



IIoT Solution Product Guide

Leads Way into the Future of IIoT



Smart Manufacturing

Machine Vision

Industrial machine vision allows equipment to "see" operations and instantly make decisions. Common uses are AOI, defect detection and predictive maintenance. Our hardware solutions for machine vision include scalable systems with Intel Core i processor, server motherboards/chassis, displays, AI accelerators and PoE frame grabber cards to achieve automated gauge, identification and inspection capabilities.

Edge AI

Using edge AI in smart manufacturing brings advantages such as faster decisions, lower expenses, greater dependability and improved safety. IEI provides diverse hardware solutions covering complete form factors of edge computing systems with a variety of expansion capabilities and AI accelerators.

Autonomous Mobile Robot

Parallel computing, industrial-grade design and low-latency network connection are essential to AMR applications. IEI AMR solution offers a full range of product portfolio that fulfill the needs of intelligent robotics applications.

▶ AIoT Developer Kit

DRPC-240AI

Real-Time Compute TSN/TCC Developer Kit

- Fanless system with Intel® Core™ i5 processor
- Intel® Time Coordinated Computing (Intel® TCC) and Time Sensitive Networking (TSN) for those real-time applications that require determinism
- Expandable VPU deep learning accelerator



TANK-XM811AI

12th Gen Intel® Core™ Developer Kit

- Fanless system with Intel® Core™ i5-12500TE processor
- 256GB 2.5" SSD and 2 x 8GB non-ECC pre-installed
- Support accelerator with eight Intel® Movidius™ Myriad™ X VPU
- Wide operating temperature: -20°C~60°C



As AI, predictive analytics and edge computing technologies continue to mature, industries and manufacturers are realizing the importance of Smart Manufacturing. It allows production and supply chain processes to be predictive and adaptive, responding instantly to requests for customized products, and quickly adjusting to market variations with demand prediction.

IEI offers a variety of products to help you build Smart Manufacturing and quickly develop data-driven, interoperable IIoT solutions.

Robotic Control

Use of robotics enhances productivity, safety and flexibility in a variety of industries. IEI offers the computing hardware and AI technologies that enable robotic control applications in welding, assembly, materials transportation and warehouse security.

Machine Health Management

System interruptions, outage or failures always cause downtime, leading to significant productivity and revenue loss. IEI's iRM software solution is designed to simplify the management process of remote edge devices. The iRM provides client systems with rich functions including hardware monitoring, troubleshooting, root cause analysis and issue prevention.

uCPE Solution

As rapid changes in enterprise networking are increasing, businesses have been forced to build a more robust network to adapt the cloud-centric environment. IEI PUZZLE series, a professional uCPE solution, is designed to offer real-time software-defined wide-area network (SD-WAN) services that support both x86 and ARM architectures with any additional virtual network functions (VNF) services.

Industrial HMI

IEI's industrial panel PCs are optimally suited for visualization HMI in factory. They convince through their robustness, performance and a brilliant display. Multi-touch panels featuring easy-to-use interface help operators tackle difficult tasks in automation manufacturing, processing and fabrication.

► Network Appliance

PUZZLE-7030A

1U Rackmount Premium Network Appliance

- Intel® Xeon® D processor
- 4 x DDR4 2400/2933MHz ECC UDIMM/RDIMM, up to 256GB
- 8 x 2.5 Gbps RJ45 LAN ports & 5 x 10 Gbps SFP+ ports
- 1 x FH PCIe Gen4 x8 or 2 x FH PCIe Gen4 x4 and 1 x OCP 3.0 slot



PUZZLE-5030

1U Rackmount Performance-Level Network Appliance

- Intel® Xeon® E processor
- 8 x 2.5 Gbps RJ-45 LAN ports & 2-pair LAN bypass
- 2 x Standard PCIe slot (1 x PCIe Gen4 x4, 1 x PCIe Gen4 x8)
- 2 x PuIM network module
- 300W AC Redundant PSU



