AXIOMTEK

www.axiomtek.com

Edge AI GPU Computing

AI at the Edge: The " Eye of IoT "

Artificial intelligence (AI) is everywhere these days. In order to meet the needs of various AI applications, Axiomtek has developed a series of edge AI embedded systems with various form factors and configurations: from the low power consumption yet high-performance embedded systems to server-grade industrial PCs. Developers and system integrators can utilize pre-trained inference models to build a variety of computer vision programs with their datasets, encompassing the tasks of image classification, object detection, facial recognition, people counting, surveillance video analytics, license plate recognition, vehicle tracking, industrial machine vision inspection, and so on.

Security

Bank

Smart City

Transportation

Automation

Robotics

Agriculture

Retail

Axiomtek & NVIDIA Partnership

As an NVIDIA Preferred Partner, Axiomtek has been in close collaboration with NVIDIA in driving AI innovation at the edge. Combining its strong edge computing expertise with NVIDIA's AI and deep learning technologies, Axiomtek delivers a full portfolio of GPU-optimized hardware platforms and data communication solutions for deploying AI to the edge, helping customers speed up the implementation of deep learning capabilities into their IoT devices and turn Artificial Intelligence of Things (AIoT) into reality. Axiomtek has rolled out a series of edge AI embedded systems specifically built around NVIDIA® Jetson Supercomputer-on-Modules, with integrated NVIDIA GPUs to deliver exceptional computing performance for processing AI data at the edge. These edge AI systems come bundled with NVIDIA JetPack SDK to provide convenient access the most advanced tools, making it quick and easy to set up development environments for running AI and deep learning algorithms.

NVIDIA PREFERRED PARTNER

Axiomtek's Edge AI Solutions

Reasons for Choosing NVIDIA Jetson Modules

Comprehensive Product Portfolio

Complete Ecosystem

Tech Support Forum

A Variety of Software Stack

*Axiomtek AI Suite (AIS):
Based on Intel® Edge Software Hub for Industrial, implementing from deep-learning training to inference.
It comes with web apps design and intuitive user interfaces, helping the users deploy AI without coding.

NVIDIA® Jetson AGX Orin™

AGX Orin – 8-core CPU, 1792 CUDA-core GPU, up to 275 TOPS

- M.2 Key M PCIe SSD slot
- Dual 2.5GbE LAN & 8 PoE
- M.2 Key B slot for 5G/LTE
- M.2 Key E slot for Wi-Fi 6(E)
- -30°C to +50°C
- 24 VDC with ignition power control

AIE900A-AO

Robotics | 5G/Wi-Fi 6(E) | Vision I/O | Remote Management (Allxon)

AIE900-XNX

NVIDIA® Jetson Xavier™ NX

Xavier NX - 6-core CPU, 348-core GPU

- M.2 Key B slot for 5G/LTE
- 4 PoE for GigE cameras & LiDAR
- -30°C to +60°C
- 9 to 36 VDC
- Optional SerDes FPD-LINK III
- Device management & Out-of-band service

5G/LTE | Vision I/O | Ignition | Remote Management (Allxon)

AIE800-904-FL/-DC

NVIDIA® Jetson Xavier™ NX

Xavier NX – 6-core CPU, 348-core GPU

- Up to 1 HDMI, 2 USB, 1 GbE PoE
- -30°C to +50°C
- 100 to 240 VAC for AIE800-904-FL
- 9 to 36 VDC for AIE800-904-FL-DC
- 4 N-jack antenna openings
- M12 lockable I/Os

IP67 Rating | 10KV Surge Protection | Remote Management (Allxon)

AIE100

NVIDIA® Jetson Nano™, TX2 NX & Xavier™ NX

Nano – 4-core CPU, 128-core GPU
TX2 NX – 6-core CPU, 256-core GPU
Xavier NX – 6-core CPU, 348-core GPU

- Ideal for edge AI smart city
- 15W GbE PoE for camera
- Up to -30°C to +60°C
- Supports Allxon Device Management Solutions

Smart City

Semi-outdoor Design

Remote Management (Allxon)

AIE110 Developer Kit

NVIDIA® Jetson Xavier™ NX

Xavier NX – 6-core CPU, 348-core GPU

- 15W PoE for camera & sensor
- 2 USB, 1 GbE & 8CH DIO
- -10°C to +60°C
- Supports Allxon Device Management Solutions

PoE for Camera Deployment

Palm-size

Remote Management (Allxon)

IPC972

2 PCIe x16 Gen3 slots Dual NVIDIA® GeForce GPU cards

- Intel® Xeon® or 10th gen Intel® Core™
- Intel® W480E chipset
- Supports NVIDIA® RTX/Quadro GPU
- M.2 Key B slot for 5G
- M.2 Key E slot for Wi-Fi
- Supports RAID 0, 1, 5
- Supports power-on delay function
- Supports TPM 2.0

Automation

High-speed PCIe/PCI Slots

NVIDIA® RTX/Quadro

IPC962-525

NVIDIA CERTIFIED

1 PCIe x16 Gen3 slot NVIDIA® A2 Tensor Core GPU card

- LGA1151 socket 9th/8th gen Intel® Core™ processor, up to 65W
  NVIDIA® GPU card, up to 125W
- Supports NVIDIA® A2/Quadro GPU
- M.2 Key B slot for 5G (optional)
- Supports RAID 0,1 (Intel® Q370)
- Supports power-on delay function
- Supports TPM 2.0
- Supports AMT 12 (Intel® Q370)

Automation

High-speed PCIe/PCI Slots

NVIDIA® A2/Quadro

Edge AI Systems Selection Guide

NVIDIA Solution

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 AIE100A-ONX	NVIDIA® Jetson Orin™ NX	2 USB, 1 GbE & 1 PoE
AIE500-901-FL	NVIDIA® Jetson™ TX2/TX2i	2 USB, 2 GbE & 2 COM or 2 CAN
AIE800-904-FL(-DC)	NVIDIA® Jetson Xavier™ NX	1 HDMI, 1 PoE & 1 USB
AIE900-XNX	NVIDIA® Jetson Xavier™ NX	2 USB, 1 GbE, 4 PoE, 5G & MIPI
AIE900-902-FL	NVIDIA® Jetson AGX Xavier™	6 USB, 2 GbE, 4 PoE & 2 COM or 2 CAN
New AIE900A-AO	NVIDIA® Jetson AGX Orin™	6 USB, 2 2.5GbE, 8 PoE, 8CH DIO & MIPI

Intel Solution

Model	CPU & AI Accelerator	I/O Connectivity
eBOX671-521-FL	9/8th Gen Intel® Core™ Processor with NVIDIA® MXM/Hailo-8™ Supported	2 USB, 1 GbE & 1 PoE
eBOX671A	9/8th Gen Intel® Core™ Processor with Intel® Movidius™ Myriad™ X VPU Supported	2 USB, 1 GbE & 1 PoE
New IPC970	Intel® Xeon® or 10th Gen Core™ Processor with NVIDIA® RTX/Quadro supported	8 USB, 2 GbE & 3 PCIe slots
IPC962-525	9th/8th gen Intel® Core™ processor with NVIDIA® A2/Quadro GPU Supported	4 USB, 2GbE, 1 COM & 2 PCIe/PCI slots

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