

AI Computer System Powered by NVIDIA Jetson Orin Nano Series Supports Exceptional Generative AI and Edge AI Performance

Advantech MIC-AI Computer System Powered by NVIDIA Jetson Orin Nano Series Supports Super Mode for Exceptional Generative AI and Edge AI Performance



Eastern Taipei, Taiwan Mar 19, 2025 ([Issuewire.com](https://www.issuewire.com)) - Advantech, a global leader in industrial IoT and AI solutions, is proud to announce that its MIC-AI Computer System supports Super Mode for NVIDIA Jetson Orin™ Nano series system-on-modules. This enhancement empowers businesses with unprecedented AI capabilities at the edge, including support for generative AI and cutting-edge industrial applications across various industries.

Unlocking Advanced GenAI Performance with Super Mode for Jetson Orin Nano Series

The Super Mode support for Jetson Orin Nano series delivers breakthrough performance in edge AI computing, enhancing GPU and CPU performance to tackle demanding AI workloads with software optimization. With up to 67 TOPS (Tera Operations Per Second) of AI computing power, Super Mode enables real-time processing for various applications such as smart manufacturing and industrial automation, intelligent video analytics, AMR, AGV, and smart cities.

Key performance highlights:

- **Boosts Generative AI Performance:** Optimized for applications such as large language models (LLMs), vision language models (VLMs), and Vision Transformers. This software update boosts

generative AI performance by 1.7X compared to the previous mode.

- Enhanced Compute Performance: Super Mode increases GPU frequencies up to 1020 MHz and CPU frequencies up to 1.7 GHz, enabling up to 67 TOPS (Tera Operations Per Second) of AI computing power.
- NVIDIA JetPack 6.2 Support: Fully compatible with the latest [NVIDIA JetPack 6.2 SDK](#), featuring improved libraries, frameworks, and tools for advanced AI development.
- Dynamic Power Scaling: Optimized for higher performance while balancing energy efficiency, supporting power budgets of up to 25W.

MIC-AI Computer System Powered by Jetson Orin Nano Series: Advancing AI-Powered Solutions

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MIC-711-ON: Empowering Security and In-Vehicle AI Solutions

- Real-Time Vision Analytics: Provides advanced multi-camera vision systems for security monitoring in urban areas and critical infrastructures.
- In-Vehicle AI: Supports edge AI processing for fleet management, driver monitoring, and vehicle diagnostics, enhancing road safety and efficiency.
- Predictive Maintenance: Integrates AI and IoT to predict equipment failures, minimizing downtime for automotive and industrial systems.

MIC-712-ON: Advancing Mobility AI and Property Management Applications

- Mobile Monitoring Towers: Enables portable AI-powered monitoring for open spaces such as roadside locations, temporary construction sites and parking lots.
- Asset Management: Provides robust monitoring for construction sites and facilities, preventing unauthorized access.
- AI-Driven Mobility Solutions: Powers autonomous drones and smart logistics systems for enhanced mobility and delivery operations.

MIC-713-ON: Revolutionizing Logistics and Warehouse Automation with Edge AI

- Logistics Optimization: Powers AI systems for route planning and real-time inventory tracking.
- Warehouse Automation: Enables robotics systems for sorting, picking, and packing tasks.
- Smart Monitoring: Provides high-resolution analytics for monitoring warehouse and transportation environments.

Why Choose Advantech MIC-AI Computer System powered by Jetson Orin Nano Series?

- Comprehensive Support: Seamless integration with JetPack SDK and tailored support services reduce deployment complexities.
- Scalable Solutions: Modular options mean flexibility to scale with evolving business requirements.
- Global Industry Expertise: With strong collaborations with diverse industry experts, Advantech provides seamless integration in various AI applications.

- **Proven Reliability:** Advantech's industrial-grade design delivers uninterrupted performance in challenging environments.

Expect to see Advantech's Super Mode support for the Jetson Orin NX available early this year. The Jetson Orin NX upgrade ensures broader scalability and flexibility, empowering businesses to unlock new possibilities in edge AI innovation. For more information, please visit our [website](#) or contact Advantech local sales.

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