

INTRODUCING

# The World's Fastest NVMe & NVMeoF RAID Card for PCIe Gen 4



DATA CENTER WORLD  
2022 STARTUP CHALLENGE WINNER

Further disrupting the global storage industry, GRAID Technology now offers the world's fastest NVMe and NVMeoF RAID card for PCIe Gen 4, designed to deliver world class data protection while increasing read and write performance—all at world record performance speeds and at a fraction of the lead time.



## 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 recognized the limitations and bottlenecks that traditional RAIDs caused and decided a new solution was needed to move RAID technology into the future.

GRAID is proud to introduce the world's first NVMe and NVMeoF RAID card to unlock the full potential of your SSD performance. Our innovative solution delivers world-record performance while increasing scalability, improving flexibility, and lowering the total cost of ownership. With proven performance tests and partnerships with global industry leaders, GRAID SupremeRAID™ removes the traditional RAID bottleneck to deliver maximum SSD performance, comprehensive data protection, and unmatched flexibility at the lowest TCO available.



**19M**  
IOPS

**110GB/s**  
Throughput

UP TO **100%**  
SSD Performance

**80%**  
Cost Savings

**5x**  
Faster

	SupremeRAID™ SR-1010	High-end Hardware RAID
4k Random Read	19 M IOPS	3.5 M IOPS
4k Random Write	1.5 M IOPS	180 k IOPS
512k Sequential Read	110 GB/s	13.5 GB/s
512k Sequential Write	22 GB/s	4 GB/s
4k Random Read In Rebuild	<b>5.5 M IOPS</b>	36 k IOPS
4k Random Write In Rebuild	<b>1.1 M IOPS</b>	18 k IOPS

\*Based on Linux RAID5 with Intel Xeon Gold 6338 CPU 32-Core with 2.0GHz x 2

# Unbeatable Performance



The SupremeRAID™ SR-1010 increases read performance to **19 M IOPS and 110GB/s** throughput and increases write performance to **1.1 M IOPS and 22 GB/s** throughput in RAID 5/6, 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

SupremeRAID™ SR-1010 increases read performance to 19M IOPS and 110GB/s throughput and write performance to 1.5M IOPS and 22GB/s throughput in RAID5/6



## 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 the GRAID card to free-up CPU computing resources for 5G, AI and AIoT applications



## Easy to Use

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

GIGABYTE

KIOXIA

AMD

SEAGATE

NVIDIA

## GRAID Technology Delivers The Ultimate in Flexibility & Choice

“Building on the success of our PCIe Gen 3 offering, the SR-1010 provides the perfect option for customers committed to PCIe Gen 4 infrastructure and the demanding workloads it will support.”

LEANDER YU,  
CEO & PRESIDENT  
GRAID TECHNOLOGY

## Are You Ready to Unleash Your Data Performance?

**Don't get left behind, join the future of enterprise data protection. Contact us today.**

Learn more about the world's first NVMe and NVMeoF RAID card to unlock the full potential of your SSD performance—enabling enterprise data centers to achieve record-breaking performance without sacrificing data security or business continuity.

GRAID Technology is headquartered in Silicon Valley, with a sales office in Ontario and 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.

[info@graidtech.com](mailto:info@graidtech.com)

1 (866) GRAID-10

5201 GREAT AMERICA PARKWAY, SUITE 320 | SANTA CLARA, CA 95054



Copyright © 2021-2022 GRAID Technologies. All Rights Reserved. GRAID, the GRAID logo, and GRAID SupremeRAID are among the trademarks of GRAID Technologies and/or its affiliates in the United States, certain other countries, and/or the EU. The term GRAID refers to GRAID Technologies and/or its subsidiaries. For more information, please visit [www.graidtech.com](http://www.graidtech.com). GRAID reserves the right to make changes without further notice to any products or data described herein. Information provided by GRAID is believed to be accurate. However, GRAID does not assume any liability arising from the use of any application or product described herein, neither does it convey any license under its patent rights nor the rights of others.

