AXIOMTEK®

Realizing the Power of AIoT

Products with Powerful
Computing Capabilities for
HPC, AI, and 5G Solutions

www.axiomtek.com

The Rise of 5G

Boundless connectivity transforms the way we live

Over the years, technology has revolutionized our world and daily lives from education to entertainment and healthcare to transportation. This technological leap is most evident in the rapid evolution of wireless communications. Thanks to the availability of high-band radio spectrum and upgrades of mobile technology performance, the 5th generation mobile network (5G), a new global wireless standard after 4G networks, is now ready to deliver faster download speeds, greater coverage, ultra low latency, and massive network capacity, giving businesses and consumers the potential to experience new, innovative technologies. 5G enables a new kind of network that is expected to connect almost everyone and everything together including machines, objects, and devices to make the IoT a reality.

Ultra High-fidelity Media

On-site Live Event Experience

Immersive and Integrated Media

Remote Monitoring

ENTERTAINMENT Smart Home

Home Automation

Smart Healthcare

HEALTHCARE

Smart Wearables

Smart Mobility

Air Quality

Remote Control

Smart Parking

FACTORIES

Water Leakages

Connected Goods

Car-to-car Communication

Traffic Priority

AUTOMOTIVE Smart Vehicles

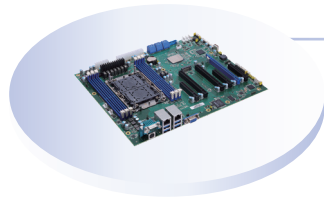Security & Surveillance

ENERGY Smart Grids

Stay connected from edge to cloud with Axiomtek

The arrival of 5G will have a huge impact on Edge computing, with improved network slicing technology supporting specific use case requirements and streamlining connectivity from the edge to the core to the cloud. Axiomtek's innovative and flexible networking platforms based on 3rd Gen Intel® Xeon® Scalable processors help enterprises upgrade infrastructure performance, supporting cloud-native, web-scale architectures for reliable execution of business and mission-critical services anywhere, at any time.

5G

AI Performance

IMB700 *Compact Server-Grade Motherboard*

The new server-grade IMB700 is powered by the dual LGA4189 socket 3rd Gen Intel® Xeon® Scalable processors (code name: Ice Lake-SP) with the Intel® C621A chipset. Utilizing Intel Deep Learning Boost technology, the IMB700 delivers high compute performance required for running complex AI workloads. Crypto acceleration functions as well as advanced security capabilities are also available with this industrial server motherboard to not just speed up crypto processing but also better protect the exchange of data among connected devices.

- 3rd Gen Intel® Xeon® Scalable processors
- 6 DDR4-3200 R-DIMM with un-buffered
  non-ECC/ECC memory capacity for up to 384GB
- 3 PCIe x16 and 3 PCIe x8
- Supports multiple graphic cards
- Supports TPM 2.0 (optional)

IMB700

Case Study: Smart Factory

- Security and surveillance
- Access control
- Personal protective equipment detection

- Automated optical inspection
- AMR (autonomous mobile robot)

- AI model training
- Data analysis

High Performance Computing (HPC)

iHPC300 *4U Rackmount GPU Workstation*

The high-density iHPC300 is powered by the dual LGA4189 socket 3rd Gen Intel® Xeon® Scalable processors (code name: Ice Lake-SP) with the Intel® C621A chipset. It provides multiple PCIe for flexible GPU, NIC, and various card integration. Integrating Intel® Crypto Acceleration technology, memory encryption and advanced security capabilities, the iHPC300 is specifically designed to improve performance and throughput of computationally intensive tasks in applications such as data analytics, HPC, automated optical inspection (AOI), and deep learning workloads.

DDR4   Multi-GPU Cards   NVMe

- 3rd Gen Intel® Xeon® Scalable processors
- 6 DDR4-3200 R-DIMM with an un-buffered
  non-ECC/ECC memory capacity for up to 384GB
- 3 PCIe x16 and 3 PCIe x8
- Supports M.2 Key M 2280
- Sufficient PSU 1200W or 2000W for multiple
  accelerator cards
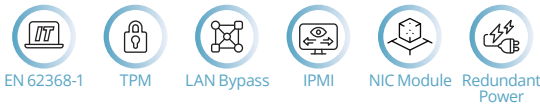- Supports TPM 2.0 (optional)

