



# Edge AI Computing Solutions



[www.axiomtek.com](http://www.axiomtek.com)

AI Everywhere

# Unleashing the Potential of Edge Computing

Artificial Intelligence (AI) has become a transformative force that reshapes the world with its ability to automate tasks and streamline industries for unprecedented efficiency. The swift analysis of vast datasets empowers decision-makers and enables personalized experiences to redefine our interaction landscape.

Axiomtek offers a diverse range of innovative edge AI embedded systems designed to accelerate the introduction of new applications in edge AI. By utilizing distributed computing extending from the edge to the edge-cloud, these systems effectively adapt to a growing range of IoT use cases. They provide a cost-effective solution for testing applications, thereby reducing deployment time across various sectors including security, infrastructure, retail, smart factories, cities, and beyond.

## Edge Computing Use Cases

### Smart Manufacturing

Predictive maintenance, quality control, yield optimization, vision inspection, and workplace safety

### Smart Energy

Oil and gas operations, offshore wind farm, and smart grid predictive maintenance

### Smart City

AI-enabled recycle bin, unmanned parking lots, smart streetlights, and last-mile delivery

### Public Sector

Curbside management, public safety, pedestrian detection, congestion detection, and crowd safety

### Autonomous Machine

Robotics, service robot, autonomous mobile robot (AMR), and delivery robot

### Smart Agriculture

Autonomous tractor, animal health monitoring, smart fish farm, coffee bean defeat inspection, and smart fruit picker

### Smart Retail

Customer behavior analytics, smart shopping cart, unmanned store, and inventory management

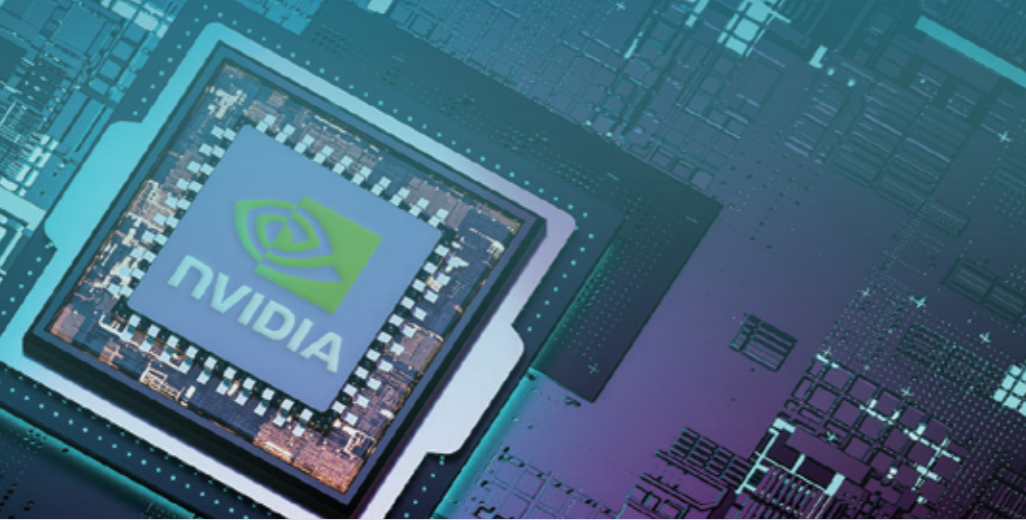
### Smart Transportation

Traffic management, automated number plate recognition (ANPR), smart traffic light, and fleet management

Strategic Alliance

# Axiomtek's Partnership with NVIDIA

Axiomtek's edge AI systems seamlessly integrate GPU computing with AIoT potential, offering versatile solutions for diverse market needs. These systems leverage NVIDIA® Jetson-based and GPU computing platforms. The Jetson modules, known for their compact yet high-performance design, are complemented by the NVIDIA JetPack™ SDK, which accelerates software development. This simplifies the setup of development environments for AI and deep learning algorithms, providing convenient access to advanced tools. With unparalleled performance within Axiomtek's edge AI systems based on the Jetson Ecosystem, they excel in robotics, vision AI, autonomous machines, and edge applications. Ensuring robustness and reliability even in the most challenging scenarios, these systems drive innovation and efficiency in this new era.



