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#### **SUPERMICRO**

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

#### SCALE COMPUTING

Scale Computing™ is a leading provider of an edge computing software platform for hospitality and retail. Scale Computing Platform™ centralizes, automates, and controls application and content delivery, management, and security on-premises, in stores and restaurants. A natural extension of the cloud, edge computing reduces latency, supports continuous operations, and can accelerate digital transformation.

Scale Computing Platform is a ready-to-deploy, proven solution with embedded tools to support large scale distributed environments through virtualization, containerization, centralized management, and comprehensive monitoring and security. Scale Computing converges new and legacy applications into an integrated and scalable system that is hardware agnostic. Scale Computing's clients represent leading retailers and restaurants.

# DEPLOYING NEXT-GENERATION INITIATIVES AT THE EDGE

Leveraging Cloud + Edge Computing to Accelerate Digital Transformation

## **Executive Summary**

Edge computing has become the defining architecture for distributed retail, hospitality, and convenience businesses seeking to transform customer experiences. By bringing compute closer to users and applications, edge infrastructure reduces latency, improves uptime, and powers new digital services such as Al-driven analytics, video monitoring, contactless ordering, and real-time personalization.

Today, connected consumers expect faster and more immersive experiences, requiring technology that processes data locally while maintaining centralized visibility and control. Supermicro and Scale Computing deliver this through a unified edge-to-core architecture by providing proven reliability, scalability, virtualization, and containerization performance.

Together, Supermicro's advanced server technology and Scale Computing's software innovation deliver flexible infrastructure options for enterprises modernizing their distributed environments. Whether deployed as a fully managed Edge Computing as a Service through Scale Computing Reliant Platform™, or as a self-managed virtualization alternative with Scale Computing HyperCore™ virtualization suite, organizations can rapidly deploy, scale, and protect workloads across thousands of locations.

## **Scale Computing and the Edge**

Scale Computing is a leading provider of virtualization and edge computing software designed for distributed enterprises across retail, hospitality, convenience, and industrial environments. Scale Computing's technologies eliminate complexity by combining virtualization, storage, compute, and management into a single, automated platform built to handle both new, legacy, and containerized workloads.

The Scale Computing product portfolio now includes two complementary solutions designed to meet different customer deployment models: Scale Computing HyperCore™ virtualization suite and Scale Computing Reliant Platform Edge Computing as a Service.

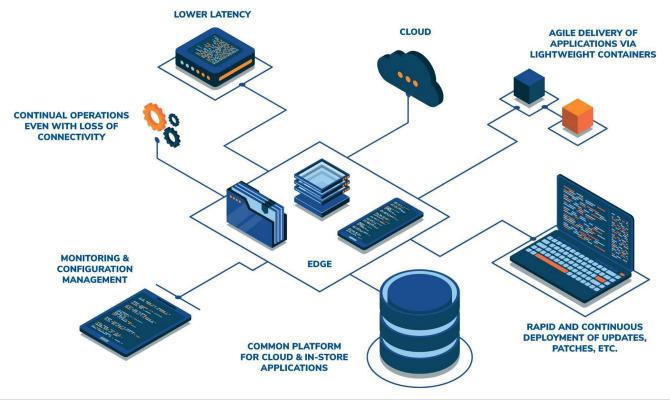


Figure 1: Scale Computing Platform Benefits

#### Scale Computing HyperCore™

Scale Computing HyperCore™ is a modern, highly efficient virtualization platform built to simplify and replace legacy hypervisor environments such as VMware. Featuring built-in high availability, automated failover, and near-zero-touch management, SC//HyperCore™ delivers enterprise-class performance from the data center to the edge.

#### **Key advantages:**

- VMware Alternative: Run virtual machines natively without external licensing dependencies or complexity.
- Edge-to-Core Flexibility: Deploy the same platform across branch sites, regional data centers, and cloud-connected environments.
- Fleet management Integration: Centrally manage and orchestrate distributed clusters with Scale Computing Fleet Manager™.
- Resilience and Efficiency: Built-in replication and self-healing architecture ensure continuous uptime for missioncritical workloads.
- Certified Hardware: SC//HyperCore runs on a variety of x86 platforms, including the following Supermicro-certified systems:
  - o <u>SYS-511R-M</u>
  - o SYS-511E-WR
  - o SYS-512AR-N4T
  - o SYS-112B-FWT
  - o SYS-111AD-WN2R

These systems deliver performance-optimized compute density for virtualized workloads, ideal for enterprises seeking to transition from VMware to a more cost-effective, scalable infrastructure.

## Scale Computing Reliant Platform™

Originally built for the retail, hospitality, and convenience industries, Scale Computing Reliant Platform extends enterprise-grade computing directly to store and restaurant environments. Delivered as an Edge Computing as a Service (ECaaS) solution, it combines hardware, software, and managed services to simplify the deployment and management of on-premises applications at scale.

