HighPoint is Now shipping the Rocket 7600 Series; Industry's 1st Gen5 x16 NVMe RAID AICs & Adapters

Fremont, CA – June 2024. HighPoint is now shipping its Rocket 7600 RAID/Pro series of PCIe Gen5 x16 NVMe AICs and Adapters. These revolutionary PCIe NVMe storage solutions are capable of directly hosting up to 8 M.2 or 2.5" U.2, U.3 and E3.S media, and can be configured to host as many as 32 NVMe devices via backplane connectivity. Engineered to comply with enterprise grade computing environments and built to accommodate today's most data-intensive AI applications, ML solutions, Scientific and Engineering workflows and Professional Media platforms, Rocket 7600 series solutions have been designed to comply with industry standard server and workstation form factors to ensure maximum reliability, endurance and compatibility.
HighPoint's innovative PCIe Switching Architecture enables each AIC and Adapter to maximize transfer performance and storage capacity over x16 lanes of host bandwidth, and deliver real-world performance in excess of 56GB/s.

Introducing the Rocket 7628A Adapter and Rocket 7608A AIC – High-Performance 8-Channel NVMe RAID Solutions for AI Server and Workstation Applications

Available in two form factors, Rocket 7600 RAID/Pro series PCIe Gen5 x16 AICs and Adapters can be easily integrated into any industry standard x86 server or workstation platform with a free PCIe Gen5 x16 slot. The Rocket 7608A RAID AIC directly supports up to 8 M.2 NVMe SSDs, up to form factor 2280, which can be connected directly to the card internal M.2 ports. The Rocket 7682A Adapter can directly host 8 2.5" U.2, U.3 or E3.S NVMe SSDs via a selection of cabling solutions for direct to device or storage backplane connectivity. Both form factors feature integrated RAID 0, 1 and 10 technology, and can host up to 4 RAID arrays, including bootable volumes.

48 Lanes of Dedicated PCIe Gen5 Bandwidth: HighPoint's high-performance PCIe Gen5 switching architecture integrates Broadcom's PEX89048 switch IC to provided 48-lanes of internal Gen5 host bandwidth; x16 lanes of which are allocated to the upstream port (connection to the host platform), with x4 lanes dedicated to each device channel. The innovative architecture enables the Rocket 7600 series AICs and Adapters to deliver up to 64GB/s of transfer bandwidth, minimize latency, and facilitate consistent, robust I/O throughput.

8-Dedicated PCIe Gen5 NVMe Device Channels: Each AIC or Adapter provides 8 independent NVMe device channels, each capable of provide x4 lanes of dedicated bandwidth. This ensures each SSD can function concurrently or independently as needed, without sacrificing transfer performance, IOPS or response time.

Engineered for Seamless Integration with Enterprise Computing Environments

Engineered to excel in enterprise and business class server and workstation environments, Rocket 7600 RAID/Pro series NVMe AICs and Adapters are fully compliant with CEM (Card Electromechanical) PCIe card specifications to ensure robust connectivity and guarantee compatibility with industry standard server and datacenter chassis form factors. The innovative, refined PCB design significantly lowers power consumption and enhances signal integrity. Rocket 7600 adapters are LP-MD2 form factor PCIe devices, are compliant with VPP (Virtual Pin Point) and UBM (Universal Backplane Management) backplane specifications, and SFF-9402 cable and port connectivity for industry-standard 2.5" drive chassis and NVMe media.

Intelligent, Pro-Active PCIe Gen5 Cooling Solutions

Rocket 7600 RAID/Pro series NVMe AICs and Adapters pair highly advanced hardware cooling systems with a powerful suite of pro-active monitoring and management tools to keep temperatures in check under the most grueling working conditions. The solution was designed to enhance the reliability of NVMe media and maximize storage performance by keeping the threat of performance robbing thermal throttling at bay.
The Rocket 7628A Adapter employs a full-Length Aluminum heat exchanger with copper piping to rapidly whisk waste heat away from vital Gen5 switch IC and controller componentry. The Rocket 7608A AIC employ a full-length aluminum heatsink with copper SSD contacts, two layers of thermal padding and a powerful low-decibel cooling to

ensure connected M.2 media always operates within the recommended temperature threshold to maximize lifespan and transfer speed.

On the software side, HighPoint's proven SHI (Storage Health Inspector) solution enables administrators to track the temperature of each hosted SSD in real-time using S.M.A.R.T. technology, customize temperature thresholds to comply with each manufacturer's specifications, and configure SMTP Email notification to keep abreast of any environmental changes. Full Fan Control is provided for the Rocket 7608A AIC, with 4 speed settings including an option to activate a passive cooling mode for workflows that demand complete silence.

