

# EDGE AI from ASUS

Compact, Powerful, and Scalable



IN SEARCH OF INCREDIBLE

NUC BDM Vitalie Braghis

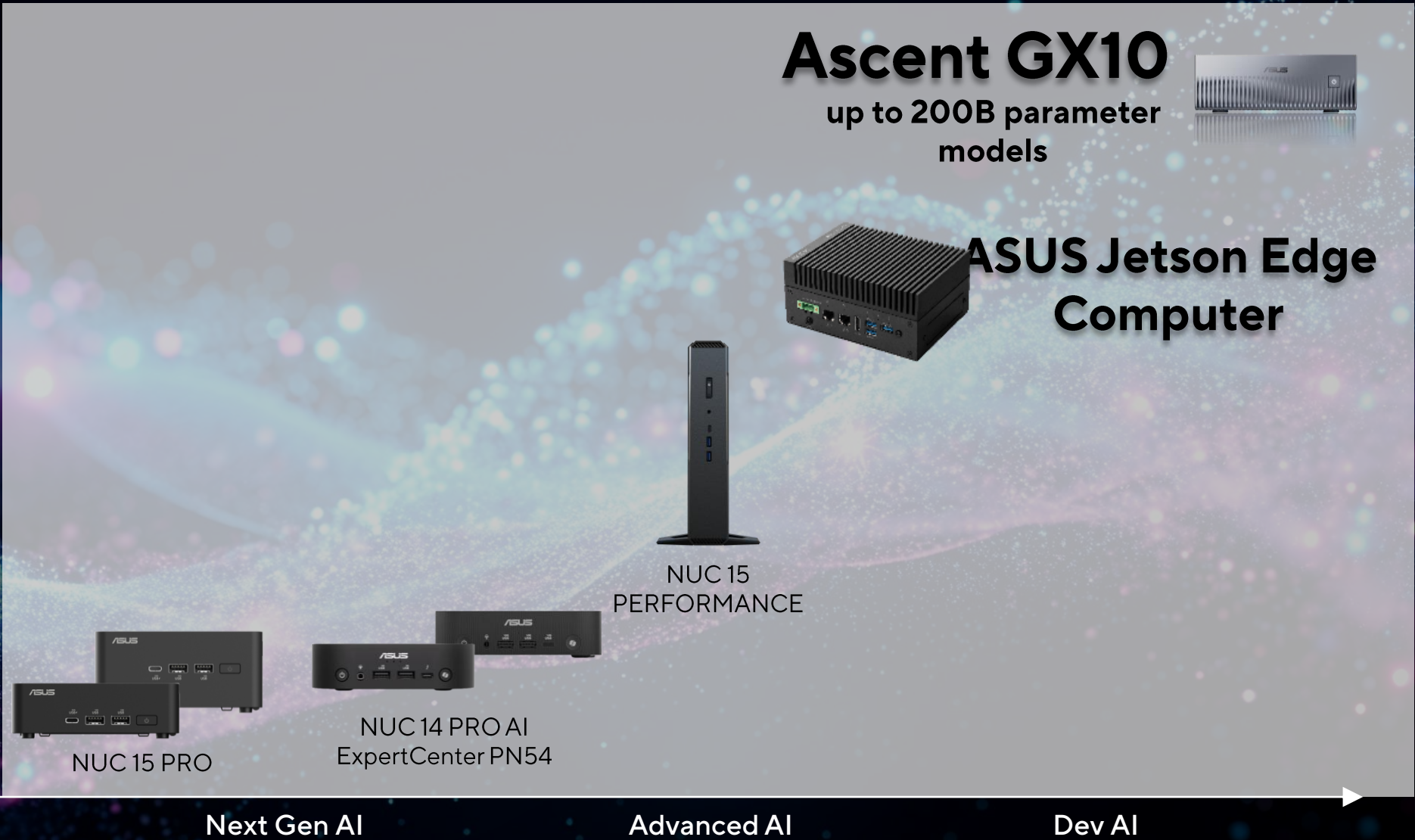


# Positioning

200B

13B  
(Llama)

7B  
(DS/YOLO)