iHPC300

- Smart packing
- Intelligent warehouse management

5G Performance

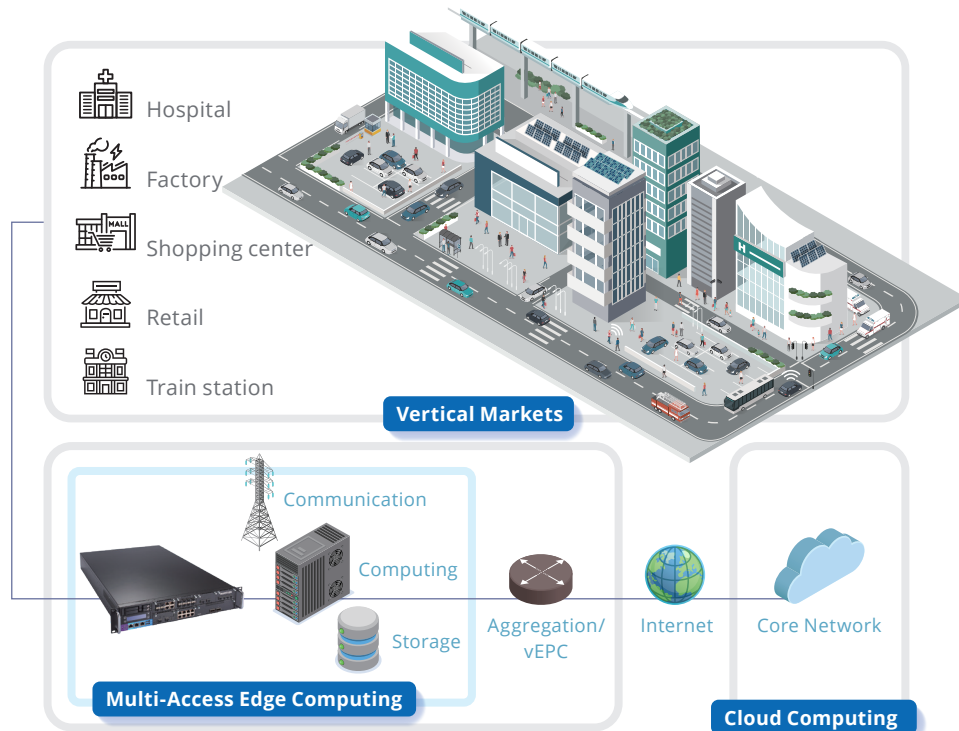### NA870 *2U Rackmount Cloud-Scale Computing*

The NA870 with a maximum of sixty-six LAN ports is powered by the dual LGA4189 sockets 3rd Gen Intel® Xeon® Scalable processors (code name: Ice Lake-SP) along with the Intel® C621A or C627A chipset. It can manage multiple connected computers through the integration of up to eight expandable NIC modules. The Intel® Ice lake processors with Intel® Crypto Acceleration technology ensure that the NA870 delivers a perfect mixture of performance, flexibility, and security for service providers to build up the infrastructure that enables 5G and IoT applications with convenient networking connectivity close to the end users.

EN 62368-1 | TPM | LAN Bypass | IPMI | NIC Module | Redundant Power

NA870

- 3rd Gen Intel® Xeon® Scalable processors
- 20 DDR4-3200 R-DIMM with un-buffered non-ECC/ECC memory capacity for up to 1280GB
- 8 expandable LAN modules supported
  1GbE/10GbE/25GbE/40GbE/100GbE/Fiber/Copper/Bypass

Hospital

Factory

Shopping center

Retail

Train station

Vertical Markets

Communication

Computing

Storage

Aggregation/vEPC

Internet

Core Network

Multi-Access Edge Computing

Cloud Computing

Accelerate Deployment for Cloud, AI, Enterprise, HPC, Network, Security, and IoT Workloads

Axiomtek provides network appliance platform, server-grade ATX motherboard and 4U rackmount GPU workstation with 3rd Gen Intel® Xeon® Scalable Processors - a balanced architecture with built-in acceleration and advanced security capabilities, designed through decades of innovation for the most demanding workload requirements.

intel. XEON PLATINUM

Compact Server-Grade Motherboard

IMB700

High-Density 4U Rackmount GPU Workstation

iHPC300

2U Rackmount Cloud-Scale Computing

NA870

Make your businesses ready for an AI world

Axiomtek's high-performance computing applications include as below:

- Data Analytics and Machine Learning
- Automated Optical Inspection (AOI)
- Efficient Machine and Deep Learning Workloads

- AI
- 5G and HPC Networks
- Multi-access Edge Computing (MEC) Applications

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