

HighPoint SSD7103 & Dell PowerEdge R620

Compatibility Report

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1. Conclusion

Dell PowerEdge R620 supports UEFI, and has a x16 slot available to support the full performance of HighPoint's SSD series. The only concern is that the Dell PowerEdge R620

requires risers in order to install PCI devices. If the risers are industry standard, then they should be able to support HighPoint's SSD series.

2. Launch Date

December 2013

3. User Manuals

a. URL

https://topics-cdn.dell.com/pdf/poweredge-r620_owners-manual_en-us.pdf

<http://i.dell.com/sites/content/shared-content/data-sheets/en/documents/dell-poweredge-r620-technical-guide.pdf>

b. Chipset/Motherboard : Intel C602

Chipset	Intel C602
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Source: <http://i.dell.com/sites/content/shared-content/data-sheets/en/documents/dell-poweredge-r620-technical-guide.pdf>

4. Physical Properties

a. Form Factor : 1U rack

Form factor	1U rack
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Source: <http://i.dell.com/sites/content/shared-content/data-sheets/en/documents/dell-poweredge-r620-technical-guide.pdf>

b. Riser Cards/Brackets: Yes

Expansion Bus	
Bus type	PCI Express Generation 3
Expansion slots using riser card:	
Riser 1	(Slot 1) One half-height, half-length x8 link (Slot 2) One half-height, half-length x16 link
Riser 2	(Slot 1) One half-height, half-length x8 link or one half-height, half-length x16 link <div style="border: 1px solid black; padding: 2px; display: inline-block;"> NOTE: Both processors must be installed to use the slots on riser 1 and the x16 link on riser 2. </div>
Riser 3	(Slot 1) One full-height, three fourth-length x16 link or one half-height, half-length x16 link

Source: https://topics-cdn.dell.com/pdf/poweredge-r620_owners-manual_en-us.pdf
pg. 111

5. System BIOS Setting

a. UEFI : Yes.

Boot Mode	Allows you to set the boot mode of the system. <div style="border: 1px solid black; padding: 2px; display: inline-block;"> CAUTION: Switching the boot mode may prevent the system from booting if the operating system is not installed in the same boot mode. </div> If the operating system supports UEFI, you can set this option to UEFI. Setting this field to BIOS allows compatibility with non-UEFI operating systems. By default, the Boot Mode option is set to BIOS .
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b. Option ROM: Yes.

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. <div style="border: 1px solid black; padding: 2px; display: inline-block;"> 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. </div>
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5. PCIE Configuration

a. How many PCIe slots?

Three slots. However, risers are needed to install PCI devices. It needs to be validated by the manufacturer that this model utilizes industry standard risers for it to be able to support HighPoint products.

Riser	PCIe Slot	Processor Connection	Height	Length	Link Width	Slot Width
1	1	Processor 2	Low Profile	Half Length	x8	x16
1	2	Processor 2	Low Profile	Half Length	x16	x16
3	3	Processor 1	Low Profile	Half Length	x16	x16

Source: https://topics-cdn.dell.com/pdf/poweredge-r620_owners-manual_en-us.pdf
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b. PCIe Length (Bandwidth) of each slot

See above.

6. Secure Boot: Yes.

Secure mode	BIOS has the ability to enter a secure boot mode through system setup. This mode includes the option to lock out the power and NMI switches on the control panel or set up a system password.
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Source: <http://i.dell.com/sites/content/shared-content/data-sheets/en/documents/dell-poweredge-r620-technical-guide.pdf> pg. 15