# ASUS Ascent GX10

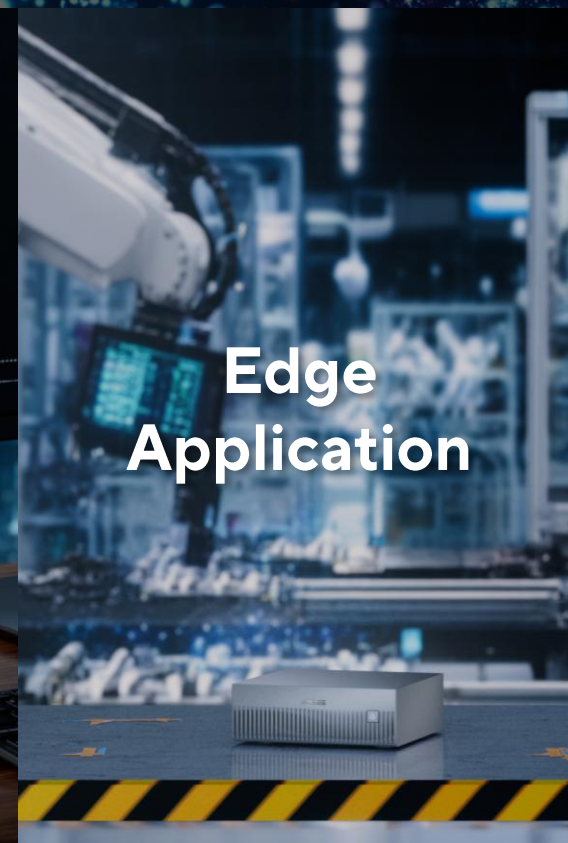


IN SEARCH OF INCREDIBLE



# AI Experience Key Workloads

The ASUS Ascent GX10 is purpose-built to accelerate AI-driven workloads across diverse user groups – from professional developers and academic researchers to data scientists and students. Whether you're advancing data science projects, building edge AI applications like robotics, computer vision, or Vision-Language Models (VLMs), or engaged in prototyping, fine-tuning, and inference tasks, the GX10 delivers the performance and flexibility needed to push boundaries and turn ideas into reality.







Inspired by AI Ocean Wave

## Stellar Grey

Precision-etched dark finish

## Anodized Metal

Robust and premium feel

51 mm

height

1.6 kg

light

240W Adapter  
cTPD 140W



# ASUS Ascent GX10

## Compact, Powerful, and Scalable

The ASUS Ascent GX10 AI Supercomputer, powered by the state-of-the-art NVIDIA® GB10 Grace Blackwell Superchip and Blackwell GPU, delivers petaflop-scale computing performance for developers, AI researchers, and data scientists. Its compact design ensures seamless integration and deployment, enabling high-performance local AI development with advanced tools and NVIDIA® ConnectX®-7 connectivity. This powerful system enhances your AI capabilities while supporting cutting-edge, customized solutions.

**NVIDIA® GB10  
Grace Blackwell  
Superchip**



**NVIDIA®  
Blackwell GPU**  
**128 GB** Unified memory

**NVIDIA® NVLink™-C2C**

Deliver a cohesive CPU+GPU memory model with five times the bandwidth of PCIe Gen 5

**NVIDIA® ConnectX®-7**

Allows two GX10 systems to be linked for handling even larger models

**1000  
TOPS**

**NVIDIA® DGX  
Base OS**

**Compact Size**  
150 x 150 x 51mm



**NVIDIA® AI Enterprise  
Software Suite**

**Optimized Cooling design**

**AI Development Environment**

Includes NVIDIA NIM™ and Blueprints.  
Supports Pytorch, Jupyter, Ollama for  
prototyping and inference.

CPU

# Unleash AI Power

Step into the future of breakthrough performance with the ASUS Ascent GX10, powered by the revolutionary NVIDIA® GB10 Grace Blackwell Superchip. Unleashing up to 1,000 TOPS, it crushes AI workloads that once required data centers. With a fused CPU-GPU architecture and lightning-fast memory, real-time inferencing and massive model training become seamless. From generative design to deep learning, every process flows with purpose. Build boldly—because limits no longer apply.



NVIDIA® GB10  
Grace Blackwell Superchip  
processor

**20** core Arm,  
**10** Cortex-X925+ **10** Cortex-A725 Arm

Up to  
**4 TB** of NVMe storage

Connected by NVIDIA® NVLink™-C2C



GPU

# Next-Gen AI Language Development Powerhouse.

ASUS Ascent GX10 features the NVIDIA® Blackwell GPU with 5th Gen Tensor Cores and FP4, delivering up to 1,000 TOPS. Its 128GB unified memory efficiently handles large ML models, accelerating training and inference. Ideal for complex AI language models, ML workflows, and AI-assisted data analysis, the GX10 ensures smooth processing and rapid insights. NVIDIA AI software compatibility enables seamless scaling from local to enterprise deployment, making it a versatile solution for AI professionals.

NVIDIA®

## Blackwell GPU

graphics

## 5<sup>th</sup> gen Tensor Cores

Up to

### 128 GB

Unified Memory

Up to

### 1000

total TOPS using FP4

Up to

### 200B parameter capacity

AI model development and inference

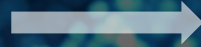




AI Elevated

# Double the Power with Two ASUS Ascent GX10 Units

Stack two ASUS Ascent GX10 units to instantly double your AI performance — from 1,000 to 2,000 AI TOPS, 128GB to 256GB Unified Memory, and from 200B to 405B parameter support, all with up to 8TB of storage. Perfect for scaling demanding AI workloads with ease.



**1,000** AI TOPS

**128GB** Unified Memory

Up to **200 Billion** parameters

Up to **4TB** Storage

**2,000** AI TOPS

**256GB** Unified Memory

Up to **405 Billion** parameters

Up to **8TB** Storage



QSFP cable  
0.4m / Sold Separately.

