

SupremeRAID™ Pro

Advanced GPU-Based NVMe RAID for
Mid-Scale Enterprise Environments



SupremeRAID™ Pro (formerly SR-1000) is a powerful, GPU-accelerated NVMe RAID solution designed for mid-scale enterprise data centers, offering exceptional RAID performance, scalability, and data resilience. Leveraging NVIDIA RTX A1000 GPUs, SupremeRAID™ Pro enables modern IT teams to maximize NVMe SSD speed, simplify management, and protect vital data.

Performance

High-Performance NVMe RAID: Achieve up to 22 million IOPS read and 280GB/s throughput per card, ideal for virtualization, DBaaS, and high-throughput content delivery.

Resilience

Comprehensive RAID Levels: Supports RAID 0, 1, 5, 6, and 10, with up to 32 physical NVMe SSDs per solution, providing flexible redundancy for enterprise needs.

ROI

Versatile Platform Support: Compatible with Intel, AMD, and Arm (Ubuntu) servers; broad SSD interoperability supporting all leading NVMe SSD brands for maximum deployment flexibility.

Efficient Resource Allocation: Offloads RAID computation to the GPU, freeing CPU and system memory for applications, reducing bottlenecks.

Easy Integration: PCIe Gen 4 x8, single-slot form factor, and simple deployment with bundled GPU license for rapid deployment without architectural changes.

SupremeRAID™ Pro Ideal For:

Virtualization cloud hosting
and hyper-converged
infrastructure

Enterprise-grade file servers
and database workloads

Media streaming, VOD, or
CDN edge deployments

Multi-tenant SaaS hosting
for regulated industries

“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™ Pro (formerly SR-1000)

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 A1000, 8GB
Host Interface	PCIe Gen 4 x8
Max SSDs Supported	32 NVMe SSDs
Max Throughput	280GB/s
Max Read IOPS	22M
Max Write IOPS	5M
Max Power Consumption	50W
Dimensions	2.7" H x 6.4" L, Single 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

Leading NVMe RAID
Delivers high throughput and IOPS, surpassing traditional hardware or CPU RAID limits

32-Drive Scalability
Manages large NVMe SSD pools with unified policy and simplified expansion

Sustained Performance
Fast rebuilds and minimal slowdown ensure uptime during drive failures

No Legacy Hardware
True SSD-native NVMe RAID with no batteries or external cache required



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