## **Key capabilities:**

- Application Hosting: Supports both containerized and virtualized workloads.
- Centralized Management: Cloud-based management plane with intuitive web UI and API integration.
- Comprehensive Monitoring: End-to-end visibility across applications, systems, and endpoints.
- Data Aggregation: Localized data collection for analytics, AI inferencing, and operational visibility.
- Security: Built-in endpoint protection, intrusion detection, and vulnerability management.

- Flexible Delivery Models:
  - o Platform as a Service (PaaS): Fully managed service combining hardware, software, and 24x7 support.
  - Software as a Service (SaaS): Software-only deployment for existing customer hardware, with optional support tiers.

SC//Reliant Platform provides a turnkey edge architecture for large-scale operators and franchise organizations seeking a managed service approach with integrated security and PCI DSS compliance.

## **Supermicro Servers for Edge and Virtualization**

Supermicro is a global leader in high-performance and energy-efficient computing solutions, offering one of the industry's broadest portfolios of edge and data center systems. Supermicro's designs are optimized for reliability, flexibility, and longevity—ideal for supporting both virtualized workloads and ruggedized retail deployments.

## For Scale Computing HyperCore

These systems provide robust virtualization performance for enterprise and edge environments:

- SYS-511R-M 1U rackmount system offering optimized balance of compute density, expandability, and energy efficiency.
- SYS-511E-WR High-efficiency 1U system featuring Intel® Xeon® Scalable processors, ideal for dense virtualization clusters.
- SYS-512AR-N4T Compact system featuring Intel® Core™ Ultra Series 2 processor with integrated Al capabilities
- SYS-112B-FWT Powerful 1U edge system featuring Intel® Xeon® 6700/6500 series processor and room for a single-width AI acceleration card
- SYS-111AD-WN2R Compact edge system optimized for data storage

#### SUPERMICRO SERVERS FOR RETAIL EDGE

Supermicro offers a range of servers optimized for edge computing, with the processing power needed for applications and services for retail and hospitality businesses. Compact edge systems also support local data storage and coprocessors for Edge AI inferencing and visual computing.

#### E302-12D-4C/8C



The Supermicro E302-12D is a high performance fanless system that brings the power of the Intel® Xeon® D processor into kitchen environments where particulates and humidity wreak havoc on electronics.

#### SYS-510D-4C/8C/10C-FN6P



The SYS-510D is a low-power short-depth server that is ideal for the typical retail and hospitality environment while offering the cost/performance the market demands.

## SYS-E200-12D-4C/8C/10C w/Dual System Tray



Redundancy is a critical requirement for retailers, where downtime can result in lost sales. Supermicro's small form factor systems are the ideal solution to maintain retail uptime.

## For Scale Computing Reliant Platform™ Edge Computing as a Service

These systems are tailored for distributed edge environments with ruggedized or compact designs:

- SYS-E302-12D-4C/8C: Fanless, high-performance system ideal for kitchen or harsh environments.
- SYS-510D-4C/8C/10C-FN6P: Short-depth, low-power system designed for retail and hospitality sites.
- SYS-E200-12D-4C/8C/10C (Dual System Tray): Compact redundancy for mission-critical uptime.
- SYS-E403-14B-FRN2T: Versatile and powerful edge server supporting multiple GPUs for AI inferencing at the edge.



E403-14B-FRN2T

These servers are purpose-built for demanding retail and restaurant deployments, ensuring consistent uptime and easy scalability for thousands of sites.

## **Supermicro and Scale Computing Partnership**

Supermicro and Scale Computing have collaborated to deliver flexible, enterprise-grade compute solutions for distributed organizations.

- Supermicro provides ISO-certified manufacturing and a broad range of x86 hardware optimized for both core and edge environments.
- Scale Computing delivers virtualization and edge computing software that transforms this hardware into fully managed or self-managed digital infrastructure.

All systems built for Scale Computing deployments undergo rigorous image preparation, QA testing, and configuration validation prior to shipment—ensuring reliability, consistency, and fast time to value.

Together, the companies offer a unified hardware and software ecosystem that supports the full lifecycle of digital transformation, from the data center to the store floor.

#### Conclusion

The pace of digital transformation continues to accelerate across retail, hospitality, convenience, and industrial sectors. Businesses require agile, reliable, and cost-effective infrastructure that can extend cloud capabilities to the edge while maintaining centralized control and security.

The partnership between Supermicro and Scale Computing delivers exactly that—a flexible and scalable foundation for virtualization and edge computing.

- Scale Computing HyperCore provides a modern virtualization alternative to VMware, simplifying deployment and management across edge and core.
- Scale Computing Reliant Platform delivers fully managed Edge Computing as a Service for turnkey deployments in highly distributed environments.
- Supermicro hardware ensures dependable performance, from rugged edge systems to enterprise-grade servers.

Together, these technologies enable enterprises to deploy next-generation applications—AI, machine vision, analytics, IoT, and more—quickly and confidently, anywhere business happens.

#### For more information, visit:

www.supermicro.com/iot-edge

www.scalecomputing.com