

The World's Fastest NVMe & NVMeoF RAID Card for PCIe Gen 3, 4, & 5

Further disrupting the global storage industry, Graid Technology Inc. now offers the world's fastest NVMe and NVMeoF RAID card for PCIe Gen 3, 4, & 5 designed to deliver world class data protection while increasing read and write performance — all at world record performance speeds and and extremely low TCO.



THE CHALLENGE

RAID Bottleneck

As NVMe SSD quickly becomes the new standard for storage infrastructure, a challenge arises for data center storage infrastructure design: the industry requires a future-ready solution to deliver NVMe SSD performance without sacrificing data security or business continuity. Simply put: flash storage performance is evolving too fast to be fully utilized by existing storage architecture.

Implementing a basic software RAID via the CPU can only deliver 10-20% SSD performance on average, while unfortunately consuming almost all of the CPU computing power. While utilizing proprietary hardware might achieve improved performance, the architecture still can't maximize the potential of flash storage.

THE SOLUTION

SupremeRAID™ SR-1010

In today's data center world, speed and throughput are everything. Graid Technology recognized the limitations and bottlenecks caused by traditional RAID and developed a GPU-based storage solution to launch RAID technology into the future.



Graid Technology is proud to introduce the world's first NVMe and NVMeoF RAID card created to unlock the full potential of your SSD performance. Our innovative GPU-based solution delivers world-record performance while increasing scalability, improving flexibility, and lowering TCO. With proven performance tests and partnerships with global industry leaders, SupremeRAID™ delivers maximum SSD performance, comprehensive enterprise data protection, unmatched flexibility, and unbeatable ROI.

28M
IOPS

260GB/s
Throughput

UP TO **100%**
SSD Performance

80%
Cost Savings

9x
Faster

	SupremeRAID™ SR-1010	High-end Hardware RAID
4K Random Read	28 M IOPS	6.9 M IOPS
4K Random Write	2 M IOPS	651 K IOPS
1M Sequential Read	260 GB/s	28.2 GB/s
1M Sequential Write	100 GB/s	10.4 GB/s
4K Random Read In Rebuild	5.5 M IOPS	1 M IOPS
4K Random Write In Rebuild	1.1 M IOPS	548 K IOPS

Based on Linux RAID5 with AMD EPYC 9654 96-Core Processor x 2 and KIOXIA CM7 x 24

Unbeatable Performance

SupremeRAID™ SR-1010 increases read performance to **28 M IOPS and 260GB/s** throughput and increases write performance to **2 M IOPS and 100 GB/s** throughput in RAID 5, while maintaining the superior level of data protection our customers and partners have come to expect.



Flexible & Future Ready

Unmatched flexibility with features like new O/S support, compression, encryption, thin provisioning, or boot drive protection easily added with software releases



World Record Performance

Unprecedented NVMe/NVMeoF performance up to 28M IOPS and 260GB/s throughput with a single SupremeRAID™ card delivers the full value of your server investment



Highly Scalable

Easily manage 32 direct attached NVMe SSDs; extend data protection without sacrificing performance with Software Composable Infrastructure



Plug & Play

Effortless installation, no cabling or motherboard re-layout required; direct connect to SSD without PCIe switches



Free Up CPU Resources

Offload your entire RAID computation to SupremeRAID™ to free-up CPU computing resources for 5G, AI and AIoT applications



Easy to Use

SupremeRAID™ doesn't rely on memory caching technology, eliminating the need for battery backup modules

Global Partners & OEMs

AIC	ASUS	LIQID	SuperMicro
Altos	Gigabyte	MSi	Tyan
AMD	KeyWin	Seagate	Western Digital
ASRock Rack	KIOXIA	StarWind	

Global Distributors

Afastor	CLIMB	InnoTech
Arrow	EDOM Tech	Sunway
ASBIS	Gluesys	TD Synnex

Global Resellers

Advanced HPC	Define Tech	primeLine Solutions
Applied Data Systems	Evotek	SHI
ARKAY	Exxact	Starline
Aspen Systems	Flytech Spain	SysGen
AUK Computing	GPL Technologies	TBA Informatica
A-VAR	GTS Technology Solutions	Technologies for Tomorrow
Boston	HPC Tech Japan	Thinkmate
Bold Data	Images et Technologie	Top Flight Computers
Computacenter	365 Master Data	Trenton Systems
Crystal Group	Mazda Computing	Vesper
Data in Science (DST)	Nextron	
DiGiCOR	OMTX Brazil	

“SupremeRAID™ SR-1010 arrives with a substantial performance uplift... it's light years beyond even the most high-end hardware RAID arrays.”

TOM'S HARDWARE
INDEPENDENT REVIEW

tom'sHARDWARE

Challenge the status quo for performance-demanding workloads with SupremeRAID™

Graid Technology Inc. is headquartered in Silicon Valley, with an R&D center in Taipei, Taiwan. Our leadership is composed of a dedicated team of experts with decades of experience in the SDS, ASIC and storage industries. Learn more at www.graidtech.com.

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