

SupremeRAID™ Core

Efficient GPU-Based NVMe RAID for Edge and Smaller Enterprise Deployments



SupremeRAID™ Core (formerly SR-1001) empowers edge enterprise and SMB environments with cost-effective, GPU-accelerated NVMe RAID. Designed for compact NVMe SSD arrays, SupremeRAID™ Core ensures fast deployment, easy management, and essential protection for key data workloads, without sacrificing performance.

Performance

Solid NVMe Performance: Delivers up to 10 million IOPS read and 140GB/s throughput per card—optimized for edge data centers, branch offices, and distributed IT deployments.

Resilience

Flexible RAID Support: Includes RAID 0, 1, 5, 6, 10 for robust redundancy and quick recovery, suitable for up to 12 NVMe SSDs per card.

ROI

Versatile Integration: Works seamlessly with Intel, AMD, and ARM (Ubuntu) server platforms; supports all leading NVMe SSD brands for maximum deployment flexibility.

GPU-Based Offload Efficiency: Minimizes CPU usage for RAID processing, increasing overall server responsiveness for critical business apps.

Simple Deployment: PCIe Gen 4 x8, single-slot form factor; includes bundled GPU software license for easy activation and management.

SupremeRAID™ Core Ideal For:

Distributed/edge office
IT environments

SMB file servers and
departmental storage

Virtualized desktop and
branch workloads

Cost-conscious, resilient
private cloud storage

“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™ Core (formerly SR-1001)

Detailed Technical Specifications

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

Supported RAID Levels	RAID 0/1/5/6/10	<p>Right-sized for Edge Balanced performance and manageability for edge and smaller enterprise deployments</p> <p>Ease of Use Fast setup, web-based tools, and unified monitoring simplify IT operations</p> <p>Consistent Performance Resilient RAID engine with all-NVMe design and no legacy bottlenecks</p> <p>Deployment Versatility Works seamlessly across major OEM servers and Windows or Linux environments</p>
GPU Option	NVIDIA RTX A400, 4GB	
Host Interface	PCIe Gen 4 x8	
Max SSDs Supported	12 NVMe SSDs	
Max Throughput	80GB/s	
Max Read IOPS	10M	
Max Write IOPS	2.9M	
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	



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

