Xinnor to Showcase xiRAID Opus Solution, Based on NVIDIA BlueField-3, at FMS 2024

Xinnor, a leading provider of advanced storage solutions, announces its participation in the Future of Memory and Storage (FMS) conference, taking place August 6-8, 2024, in Santa Clara, California. At Booth #751, Xinnor will demonstrate its innovative xiRAID Opus software running on the NVIDIA BlueField-3 Data Processing Unit (DPU), a cutting-edge solution designed to transform disaggregated storage infrastructures and virtualized environments.

Xinnor's xiRAID Opus is a high-performance software RAID engine running in user space, leveraging SPDK libraries to eliminate kernel dependencies and enhance system efficiency. When paired with the NVIDIA BlueField-3 DPU, which boasts 16 Armv8.2+ A78 Hercules cores, this solution significantly boosts storage performance while removing the need for dedicated storage servers. This advancement allows organizations to attach NVMe drives via high-speed networks, drastically cutting costs associated with storage deployment and operation.

"Our collaboration with NVIDIA to validate xiRAID Opus on the BlueField-3 DPU is a major milestone," said Davide Villa, CRO at Xinnor. "By offloading RAID calculations to the DPU, we enable customers to achieve unprecedented storage performance, consolidate the hardware, thus reducing power consumption, and enhance the efficiency of their AI and machine learning workloads."

"Advancing the capabilities of disaggregated storage infrastructures and virtualized environments is crucial for optimizing storage performance and minimizing operational costs," said Rob Davis, vice president of storage technology at NVIDIA. "Using the power of the NVIDIA BlueField-3 DPU, xiRAID Opus can set a new standard in storage solutions, helping to ensure cost-effective, high-performance outcomes for businesses across the globe."

During FMS 2024, attendees will have the opportunity to witness the capabilities of xiRAID Opus on the NVIDIA BlueField-3 DPU firsthand. This demonstration will highlight the solution's ability to manage demanding, data-intensive applications such as AI and ML, providing high-speed data access and robust RAID protection.

Key benefits of the xiRAID Opus solution with the NVIDIA BlueField-3 DPU include:

- Enhanced Performance: Achieving fast sequential read and write throughput, critical for AI and machine learning applications.
- Cost Efficiency: Reducing the need for expensive dedicated storage servers and lowering power and cooling requirements.
- Operational Simplicity: Seamless integration with existing host operating systems and hypervisors, simplifying deployment across diverse environments.
- Security and Independence: Operating independently from the host OS, allowing for secure updates and maintenance without disrupting storage or network operations.

Benchmark tests conducted by Xinnor and NVIDIA demonstrated that xiRAID Opus running on BlueField-3 significantly outperforms traditional RAID solutions, offering superior performance at zero CPU load. This makes the CPU redundant for storage tasks, freeing it up for other critical operations and improving overall system efficiency.

Xinnor invites all FMS attendees to visit Booth #751 to explore how xiRAID Opus on the NVIDIA BlueField-3 DPU can revolutionize their storage infrastructure.