North Macedonia AI Server Motherboard Manufacturer

Overview

About – VezilkaEstablished under the European Union's EuroHPC AI Factory Antennas initiative, VEZILKA is North Macedonia's central place for AI and innovat.

Key Takeaways

Currently, there is no publicly documented AI server motherboard manufacturer based in North Macedonia, but global suppliers provide advanced solutions suitable for AI data centers.

Overview of A

I Server Motherboard ManufacturingAI server motherboards are critical components in high-performance computing, connecting CPUs, GPUs, and AI accelerators while ensuring ultra-high-speed data transmission and stable power delivery.

Modern A

I server motherboards often require: High-speed PCB designs with 20–68 layers and data rates exceeding 112 Gbps. Advanced materials like ultra-low-loss dielectrics (e.g., Panasonic Megtron or Isola Tachyon) to maintain signal integrity at high frequencies. Heavy copper power delivery to support 300–700W components and advanced thermal management for kilowatt-level heat dissipation.

Support for multi-GPU interconnects such as SSXM, OAM, and NVIDIA DGX-compatible designs. Precision stack-up and signal integrity optimization to ensure reliable operation under demanding AI workloads.

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Key Global Manufacturers

While North Macedonia does not appear to host a dedicated AI server motherboard manufacturer, several international companies provide high-performance AI server PCBs: KINGBROTHER: Offers 28+ years of experience, 68-layer prototyping, 112 Gbps transmission, and comprehensive certifications for mission-critical AI server PCBs. Highleap Electronics: Specializes in AI server PCBs for GPUs, TPUs, and ASICs, with advanced signal routing, thermal and power management, and compact HDI designs.

GIGABYT

E: Provides AI servers with scalable architectures and motherboards optimized for AI training and inference workloads.

Regional AI Data Center Support

Companies like Schneider Electric North Macedonia provide AI-ready data center infrastructure, including power, cooling, and energy optimization solutions, which are essential for deploying AI servers even if the motherboard itself is sourced internationally.

Recommendations

For organizations in North Macedonia seeking AI server motherboards: Partner with global PCB manufacturers like KINGBROTHER or Highleap Electronics for high-performance AI server motherboards. Leverage local data center infrastructure providers such as Schneider Electric for deployment, cooling, and power management. Consider custom PCB design services if specific AI workloads require specialized interconnects or thermal solutions.

This approach ensures access to cutting-edge AI server technology while utilizing local expertise for deployment and operational support.

Article Content

About – Vezilka

Established under the European Union''s EuroHPC AI Factory Antennas initiative, VEZILKA is North Macedonia''s central place for AI and innovation. Its mission is to accelerate the adoption of

GIGABYTE European Union

From personal computer hardware to business server solutions, renowned for quality and innovation, GIGABYTE is the very choice for PC users and business partners.

AI Servers with NVIDIA HGX, OAM & PCIe GPU

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Explore GIGABYTE AI servers for AI training and inference, supporting NVIDIA HGX, OAM, and PCIe GPU platforms. Compare models to find the right configuration.

PCB Layout,PCB Manufacturing,PCB Assembly,Component

Founded in 2011, AnyPCBA has swiftly risen to prominence in the PCB assembly solutions industry. With a focus on rapid-response R&D prototype manufacturing, we empower clients to

AI Association North Macedonia | AI Now

Get to know our story, mission and vision for the future of artificial intelligence in Macedonia. Discover our initiatives, educational programs, and events to promote AI Technology. Become part of the

City Product Center_1-Shanghai Sixunited Intelligent Technology Co,Ltd

North Macedonia ES12EV2 ES12EV2 is a 1S2U general server, based on the AMD 4th Gen Genova EPYC 9004 series processor,with ATX standard motherboard design（307.4mm*256.5mm）. The

Industrial Motherboards, Industrial Motherboard, Custom

Since 1990, Intel Prestige Partner - Builder and US-based engineering ODM providing custom industrial motherboards, server motherboards, and long-lifecycle AI-enabled embedded computing with local

27 Motherboard Manufacturers in 2026

This section provides an overview for motherboards as well as their applications and principles. Also, please take a look at the list of 27 motherboard manufacturers and their company rankings.

PCB For AI Server Market''s Decade-Long Growth Trends and Future ...

The booming AI server market fuels explosive growth in the demand for specialized PCBs. Discover key market trends, forecasts (2025-2033), leading manufacturers, and regional market

Top 100 Server Motherboard Manufacturers in 2026 | ensun

A server motherboard is a crucial component in server architecture, serving as the main circuit board that connects all hardware elements. It houses the central processing unit (CPU), memory slots, and

Computer Motherboard Companies and Links

An extensive list of leading computer motherboard manufacturers, featuring both current and legacy companies, plus helpful links to related resources.

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AI Server PCB: The Right Manufacturer for Data

AI server PCB costs can be expensive. Learn technical requirements, manufacturing challenges & how to select the right supplier for data centers.

Top PC Motherboard Manufacturers: Verified Suppliers & Products

Need reliable PC motherboard manufacturers? Discover certified suppliers offering gaming, business, and custom solutions. Compare products and connect directly today!

Avalue Unveils HPM-GNRUA: High-Performance Server Motherboard for AI ...

Avalue Technology was established in 2000 and provides customers with IoT product design and manufacturing services, including computer modules, industrial-embedded

Former officials from the British Ministry of Defense are lining up to ...

Former officials from the British Ministry of Defense are lining up to advise the Macedonian ammunition manufacturer ATS Group, based in Skopje, whose future production of 155 mm shells by

How North Macedonia is Leveraging AI to Drive Innovation

Embracing AI in Macedonia: fostering innovation, economic growth, and smart solutions in tech, government, and education sectors.

EU Expands AI Infrastructure, Boosting Opportunities for North ...

For North Macedonia and Serbia, AI Factory Antennas, soon to be announced, will provide secure remote access to the network, enabling local researchers, businesses, and public

Artificial Intelligence & Advanced Digital Services – Invest North ...

Sector Overview North Macedonia is emerging as a dynamic hub for Artificial Intelligence (AI) and advanced digital services, combining a skilled technical workforce with a rapidly expanding ICT

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