HighPoint
Technologies, Inc.

Rocket 1508
PCIe 4.0 x16 8-Port M.2 NVMe HBA

Industry's fastest M.2 NVMe Connectivity Solution for PCIe Gen4

HighPoint Rocket Series NVMe connectivity HBAs address the needs of solution providers and system integrators that cater to vertical marketplaces for high-speed industrial, corporate, and media applications. They were designed for professional applications that demand uncompromised storage performance, scalability and adaptability, in a compact, easy to integrate package that is universally compatible with industry standard x86-64 (Intel/AMD), Mac and ARM platforms.

The Rocket 1508 is the industry's fastest PCIe Gen4 M.2 NVMe connectivity HBA. The eight independent device ports can support off-the-shelf 2242/2460/2280 M.2 SSDs of any capacity.

Performance-Focused NVMe Hardware Architecture

HighPoint NVMe connectivity HBAs benefit from decades of engineering and design expertise, and are capable of saturating x16 lanes of PCIe Gen4 or Gen3 host bandwidth. The highly flexible, performance-focused NVMe hardware architecture leverages intelligent PCIe switch technology to allocate up to x4 lanes to each device port, as needed.

Native, In-Box NVMe Device Driver Support

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

Rocket 1500 Series HBA's are natively supported by all major Windows and macOS operating systems, 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.

Ultra-High-Performance NVMe Storage Solution

R1500 Series NVMe HBAs 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 or JBOD arrays using two or more M.2 SSDs.

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

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

The Rocket 1508's eight M.2 ports are capable of supporting industry standard off-the-shelf M.2 NVMe SSDs of any capacity.

NAND Form Factor: Single & Double-Sided

M.2 Form Factor: 2280, 2260, 2242

Advanced Gen4 Cooling System Eliminates Thermal Throttling

HighPoint's Low-Noise Hyper-Cooling solution eliminates the risk of thermal throttling by ensuring PCIe Gen4 NVMe SSDs consistently operate within their recommended temperature thresholds, even under sustained heavy I/O.

Each Rocket 1508 HBA features a full-length anodized aluminum heat sink equipped with dual ultra-durable, low-decibel fans and high-conductivity thermal pads.
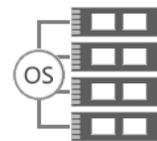This innovative, ultra- efficient cooling system rapidly transfers waste heat away from critical NVMe and controller componentry, without introducing unwanted distraction into your work environment.

Key Benefits

- Up to 8 NVMe SSDs
- Fully compliant with Industry standard PCIe 3.0 Slots; no-Bifurcation dependency or need for specific brand/model of motherboards
- Integrated, Intelligent, Next-Gen PCIe 4.0 Switch technology ensures up to PCIex4 lanes are allocated 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
- Card can be used in any slot PCIe 3.0 or 4.0 slot; Bifurcation or standard
- Gen4 Hyper Cooling Solution

R1500 HBAs can host bootable NVMe SSD's when used with Legacy Mac Pro 5.1 systems and macOS 10.x or earlier.

R1500 HBAs support OS-based RAID, which can be configured using the operating system's default storage management interface.

Product	R1508
Bus Interface	PCI-Express 4.0 x16
Number of Channels / Devices	8x M.2 NVMe ports (Up to x4 lanes per port)
Data Transfer Rate	16GT / 16Gbps per lane
SSD Form Factor	2242/2260/2280
Form Factor	Full-Height
Card Dimensions	11.22''(W)*4.37''(H)*0.83''(D)
Card Weight	1.70 lbs.
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 **PC Platforms:** • Any PC or Motherboard with an industry standard PCIe x16/x8 physical Slot (Bifurcation is not required)
Cooling	Full-Length Anodized Aluminum Heat sink with built-in Low-Noise fans
Operating Environment	
Work Temp	+5°C ~ + 55°C
Storage Temp	-20°C ~ +80°C
Operating Voltage	PCI-e: 12V, 3.3V
Power	Typical: 17.28W
MTBF	920,585 Hours
Certification	CE, FCC, RoHS, REACH, WEEE
Kit Contents	R1508
	QIG

Compact, Self-Contained M.2 Solution:

The M.2 SSD's are directly hosted by the R1500 HBA; no additional drive bays or enclosures are required.

Ultra-High Performance:

Dedicated PCIe
4.0 x16 Bus-Bandwidth