User Guide:

[Dell PowerEdge R320 Systems Owner's Manual](#)

[Dell PowerEdge R320 Technical Guide](#)

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

List:

Table 2. Comparing the PowerEdge R310 to PowerEdge R320

Feature	PowerEdge R310	PowerEdge R320
Chassis	1U rack	1U rack
Processors	Intel Xeon processors 3400 series Intel Core™ i3 processor 500 series Intel Pentium® G6950 Intel Celeron™ G1101	Intel Xeon processor E5-2400 and E5-2400 v2 product families Intel Xeon processor E5-1410 Intel Pentium processor 1400 product family
Internal interconnect	Intel DMI	Intel DMI 2.0
Memory ¹	4 x 1333 DDR3 UDIMM or 6 x 1333 DDR3 RDIMM Up to 32GB	6 x DDR3 RDIMM and UDIMM Up to 192GB
Hard drive bays (hot-plug)	Up to 4 x 3.5" cabled or hot-plug	Up to 4 x 3.5" cabled or hot-plug Up to 8 x 2.5" hot-plug
RAID controller	PERC 6/i, SAS6/iR, PERC6/E, S100, S300, H200, H700, H800	PERC S110, H310, H710, H810
PCI slots	2 PCIe 2.0 slots	1 PCIe 3.0 slot and 1 PCIe 2.0 slot

[Dell PowerEdge R320 Technical Guide](#) (page8)

Example: SSD7204: 7.68" (W) x 4.38" (H) x 0.73" (D)

H710 Adapter: [Dell PowerEdge RAID Controller \(PERC\) H310, H710, H710P, and H810 User's Guide](#)