

# **HighPiont Product& Motherboard PowerEdge R610**

## **Compatibility Report**

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## 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 R610

## 2. Compatibility Status:

Compatible (Boot & Data RAID)

## 3. Description:

DELL PowerEdge R610 workstation platforms are not capable of supporting HighPoint NVMe RAID controllers.

The current motherboards used by DELL Precision R610 utilize the Intel 5520 Chipset.

This motherboard support for UEFI and legacy devices.

## 4. Compatibility Details:

### a. PCIe Host Interface:

Dell PowerEdge R610 supports PCIe Gen2, and provides two PCIe 2.0 x8 slots.

Support full height.

#### 11.1 Overview

The R610 has two PCI Express risers. The two PCIe risers provide two PCI Express expansion slots, which are detailed as follows:

- Two x8 PCIe Gen2 slots connected to the IOH
- One x4 PCIe Gen1 slot for dedicated for the integrated storage controller card on the Riser 1 connected to the ICH9
- Support for full-height, half-length (6.6" max length) PCIe cards

To ensure proper cooling, only one of the two expansion cards can have a power consumption of greater than 15W (up to 25W maximum), not including the integrated storage controller.

The system does not support hot-plug or hot-removal of PCI Express cards.

For more information on installing expansion cards and expansion-card priority, see the Expansion Cards and Expansion-Card Risers section in the Installing System Components chapter of the *Dell PowerEdge R610 Systems Hardware Owner's Manual* on [Support.dell.com](http://Support.dell.com).

Reference: [!](#) (page 37)

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

Dell PowerEdge R610 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 x64 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 will 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 \(dell.com\)](#) (page70)

## 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 R610 | Overview | Dell US](#)

### b. User Guide:

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

[Dell PowerEdge R610 Technical Guide](#)

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

List:

Feature	R510	R610	R710
RAID	SAS 6/iR and PERC H200: RAID 0, 1 PERC 6/i and PERC H700: RAID 0, 1, 5, 6, 10, 50, 60 PERC S100: 0, 1, 5, 10 PERC S300: 0, 1, 5, 10	SAS 6/iR and PERC H200: RAID 0, 1 PERC 6/i and PERC H700: RAID 0, 1, 5, 6, 10, 50, 60	SAS 6/iR and PERC H200: RAID 0, 1 PERC 6/i and PERC H700: RAID 0, 1, 5, 6, 10, 50, 60

Example:

RocketRAID 2700 Series: [SAS Catalog | HighPoint Technologies, Inc. \(highpoint-tech.com\)](#)

H700: [User's Guide \(dell.com\)](#)

We prefer to use products with 2.0 interface, and products with 3.0 interface will be limited.