SOLUTION BRIEF

SUPERMICRO AND STORMAGIC DELIVER SIMPLIFIED HYPERCONVERGED INFRASTRUCTURE

SYS-221HE-FNTR

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Executive Summary

In today's fast-paced digital world, businesses need IT infrastructure that adapts to their unique demands, especially at the edge. Businesses require the ability to choose the perfect infrastructure, without compromise. Whether it's a compact, edge-optimized model for remote locations or a high-performance traditional rack server for core operations, organizations need a solution to fine-tune their environment for both performance and cost efficiency.

Solution Description

StorMagic and Supermicro have collaborated to validate joint solutions that support a wide range of deployment needs.

By combining StorMagic with the diverse Supermicro server portfolio, businesses can confidently achieve a right-sized hyperconverged infrastructure. This collaboration enables you to select the ideal server model tailored to your specific needs, thereby eliminating overprovisioning while ensuring simplicity, reliability, and cost-effectiveness.

- StorMagic simplifies hyperconverged infrastructure at the edge, allowing enterprises, ROBOs, and SMBs to deploy a full-stack HCI solution on a single server or a two-node setup for high availability and zero downtime.

- Supermicro's validated IoT SuperServers deliver the speed, reliability, and scalability edge applications demand, powering multi-access, enterprise workloads, and 5G deployments with top-tier performance.

- StorMagic and Supermicro servers eliminate unnecessary complexity, maximize efficiency, and provide an affordable, high-performance infrastructure designed for edge environments.

Validated Supermicro Servers

StorMagic's software has been validated on a curated range of Supermicro servers, each delivering distinct advantages tailored to the unique demands of edge and distributed infrastructure.

- The Supermicro **SYS-221HE-FTNR** is a high-performance 2U dual-socket server equipped with the latest Intel® Xeon® Scalable processors, offering exceptional compute density and versatile I/O capabilities. It supports multiple drive bays and PCIe lanes, making it ideal for edge data centers and industrial environments that require both processing power and flexible storage expansion.

Figure 1 - Supermicro SYS-221HE-FTNR Server

- The **SYS-110D-20C**, a compact 1U single-socket system, is optimized for edge deployments, offering essential power efficiency, reduced depth, and quiet operation, making it ideal for use in retail stores, remote branches, and space-constrained industrial locations. Despite its compact form factor, it delivers strong performance with up to 20 cores and supports a wide range of rich connectivity options.

Figure 2 - SYS-110D-20C

- The **SYS-211SE-31A** balances density (3 nodes) and expandability in a 2U short-depth design, making it an excellent choice for both edge and micro data centers. It provides a flexible platform for compute- and storage-intensive applications, with ample memory capacity and support for enterprise-class NVMe drives.

Figure 3 - SYS-211SE-31A

These validated systems ensure that StorMagic's lightweight, high-availability HCI software can be deployed confidently in virtually any scenario—from single-server installations to two-node HA clusters—without overprovisioning.

Use Cases

Seamless IT – StorMagic and Supermicro deliver a powerful, cost-effective solution for industrial environments, enabling organizations to upgrade their infrastructure with high availability and minimal complexity.

Zero Downtime Deployment – StorMagic, running on Supermicro servers, ensures a smooth, uninterrupted transition to hyperconverged infrastructure. Businesses can repurpose existing SAN storage for backups while maintaining continuous operations.

Installation – Can be deployed as a single server, simple 2-node cluster, or multi-node cluster, with the flexibility to meet changing capacity and performance needs. This is achieved by adding additional capacity to existing servers or growing the cluster, without impacting service availability.

Scalability – With StorMagic's flexible licensing model and Supermicro's scalable hardware, businesses can easily expand their compute and storage capacity without disruptions, adapting to future demands effortlessly.

Reduced Hardware Requirements – StorMagic is both server-and hypervisor-agnostic, providing customers with flexibility at initial installation and over time as their needs change. Because StorMagic only requires two servers, it can dramatically reduce overall hardware requirements.

Maximized Performance and Reliability – StorMagic synchronously mirrors data between Supermicro servers, eliminating single points of failure and ensuring high availability, uptime, and performance for mission-critical applications.

Cost-effective – By processing and storing data locally, this solution reduces cloud storage costs while delivering the high availability and reliability modern industrial operations require.

Data Protection and Storage Capacity – The reliable, resilient solutions protect data, eliminating the threat of downtime. At the same time, the StorMagic licensing model enables additional compute and storage capacities to be increased without incurring increased costs or disruption.

Energy Efficiency – Software-defined StorMagic requires much less power and cooling resources than traditional, physical SANs.

Conclusion

Combining StorMagic with Supermicro's high-performance servers gives businesses a flexible, scalable, and cost-effective IT system. This collaboration simplifies operations, reduces hardware costs, and ensures zero downtime. Whether in remote locations, industrial sites, or enterprise data centers, organizations can easily upgrade their IT systems while maintaining smooth operations with high performance and reliability.

Summary

StorMagic and Supermicro have teamed up to create a simple, high-performance collaboration for edge computing. StorMagic and Supermicro's servers work together to simplify IT operations, boost performance, and reduce costs.

Businesses can build a flexible system with fewer hardware requirements, high availability, and easy scaling. With features such as real-time data mirroring, energy-efficient storage, and the ability to replace traditional SANs, this solution provides enterprises, ROBOs, and SMBs with the tools to enhance their IT at the edge.

For More Information:

www.supermicro.com/storage

www.stormagic.com/svhci

www.stormagic.com/svsan

SUPERMICRO

As a global leader in high performance, high efficiency server technology and innovation, we develop and provide end-to-end green computing solutions to the data center, cloud computing, enterprise IT, big data, HPC, and embedded markets. Our Building Block Solutions® approach allows us to provide a broad range of SKUs, and enables us to build and deliver application-optimized solutions based upon your requirements.

Learn more at www.supermicro.com

STORMAGIC

StorMagic is solving the world's edge data problems. We help organizations of all types and sizes use, protect and manage their applications and data at and near the edge. Our solutions are easy to implement and maintain, and eliminate downtime to provide value anytime, anywhere. StorMagic's solutions are simple, reliable, and cost-effective, without sacrificing enterprise-class features, for SMBs to Fortune 500 companies with one to thousands of sites.

Learn more at www.stormagic.com