

# HOW FAST CAN YOUR 24 NVMe DRIVES BE ?

## Overview

### ► S2205- 04



- Dual 4th Gen Intel® Xeon® Scalable processors
- 32 x DIMM Slots, 8 channel DDR5, up to 4800MHz, RDIMM/3DS
- 4 PCIe Add-on Cards
- Flexible LAN options: standard PCIe type and OCP 3.0
- NIC are supported
- 24 NVMe Hybrid Hot-swap drive bays

**NOTE: DUAL AMD EPYC™ 9004 Series Processors is optional**

### ► SupremeRAID™ SR-1010 Series



SupremeRAID™ SR-1010 is the world's fastest GPU-based RAID controller for PCIe Gen 3, 4, and 5 servers -- designed to deliver superior NVMe/NVMeoF, SAS, and SATA performance while increasing read/write in all flash array and HPC applications.

### ► S1206- 01



- Dual AMD EPYC™ 9004 Series Processors
- 24 x DIMM Slots, 12 channel DDR5, up to 4800MHz, RDIMM/3DS
- 3 PCIe Add-on Cards
- Flexible LAN options: standard PCIe type and OCP
- 3.0 NIC are supported
- 12 NVMe Hybrid Hot-swap drive bays

**NOTE: DUAL 4th Gen Intel® Xeon® Scalable processors is optional**

### ► SupremeRAID™ SR-1000 Series



Challenge the status quo for performance-demanding workloads with SupremeRAID™ SR-1000 for PCIe Gen 3, 4, and 5 -- designed to deliver superior SSD performance while increasing scalability, improving flexibility, and lowering TCO.

**Application:** Cloud Computing Service/ Content Delivery Network /Network Function Virtualization/ 5G Core and Edge Telecom Micro Data Center/ AI Inference and Machine Learning

**19M**

IOPS

**220GB/s**

Throughput

**UP TO 100%**

SSD Performance

**80%**

Cost Savings

**UP TO 20x**

Faster

#### SupremeRAID™ SR-1010

4k Random Read	19 M IOPS
4k Random Write	1.5 M IOPS
512k Sequential Read	220 GB/s
512k Sequential Write	90 GB/s
4k Random Read In Rebuild	<b>5.5 M IOPS</b>
4k Random Write In Rebuild	<b>1.1 M IOPS</b>

#### Hardware RAID

4k Random Read	3.5 M IOPS
4k Random Write	180k IOPS
512k Sequential Read	13.5 GB/s
512k Sequential Write	4 GB/s
4k Random Read In Rebuild	36k IOPS
4k Random Write In Rebuild	7 k IOPS

\*Based on Linux RAID5(Samsung PM1743) with Intel Xeon Gold 6430 CPU 32-Core with 2.1GHz x 2



### 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

Full NVMe performance with a single card: 19M IOPS and 220GB/s throughput based on RAID5 with 4th Generation Intel® Xeon Scalable Platform



### 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

## ► Scalable Storage Solution

This server features scalable storage solutions to support maximum performance for data center flexibility, and enable industry-standard SAS/SATA/NVMe interfacing through Broadcom Tri-Mode RAID adapters for increased connectivity and security.

## ► Unbeatable Performance

SupremeRAID™ SR-1010 increases read performance to **19 M IOPS and 220GB/s** throughput and increases write performance to **1.5 M IOPS and 90GB/s** throughput in RAID 5/6, while maintaining the superior level of data protection for users at HPC & AI workload.



## Innovations In The World of Data

**“SupremeRAID™ not only delivers maximum performance from SSDs, but also increases performance by using multiple carriers in one RAID — all without straining the processor.”**

WOJCIECH URBANEK  
WWW.CR.N.PL  
DEC. 2022

**CRN**

## Are You Ready to Unleash Your Data Performance?

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

MSI EPS (Enterprise Platform Solution) is a global forerunner hardware provider. Our products are developed 100% in-house by MSI R&D team to support customers and to approach actual market demand with great focus on Design and Manufacturing.

Graid Technology Inc. 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. Learn more at [www.graidtech.com/news](http://www.graidtech.com/news).

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