HighPoint Technologies, Inc.



Rocket 1000 Series PCIe Gen3 U.2/U.3 NVMe HBAs

Dedicated x8/16 Bandwidth & Low-Noise Cooling System

NVMe Solution

Fully Independent NVMe Solution - No Bifurcation Required

No Bifurcation Required: *Works with any Industry Standard PCIe 3.0/4.0 Slot!*

HighPoint NVMe HBAs are compatible with a wide range of hardware platforms. The PCIe 3.0 host interface is fully compliant with industry standard PCIe 3.0 and 4.0 PCIe slots, does not require a host platform with Bifurcation support, and is not limited to a specific brand or model of motherboard.

Built-in High-speed, Intelligent Switch Chipset

HighPoint NVMe HBAs integrate Broadcom's high-performance intelligent PCIe switch chipset, which ensures maximum transfer bandwidth is available for each device port, at all times. Up to x4 dedicated lanes can be allocated to each U.2/U.3 NVMe SSD.

Native, In-Box NVMe Device Driver Support

Rocket 1000 Series HBAs are natively supported by all major operating systems, including Windows 11, Windows Server 2022, macOS 12.x Monterey, and current distributions of Linux.

You won't need to juggle a series of device drivers, install a complex software suite, or master a specialized management interface. Your NVMe SSDs will be automatically recognized, and can be prepped and mounted using the operating system's standard tool set.

Ultra-High-Performance NVMe Storage Solution

Rocket 1000 Series NVMe HBA's can host RAID arrays created using the operating systems built-in storage management tools.
macOS Disk Utility and Windows Disk Management can configure RAID 0 arrays using up to 8 NVMe SSDs.

Supports any Industry Standard U.2/U.3 NVMe SSD

Any Capacity & Any Generation

Rocket 1000 series M.2 ports are capable of supporting any industry standard U.2/U.3 NVMe SSD

Form Factor: 2.5" U.2/U.3

Ultra-Efficient Silent & Low-Noise Cooling Systems

The Rocket 1120 features a full-length fan-less, anodized aluminum heatsink for completely silent operation; ideal for high-performance media applications that require a controlled, quiet working environment.

The 8-Port Rocket 1180 employs our new multi-stage cooling solution that combines an anodized aluminum heatsink with a built-in low noise fan This design ensures the NVMe chipset and RAID componentry remain cool under heavy load while minimizing the risk of distraction in the work environment.

Key Benefits

- Fully compliant with Industry standard PCIe 3.0 Slots; no-Bifurcation dependency or need for a specific brand/model of motherboard
- Integrated, High-Performance, Intelligent PCIe Switch controller chipset powered by Broadcom ensures Dedicated PCIe x4 lane bandwidth is allocated to each U.2 port at all times
- Native, in-box NVMe driver support for all major OS platforms
- Broad Compatibility with current computing platforms: HP, Dell, Alienware, Legacy Mac Pro, 2019 Mac Pro, Apple M1 Platforms
- Silent & Low-Noise Cooling Solutions

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HighPoint Rocket 1000 Series Gen3 U.2/U.3 NVMe HBAs

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	Rocket 1120 (R1120)	Rocket 1180 (R1180)
Product		
Bus Interface	PCI-Express 3.0 x16	PCI-Express 3.0 x16
No. of Channels/Ports	4x U.2 NVMe port (Dedicated PCIe 3.0 x4 per port)	8x U.2 NVMe ports (Up to PCIe 3.0 x4 per port)
Data Transfer Rate	8GTs	
Number of devices	4x M.2 NVMe SSDs	8x M.2 NVMe SSDs
SSD Form Factor	2.5” U.2/U.3	
Form Factor	Half-Height (Low-Profile)	Half-Height (Low-Profile)
Card Dimensions	5.71" (W) x 2.72" (H) x 0.68" (D)	6.55" (W) x 2.71"(H) x 0.83" (D)
Package Weight	0.60 lbs.	0.93 lbs.
Cooling	Full-Length Anodized Aluminum Heat sink	Full-Length Anodized Aluminum Heat sink with built-in Low-Noise fan
Supported Operating Systems & Platforms		
Windows	Windows 11, 10 / Windows Server 2022, 2019	
Linux	Linux Kernel v3.10 or later	**n/a**
macOS	MacOS 10.13 and later	
FreeBSD	FreeBSD 12.1 and later	
System Requirements	**Mac Platforms:** • Apple Mac Pro Systems: 2012; 5.1, 7.1 (2019) • Apple M1 Platform compatible	**n/a**
	PC Platforms: • Any PC or Motherboard with an industry standard PCIe x16 physical Slot (Bifurcation is not required)	
Operating Environment	**R1120**	**R1180**
Work Temp	+5°C ~ + 35°C	
Storage Temp	-20°C ~ +80°C	
Operating Voltage	PCI-e: 12V, 3.3V	
Power	Typical: 17.72W	
MTBF	920,585 Hours	
Certification	CE, FCC, RoHS, REACH, WEEE	
Kit Contents	R1120	R1180
	QIG	QIG

Industry Standard SFF-8643 Connector Ports

The Rocket 1120 and 1180 utilize industry standard SFF-8643 connectors, which are compatible with a wide selection of 2.5” form-factor server chassis available in today’s marketplace. SFF-8643 connectors can accept cables of varying length, which allow the controllers be easily integrated into custom built hardware environments.


Oculink Backplane


U.2 SSD


mini-SAS HD Mobile



HighPoint Certified Cable & Enclosure Accessories

We manufacture a selection of certified data cables and enclosures for Rocket 100 series NVMe HBAs. HighPoint Certified Cable accessories are fully compliant with all current technology standards and have been rigorously tested with our Rocket 1120 and Rocket 1180 host bus adapters to ensure maximum transfer performance, secure connectivity, and ease of integration.
As we cannot guarantee secure connectivity, stability or compatibility with unqualified third-party devices or accessories, only HighPoint Certified cables and enclosures can be used with our storage products and solutions.

SSD7180 & SSD7184 (Internal)	
8643-8643-0350 / 8643-8643-060 	SFF-8643 NVMe Host to SFF-8643 NVMe HD-Mini-SAS Device (U.2) cables Length: 13.78" (35cm) / 23.62" (60cm)
8643-8639-50 	SFF-8643 to SFF-8639 NVMe HD-Mini-SAS Device (U.2) cable, with Power Connector Length: 19" (50cm)
OLX4-8643-061 	SFF-8643 NVMe Host to Oculink backplane cable Length: 23.62" (60cm)

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