# Supermicro Scale-out File, Block & Object Storage Solutions

Unified File, Block & S3 Object storage in a single platform.

Scalable to over 100PB per Storage Grid.

End-to-end Security, NIST, CJIS, HIPAA compliant.

No feature add-on fees, support and upgrades are included with subscription.

Automate using CLI, REST API, and integration modules for popular technologies like Docker and Ansible.

Easy manage solution with native web management interface accessible from all systems.

IT staff training included with QuantaStor solution

Addresses scalability needs and hybrid cloud requirements

Scale-out Supermicro storage solutions leverage OSNEXUS QuantaStor to provide unified file, block, and object storage in a distributed storage platform that scalesout across sites and datacenters with its unique Storage Grid technology.

## Storage Grid Technology

Storage Grid technology is built into the platform and unifies storage management of QuantaStor clusters across sites while simplifying security configuration and enforcement. Each Storage Grid can combine up to 64x servers to deliver over 53PB of storage per grid using Supermicro servers. Storage Grids may be comprised of a single scale-out storage cluster or be made up of multiple clusters to meet a diverse set of workloads and use cases. Storage Grids may also span on-premise locations and datacenters to enable hybrid-cloud deployment while still being easily accessed and managed as a unified storage solution.

## Supermicro Hardware Integration

All Supermicro SBB and most standard server models are certified for use with OSNEXUS QuantaStor. Beyond certification QuantaStor has deep integration with the Supermicro server product line to fully integrate hardware monitoring and management. Monitoring includes all key system metrics including storage media health, power-supplies, system thermals, memory, fans, system board and CPU status. If an issue is detected, an alert is raised and communicated via QuantaStor's alert management system which integrates with email, Slack, Pagerduty, SNMP, and more. QuantaStor on Supermicro hardware provides IT organizations with the benefits of a fully integrated solution combined with the flexibility of software - defined.

## SUPERMICRO

Supermicro is a global leader in high performance, green computing server technology and innovation. We provide our global customers with applicationoptimized servers and workstations customized with blade, storage, and GPU solutions. Our products offer proven reliability, superior design, and the industry's broadest array of product configurations, to fit all computational needs

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## Automation

Automation is simplified with QuantaStor's REST API, scriptable CLI and API bindings to Python. QuantaStor grids may also be automated using Ansible, Docker, Openstack, and VMware VASA. These tools and integration points make it easy for IT administrators to orchestrate operations and storage provisioning activities across a given storage grid regardless of where the QuantaStor systems are deployed.

## End-to-End Encryption and Security

QuantaStor delivers end-to-end security coverage, enabling multi-layer data protection on-thewire and for data-at-rest. With NIST 800-53, 800-171, HIPAA, and CJIS compliance, QuantaStor provides the advanced security features required by governments and regulated industries.

QuantaStor also has a powerful patented Role-Based Access Control (RBAC) system which combines with its multi-tenancy features to enable organizations to enforce security policies with ease.
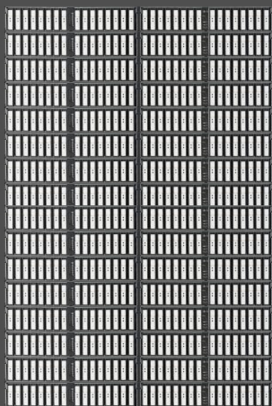
## Solution Design Simplified

Designing storage solutions with the right mix of hardware and configuration options to meet the requirements of a customer's use case can be complex. To simplify this process Supermicro offers solution design tools (see https://www.supermicro.com/en/solutions/osnexus) that make it easy to design customized storage solutions to meet the capacity and performance requirements of your specific workloads.

**Supermicro SuperStorage high-density servers combine to form scale-out object and file storage solutions scalable to over 100PB**

### https://link.osnexus.com/scaleout-90

**Supermicro 1U all-flash NVMe servers deliver high performance and high density with the latest ruler form-factor media.**

### Key Advantages

Provides a low cost, highly resilient, private cloud platform that can save IT organizations over 80% vs public cloud storage. Easily expanded by adding or removing Supermicro servers. Support for all major protocols including file (SMB/NFS), block (iSCSI/FC), and object (S3) in a single platform. Linux-based, QuantaStor integrates with open-source Ceph technology to eliminate vendor lock-in risks associated with proprietary storage technologies

### Conclusion

QuantaStor provides IT administrators with a versatile, secure, and scalable storage platform, simplifying management through its storage grid technology. QuantaStor's deep integration with Supermicro hardware makes it easy for organizations and solution architects to develop efficient, reliable solutions that meet the needs of a diverse set of application workloads

For more information on Supermicro QuantaStor solutions visit https://www.supermicro.com/en/ solutions/osnexus to begin designing a storage grid for your organization.

### https://link.osnexus.com/ruler-ssd

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