Discover How to best utilize you NVME Storage HighPoint With Active Sensor Logging!

Rocket 7600 RAID/Pro series AICs and Adapters incorporate a real-time NVMe logging system that tracks and records the temperature, fan-speed and power consumption of the AIC/Adapter and each hosted SSD. The system can record 5-working days of data, which are presented via simple graphs and line charts.

These records can be exported as needed, and can help administrators optimize storage configurations for specific workflows by analyzing the electrical characteristics and thermal status of each SSD at peak I/O, or narrow the scope of troubleshooting tasks by identifying potential faults and at-risk storage media, and then implement preventative measures to maximize the lifespan of the RAID array and maintain optimal performance.

Rocket 7600 RAID/Pro series solutions are equipped with HighPoint's comprehensive monitoring, management and analysis suite. A series of intuitive set of software interfaces for Windows and Linux platforms enable administrators to easily configure and maintain the platform's NVMe storage ecosystem with a few simple clicks and commands. RAID arrays created using these interfaces will be recognized as single, physical disks, and can be configured and tailored for a variety of roles, such an application disk or virtual scratch disk, general storage or even for hosting bootable OS or virtualization platform.

Full-Featued Data Security Suite

Rocket 7600 series AICs and Adapters benefit from a full-feature suite of hardware and software level features designed to enhance the security of your critical data assets. Hardware Secure boot Hardware Secure Boot enhances the overall security of the computing platform by preventing the execution of unauthorized software during the boot process; there by halting potentially devastating rootkits and ransomwares in their tracks. SMTP Email notification includes SSL data encryption to keep vital storage configuration and status data from prying eyes.

Each Pro-Class RAID Adapter and Enclosure is protected by HighPoint SafeStorage, a revolutionary OPAL SSC TCH based NVMe hardware Encryption Solution designed for both large-scale RAID configurations and individual SSDs. SafeStorage safeguards critical assets by preventing access to stored data when physical disks are misplaced or stolen, and can be easily administered via HighPoint's WebGUI and CLI management utilities.

Streamlines Field Service, Maintenance and Support Workflow

The Rocket 7628A RAID Adapter provides true NVMe Hot-Plug and Hot-Swap support to dramatically enhance efficiency and serviceability of the storage rackmount/chassis environment; administrators can quickly and safely add or remove individual SSDs and RAID arrays without having to reboot or power down the host computing platform.

HighPoint Online Roaming technology enables RAID configurations to be moved from one AIC or Adapter to another without putting your data assets at risk - all exiting logical volumes will remain intact and accessible; no reconfiguration is required.

A simple and easy 1-click Log Collection solution has been integrated into our management interfaces to streamline the troubleshooting process and expedite the service/support process.

In addition, all Rocket 7600 series solutions are FRUs (field replacement units) and store VPD (vital product data) via onboard EEPROM to streamline the procurement process for repair and replacement workflows.

An intuitive Onboard LED notification system enables administrators to instantly assess the current status, temperature and host connectivity of the AIC/Adapter and its hosted SSDs and RAID arrays. One Led is provided for

each of the 8 device channels; these are designed to work in tandem with a dedicated Status and Fault LED – simple color coding and flashing patterns can indicate everything from the strength of the current PCIe connection to progress of a RAID rebuild session.

Learn More About HighPoint's Revolutionary Pro-Class NVMe RAID Solutions

HighPoint Rocket 7600 RAID/Pro series PCIe Gen5 x16 NVMe AICs and Adapters are engineered to enhance the productivity and storage performance of a wide range of professional computing environments and workflows. Want to learn more about a particular feature or product line, or have questions about how maximize storage performance and connectivity for your platform? Don't hesitate to get in touch – contact a [tech expert](#) today!

Now Shipping:

Rocket 7600 RAID/Pro Series (PCIe Gen5 x16)

Rocket 7628A PCIe Gen5 x16 to 4-MCIOx8 NVMe RAID Adapter – MSRP USD$ 1,999.00
Rocket 7608A PCIe 5.0 x16 to 8-M.2x4 NVMe RAID AIC – MSRP USD$ 1,999.00

2nd Gen Rocket 7500 Series (PCIe Gen4)

Rocket 7528D PCIe Gen4 x16 to 4x SlimSAS NVMe RAID Adapter – MSRP USD$ 1,499.00