## Reasons for Choosing Axiomtek



Comprehensive Product Portfolio



Design-in Service



BSP & Toolkit Service



Strong Ecosystem Partnership

Empowering Innovation

# Axiomtek's Edge AI Solutions

Axiomtek DigiHub | Ecosystem partner AI package  
**UTILITY**



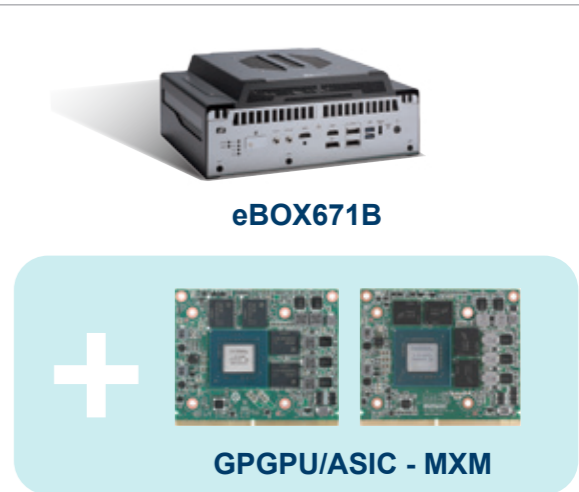
**TOOLKITS/SDKS**



**PLATFORMS**



**TOOLKITS/SDKS**



**PLATFORMS**

# Smart Choices, Intelligent Outcomes: Axiomtek's Edge AI Array

Axiomtek has developed edge AI platforms, leveraging the full spectrum of NVIDIA® Jetson modules, such as the NVIDIA® Jetson Nano™, NVIDIA® Jetson™ TX2, NVIDIA® Jetson Xavier™ NX, NVIDIA® Jetson AGX Xavier™, NVIDIA® Jetson Orin Nano™, NVIDIA® Jetson Orin™ NX, and NVIDIA® Jetson AGX Orin™. These platforms cater to a diverse range of AI applications, including robotics, computer vision, autonomous systems, and intelligent video analytics.



## AIE510-ONX

Up to 100 TOPS

NVIDIA® Jetson Orin™ NX  
NVIDIA® Jetson Orin Nano™

- Seamless speed: 5G, Wi-Fi 6E, and 2.5 GbE
- Easy management: USB and PoE device power control
- 2 PoE, 4-CH GMSL and isolated DIO (4-in/4-out)
- 9 to 36VDC with ignition power control
- CE, FCC, and E-Mark certified



