

ASUS RACK Server with GRAID

ASUS RS700-E11-RS12U X SupremeRAID™ SR-1010 SERIES



Empower Your Vision: Unleash the Server's Supreme Speed and Strength, Revolutionizing AI with SupremeRAID™ Protection

► RS700-E11-RS12U



► SupremeRAID™ SR-1010 Series

Further disrupting the global storage industry, Graid Technology Inc. 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 extremely low TCO.



THE SOLUTION

- **Powerful performance:**
Powered by 4th Gen Intel Xeon Scalable processors designed for potent data infrastructure from the cloud, to the network, to the intelligent edge
- **Scale-up storage and expansion design:**
Up to 12 all-flash NVMe drives on the front panel, and 4 PCIe 5.0 slots for higher bandwidth and system upgrade
- **Flexible networking module design:**
Optional two 10 Gbps or four 1 Gbps on-board LAN module, and OCP 3.0 module with PCIe 5.0 slot in rear panel for faster connectivity
- **Advanced air cooling solution:**
Features enhanced volume air cooling (EVAC) heatsink for processors with higher TDP
- **Enhanced IT-infrastructure management:**
ASUS ASMB11-iKVM remote control with ASPEED AST2600, ASUS Control Center IT management software and hardware-level Root-of-Trust solution
- **Ready for AI and HPC workloads:**
Supports 1 dual-slot GPU, including Intel Data Center GPU Flex series and NVIDIA A100

APPLICATION

- High Performance Computing
- AI Forecast of Utilization Workload
- Terabyte-scale data warehousing
- Virtualization applications

19M
IOPS

150GB/s
Throughput

UP TO **100%**
SSD Performance

80%
Cost Savings

UP TO **12x**
Faster

	SupremeRAID™ SR-1010	Hardware RAID
4k Random Read	19 M IOPS	3.5 M IOPS
4k Random Write	1.5 M IOPS	180k IOPS
512k Sequential Read	150 GB/s	13.5 GB/s
512k Sequential Write	50GB/s	4 GB/s
4k Random Read In Rebuild	5.5 M IOPS	36k IOPS
4k Random Write In Rebuild	1.1 M IOPS	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 **1.1 M IOPS and 50 GB/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.CRN.PL
DEC. 2022

Are You Ready to Unleash Your Data Performance?

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

ASUS, established in 1989, is a multinational company known for the world's best motherboards and high-quality personal computers, monitors, graphics cards, routers and other technology solutions. Today, ASUS is designing and building next-generation smart technologies to provide incredible experiences that enhance the lives of people everywhere.

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.

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