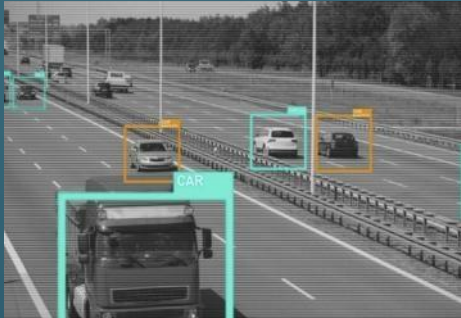
# Nvidia Jetson Series



# Focus Market



Retail



Video Analysis



Logistics



Agriculture



Healthcare



Construction



Robotics

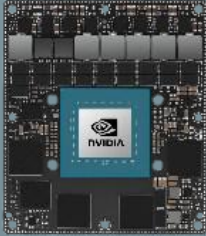
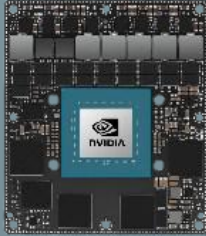


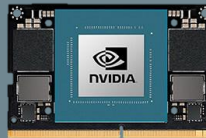
Smart City



Manufacturing

# NVIDIA Jetson Modules Roadmap

|                                                                                                                                                        |                                                                                                                                                         |                                                                                                                                                                |                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| <b>AGX Orin 32GB</b><br>200 TOPs (INT8)<br><br>15 - 40W<br>100 x 87mm | <b>AGX Orin 64GB</b><br>275 TOPs (INT8)<br><br>15 - 60W<br>100 x 87mm | <b>Jetson Thor T4000</b><br>1200 TFLOPS (FP4)<br><br>40 - 70W<br>100 x 87mm | <b>Jetson Thor T5000</b><br>2070 TFLOPS (FP4)<br><br>40 - 130W<br>100 x 87mm |
| PERFORMANCE                                                                                                                                            |                                                                                                                                                         | SUPERCOMPUTER                                                                                                                                                  |                                                                              |

|                                                                                                                                                      |                                                                                                                                                       |                                                                                                                                                        |                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Orin Nano 4GB</b><br>34 TOPs (INT8)<br><br>7 - 25W<br>45 x 70mm | <b>Orin Nano 8GB</b><br>67 TOPs (INT8)<br><br>7 - 25W<br>45 x 70mm | <b>Orin NX 8GB</b><br>117 TOPs (INT8)<br><br>10 - 40W<br>45 x 70mm | <b>Orin NX 16GB</b><br>157 TOPs (INT8)<br><br>10 - 40W<br>45 x 70mm |
| ENTRY                                                                                                                                                |                                                                                                                                                       | MAINSTREAM                                                                                                                                             |                                                                                                                                                         |

\*Super Mode



# PE1100N V2

Powered by Orin Nano/NX

MP 2026 Q1

## Super Mode Enabled

- Boosts next-gen Gen AI performance by up to 1.7x
- Active cooling system ensures sustained turbo performance

## High Expandability and Connectivity

- 3 x M.2 slot for expansion, Wi-Fi, SSD, 4G/5G, etc.
- 2 x RS232/422/485, 1 x CAN bus, and 4 x DI, 4 x DO
- 1 x AEM for option, OOB, Dual LAN, etc.

## Engineered for Harsh Environments

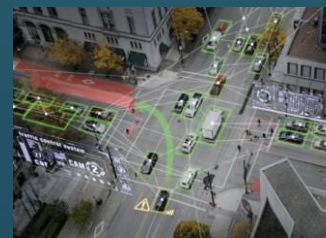
- Withstand harsh environment and tested by MIL-STD-810H
- Wide range of operating temperature up to 60°C



With FAN  
(40W, NX Super)



Without FAN  
(25W, Nano Super, NX)



Smart Transportation



Smart Manufacturing



Smart Parking

# PE1102N

Powered by Orin Nano/NX

MP 2026 Q1

## Rugged Edge Computing

- Rugged fanless design
- Wide operating temperature from -20°C - 60°C
- Withstand harsh environment and tested by MIL-STD-810H

## Flexible Modular Expansion

- 3 x M.2 slot for expansion, Wi-Fi, SSD, 4G/5G, etc.
- 2 x RS232/422/485, 1 x CAN bus, and 4 x DI, 4 x DO
- 1 x Versatile I/O Port with optional AEM extension
  - \*4 x GMSL2.0/1.0 with FAKRA connectors
  - \*1 x Remote management module

## Power for Mobility

- DC 12-36V wide range of power input
- Ignition control specifically designed for in-vehicle applications

Front



FAKRA  
4 x GMSL 2.0  
(AEM optional)