AMR  
& Robotics



4-CH GMSL



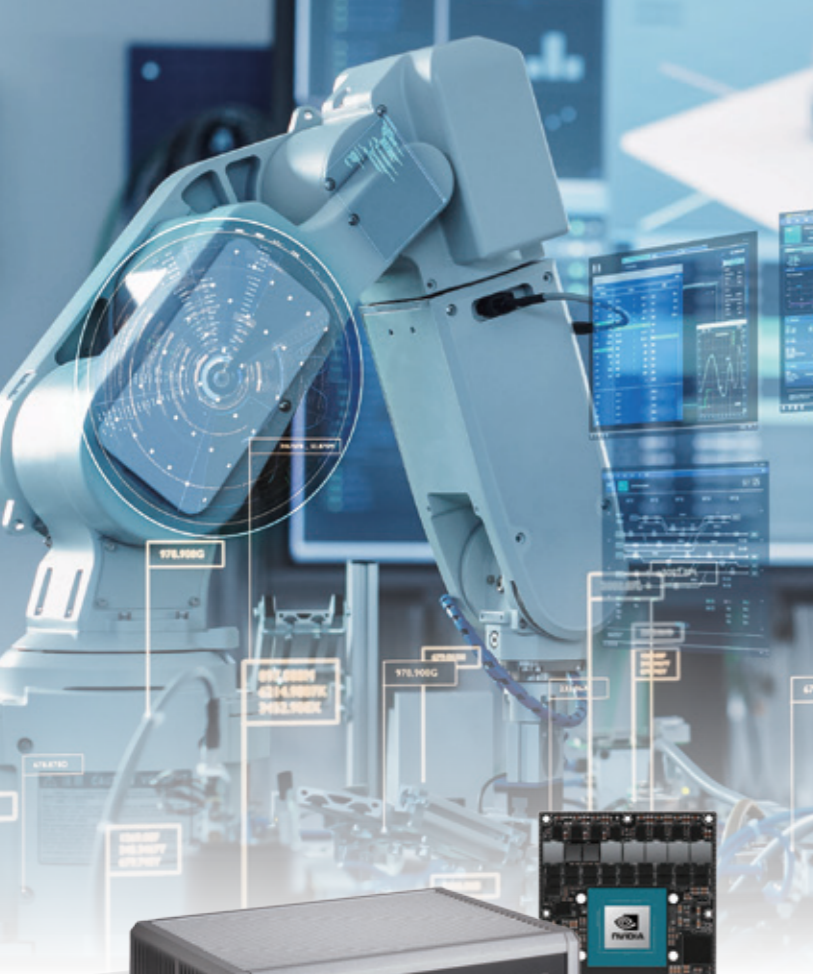
Palm-size



Ignition



E-Mark



## AIE900A-AO

Up to 275 TOPS

NVIDIA® Jetson AGX Orin™

- Seamless speed: 5G, Wi-Fi 6E, and 2.5 GbE
- 6 USB, 2 COM/CAN, and 8-CH DIO
- 8 PoE, GMSL or FPD-LINK for camera and sensor
- 9 to 36VDC with ignition power control
- Supports ISAAC SDK and ROS 2



Robotics 5G/Wi-Fi 6E 8-CH GMSL NVIDIA Isaac™ ROS 2



## AIE110 Developer Kit

Up to 100 TOPS

NVIDIA® Jetson Orin™ NX  
 NVIDIA® Jetson Orin Nano™  
 NVIDIA® Jetson Xavier™ NX

- Palm-sized, budget-friendly, and highly expandable
- Seamless speed: LTE, Wi-Fi, and GbE
- 2 USB, GbE, PoE, and 8-CH DIO
- -10°C to +60°C



PoE for Camera Deployment Budget-friendly Palm-size Remote Management (Allxon)



## AIE100-ONX/ONA

Up to 100 TOPS

NVIDIA® Jetson Orin™ NX  
 NVIDIA® Jetson Orin Nano™  
 NVIDIA® Jetson Xavier™ NX  
 NVIDIA® Jetson™ TX2 NX  
 NVIDIA® Jetson Nano™

- 15W GbE PoE for camera
- Seamless speed: LTE, Wi-Fi, and GbE
- IP42 rating for semi-outdoor applications
- Up to -25°C to +70°C



Smart City Semi-outdoor Design Palm-size Remote Management (Allxon)



## AIE810-ONX/ONA

Up to 100 TOPS

NVIDIA® Jetson Orin™ NX  
 NVIDIA® Jetson Orin Nano™

- IP67 rating for outdoor applications
- Seamless speed: 5G, Wi-Fi 6E, and 2.5 GbE
- 2 PoE, USB, and 8-CH DIO
- 9 to 36VDC
- -25°C to +60°C



IP67 outdoor PoE for Camera Deployment 9-36VDC Wide Temperature

# Beyond Limits: Unleash Innovation with Our Tower GPU Workstation

NVIDIA® RTX/Quadro Support  
Cutting-Edge GPU Cooling  
Engineered for Complex AI Workloads



## iHPC100

- Unique cooler design for Graphics card
- ATX redundant power 750W for GPU card
- 4 SATA3 with RAID 0/1/5/10



Automation



High-speed  
PCIe/PCI Slots



NVIDIA®  
RTX/Quadro



## IPC964A/IPC962A/IPC960A

### Modular Industrial Edge System

- Supports NVIDIA® L4/RTX 4000 SFF graphics card
- Compact optional fan system
- Additional 200W power for accelerator cards
- Advanced thermal design for reliable GPU computing



Automation



AI  
Accelerating



5G



Flexible I/O  
Configurations



## eBOX671B

### Robust GPU Computing System

- Seamless speed: 5G, Wi-Fi 6, and 2.5 GbE with TSN
- Supports NVIDIA® MXM 3.1 GPU card for up to 5 display outputs
- -40 °C to +70 °C
- Optional fan kit



