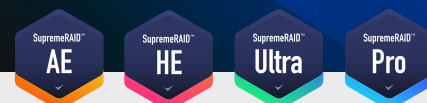


SupremeRAID™ Core

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 and AMD 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
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	AMD, Intel
Supported Virtualization	KVM, Proxmox VE, OpenVZ, Windows Server Hyper-V
Supported NVMe SSDs	Dapustor, FADU, Hagiwara, Intel/Solidigm, Kingston Technologies, KIOXIA, Memblaze, Micron, Petaio, Phison, QUANXING, Samsung, Scaleflux, Seagate, Western Digital/SanDisk
Management Interface	Web GUI, CLI, RESTful API

Right-sized for Edge

Balanced performance and manageability for edge and smaller enterprise deployments

Ease of Use

Fast setup, web-based tools, and unified monitoring simplify IT operations

Consistent Performance

Resilient RAID engine with all-NVMe design and no legacy bottlenecks

Deployment Versatility

Works seamlessly across major OEM servers and Windows or Linux environments



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