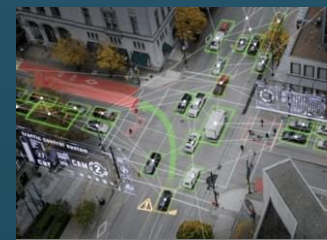
Back



DB25 connector  
RS-232/422/485  
& CAN-Bus

DIO

SIM card slot



Smart Transportation



Smart Logistics



Smart Surveillance



# PE1103N Powered by Orin Nano/NX

MP 2026 Q1

## Built to Last at the Edge

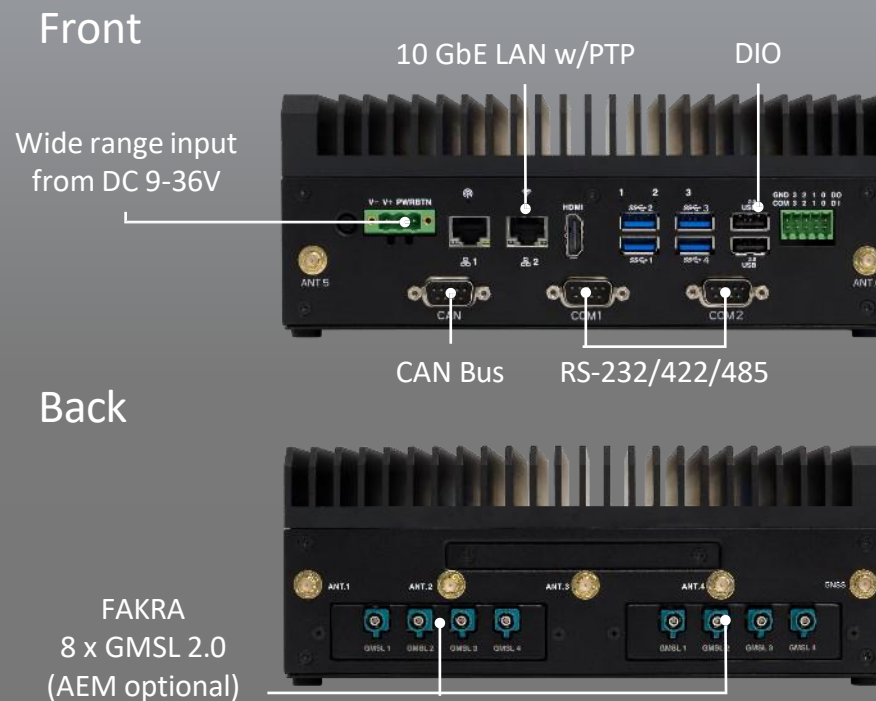
- Fanless with wide operating temperature from -20°C - 60°C
- MIL-STD 810H, military grade shock & vibration
- Vehicle-ready ignition control with DC 9-36V wide range of power input

## Comprehensive Connectivity & Expansion

- 3 x M.2 slot for expansion, Wi-Fi, SSD, 4G/5G, etc.
- 2 x RS232/422/485, 1 x CAN bus, and 4 x DI/DO
- 2 x Versatile I/O Port with optional AEM extension
  - \* Up to 8 x GMSL2.0/1.0 with FAKRA connectors
  - \* 1 x Remote management module

## Accurate Timing for Precise Coordination

- 1 x 10GbE LAN Port with PTP & 1GbE LAN Port
- Built-in GNSS supports concurrent reception (GPS, Galileo, GLONASS, BeiDou)
- Supports optional high-precision Time Sync and Frame Out for cameras, LiDARs, radars, and IMUs



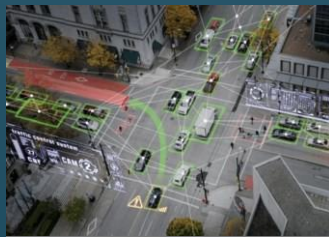
# PE2100N Powered by AGX Orin

## Excellent AI Performance

- Fanless design for maintenance-free operation
- Wide operating temperature range from -25°C - 55°C
- Wide power input DC 12-36V for industrial environments
- MIL-STD 810H, military grade shock & vibration

## Rich Connectivity & Connectivity

- 3 x M.2 slots for Wi-Fi, SSD, 4G/5G
- 1 x 10 GbE + 1 x GbE + 4 x PoE (IEEE 802.3af)
- 2 x COM ports (RS-232/422/485), CAN bus, GPIO, OOB



Smart Transportation

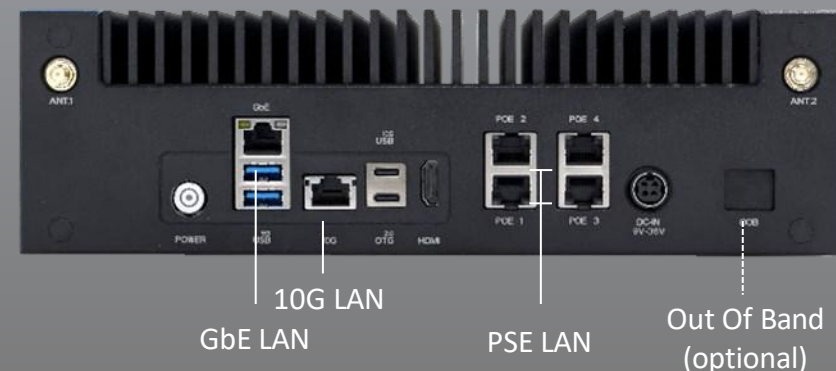


Smart Manufacturing



Visual Analysis

## Front



## Back





# PE3000N

Powered by Thor T5000/T4000

Sample 2026 Feb.  
MP 2026 1H

## Extreme AI Performance

- Next-Gen Edge AI Supercomputer with NVIDIA Jetson Thor T5000/T4000 (up to 2,070 FP4 TFLOPS)
- Delivers over 7.5x higher AI compute and 3.5x better power efficiency than AGX Orin