PUZZLE-3034

Desktop Network Appliance

- Intel® Atom® C3758R 8C/8T (16M cache, 2.4 GHz)
- 2 x DDR4 2400MHz Non-ECC UDIMM
- 8 x 2.5GbE RJ45 LAN ports, 4 x 10 GbE SFP+
- 1 x RJ45 console, 2 x USB 3.0



Panel PC & Embedded System

Panel PC

IEI provides comprehensive IP64/IP65 panel PC solutions with anti-glare & anti-UV PCAP touch screen, shock/vibration resistance, and rugged design for operation in harsh environment.

► Heavy Industry Panel PC

PPC2-ADL

15"~21.5" panel PC with Intel® Core™ i7/i5/i3 & pentium® Alder Lake-S processor

- Intel® UHD Graphics with up to 32 EUs for 4K dual display
- Anti-glare, anti-UV and 10-point multi-touch screen
- M.2 M key, M.2 E key & PCIe Gen4 x16 slots for expansion
- Dual 2.5 GbE LAN ports for network redundancy
- Wide operating temperature: -10°C ~ 60°C



PPC2-EHL

8"~21.5" fanless panel PC with Intel® Celeron® Elkhart Lake processor

- Intel® UHD Graphics with 16 EUs for 4K dual display
- Anti-glare, anti-UV and 10-point multi-touch screen
- Dual 2.5 GbE LAN ports for network redundancy
- Wide operating temperature: -10°C ~ 60°C



► Light Industry Panel PC

AFL4-ADL-P

10"~13" fanless panel PC with Intel® Alder Lake-P Core™ i7/i5/i3 or Celeron® processor

- Light industry panel PC with anti-UV & anti-glare PACP touchscreen
- Supports Wi-Fi 6E, Bluetooth 5.0 & dual 2.5GbE port
- M.2 M key 2242/2280 (PCIe Gen4 x4) expansion slots
- Wide operating temperature: -10°C ~ 50°C



AFL4-EHL

7"~13" fanless panel PC Intel® Elkhart Lake Celeron® J6412 processor

- Light industry panel PC with anti-UV & anti-glare PACP touchscreen
- Supports Wi-Fi 6E, Bluetooth 5.0 & dual 2.5GbE port
- M.2 M key 2242 (PCIe Gen3 x1 or SATA) / 2280 (PCIe Gen3 x2) expansion slots
- Wide operating temperature: -10°C ~ 50°C



AFL3-ADL-P

15.6"~21.5" fanless panel PC with Intel® Core™ i7/i5/i3 Alder Lake-P processor

- Light industry panel PC with anti-UV & anti-glare PACP touchscreen
- Two 2.5GbE low-latency network ports
- Built-in 3W speakers, camera and digital mic
- 4 x M.2 slots for storage, IPMI function and wireless network expansions



Video Solution

iSDV-200CTR

4K HDR SDVoE IP combo transceiver

- Hybrid encoder-decoder
- 10GbE SFP+ (fiber) and RJ45 (copper) combo ports
- Stunning 4K video resolution
- Free software for centralized management



Embedded System

IEI embedded system solutions feature reliable performance, rugged design and flexible customization options, which are ideal for mission-critical industrial applications.

► Embedded System

TANK-XM811

Fanless, wide-temp embedded system with 13th Gen Intel® Core™ Raptor Lake processor and modular expansion options

- 13th Gen Intel® Core™ processors with Intel® Hybrid Technology
- Modular chassis/backplanes for expansion options via PCI/PCIe
- HDMI and DP++ ports support dual independent display
- Wide operating temperature: -20°C ~ 60°C



FLEX-BX210-Q470

2U rackmount embedded box PC with built-in power module, efficient heat dissipation design, and enhanced network capabilities.

