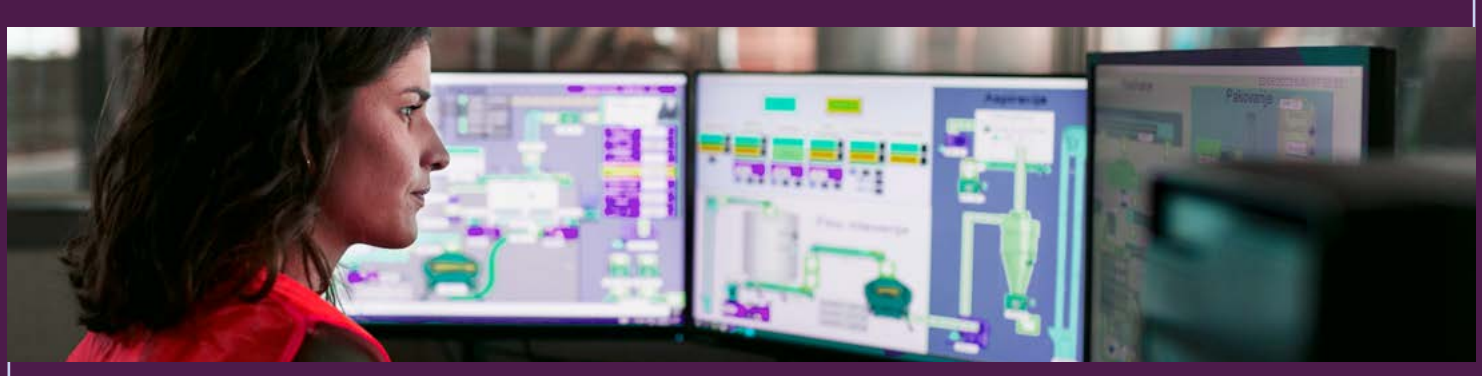
Advance your smart manufacturing strategy with AI at the edge.

Lenovo | AMD

Why AI at the edge?

Improve product quality, optimize manufacturing processes, and keep your sensitive data secure. Discover edge-optimized Lenovo infrastructure with the leadership performance and energy efficiency of AMD processors.



Smart factories are built on the combination of physical and digital processes across the business and other supply chain elements. Bringing compute power to the edge – including the ability to leverage Artificial Intelligence – enables new approaches to product development and optimizing processes.

Manufacturers are prioritizing technology investments to solve challenges such as:

- **Mitigating supply chain disruption** with improved control, coordination, and supply network visibility.
- **Driving future competitiveness** by establishing a digital core that supports automation, AI, IoT, and more.
- **Increasing agility** in the face of economic challenges such as inflation by developing new efficiencies.
- **Helping protect IP and sensitive data** better as security risks grow.

Use your data to drive innovation and efficiency.

Edge computing brings a different set of challenges compared to the data center. Solutions built on the Lenovo ThinkEdge SE455 V3 servers are purpose-built for tougher environments like manufacturing locations. Powered by AMD EPYC processors, they offer exceptional performance per watt for edge AI workloads.

Accelerate insights that optimize manufacturing processes.

- **Accelerate or consolidate workloads** with up to 64 cores per AMD EPYC 8004 processor.
- **Transform quality assurance at scale** with real-time AI inspection of components and products.
- **Reduce human error** by identifying patterns and anomalies in real time with AI.

Drive competitiveness with increased productivity.

- **Access AI expertise and tools** with the Lenovo AI Discover Center of Excellence and the AI Innovators partner program.
- **Quickly meet growing needs** with huge storage and expansion options.
- **Run workloads closer to where data is created** with compact, rugged, edge-optimized servers.
- **Simplify management** with a single interface for your entire edge AI portfolio, with Lenovo XClarity dashboards.

Increase efficiency with simplified, energy-saving solutions.

- **Consume up to 32% less energy** than comparable servers with the exceptional performance per watt of AMD EPYC 8004 Series Processors.[3]
- **Save up to 50% in deployment costs** with Lenovo Open Cloud Automation software.[4]
- **Reduce the need for in-house IT expertise** at every branch with managed services from Lenovo TruScale for Edge and AI.
- **Run edge AI infrastructure as a service** and pay one predictable monthly bill, with Lenovo TruScale for Edge and AI.
- **Reduce waste** and overprovisioning with right-sized infrastructure via Lenovo TruScale for Edge and AI.

Better protect your business with enhanced security and reliability.

- **Enhance security** at your facilities with real-time, AI-powered video analytics leveraging up to six GPUs and multiple video streams.
- **Increase resiliency with a rugged design** that includes dust filtering, shock resistance, and reliable operation from 0–55°C.
- **Improve infrastructure reliability.** Lenovo servers are consistently rated #1 for reliability in ITIC global x86 server surveys.[5]

Take the next step

at **www.lenovo.com/amd-edge**

[1] IDG (2022). State of the CIO 2022.
[2] Lenovo and Reach3. Future of Work 2022.
[3] Lenovo (2023, Sept 18). Lenovo Delivers Next Generation AI at the Edge with Industry's Most Powerful Edge Server Based on AMD EPYC 8004 Series Processors, Providing Breakthrough Performance and Efficiency. https://news.lenovo.com/lenovo-delivers-next-generation-ai-at-the-edge-with-industrys-most-powerful-edge-server/.
[4] Based on internal Lenovo testing.
[5] ITIC (2023, February). ITIC 2022 Global Server Hardware, Server OS Reliability Report. https://www.lenovo.com/us/en/resources/data-center-solutions/analyst-reports/itic-2022-global-server-hardware-server-os-reliability-report-feb-2023/.

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