ELEVATING IN-STORE EXPERIENCES WITH EDGE AI

How the right AI platform helps retailers **innovate and drive revenue.**

Traditional retail is more competitive than ever. As AI advances, retailers have the opportunity to unlock new efficiencies and incredible shopper experiences. But success isn't guaranteed. It requires enterprise-grade edge systems with rack-simplicity. That's where Supermicro and AMD come in.

91% of retail IT leaders are prioritizing AI implementation by 2026.[1]

2/3 of consumers say AI makes shopping more convenient.[2]

$112B is lost to retail shrinkage; AI-powered loss prevention offers ROI within 3 months.[3]

Supermicro retail AI solutions, powered by 5th Gen AMD EPYC™ processors, are designed to accelerate AI with advanced performance, flexibility, and efficiency across the most demanding in-store environments.

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AS -1115S-FWTRT

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MODERNIZING IN-STORE EXPERIENCES & OPERATIONS

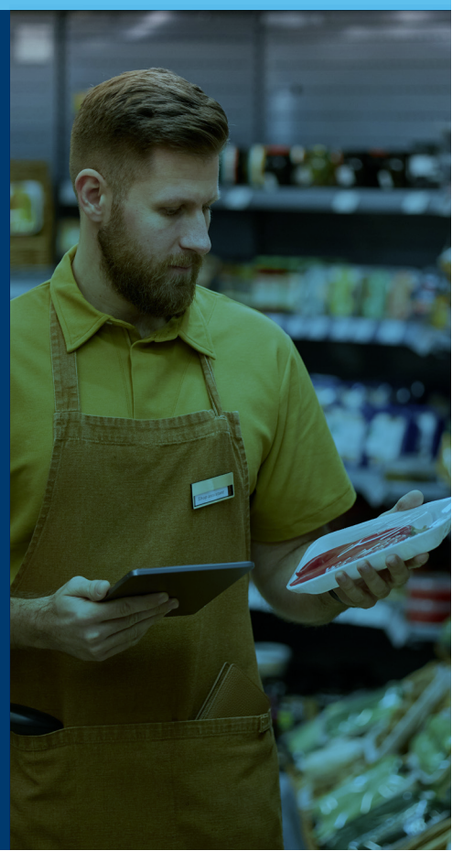
Supermicro servers with 5th Gen AMD EPYC™ processors enable the industry's top AI software partners to tackle common retail challenges.

Hotspot analysis: AI tracks customer movements to help retailers design smarter layouts so customers enjoy a smoother, more personalized in-store experience

Retail loss prevention: AI systems detect suspicious behavior in real time, reducing losses for retailers while creating a safer experience for shoppers

Frictionless checkouts: AI-driven carts recognize items and support payments—reducing delays and making checkout hassle-free

Inventory management: Computer vision monitors shelves to predict demand and prevent stockouts, keeping customer favorites in stock and maximizing sales



Supermicro servers with AMD EPYC™ CPUs are right-sized for edge AI applications, so retailers can transform customer loyalty, boost store efficiency, and drive success.

PERFORMANCE: PROTECT MARGINS WITH REAL-TIME ANALYSIS

High core counts, ample processing power & large memory bandwidth for AI inference

Rapid computer vision model training & deployment with **GPU-accelerated systems**

Complete solutions ship pre-validated, ready for **faster rollout to new locations**

'Zen 5' architecture optimizes both in-store technology and back- end infrastructure

FLEXIBILITY: MEET DEMANDS OF DIVERSE ENVIRONMENTS

Compact systems with computational power to support AI in different retail environments

Open AI ecosystem with AMD ROCm™ open software and a foundation of heterogeneous portability

Multilayered, built-in security with AMD Infinity Guard to help prevent threats and keep data safe[4]

Unified computing platform with x86 software compatibility for seamless integration

EFFICIENCY: REDUCE COSTS AND STAY COMPETITIVE

Industry-leading air- and liquid-cooled systems improve power efficiency to cut costs and meet sustainability goals

Virtualization & consolidation to support multiple workloads on one system, improving ROI

Chip-level power intelligence enables AMD EPYC™ CPUs to deliver outstanding power performance

Purpose-built silicon design of AMD EPYC™ 5th Gen processors deliver accelerated AI capabilities for speed and efficiency

READY TO THRIVE WITH AI-POWERED RETAIL?

Explore how Supermicro retail AI solutions, from the compact 1U edge server to the multi-GPU 2U high-performance platform, can transform your retail operations.

LEARN MORE

For more information:

SUPERMICRO | AMD

SOURCES:

[1] https://www.gartner.com/en/industries/retail-digital-transformation

[2] https://www.businesswire.com/news/home/20250225425683/en/New-Everseen-Report-Retailers-and-Consumers-Weigh-in-on-the-Future-of-Retail-AI

[3] https://nrf.com/research/national-retail-security-survey-2023

[4] AMD Infinity Guard features vary by EPYC Processor generations. Infinity Guard security features on AMD EPYC™ processors must be enabled by server OEMs and/or cloud service providers to operate. Learn more about Infinity Guard at https://www.amd.com/en/technologies/infinity-guard