- 10th/11th Gen Intel® Core™ processors ranging from 4 to 10 cores
- Knockout holes for antenna and M.2 B-Key socket for 5G/LTE connection
- 350W 80-plus gold power supply



IDS-330

Fanless, compact size digital signage player with eligible Intel® Core™ i5/i7 processor

- 12th Gen Intel® Core™ i5/i7 processors with built-in Intel® Iris® Xe graphics card
- 4 x HDMI ports with 4K resolution
- M.2 B Key, M.2 M Key & M.2 E Key expansion for wireless connection
- 4 x USB3.2 Gen2, 2 x 2.5GbE LAN ports



► DIN Rail Embedded System

DRPC-240

Fanless DIN-rail PC with eligible Intel® Core™ i5/i7 or Intel® Celeron® 6305 processor

- 11th Gen Intel® Core™ i3/i5/i7 & Intel® Celeron® 6305 processor
- Modular PCIe x4 expansion capability
- 2.5kV isolated COM ports: 2xRS-232 and 2xRS-422/485 for system reliability
- Wide operating temperature: -20°C ~ 60°C & 12V~28V DC input



DRPC-242

Fanless DIN-rail PC with eligible Intel® Core™ i3/i5/i7 processor, rugged design for use in severe environments, and rich I/O connectivity

- 12th Gen Intel® Core™ i3/i5/i7 & Intel® Celeron® 6305 processor
- Modular PCIe x4 expansion capability
- 2.5kV isolated COM ports: 2xRS-232 and 2xRS-422/485 for system reliability
- Wide operating temperature: -20°C ~ 60°C



DRPC-124

Fanless slim-type DIN-rail PC with Intel® Celeron® J6412 quad-core processor and on-board 8GB LPDDR4x memory

- Great network capability: 3x2.5GbE + 1xGbE port
- Three M.2 slots for flexible expansion
- 12V - 28 V DC wide power input
- Slim design fits in most rugged industrial applications



► Industrial Mini PC

TANGO-3010

Fanless industrial mini PC with Intel® Celeron® J6412 quad-core processor and on-board 8GB LPDDR4x memory

- Tri-band Wi-Fi 6E and Bluetooth 5.2 with embedded antennas
- Three Intel® 2.5 GbE LAN ports
- Support 2.5-inch SSD and M.2 NVMe SSD, up to 2TB large storage
- RS-232/422/485 serial ports for industrial needs



uIBX-260

Fanless ultra-compact embedded box PC with Intel® Celeron® J6412 quad-core processor

- Two 2.5GbE LAN ports via Intel® I225V
- M.2 A-key & M-key slots for storage and functionality expansion
- Four USB 10Gb/s, one RS-232/422/485 and expandable I/O options
- Rugged design, shock & vibration resistance



Embedded Boards & Modules

Computer-On-Module

IEI's latest Computer-On-Module (COM) solutions have multiple form factors and high computing performance, allowing for implementation of versatile and data-demanding computing applications for IoT devices that produce huge amounts of data 24/7

► Qseven®

iQ7-EHL

Qseven® 2.1 computer module with Intel® Elkhart Lake Celeron® J6410/J6412 on-board SoC and 8GB LPDDR4x 3200 and 16GB eMMC

- Standardized form factor of 170mm x 170mm
- On board LPDDR4x 8GB (up to 16GB) & 16GB eMMC (up to 64GB)
- Dual independent display via DP and LVDS
- 4 x PCIe x1 expansion slot
- 1 x 2.5GbE LAN port, 2 x USB 3.2 / 6 x USB 2.0, 2 x SATA 6Gb/s



► SMARC®

iSMC-EHL

Low-power SMARC® computer module with Intel® Elkhart Lake Celeron® J6412/x6413E on-board SoC, 8GB LPDDR4x 3200 and 32GB eMMC

- Module size: 82mm x 50mm
- On board LPDDR4x 4GB (up to 16GB) & 32GB eMMC (up to 256GB)
- Triple independent display via HDMI, DP and LVDS
- 4 x PCIe x1 / 1 x eSPI expansion slot
- 1 x UART, 2 x 2.5 GbE PCIe, 2 x USB 3.2 / 6 x USB 2.0



Embedded Single Board Computer

IEI offers comprehensive Single Board Computer (SBC) solutions with diverse form factors and longevity product support to meet different needs of industrial applications.