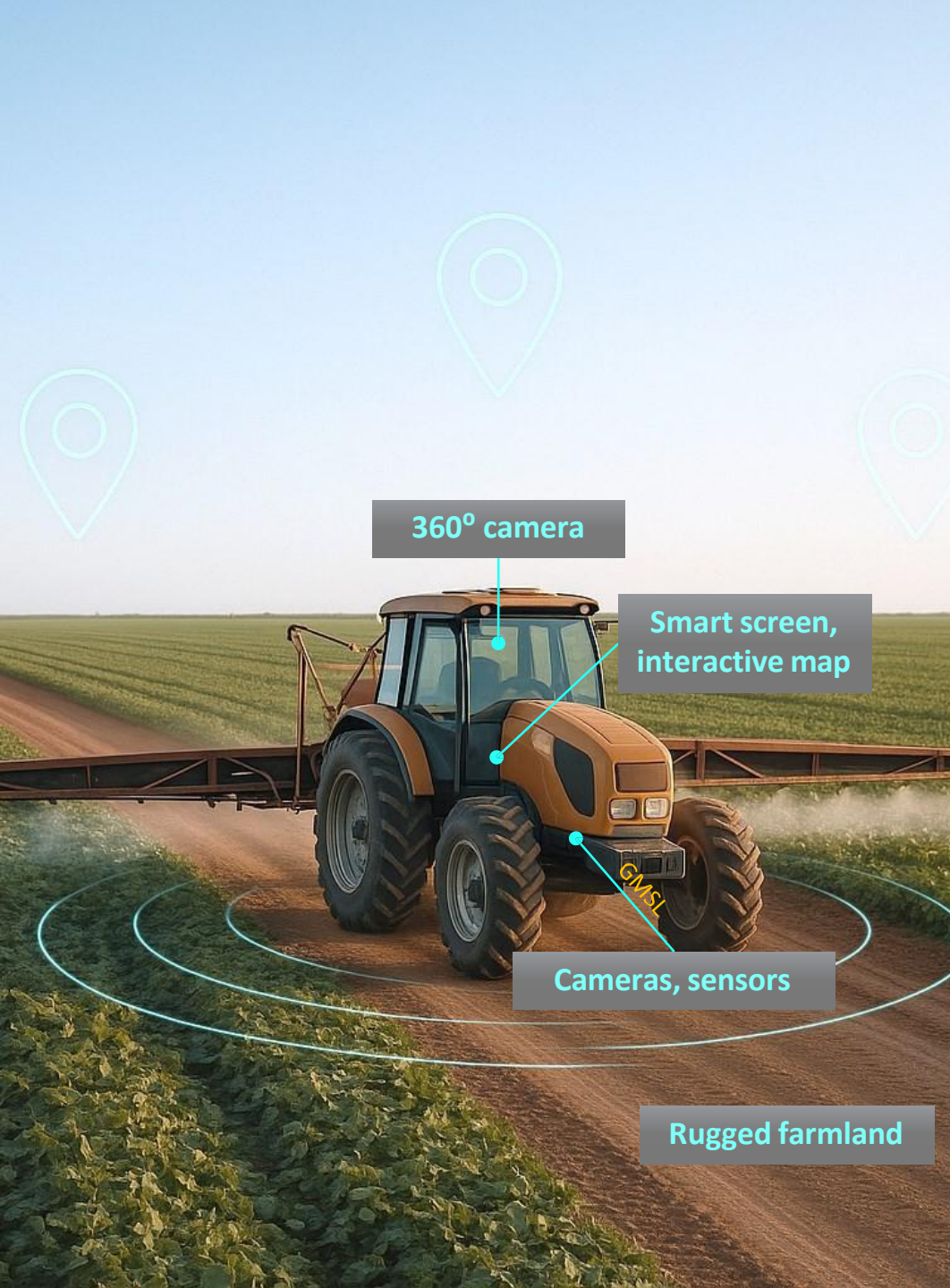
## High Expandability Design with a Modular Layer

- Rugged, Low-profile and scalable chassis design
- Delivers project-specific I/O configurations without changing core system
- Optional: M12 w/ POE, GMSL, GPS, PPS, DIO, COM, CAN, MIPI CSI, QSFP28 (4x25GbE), Jetson Holoscan Bridge, OOB, 2nd M.2 M key, etc.

## Power Design & Environments

- DC 12-60V wide range of power input with ignition control
- MIL-STD 810H, military grade shock & vibration
- Wide range of operating temperature up to 60°C





# Smart Agriculture

Transforming traditional farming into data-driven, automated, and intelligent operations

## Needs

- High system reliability and durability
- Real-time decision making
- Multi-sensor integration challenges
- Integration with engine's power system
- Limited connectivity & maintenance difficulty

## ASUS

- Rugged design with MIL-STD 810H certified
- Build-in ignition for vehicle with wide range of voltage
- High-precision sensor fusion enabled by PTP
- GMSL cameras enable low-latency data transmission, while GNSS provides pinpoint positioning
- OOB management streamlines centralized control, monitoring, remote access, and security for multiple devices



