

## HighPoint and OSNexus Launch Turnkey True Unified Storage Solution to Accelerate AI, M&E, and Private Cloud Infrastructure

*By pairing OSNexus QuantaStor Software-Defined Storage with the HighPoint RocketStor 4243AS hardware-neutral BYOD platform, the joint solution delivers multi-protocol file, block, and object storage at bare-metal NVMe-oF speeds.*

**Milpitas, CA — June 2026** — HighPoint Technologies, Inc., a pioneer in high-performance NVMe storage infrastructure, and OSNexus, a leading developer of unified Software-Defined Storage (SDS) solutions, have announced the official qualification of OSNexus QuantaStor™ on the HighPoint RocketStor 4243AS (RS4243AS) NVMe-over-Fabrics (NVMe-oF) storage platform. This synergistic turnkey solution redefines Composable Disaggregated Infrastructure (CDI) by combining an open, Bring-Your-Own-Drive (BYOD) storage hardware platform with an enterprise-class software management grid. The result is a True Unified Storage pipeline that simultaneously serves file (NFS/SMB), block (iSCSI/NVMe-oF), and object (Amazon S3-compatible) workloads over standard 100GbE Ethernet infrastructure—completely eliminating the high costs and rigid vendor lock-in associated with proprietary flash arrays.

### The Power of Synergy: Bare-Metal Performance Meets Grid Management

Modern data-intensive industries are frequently trapped between two extremes: complex, expensive legacy storage infrastructure, or fragmented software tools that are difficult to manage. HighPoint and OSNexus' collaboration effectively resolves this dilemma by cleanly separating high-density NVMe hardware fabric acceleration from the unified software control layer.

The HighPoint RocketStor 4243AS packs up to 24 enterprise-class U.2/U.3 NVMe SSDs into a compact industry-standard 2U rackmount footprint. It offloads the entire NVMe-oF protocol stack to dedicated fabric bridge silicon, routing clean, low-latency storage traffic over dual 100GbE ports using NVMe/TCP or ultra-low-latency RoCE v2 fabrics.

OSNexus QuantaStor acts as the master intelligence engine over this high-speed pool. It ingests the raw NVMe-oF block capacity and natively translates it into diverse multi-protocol storage tiers. Through QuantaStor's advanced Storage Grid Technology, administrators can manage these high-density appliances alongside multi-site data centers and hybrid public clouds from a single, federated management interface.

## Key Value Propositions for IT Architects

- **End-to-End CPU Offload via RoCE v2 Lowers TCO:** When deployed over a RoCE v2 network fabric, the solution achieves total, dual-sided CPU offload to deliver massive operational cost savings. The RocketStor 4243AS processes the NVMe-oF protocol entirely in hardware silicon at the target side, while hardware-driven RDMA completely bypasses the host server's network stack on the initiator side. By eliminating this storage-related CPU overhead, CSPs and MSPs can instantly reclaim valuable host compute cycles to maximize virtual machine (VM) density and lower data center TCO.
- **Unified Enterprise Storage Pool:** Run high-throughput file shares, sub-millisecond database block storage, and massive S3-compatible object repositories simultaneously from a single unified pool of enterprise NVMe storage.
- **Maximizing Capital Efficiency with a BYOD Architecture:** Engineered as a hardware-neutral platform, the solution optimizes storage performance and density-per-dollar by allowing organizations to source industry standard commercially available SSDs at market prices. The streamlined, space-efficient 2U rackmount chassis has been engineered to maximize raw NVMe-oF throughput without the cost or complexity of conventional CDI infrastructure.
- **Single-Pane-of-Glass Enclosure Management:** The joint solution delivers deep hardware-to-software visibility. Administrators can directly manage and monitor fan speeds, power supplies, and view a visual, direct slot-to-drive mapping of the physical RS4243AS chassis through the QuantaStor management console.
- **Protocol Flexibility (NVMe/TCP and RoCE v2):** Organizations can customize deployments using dual 100GbE connectivity. It supports low-cost NVMe/TCP setups over standard networking fabrics or ultra-low-latency, lossless RoCE v2 (RDMA over Converged Ethernet) pipelines.

## Target Applications & Industry Impact

### *AI, Machine Learning, and Data Science Pools*

High-performance GPU clusters often sit idle while waiting for traditional storage systems to feed them training datasets. This solution effectively eliminates "data stalling" by delivering millions of IOPS over 100GbE fabrics; keeping expensive GPU nodes continuously saturated at

local-flash speeds. QuantaStor presents this data as a massively scalable S3-compatible object storage lake or an NFS mount, enabling seamless, high-speed ingestion and checkpointing.

### ***Media & Entertainment (M&E) Post-Production***

Editing multi-stream 8K RAW video requires massive sequential throughput across collaborative teams without dropping frames. Production houses can deploy the joint solution as a high-velocity central NAS via standard SMB/NFS. Creative teams can edit high-bitrate video directly over the network fabric, while the hardware-neutral design allows studios to rapidly scale up raw capacity on demand as project sizes expand.

### ***Private Cloud Virtualization and Hypervisors***

By adopting a disaggregated CDI approach, IT departments can scale high-density RocketStor NVMe storage nodes completely independently of their compute layers. Hypervisors pull high-performance block storage targets over standard Ethernet fabrics, maximizing infrastructure flexibility and hardware utilization while eliminating stranded hardware resources.

## **Executive Perspectives**

*“HighPoint’s RocketStor 4243AS provides a great building block for our scale-out Ceph based storage clusters and enables organizations to expand any server from any manufacturer with additional NVMe storage capacity at any time,” said Steven Umbecker, Founder & CEO of OSNexus. “With current supply chain challenges around NAND/flash media this is coming at a key time when flexibility to expand existing infrastructure is paramount.”*

*"The RocketStor 4243AS was purposefully engineered to democratize NVMe-over-Fabrics by utilizing a streamlined, single-controller architecture that maximizes thermal efficiency, power savings, and raw storage density per rack unit," said May Hwang, VP of Marketing at HighPoint Technologies, Inc. "Partnering with OSNexus allows us to wrap that ultra-low-latency hardware fabric in a mature, enterprise-grade data management layer. Our customers in AI, media production, and private cloud data centers can now leverage a true unified storage solution that handles file, block, and object data seamlessly at full 100GbE line rates without a proprietary cost premium."*

## Availability

The HighPoint RocketStor 4243AS and OSNexus QuantaStor turnkey unified solution is qualified and available immediately through major global distribution networks, including ASI and TD SYNEX. To design a customized architecture tailored to specific workload requirements, infrastructure teams can utilize OSNexus' interactive [QuantaStor Scale-Out Storage Solutions designer](#).

### **About HighPoint Technologies, Inc.**

For over 30 years, HighPoint Technologies has been at the forefront of PCIe storage and connectivity innovation. HighPoint Technologies, Inc. is a leading developer of high-performance storage and connectivity solutions for enterprise, industrial, AI, media, and HPC applications. For over two decades, HighPoint has delivered innovative PCIe, NVMe, RAID, and storage networking technologies that enable organizations to maximize performance, scalability, and reliability across mission-critical environments.

### **About OSNexus**

Founded in 2010, OSNexus enables organizations to manage their storage as composable infrastructure with its QuantaStor™ industry-leading Software Defined Storage (SDS) platform. The QuantaStor platform provides scale-out file, block, and object storage on commodity hardware as an easy-to-manage storage grid solution. QuantaStor is deployed by Fortune 500 companies, government, and major research institutions to address a broad set of storage use cases ranging from backup, archive, cloud computing, virtualization, and high-performance applications. Go to [osnexus.com](https://osnexus.com) to learn more.