► 3.5" SBC

WAFLER-EHL-x6000EWC

3.5" SBC powered by Intel® Elkhart Lake Atom®/Celeron® J series on-board SoC and 8GB LPDDR4x 3200, 12-28V DC input

- Triple independent display via HDMI, DP and iDPM
- On board LPDDR4x 3200 8GB
- M.2 A Key for Wi-Fi card/B Key for 5G LTE card
- Wide operating temperature: -40°C~85°C
- 2.5GbE LAN port, USB 3.2, SATA 6Gb/s



WAFLER-ADL-P

3.5" SBC powered by Intel® mobile Alder Lake-P on-board SoC, with 8GB LPDDR4x 3200 and great expansion capabilities

- Quadruple independent display via 2x HDMI/2x DP
- On board LPDDR4x 3200 8GB
- M.2 A Key for Wi-Fi card/M.2 M Key (2242/2280)/M.2 B Key for SIM card/PCIe x4 expansion slots



► Pico-ITX SBC

HYPER-EHL

High performance Pico-ITX motherboard with Intel® Celeron® J6412/N6210 on-board SoC and 4GB LPDDR4x 3200

- Dual independent display via HDMI and iDPM
- On board LPDDR4x 3200 4GB, up to 8GB
- PCIe x4 & M.2 M Key 2242 (PCIe x2) expansion slots
- 2.5GbE LAN port, USB 3.2, iSATA 6Gb/s and RoHS



► EPIC SBC

NANO-EHL

EPIC SBC powered by Intel® Elkhart Lake Celeron® J6412/N6210 on-board SoC and 8GB LPDDR4x 3200

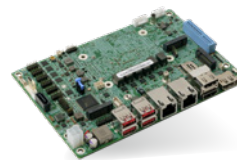
- Triple independent display via HDMI, DP and iDPM
- On board dual channel LPDDR4x 8GB, up to 16GB
- PCIe Gen3 x4 and M.2 A Key/B Key expansion slots
- Triple 2.5GbE LAN port, USB 3.2, SATA 6Gb/s



NANO-ADL-P

EPIC SBC powered by Intel® mobile Alder Lake-P on-board SoC and 8GB LPDDR4x 3200

- Quadruple independent display via two HDMI, one DP and one iDPM
- On board LPDDR4x 8GB, up to 16GB
- PCIe x4/M.2 A Key/M.2 B Key expansion slots
- Dual 2.5GbE LAN port, USB 3.2, SATA 6Gb/s



Embedded Motherboards

IEI's motherboard solutions feature high CPU/graphics performance, rich I/O connectivity, great scalability, and longevity product support for mission-critical industrial applications.

▶ ATX Motherboard

IMBA-ADL-H610

High performance ATX motherboard supports 12th/13th Gen Intel® Core™ i9/i7/i5/i3, Pentium® and Celeron®, Intel® H610/H610E chipset

- Triple independent display via HDMI, DP and iDPM
- Supports DDR4 3200, up to 64GB
- PCIe x16/PCIe x4/PCI expansion slots
- Dual 2.5GbE LAN port, USB 3.2, SATA 6Gb/s and RoHS



IMBA-ADL-Q670

High performance ATX motherboard supports 12th/13th Gen Intel® Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, Intel® Q670/Q670E chipset

- Triple independent display via HDMI, DP and iDPM
- Supports DDR4 3200, up to 64GB
- PCIe x16/PCIe x4/PCIe x1/PCI/M.2 M Key NVMe expansion slots
- Dual 2.5GbE LAN port, USB 3.2, SATA 6Gb/s and RoHS