**PE1102N**

GMSL, Ignition



**PE1103N**

GMSL, Ignition

**ASUS IoT**





# Smart Logistic Management

Utilizing AMRs to enhance efficiency & automation in modern logistics operations

## Needs

- Real-time decision making
- Multi-sensor integration challenges
- Navigation in complex layouts
- Space-constrained, low-power-consumption design
- Maintenance difficulty

## ASUS

- High-precision sensor fusion enabled by PTP
- Supports up to eight GMSL cameras for low-latency data transmission
- Compact design with excellent thermal performance per watt
- OOB management streamlines centralized control, monitoring, remote access to support large-scale fleet management



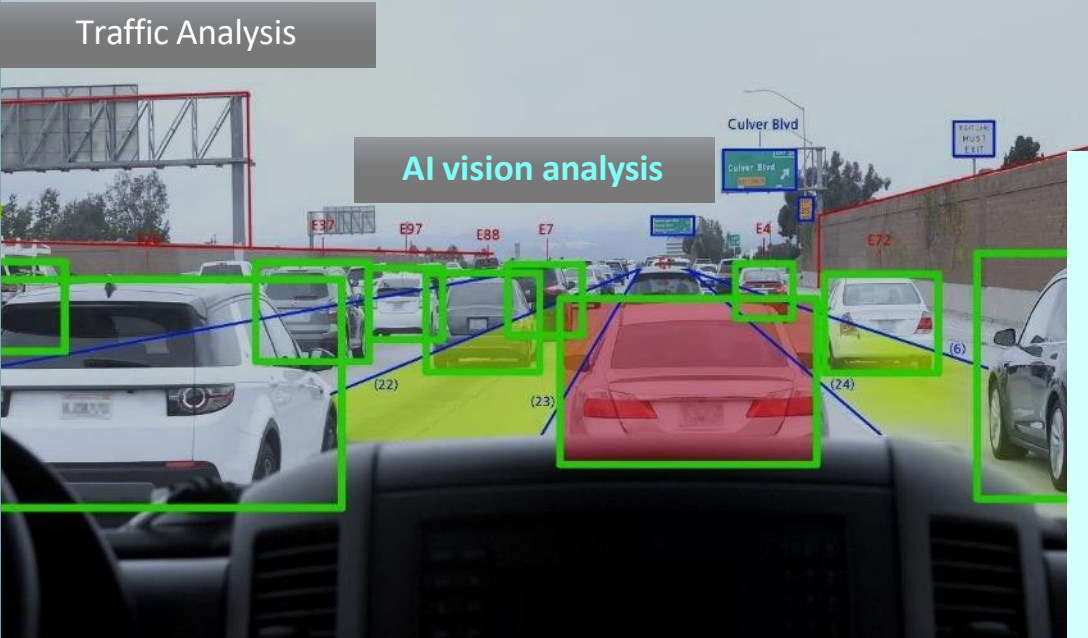
**PE1102N**

GMSL, Ignition



**PE1103N**

GMSL, Ignition



AI vision analysis

Roadside Monitoring



In-vehicle integration  
Ignition control

# Smart Transportation

Integrating AI-driven traffic monitoring to enhance urban mobility & ease enforcement workloads

## Needs

- Real-time monitoring and decision making
- High system reliability, durability, and reliable connectivity
- Integration with engine's power system
- Multiple devices management
- Power efficiency & limited space

## ASUS

- Supports up to eight GMSL cameras for low-latency data transmission
- Compact design with excellent thermal performance per watt
- Build-in ignition for vehicle with wide range of voltage
- OOB management streamlines centralized control, monitoring, remote access to support large-scale fleet management



**PE1100N**

Flexible I/O, up to  
4 x Lan & 5 x USB



**PE1102N**

GMSL, Ignition





## Public Safety

Leveraging edge AI for real-time data processing to improve accuracy & efficiency in smart surveillance

### Needs

- Real-time monitoring and decision making
- High system reliability and durability
- High-accuracy recognition
- Multiple cameras/sensors inputs & rugged I/O connectors for outdoor use
- Scalability and maintenance

### ASUS

- Supports up to four PoE cameras for or flexible placement and real-time monitoring
- Compact design with excellent thermal performance per watt
- OOB management streamlines centralized control, monitoring, remote access to support large-scale fleet management



#### PE1100N

Flexible I/O, up to  
4 x Lan & 5 x USB



#### PE2100N

275 TOPS, up to 6 IP Cam,  
up to 4 POE, OOB

# NUC 15 Pro

Best Compact Choice for the AI-Driven Future.



IN SEARCH OF INCREDIBLE



# Target Market

Built for 2025 New AI Business



## Artificial Intelligence Firms

The NUC 15 Pro is ideal for AI development, offering the power needed for training machine learning models and complex data analysis.

## Remote Work Solutions Providers

With its compact design and advanced connectivity, the NUC 15 Pro is perfect for organizations facilitating remote work, allowing seamless collaboration for distributed teams.

## IoT and Edge Computing

Built for IoT and edge computing, the NUC 15 Pro offers the flexibility and scalability for diverse IoT and Edge application deployments.

