



Edge AI Computing Solutions



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

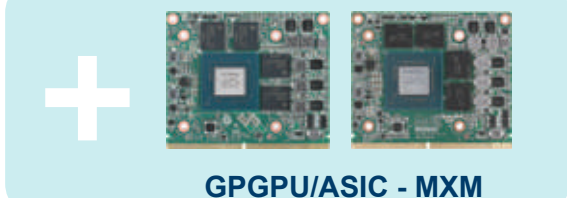
UTILITY



TOOLKITS/SDKS

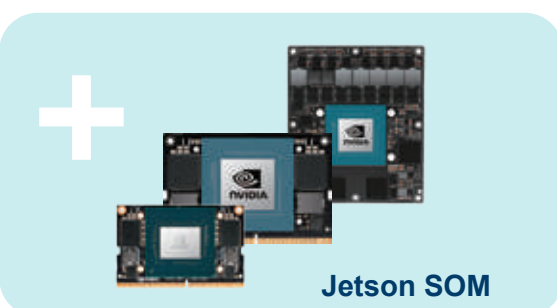


TOOLKITS/SDKS



PLATFORMS

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
New	AIE100-ONX/ONA	NVIDIA® Jetson Orin™ NX/ Orin Nano™	2 USB, 1 GbE & 1 PoE
New	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
New	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
New	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
New	AIE900A-AO	NVIDIA® Jetson AGX Orin™	2 USB, two 2.5GbE, 8 PoE, 8-CH DIO, 2 COM/CAN & 8-CH GMSL
New	iHPC100	NVIDIA® RTX/ Quadro Graphics card	11 USB, 2 GbE & 1 HDMI
New	IPC964A	NVIDIA® Tesla/RTX/ Quadro Graphics card	6 USB, 2 GbE, 1 NVMe (PCIe x4) & 4 PCI/PCIe slots
New	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