IMBA-R680

High performance ATX motherboard supports 12th/13th Gen Intel® Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, with great expansion capabilities

- Triple independent display via HDMI, DP and iDPM
- Supports next-gen DDR5 4400, up to 128GB
- PCIe Gen5 x16/PCIe Gen4 x4/PCIe Gen3 x1 M.2 M Key NVMe expansion slots
- Dual 2.5GbE LAN port, USB 3.2, SATA 6Gb/s and RoHS



▶ Mini-ITX Motherboard

KINO-ADL-H610

High performance Mini-ITX motherboard supports 12th/13th Gen Intel® Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, Intel® H610/H610E chipset

- Triple independent display via HDMI, DP and iDPM
- Supports DDR4 3200, up to 64GB
- PCIe x16/M.2 A Key/M Key expansion slots
- Dual 2.5GbE LAN port, USB 3.2, SATA 6Gb/s and RoHS



KINO-ADL-P

High performance Mini-ITX motherboard with 12th Gen Intel® mobile Alder Lake-P on-board SoC, great expansion capabilities and 12-28V DC input

- Triple independent display via HDMI, DP and iDPM
- Supports DDR4 3200 SO-DIMM, up to 64GB
- PCIe x16/PCIe x4/PCIe x1/M.2 M Key NVMe expansion slots
- Triple 2.5GbE LAN port, USB 3.2, SATA 6Gb/s and RoHS



KINO-EHL

High performance Mini-ITX motherboard with Intel® Elkhart Lake Celeron® on-board SoC, 8GB LPDDR4x memory

- Triple independent display via HDMI, DP and iDPM
- On board LPDDR4x 3200 8GB, up to 16GB
- PCIe x4/M.2 B Key & A Key NVMe expansion slots
- Triple 1GbE LAN port, USB 3.2, SATA 6Gb/s and RoHS

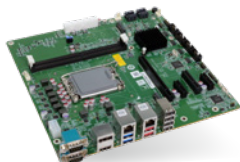


▶ Micro-ATX Motherboard

IMB-ADL-H610

High performance Micro-ATX motherboard supports 12th/13th Gen Intel® gen Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, Intel® H610/H610E chipset

- Triple independent display via HDMI, DP and iDPM
- Supports DDR4 3200, up to 64GB
- PCIe x16/PCIe x4/M.2 M Key NVMe expansion slots
- Dual LAN port, USB 3.2, SATA 6Gb/s and RoHS



IMB-ADL-Q670

High performance micro ATX motherboard supports 12th/13th Gen Intel® Core™ i9/i7/i5/i3, Pentium® and Celeron® processor, Intel® Q670/Q670E chipset

- Triple independent display via HDMI, DP and iDPM
- Supports DDR4 3200, up to 64GB
- PCIe x16/PCIe x4/M.2 M Key NVMe expansion slots
- Dual LAN port, USB 3.2, SATA 6Gb/s and RoHS





*Specifications are subject to change without prior notice.

Headquarters

威強電工業電腦股份有限公司 IEI Integration Corp.

No. 29, Zhongxing Rd., Xizhi Dist., New Taipei City 221

TEL : +886-2-86916798 / +886-2-26902098 FAX : +886-2-66160028
sales@ieiworld.com www.ieiworld.com

America

IEI Technology USA Corp.

138 University Parkway, Pomona, CA 91768

TEL : +1-909-595-2819 FAX : +1-909-595-2816
sales@usa.ieiworld.com usa.ieiworld.com

China

上海威強電工業電腦有限公司 IEI Technology (SH) Co.,Ltd

上海市閔行華莊工業區申富路515號

515, Shen Fu Rd., Xin Zhuang Industrial Develop Zone, Shanghai, 201108, China
TEL: +86-21-3116-7799 FAX: +86-21-3462-7797
sales@ieiworld.com.cn www.ieiworld.com.cn