AMR  
& Robotics



Quint-View



5G/Wi-Fi 6E



Ignition

## Selection Guide

# Axiomtek's Edge AI Systems

Model	AI Accelerator	I/O Connectivity
AIE100-903-FL	NVIDIA® Jetson Nano™	2 USB, 1 GbE & 1 PoE
AIE100-903-FL-NX	NVIDIA® Jetson Xavier™ NX	2 USB, 1 GbE & 1 PoE
AIE100-T2NX	NVIDIA® Jetson™ TX2 NX	2 USB, 1 GbE & 1 PoE
<b>New</b> AIE100-ONX/ONA	NVIDIA® Jetson Orin™ NX/ Orin Nano™	2 USB, 1 GbE & 1 PoE
<b>New</b> AIE110 Dev Kit	NVIDIA® Jetson Orin™ NX/ Orin Nano™/Xavier™ NX	2 USB, 1 GbE, 1 PoE & 8-CH DIO
AIE500-901-FL	NVIDIA® Jetson™ TX2/TX2i	2 USB, 2 GbE & 2 COM/CAN
<b>New</b> AIE510-ONX/ONA	NVIDIA® Jetson Orin™ NX/ Orin Nano™	2 USB, 2 PoE, isolated DIO (4-in/ 4-out), COM/CAN & 4-CH GMSL
AIE800-904-FL-DC	NVIDIA® Jetson Xavier™ NX	2 USB, 1 PoE & 9 to 36 VDC
<b>New</b> AIE810-ONX/ONA	NVIDIA® Jetson Orin™ NX/ Orin Nano™	1 USB, 2 PoE & 8-CH DIO
AIE900-XNX	NVIDIA® Jetson Xavier™ NX	2 USB, 1 GbE, 4 PoE, 2 COM/CAN, MIPI, GMSL
AIE900-902-FL	NVIDIA® Jetson AGX Xavier™	6 USB, 2 GbE, 4 PoE & 2 COM/CAN
<b>New</b> AIE900A-AO	NVIDIA® Jetson AGX Orin™	2 USB, two 2.5GbE, 8 PoE, 8-CH DIO, 2 COM/CAN & 8-CH GMSL
<b>New</b> iHPC100	NVIDIA® RTX/ Quadro Graphics card	11 USB, 2 GbE & 1 HDMI
<b>New</b> IPC964A	NVIDIA® Tesla/RTX/ Quadro Graphics card	6 USB, 2 GbE, 1 NVMe (PCIe x4) & 4 PCI/PCIe slots
<b>New</b> eBOX671B	NVIDIA® RTX™ MXM GPU card	6 USB, 4 GbE, 2 HDMI, 1 DisplayPort & 4 optional PoE



## ASIA

### Axiomtek Co., Ltd (HQ)

8F., No.55, Nanxing Road, Xizhi District,  
New Taipei City 221, Taiwan

**T/** +886-2-8646-2111

**F/** +886-2-8646-2555

**E/** info@axiomtek.com.tw

### Axiomtek (Malaysia) Sdn. Bhd.

No 16, Jalan Tandang 51/205A,  
Seksyen 51, 46050 Petaling Jaya, Selangor,  
Malaysia

**T/** +603-77731203

**F/** +603-77724403

**E/** info@axiomtek.com.my

### Axiomtek Technology (Shen- zhen) Co., Ltd

Unit GH, 6F, Building 7 (Block B), Baoneng  
Science and Technology Park, Longhua  
Street, Qinghu Community, Qinghu Village,  
Longhua District, Shenzhen, China

**T/** +86-0755-66865899

**F/** +86-0755-66863068

**E/** axcn@axiomtek.com.cn

### Axiomtek (Thailand) Co., Ltd.

7/17 Moo 6, Tumbol Banmai,  
Amphur Pakkret, Nonthaburi,  
Thailand 11120

**T/** +662-573-4725

**F/** +662-573-4726

**E/** sales@axiomtek.co.th

### Axiomtek Japan Co., Ltd.

3F, 1-7-11, Higashi Nihonbashi,  
Chuo-Ku, Tokyo  
103-0004, Japan

**T/** +81-(0)3-6206-0308

**E/** info@axiomtek.co.jp

## USA

### Axiomtek (U.S. HQ)

18138 Rowland Street, City of Industry,  
CA 91748, USA

**T/** +1-626-581-3232

**F/** +1-626-581-3552

**E/** info@axiomtek.com  
sales@axiomtek.com

### Regional Sales Office

**T/** +1-626-581-3232

Western Region ext. 116

Northeast/Southeast Region ext. 123

North Central Region ext. 189

### Axiomtek Systems

300 Griffin Brook Drive, Methuen,  
MA 01844, USA

**T/** +1-978-258-0108

**E/** sales@axiomteksystems.com

## EU

### Axiomtek Deutschland GmbH

Elisabeth-Selbert-Straße 21a  
40764 Langenfeld, Germany

**T/** +49-2173-399360

**E/** welcome@axiomtek.de

### Axiomtek UK Limited

Peter House, Oxford Street, Greater  
Manchester M1 5AN, UK

**T/** +44(0)1612093680

**E/** info@axiomtek.co.uk

### Axiomtek Italia S.r.l.

Via Pavia, 21  
20835 Muggiò (MB), Italy

**T/** +39-02-664299.1 r.a.

**E/** info@axiomtek.it



V435 94300005450E