

Industrial Motherboard Specifically for Compute-Intensive Al Workloads







New K4021-U mSTX Motherboard with integrated NPU for Al Acceleration

The Industrial Motherboard K4021-U mSTX is the first motherboard in 5.5″x5.8″ size that was developed specifically for compute-intensive AI workloads such as image recognition and automation. The integrated NPU operation and an enhanced temperature range up to 60 °C. allows up to 11 TOPS dedicated AI performance with low power consumption. It is based on the latest Intel® Core™ Ultra Processors with powerful UHD Gen12 graphics using Intel® Xe architecture. There are two DisplayPorts™ - one via front and one via rear USB Type-C - plus onboard connectors for eDP and Dual-Channel 24bit LVDS panels. Four independent displays with up to 4K display resolution or up to two with 8K are supported. The K4021-U is equipped with four M.2 connectors and in addition to this offers many other connectivity options like GPIO, two COM ports and USB 3.2 Gen2. It is designed and approved for 24/7 continuous.

Key Features



Reliable & Scalable



Energy Efficient



Modular Design



Customization Available

Intel Products & Technology



Intel® Core™ Ultra Processors Series 2

The Intel® Core™ Ultra processor scale performance and AI acceleration, powering edge computing across smart cities, factories, retail, entertainment, and healthcare for advanced AI-driven solutions.