## Media and Service Industries

Designed for media and service industries, the NUC 15 Pro supports efficient digital content creation, data visualization, and multi-display setups ideal for enhancing customer engagement and operational productivity in service-oriented environments.



IN SEARCH OF INCREDIBLE

CONFIDENTIAL AND PROPRIETARY INFORMATION

# Amazing Compact Size

The ASUS NUC 15 Pro features a compact design with dimensions of just 117 mm x 112 mm x 37 mm, making it incredibly lightweight and portable. Its small footprint is comparable to that of a passport, which typically measures 125 mm x 88 mm, allowing the NUC to fit seamlessly into any workspace or travel bag. This sleek form factor ensures that you can easily position the NUC 15 Pro in tight spaces while enjoying powerful performance, making it the ideal solution for businesses seeking efficiency without sacrificing valuable real estate.

Regular Passport  
OPEN size  
125mm x 176mm



Regular Passport  
COVER size  
125 mm x 88 mm



NUC 15 PRO Width/Length  
**117 x 112 mm**



2 US Quarters  
48mm



NUC 15 PRO Height  
**37mm**





Why **NUC 15 Pro**?

# Best Compact Choice for the AI-Driven Future.

Introducing the ASUS NUC 15 Pro—where intelligent design meets unparalleled performance. Its compact form factor is engineered for versatility, making it ideal for a variety of development scenarios, from AI model training to data visualization. Powered by the latest Gen Intel® Core™ Ultra processors, DDR5 6400 MHz memory, and Intel® Arc GPU, it delivers exceptional speed and efficiency. Experience lightning-fast connectivity and seamless collaboration with cutting-edge Wi-Fi 7. Elevate your workflow and adapt to any environment with the NUC 15 Pro—your compact powerhouse for innovation.

Powerful Platform with  
**The latest Intel®  
Processor**

**Intel® Core™  
Ultra 7**<sub>265H</sub>

Ultra Series 2 - Ultra 7, Ultra 5, Ultra 3

**DDR5**

Up to 96 GB 6400 MHz

**Windows 11 Pro &  
Copilot**

reducing task-switching time by  
up to 30% compared to  
Windows 10

Up To **99**  
**Platform TOPS**  
AI-Optimized

**Intel®  
Wi-Fi 7**

Download a 15GB file  
in just 25 seconds!



easy-to-upgrade  
**Tool-less chassis**

**Bluetooth 5.4**

speeds of up to 2 Mbps, a 100% increase  
over Bluetooth 5.3's 1 Mbps

**Quad Display**

Dual HDMI 2.1 TMDS  
Compatible (4K@60Hz)

**Intel vPro®**

for enhanced security,  
protecting data from cyber  
threats.



IN SEARCH OF INCREDIBLE

CONFIDENTIAL AND PROPRIETARY INFORMATION

## Introducing Intel® latest gen CPU Arrow Lake

# The Next Generation of Performance

Arrow Lake – H processors mark Intel's next-generation CPU lineup, using a 2nm process node architecture (Intel 20A), a significant improvement over the 7nm process in the 14th Gen chips.

The integrated graphics core count in Arrow Lake-H is twice that of Arrow Lake-S, featuring 2 Render Slices that contain 8 Xe cores, totaling 128 vector engines and 8 ray-tracing units. Notably, these 128 vector engines are also equipped with an equal number of Intel XMV (Xe Matrix Extensions), delivering enhanced AI efficiency. The estimated compute performance is expected to reach 77 TOPs (Tera Operations Per Second).

