

## HighPoint Rocket Series AICs deliver Uncompromised NVMe Storage Performance for any Platform and Application

HighPoint's Rocket series AICs are the industry's fastest NVMe AIC host bus adapters, and represent the most efficient way to add maximized PCIe Gen4 or Gen3 storage performance to any modern computing platform. Rocket 1000 series AICs incorporate state-of-the-art PCIe switch technology to deliver class leading performance and reliability, are natively supported by all major operating system platforms, and can be easily integrated into any x86 AMD and Intel, or ARM platform with a free PCIe x16 slot.

Rocket series NVMe AICs were designed to address the needs of solution providers and system integrators that cater to vertical marketplaces, from Hyperscale Servers to Industrial Server and Workstations. Rocket 1000 series AICs are ideal for workflows that employ SDS (Software Defined Storage) suites, or rely on the operating system's native storage management interface.

A wide selection of PCIe Gen3 and 4 AICs are available with 4 and 8 dedicated device channels for M.2 and U.2/U.3 form factors, and are capable of supporting as much as 30TB per port; imagine 240TB of storage form a single add in card! Rocket 1000 series AICs can be installed and used right out of the box, and can be easily integrated into just about any modern computing environment.

### Broadcom Inside! HighPoint NVMe Board Architecture *GUARANTEES* Maximum Bus Bandwidth FOR EACH Device Port

HighPoint's innovative dual-width NVMe hardware architecture incorporates state-of-the-art PCIe switch technology to deliver class leading performance, reliability, and storage capacity. Rocket series AICs leverage Broadcom switch chipsets with proven SerDes and SRIS technology, to optimize signal integrity, reduce latency and maximize transfer throughput.

These ICs provide and abundance of electrical lanes: 48 for Gen4 and 32 for Gen3. This ensures bandwidth is never wasted; x4 lanes are always on tap for each device port. The highly flexible, performance-focused hardware architecture is unique to our NVMe solutions, and guarantees that maximum bandwidth is available to each SSD at all times. This combination enables Rocket series NVMe AICs to allocate a dedicated x16 lanes of Upstream bandwidth, and x4 lanes of downstream bandwidth to each NVMe device ports, and deliver transfer throughput up to 28GB/s for PCIe Gen4 platforms, and up to 14GB/s for Gen3 systems – the maximum possible for a single-card application!

### HighPoint NVMe AICs are Equipped with the Industry's Most Effective NVMe Cooling Systems

NVMe storage solutions can generate a considerable amount of waste heat under load, especially those that employ high-density dual-sided PCIe Gen4 media. In an effort to protect this sensitive hardware, most SSDs will limit throughput when a temperature threshold has been crossed, using a technique known as "Thermal Throttling". While an ideal failsafe, it can severely bottleneck transfer performance.

Rocket series NVMe connectivity AICs were designed to mitigate the threat of thermal throttling and excel in high-stress computing environments. Our NVMe AIC products are equipped with one of four specialized cooling solutions.

***Precision Engineered "Ultra-Cooling" Fan System:*** HighPoint NVMe AICs and Enclosures are equipped with robust, high-quality, low-decibel cooling fans designed to rapidly inject and condense cool air within the enclosure chassis or casing, and expel waste heat from the ventilated drive trays or PCIe bracket. The Ultra-Cooling fan system was engineered to perform optimally in demanding 24/7 workflows while generating minimal noise.

#### NVMe Cooling Solutions

***Silent Running:*** The Rocket 1204 utilize a passive, completely silent cooling system and are ideal for professional media workflows that demand a quiet, controlled work environment. This system combines a full-length anodized aluminum heatsink with high-efficiency thermal padding.

***Low-Noise Active Cooling Solution:*** Employed by the majority of our PCIe Gen3 AICs, it ensures each hosted SSD consistently operates within the manufacturer's recommended temperature thresholds, and is comprised of a full-length anodized heat sink, thermal padding and robust, low-noise cooling fans.

**Hyper-Cooling Solution:** Designed for PCIe Gen4 M.2 media , this system leverages an anodized aluminum heatsink with one or more low-decibel cooling fans and high-efficiency thermal padding. It was designed to rapidly transfers waste heat away from sensitive hardware and ensure M.2 media always perform optimally, even under maximum load.

### **Ideal NVMe Solution for Software Defined Storage Applications**

Rocket series NVMe AICs are capable of maximizing x16 lanes of PCIe Gen4 or 3 transfer bandwidth and allocate x4 dedicated lanes to each NVMe SSD; ideal for workflows that employ Software Defined Storage suites including VMware solutions, CEPH, Microsoft S2D, and other common SDS platforms. These environments require robust, uncompromised hardware connectivity to optimize storage performance for Hyperscale servers and workstations. Rocket 1000 series AIC HBAs are natively supported hardware solutions; any hosted SSD will be automatically recognized as an independent, stand-alone drive, which can be easily partitioned and formatted using the platform's SDS suite or default OS toolset.

### **Natively Supported by all Major Operating system platforms**

Rocket series NVMe AICs are natively supported by all major operating systems including Windows 11 and Server 2022, VMware ESXi, macOS, and popular Linux distributions such as RHEL and Ubuntu, and FreeBSD/FreeNAS platforms. The cards can be installed and used right out of the box, and require no additional device drivers or a dedicated software application.

### **Pricing and Availability**

Rocket series NVMe AICs are available direct from our E-Store and HighPoint Certified Global Resale and Distribution partners.

E-Store: <https://www.highpoint-tech.com/estore>

Resale and Distribution partners: <https://www.highpoint-tech.com/where-to-buy>