

Next-Gen AI Applications for the Smart Factory



Superior AI Workload Parallelization and Image Classification Inference

Effective vision AI capabilities are essential to employ in smart factories to enhance efficiency, productivity, and safety. iEi Industrial has introduced two developer kits for the TANK-XM811 Series that developers can leverage to help customers accelerate AI capabilities within factory environments. Featuring multiple expansion slots and interfaces, these kits enable easy customization and integration of add-ons, such as Intel® Arc™ Graphics Card or PoE cards, to optimize image classification and AI inferencing. These enhancements provide particular value to automated optical inspection (AOI) systems by collaborating seamlessly with robotics, IP cameras, or AGV applications to enhance production efficiency, ensure product quality, increase worker safety.

About iEi Integration Corp.

iEi Integration Corp. is a leading industrial computer provider specializing in AI and networking edge computing. Their products cater to diverse sectors including factory automation, security, AI, IoT, and more by offering comprehensive intelligent systems with flexible hardware, operating systems, and cloud solutions.

Modularized Options to Deliver Optimized Performance for Smart Factory Applications

The TANK-XM811 AI-RPL AIoT Developer Kit is integrated with Intel® Iris® Xe graphics, improving AI imaging with enhanced GPU computing performance. Equipped with Intel® Core™ processors (13th and 14th Gen), boasting up to 24 cores with 32 threads, the kit also delivers exceptional multi-threaded performance that caters to various production line requirements.

The TANK-XM811 ADL DG kit is equipped with Intel® Core™ processors (12th Gen) and powered by the Intel® Arc™ Pro A40 GPU. This professional workstation GPU provides graphics acceleration and machine learning capabilities, supporting up to four ultra-large displays and offering more memory in a compact form factor.

Both kits leverage Intel® Distribution of OpenVINO™ Toolkit to optimize AI performance.

Key Features

- **Outstanding multithreaded performance** with the latest generation of performance-hybrid architecture that combines performance-cores with efficient-cores and increased cache sizes.
- **Customizable to specific application needs** with the support of flexible multi-expansion PCI/PCIe modules and a robust I/O design.
- **Ruggedized hardware architectures** to safeguard the small factor computer in harsh, remote, and dynamic environments.
- **Seamless wireless connectivity** for remote and mobile edge deployments.

Intel Ingredients



Intel® Core™ processors (12th, 13th and 14th Gen)

Powerful computing power with performance hybrid architecture, delivering computing power to enable productivity and creativity for users.



Intel® Arc™ Graphics Card

High-performance graphics capabilities for graphics-intensive tasks, assist with content creation, or boost the performance of AI and media processing workloads at the edge.



Intel® Distribution of OpenVINO™ Toolkit

Supports Intel® Core™ processors with optimized AI performance and deep learning for applications like Machine Vision and AI Process Control.

Learn More

- [Intel® Foundational Developer Kits](#)
- [TANK-XM811 ADL DG Developer Kit \(12th Gen\)](#)
- [TANK-XM811 AI-RPL AIoT Developer Kit \(13th and 14th Gen\)](#)
- [Github Developer Reference Script](#)
- [Developer Kits Intel® Core™ Processors \(14th Gen\)](#)

Intel® Foundational Developer Kits allow you to get started on your targeted application development with a superior out-of-the-box experience. Deploy your application at scale by building customized systems via Intel ecosystem partners.



Performance varies by use, configuration, and other factors. Learn more on the Performance Index site.

No product or component can be absolutely secure.

Your costs and results may vary.

Intel technologies may require enabled hardware, software, or service activation.

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