

SupremeRAID™ Ultra

Ultimate GPU-Based NVMe RAID for the Most Demanding High Performance Workloads



SupremeRAID™ Ultra (formerly SR-1010) is a next-generation, GPU-powered NVMe RAID solution engineered to deliver maximum performance for the most demanding enterprise workloads. Leveraging NVIDIA RTX Ada GPUs, SupremeRAID™ Ultra eliminates traditional RAID bottlenecks by offloading all RAID computation to the GPU, unlocking extreme workload performance, agility, and scalability.

Performance

Unmatched NVMe SSD Performance: Achieve up to 30 million IOPS and 280GB/s throughput per card, supporting demanding workloads like AI/ML, high-frequency trading, and 4K/8K media processing.

Resilience

Enterprise-Grade Data Protection: Flexible RAID levels (0, 1, 5, 6, 10) for robust redundancy and advanced recovery, with support for up to 32 NVMe SSDs per card.

ROI

Platform Versatility: Compatible with AMD, ARM (Ubuntu only), and Intel CPU platforms; supports all leading enterprise NVMe SSD brands including Samsung, Seagate, Kioxia, Solidigm, Western Digital.

Efficient Resource Utilization: Frees up CPU resources and DRAM, focusing RAID tasks on the GPU for maximum system efficiency.

Plug-and-Play Installation: PCIe Gen 4 x8 interface in a compact dual-slot form factor; easy installation without extra cabling or system redesign.

SupremeRAID™ Ultra Ideal For:

High-performance AI/ML training and inference

Enterprise databases and transaction processing

Cloud virtualization and multi-tenant hosting

High-resolution media production and distribution

Financial modeling, research, and analytics

“We’re perpetually impressed with the extreme storage performance SupremeRAID™ enables. For maximizing NVMe SSD performance, we haven’t seen anything on the market that can touch the SupremeRAID™ solution. It’s fantastic.”

SupremeRAID™ Ultra (formerly SR-1010)

Detailed Technical Specifications

For questions about product specs, email us at info@graidtech.com

Supported RAID Levels	RAID 0/1/5/6/10
GPU Option	NVIDIA RTX 2000 Ada, 16GB
Host Interface	PCIe Gen 4 x8
Max SSDs Supported	32 NVMe SSDs
Max Throughput	280GB/s
Max Read IOPS	30M
Max Write IOPS	6M
Max Power Consumption	70W
Dimensions	2.7" H x 6.6" L, Dual Slot
Supported OS	Linux (major distros), Windows Server
Compatibility	Intel, AMD, ARM (Ubuntu only)
Supported Virtualization	KVM, Proxmox VE, Virtuoizzo OpenVZ, Windows Server Hyper-V
Supported NVMe SSDs	Dapustor, FADU, Hagiwara, Kingston Technologies, KIOXIA, Memblaze, Micron, Petaio, Phison, Samsung, Scaleflux, Seagate, Solidigm, Western Digital
Management Interface	Web GUI, CLI, RESTful API

Up to 25× Faster

Removes RAID bottlenecks for NVMe, delivering unmatched data center performance

Highly Scalable

Manages up to 32 NVMe SSDs and supports composable architectures

Resilient Performance

Sustains speed and uptime even during rebuilds or drive failures

No Legacy Hardware

Eliminates memory caching and battery modules for simpler maintenance



Visit graidtech.com for SupremeRAID™ Ultra deployment resources, compatibility details, and configuration guides.

