AI-Optimized Industrial Controller for Rugged Edge

ASRock Industrial iEP-7040E Series

Industrial IOT controller with AI Acceleration and Wide-Temp Reliability

Industrial operations face increasing challenges at the edge, from processing AI workloads in real time to ensuring reliability in harsh environments. The iEP-7040E Series addresses these demands with powerful compute, rugged design, and versatile connectivity. Powered by 15th Gen Intel® Core™ Ultra Processors (Series 2) with integrated Intel® Arc™ graphics and an NPU, it delivers advanced AI acceleration for applications such as computer vision, predictive maintenance, and robotics. Businesses benefit from reduced latency, improved automation, and scalable deployment. Designed for tough industrial conditions, the iEP-7040E Series supports -25°C to 50°C wide-temperature operation, 100G shock, and 5 Grms vibration resistance. Flexible I/O options include multiple LAN with PoE, serial, USB, digital I/O, and expansion for 5G/Wi-Fi modules. With ECC memory and TPM 2.0 security, the iEP-7040E Series stands out by combining high-performance AI with rugged reliability, differentiating it from conventional edge systems.

AI-Optimized, Rugged, and Scalable *Edge Computing for Industrial Automation and Robotics*

Intel Products and Technologies

Accelerating AI and Analytics at the Edge

Intel® Core™ Ultra Processors

Intel® Arc™ Graphics

OpenVINO™ Toolkit

Intel® oneAPI Base Toolkit
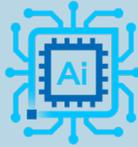
AI-Optimized Processing

Flexible Connectivity

Ruggedized Reliability

Industrial-Grade Security

ASRock Industrial iEP-7040E Series

Product Specifications

CPU	Intel® Core™ Ultra processors 255H, 16Core, 2.00 GHz, 28W / Intel® Core™ Ultra processors 225H, 14Core, 1.70 GHz, 28W
Graphics	Intel® Arc™ Graphics
Memory	2 x DDR5 5600MHz SO-DIMM, up to 96GB (Support In-Band ECC)
Storage	1 x M.2 2280 Key M (PCIe Gen4x4)
Wireless Network	1 x M.2 3042/3052 Key B (PCIe Gen3x1/USB3.2 mode) Support 4G LTE/5G module 1 x M.2 2230/2260 Key E (CNVi/PCIe Gen3x1/USB2.0 mode) Support Wifi/BT module
LAN	3 x Intel Intel® Ethernet Controller I226-IT (RJ45 connector) 2 x Intel® Ethernet Controller I210-AT for 5LAN SKU (RJ45 connector) 2 x Intel® Ethernet Controller I210-AT (RJ45 connector), PoE output max.15.4W/port, each port supports IEEE 802.3AF PoE. (For PoE SKU)2 x Intel I210-AT for PoE SKU/5LAN SKU (RJ45 connector)
Operating / Storage Temp.	-13°F~122°F (w/ airflow 0.5~0.8m/s) / -40°F ~185°F
Dimension (W x D x H)	55mm x 134mm x 170mm (Basic/8DIO SKU) 68mm x 134mm x 170mm (PoE/5LAN/5G SKU)
Weight	Basic SKU : 1.57 kg / PoE SKU : 2.37kg / 5LAN SKU : 2.27kg / 5G SKU : 2.15kg / 8DIO SKU : 1.70 kg
OS	Windows 11 & Linux

Learn More

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