HighPoint's Partnership with Phison Electronics Aims to deliver the Industry's fastest, densest field-proven PCIe Gen5 x16 NVMe Storage Solutions

July 2024, Fremont CA- HighPoint Technologies, Inc., a leading NVMe Storage Solution provider, has announced a strategic partnership with Phison Electroincs Corporation, a global leader in NAND flash controller integrated circuits (ICs) and NAND-based storage technology.

This collaboration promises to revolutionize compact PCIe storage solutions for x86 server and workstation platforms. HighPoint's NVMe Gen5 x16 Switch & RAID AIC Series, when equipped with Phison-powered M.2 NVMe SSDs, delivers the world's fastest, densest, secure and field-proven PCIe Gen5 x16 NVMe storage in today's marketplace, suitable for a wide range of applications and workflows including Data Centers, Professional Workstations, SMB platforms and personal computing.

Introducing the Industry's Fastest, Largest, and Most Reliable NVMe AIC Storage Solutions

Armed with HighPoint's proven PCIe Switching technology and x48 lanes of internal Gen5 bandwidth, Rocket series PCIe Gen5 x16 NVMe RAID and Switch AICs deliver unparalleled storage performance and flexibility. Each AIC allocates a full x16 lanes to the upstream port for connection with the host platform, with x4 dedicated lanes assigned to each NVMe SSD. This innovative hardware architecture ensures optimal PCIe signal integrity, minimizing latency and maximizing data throughput.

Precision engineered to comply with a wide range of chassis form factors, HighPoint PCIe Gen5 NVMe AICs are fully PCI-SIG compliant, and can be seamlessly integrated into any industry-standard workstation or server platform with a free Gen5 x16 slot.

In addition, HighPoint NVMe AICs are equipped with a comprehensive Data Security Suite, which includes the SafeStorage encryption solution for OPAL SSC compliant SED drives and arrays, and features hardware secure boot, to ensure data is always well protected. Pro-Class AICs, such as the Rocket 7608A, feature integrated RAID 0, 1, and 10 capability, which provides the flexibility, speed and redundancy needed to meet the demands of any data-intensive application, whether personal or professional.

"Phison's Consumer class and <u>Pascari enterprise</u> line NVMe M.2 SSDs are a perfect match for our PCle Gen5 Switch and RAID solutions." explains May Hwang, HighPoint's VP of Marketing. "Our Rocket 7608A RAID AIC is capable of leveraging 8 Phison E26-based M.2 SSDs to fully maximize Gen5 x16 bus bandwidth. The transfer speed is amazing; approaching 60GB/s, with 32TB of storage capacity. If maximizing space is your goal, E18-based SSDs can double available capacity; up 64TB with a single AIC."

"We are excited to work with Highpoint Technology to expand the PCIe Gen5 ecosystem." says Michael Wu, GM and President of Phison Technology. "HighPoint's switching and RAID technology is among the best in the industry, just like our <u>Pascari enterprise</u> and datacenter products. Through our joint efforts in developing approved vendor lists (AVL), Phison and HighPoint ensure that customers will achieve unparalleled success with our high-performance product pairings."

Optimize Performance and Reliability with HighPoint's Advanced Cooling & Storage Sensor Analysis Solutions HighPoint's groundbreaking Active Sensor Logging & Analysis Suite closely monitors the NVMe storage environment in real-time. Tracking and logging critical metrics such as temperature, power usage, and drive health enables administrators to take a proactive approach to storage management, and rapidly identify and troubleshoot potential issues to ensure the target platform runs smoothly and efficiently.

Designed to operate in conjunction with the Sensor and Logging Suite, HighPoint's Pro-Active PCle Gen5 Cooling Solution leverages the industry's most advanced hardware cooling system with a selection of powerful management tools to maintain optimal operating temperatures for the NVMe storage environment. This innovative solution will automatically establish temperature thresholds for each SSD, then dynamically adjust the AIC's cooling fans based on real-time environmental data. Not only does the solution reduce wear and tear on sensitive hardware, it actively combats the threat of thermal throttling to ensure NVMe storage performs optimally even under maximum load.

Enhance Maintenance Efficiency with HighPoint's Seamless Field Service Feature Suite

HighPoint's Seamless Field Service Feature Suite was designed to enhance the efficiency of maintenance and service workflows. The suite incorporates a series of Self-Diagnostic LED indicators and an audible alarm, which enables technicians to instantly assess the operating status and condition of the NVMe storage solution, including the temperature of the NVMe media and Switch IC, strength of the PCIe host connection, and physical status of hosted SSDs and RAID arrays. This proactive approach minimizes downtime and ensures NVMe storage operates at peak performance. An intuitive "1-click" Information Collection service will automatically compile critical log files and environmental data to expedite the troubleshooting and support process, ultimately maximizing system uptime and end customer experience. The suite also features Online RAID Roaming capability, which facilitates the seamless migration of RAID arrays and field replacement, on the fly.

Approved Vendor List

HighPoint's Gen5 x16 NVMe Switch & Pro/RAID AIC product line are capable of supporting a wide range of PCIe Gen5 and Gen4 NVMe media powered by Phison NAND controller technology. A few of the most well-known examples are outlined below.

Phison IC	Class	PCIe Gen	Form Factor	Capacity
E26	Phison Consumer Premium Class	5.0	M.2	Up to 4TB
E18DC	PLP Datacenter	4.0	M.2	480 GB up to 3.84 TB
E27T	Phison Consumer Economy class	4.0	M.2	512 to 2048GB
E18	Phison Consumer Premium Class	4.0	M.2	512 to 2048GB

About HighPoint Technologies, Inc.

HighPoint Technologies stands at the forefront of storage innovation as the industry's -premier manufacturer of high-performance, high-density NVMe Switch and RAID AIC & Adapter solutions for off-the-shelf x86 AMD and Intel platforms. With a rich history spanning nearly three decades, our dedication to delivering innovative, reliable, and high-performance storage solutions has consistently set us ahead in the marketplace. HighPoint's NVMe storage solutions are powered by industry-proven PCle Switching technology, and are designed to address the dynamic requirements of AI/ML/LLM applications, Data Centers, Edge Servers, and high-performance workstations, enabling customers to keep pace with today's rapidly evolving technology landscape.

About Phison Electronics Corporation

Phison Electronics Corp. (TPEX:8299) is a global leader in NAND flash controller, storage solutions, signal integrity IC and AI solution provider. We provide a variety of services from controller design, system integration, IP licensing to total turnkey solutions, covering applications across SSD (PCIe/SATA/PATA), eMMC, UFS, SD, and USB interfaces, reaching out to consumer, industrial, and enterprise markets. As an active member of industry associations, Phison is on the Board of Directors for SDA, ONFI, UFSA and a contributor for JEDEC, PCI-SIG, MIPI, NVMe, and IEEE-SA.

To know more about Phison, please visit <u>Phison Website</u> or <u>Phison Q&A</u> for details. Read more on our blog: www.phisonblog.com