

HighPoint Launches the Industry's Most Compact PCIe Gen5 x16 M.2 Storage & Acceleration Solution

April 2025 – Fremont, CA - In the rapidly evolving landscape of data-driven applications, the demand for high-performance, compact storage and acceleration solutions has never been greater. As industrial and edge computing platforms, along with AI and machine learning applications, continue to push the boundaries of technology, they require storage solutions that can keep pace with their demanding workloads. Addressing this critical need, HighPoint has unveiled the Rocket 1604A 4x M.2 PCIe Gen5 x16 Switch AIC, the industry's most compact M.2 storage and acceleration solution.

Revolutionizing Compact Computing with Advanced Technology

The Rocket 1604A is a compact half-length NVMe Switch AIC that leverages a revolutionary PCIe Gen5 Switch Architecture. This cutting-edge technology, combined with four independent M.2 ports, enables the Rocket 1604A to directly host up to 32TB of storage or four M.2 accelerators. This makes it an ideal solution for high-demand AI, machine learning, and data-acquisition applications hosted by compact industrial and edge computing environments.

Key Features

Unmatched Performance: The Rocket 1604A is engineered to deliver 64GB/s of throughput and 12 million IOPs, making it one of the fastest M.2 storage solutions available. This level of performance is crucial for applications that require rapid data processing and storage.

Versatile Connectivity: With four independent M.2 ports, the Rocket 1604A offers the flexibility to host up to 32TB of storage or connect four M.2 accelerators via a single PCIe slot. This versatility allows users to tailor the solution to their specific needs, whether they require massive storage capacity or high-speed data processing.

Compact and Efficient Design: The Rocket 1604A's compact design ensures that it can be easily integrated into small form-factor PCs, desktop workstations, and compact rackmount chassis. Its small footprint makes it an ideal choice for IT environments that require a powerful, small-footprint high-density storage expansion and M.2 acceleration solution.

Broad Compatibility: The Rocket 1604A is compatible with both AMD/Intel x86 and ARM platforms, ensuring seamless integration into a wide range of systems. This compatibility is further enhanced by its embedded driver support with all major operating systems, including Linux and Windows, streamlining deployment and service workflows.

Plug-and-Play Installation: The simple plug-and-play installation process, coupled with embedded driver support, makes it easy for customers to integrate Cutting-edge Gen5 storage media and M.2 Accelerators into high-performance computing environments. This eliminates the need for complex configurations and allows for quick and efficient deployment.

Advanced Cooling and Reliability

To ensure optimal performance and longevity, the Rocket 1604A features an advanced cooling system that employs a full-length aluminum heatsink and low-decibel cooling to efficiently dissipate heat generated by the Switch chipset and hosted M.2 media to prevent thermal throttling, enabling the

solution operates at peak performance even under heavy loads. Additionally, the server-grade design ensures high reliability and durability, making it suitable for 24/7 operation in demanding environments.

In Summary

The Rocket 1604A 4x M.2 PCIe Gen5 x16 Switch AIC from HighPoint is a game-changer for compact computing environments that require high-performance storage and M.2 acceleration. By delivering unparalleled speed, versatility and enterprise grade reliability, this solution empowers industries such as AI, machine learning, and industrial computing to achieve new levels of efficiency and productivity. With its compact design, cutting-edge technology, and robust performance, the Rocket 1604A is set to redefine the standards for M.2 storage and acceleration solutions, making it an ideal choice for IT professionals and organizations seeking a powerful, reliable, and versatile storage and acceleration solution.

Learn More

Rocket 1604A – PCIe Gen5 x16 to 4x M.2 NVMe Switch AIC

<https://www.highpoint-tech.com/rocket-1604a-individual-page/>

About HighPoint Technologies, Inc.

HighPoint is committed to providing innovative, reliable, and scalable solutions that meet the evolving demands of today's high-performance computing, video editing, AI, and 3D rendering applications. Our team is dedicated to helping you achieve your technical and business goals, ensuring your systems run at peak efficiency.

We invite you to explore our PCIe Gen5 and Gen4 x16 expansion solutions and experience the difference that HighPoint makes. For more information, visit our website or contact our sales team directly.