

PCI>



Rocket 1204

PCIe 3.0 x8 4-Port M.2 NVMe HBA

Cost-Effective 4-Channel PCIe Gen3 M.2 NVMe Connectivity Solution

R1000 Series NVMe HBAs are fully independent, stand-alone NVMe storage solutions for PCIe Gen3 platforms; they are not tied to a specific motherboard, chipset or operating system, can be easily integrated into any motherboard or server/workstation platform with a free PCIe 3.0/4.0 x16 or x8 slot, and are capable of supporting off-the-shelf M.2 NVMe SSDs of any capacity.

The Rocket 1204 is a cost-effective, 4channel M.2 NVMe connectivity solution that can be easily integrated into any PCIe Gen3 platform with a free PCIe x8 0r x16 slot. The four independent device ports can support off-the-shelf M.2 SSDs of any capacity.

Built-in High-speed, Intelligent Switch Chipset

The Rocket 1204 NVMe HBA's performance-focused hardware architecture leverages intelligent PCIe switch technology to ensure maximum transfer bandwidth is available for each device port, at all times. Up to x4 lanes of host bandwidth can be allocated to each M.2 NVMe SSD, on the fly.

Native, In-Box NVMe Device Driver Support

HighPoint NVMe HBAs were designed with simplicity in mind. All you need is a little patience and a screwdriver; just install the M.2 SSD's and plug in the card!

Rocket 1000 Series HBAs are natively supported by all major Windows and macOS operating system platforms, VMware ESXi 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.

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 2 or more NVMe SSDs.

Supports any Off-the-Shelf M.2 NVMe SSD

Any Capacity, Any Generation & Any Form-Factor...

Rocket 1000 series M.2 ports are capable of supporting any industry standard offthe-shelf M.2 NVMe SSD

NAND Form Factor: Single & Double-Sided

M.2 Form Factor: 2280, 2260, 2242, 22110

Fan-less Cooling for Media Sensitive Working Environments

Rocket 1204 HBAs feature a ventilated bracket and full-length black-anodized heat sink with high- conductivity thermal pad efficiently whisks waste heat away from hosted SSDs and critical controller componentry.

This robust, fan-less design allows for completely silent operation – ideal for applications that require low-noise work environments.

Key Benefits

Up to 4 NVMe SSDs

IVM

- PCIe 3.0 x8 Host Interface
- 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 technology can allocate up to x4 dedicated lanes to each M.2 Slot
- 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, Fan-less Cooling System



R1000 HBA's support OS-based RAID, which can be configured using the operating system's default storage management interface.



	Rocket 1204 (R1204)
Product	
Bus Interface	PCI-Express 3.0 x8
No. of Channels/Ports	4x M.2 NVMe port (Dedicated PCIe 3.0 x4 per port)
Data Transfer Rate	8 GT/s
Number of devices	4x M.2 NVMe SSDs
SSD Form Factor*	2242/2260/2280/22110
Form Factor	Full-Height
Card Dimensions	7.68" (W) x 4.38" (H) x 0.73" (D)
Package Weight	1.39 lbs.
Cooling	Full-length anodized aluminum heat sink
Supported Operating Systems & Platforms	
Windows	Windows 11, 10 / Windows Server 2022, 2019 / Microsoft Hyper-V
Linux	Linux Kernel v3.10 or later
macOS	MacOS 10.13 and later
FreeBSD	FreeBSD 12.1 and later
VMware	ESXi 6.7 and later
System Requirements	 Mac Platforms: Apple Mac Pro Systems: 2012; 5.1, 7.1 (2019) Apple M1 Platform compatible Thunderbolt™ 3 Connectivity via Thunderbolt™ Expansion chassis: RocketStor6661A PC Platforms: Any PC or Motherboard with an industry standard PCle x16/x8 physical Slot (Bifurcation is not required) Thunderbolt™ 3 Connectivity (requires a PC platform with a Thunderbolt™ 3 port) & Thunderbolt™ Expansion chassis: RocketStor6661A
Operating Environment	
Work Temp	+5°C ~ + 35°C
Storage Temp	-20°C ~ +80°C
Operating Voltage	PCI-e: 12V, 3.3V
Power	Typical: 7.65W
MTBF	920,585 Hours
Certification	CE, FCC, ROHS, REACH, WEEE
Kit Contents	R1204
	QIG

* Supports single and double-sided M.2 NVMe SSDs



Compact, Self-Contained M.2 Solution:

M.2 SSDs are directly hosted by HBA (no drive bays or enclosure is required) Ultra-High Performance:

Dedicated PCIe 3.0 x8 or x16 Bus-Bandwidth



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