

Lenovo

intel.

# Unleashing the Potential of Edge Computing

Transforming Edge AI with Intel® and Lenovo ThinkEdge

Lenovo **ThinkEdge** 

## Lenovo and Intel are revolutionizing edge Al

\$1.85T

Is the expected global market for Al by 2030.

40%

Of global companies are either using or exploring the use of AI in their organization.

56%

Of organizations are using machine learning in at least one business function.

By 2030, an estimated 70% of companies globally will have adopted at least one type or AI technology.<sup>1</sup>

Al is significantly expanding the integration of edge computing to power solutions such as video analytics, computer vision, and augmented reality. Edge computing harnesses the massive amounts of data created with Al and ML at the source to make smarter decisions faster, with human-like intelligence – providing numerous benefits to industries worldwide.

In manufacturing, Al-driven predictive maintenance and quality control systems help reduce downtime and defects, optimizing production processes. The retail sector leverages Al for personalized marketing, inventory management, and customer service through chatbots, enhancing customer experience and productivity. And smart cities are adopting Al for traffic and waste management systems, public safety, and energy efficiency, leading to improved infrastructure and optimized resources.

To maximize edge AI, organizations need edge solutions with the power and performance to handle complex AI workloads, seamless scalability to grow edge AI infrastructure, and technology partners that can deliver AI innovation with simplified deployment and management.

Lenovo's ThinkEdge series of edge solutions, powered by Intel processors, deliver purpose-built solutions that enable AI inferencing everywhere – leading the edge AI revolution with the greatest performance ever recorded for edge AI, providing the highest GPU density per form factor, two times the storage capacity, and the most diverse edge solutions available.

With the most comprehensive AI support and tools, including Lenovo's AI Innovators Program, the Intel® Tiber Edge Platform, and Lenovo's AI Center of Discovery & Excellence, Lenovo and Intel are providing a seamless, end-to-end edge AI experience.

 $^1 \text{McKinsey, https://www.mckinsey.com/featured-insights/artificial-intelligence/notes-from-the-ai-frontier-modeling-the-impact-of-ai-on-the-world-economy.} \\$ 







## Right-size infrastructure

Together with Intel, Lenovo offers the most powerful edge AI portfolio - from near edge to the data center - in a variety of form factors to meet the performance needs of businesses globally.

## **ThinkEdge Portfolio**

## **SE10**



## Intel® Atom

Powerful performance with reliable ease and adaptability

## **SE30**



## Intel® Celeron® or Intel® Core™

For enterprise automation, smart retail, and smart buildings

## **SE50**



## Intel® Core™

Power and reliability at the edge

## **SE350 V2**



## Intel® Xeon® D

Purpose-built edge computing server

## SE360 V2



## Intel® Xeon® D Intel® Data Center

**GPU Flex Series**Compact and secure with rugged reliability

### **SE450**



## Intel® Xeon® Platinum Intel® Data Center GPU Flex Series

The most GPU-rich Al server for the edge

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## Unmatched edge AI hardware, software, and services

Lenovo and Intel are at the forefront of edge AI innovation with next-generation AI-ready and AI-optimized infrastructure, software, and services that are delivering powerful, tailored, scalable, and energy-efficient AI solutions to businesses worldwide.



## **Innovative**

Best-in-class AI software and technologies to create and leverage generative AI, computer vision, and natural language processing.



## **Consultative**

Expert principals and customerfocused AI programs streamline the development and implementation of AI projects.



## Rugged

Built to withstand -20° to 65°C temperatures, dust, shock, and vibration.



## **Performance**

Up to 256GB memory for lightning-fast processing speeds.



## **Scalable**

Ground-up, modular design to simplify deployment from 1-1,000+ devices.



the latest Intel processors for unconstrained performance at the edge.



## Secure

Superior physical and digital security solutions with hardware-based encryption, intrusion detection, and sleeve-locking bezels.



## **Cutting-Edge**

Purpose-built to handle AI and ML-optimized workloads from unlimited data sources and applications.







## **Envision**

No matter where you are on your edge journey. Lenovo and Intel's principal consultants will help you build a strategy that delivers insights and experiences at your unique business speed. And with Lenovo's Al Innovators **Program**, get access to guided expertise and over 150 Al solutions across key verticals.

## **Innovate**

Intel® Geti™, part of the Intel® Tiber™ Edge Platform - a solution designed to solve edge challenges across industries - provides an integrated environment for AI development, allowing developers to rapidly build Al models by bringing non-technical domain experts easily into the process. Conduct edge POCs, leverage ready-to-use tools, and access experts in AI and edge computing via the Lenovo Al Center of Discovery & Excellence.

## **Optimize**

Intel's OpenVINO™ toolkit, which is also a part of the Intel® Tiber™ Edge Platform, facilitates the development and deployment of high-performance computer vision and deep learning applications. Developers can optimize and run Al inference workloads across ThinkEdge Intel hardware platforms. maximizing the performance of deep learning models while simplifying the deployment process. Companies can also utilize Intel® **SceneScape** to transform data from many sensors to create and provide live updates to a 4D digital twin of a physical space.

## **Implement**

**Lenovo Open Cloud Automation (LOC-A)** streamlines and automates the deployment, management, and scaling of edge computing infrastructure. Get near-zero-touch provisioning while reducing edge deployment time up to 70%, reducing required resources up to 76%. and saving up to 50% in deployment costs.

## Scale & Save

Enjoy edge-computing-as-a-service anywhere in the world as a predictable, stable monthly payment model with Lenovo TruScale for edge and AI. Get access to Lenovo's hardware and infrastructure on an as-a-service basis while leveraging cutting-edge technology and infrastructure without the need for significant upfront investment or the complexities of managing and maintaining hardware in-house.





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