

# 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.”**

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## Detailed Technical Specifications

For questions about product specs, email us at [info@graidtech.com](mailto: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, 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](https://graidtech.com) for SupremeRAID™ Ultra deployment resources, compatibility details, and configuration guides.