New NPU for AI &  
Elevating Xe  
Graphics

Up to  
**99**

Platform TOPs

**GPU**

Up to

**77**

TOPs

XMV & DP4a

**NPU**

Up to

**13**

TOPs

Dense vector & matrix  
math

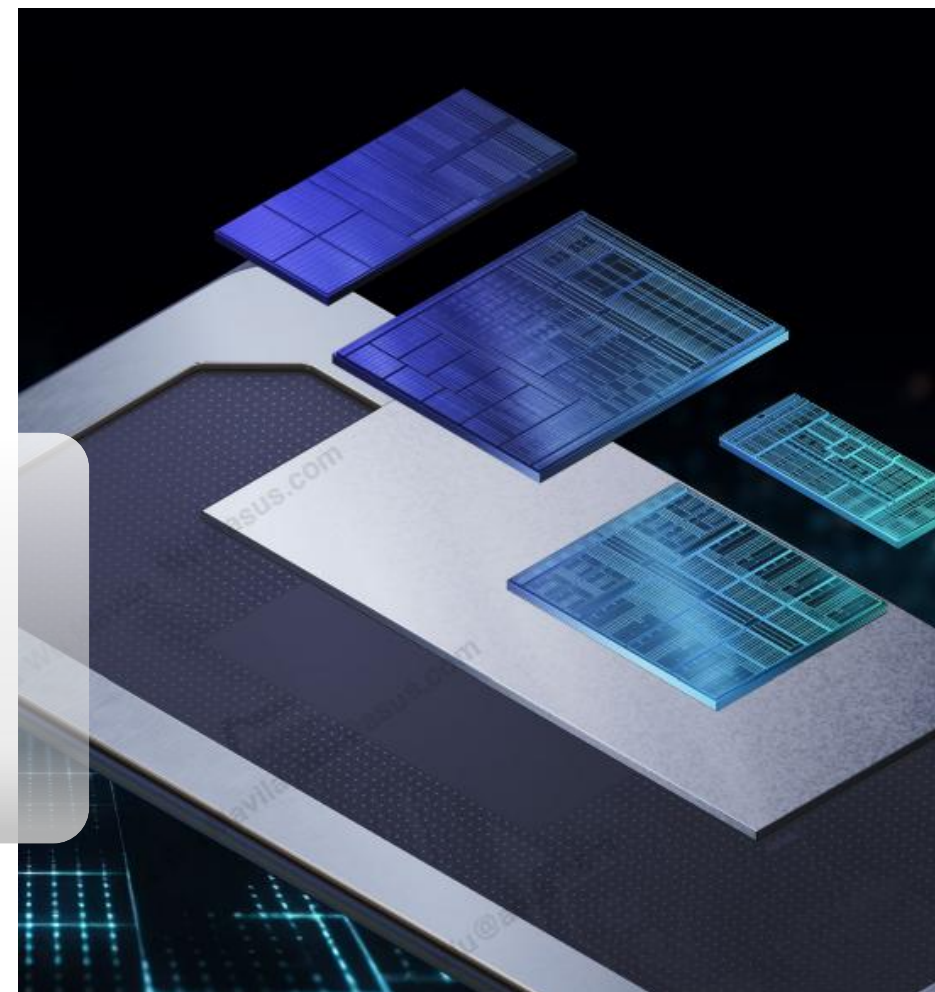
**CPU**

Up to

**9**

TOPs

VNNI & AVX



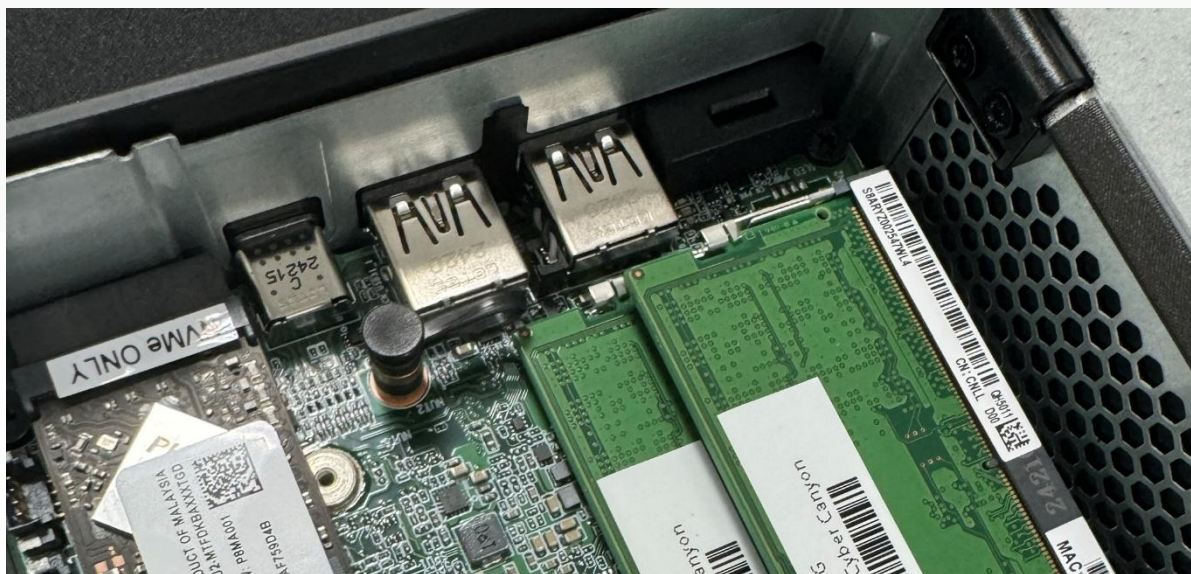


# Expanded Versatility

The NUC 15 Pro product team has carefully listened to customer feedback, and we've added Dual SSD and Dual LAN expansion options to better meet all your needs.

## NUC 15 Pro - Internal Headers

- Add PCIe FPC Header & RS232 Serial header for additional integration flexibility for L6 & Board SKUs
  - Front panel header (with Vcc5/1A, 5Vsby2A, 3.3Vsby/1A)
  - 1x internal power header
  - 2x internal USB 2.0 headers
  - PCIe FPC Header
  - 1x RS232 Serial header



## NUC 15 Pro Tall Expansion Accessories

- **Product Code: NUCIOAES0CR**
  - 2<sup>nd</sup> M.2 222x80 SSD Expansion Accessory
- **Product Code: NUCIOALA0CR**
  - 2<sup>nd</sup> 2.5GbE LAN Expansion Accessory
- **Product Code: NUCIOALASCR**
  - 2<sup>nd</sup> 2.5GbE LAN Expansion w/ RS232 Serial Port Accessory

**NUCIOALA0CR**  
2<sup>nd</sup> LAN Ethernet Port

**NUCIOALASCR**  
2<sup>nd</sup> LAN Ethernet with Serial Port



Thank You !