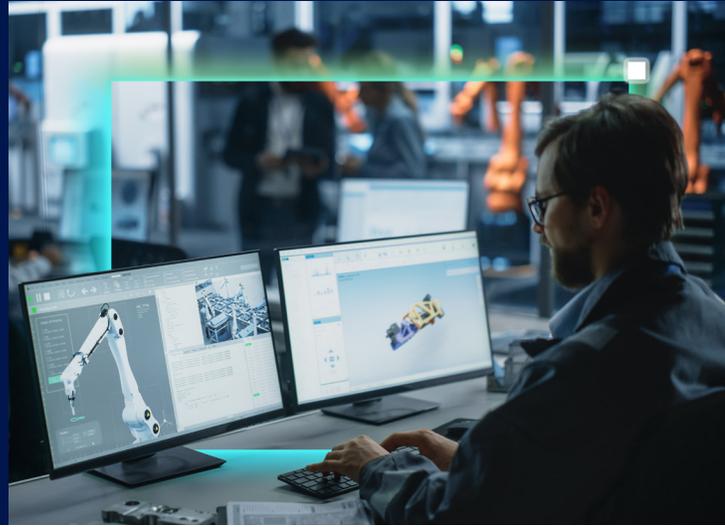# Industrial AI-Enabled Motherboard for Demanding Visual Workloads

K4031-H mITX with SMARTCASE™ S740

Compact, High-Performance Motherboard and Chassis Combo Built for 24/7 Industrial Edge Computing

The K4031-H mITX Industrial Motherboard is based on the Intel® Core™ Ultra processors, delivering advanced graphics performance through Intel® Arc™ architecture with up to 128 execution units. Supporting up to four independent 4K displays or dual 8K outputs, the K4031-H provides outstanding visual performance for graphics-intensive and multi-display applications.

A versatile combination of DisplayPort™, USB Type-C with Thunderbolt™ 4 / USB4®, embedded DisplayPort™, and dual-channel 24-bit LVDS ensures maximum display flexibility. Designed for scalability and system expansion, the board features four M.2 slots for high-speed storage and wireless connectivity, complemented by a comprehensive set of industrial I/O interfaces, including GPIO, dual COM ports, USB 3.2 Gen2, and Thunderbolt™ 4 / USB4®.

Built for reliable 24/7 continuous operation and validated for extended temperature ranges up to 60 °C, the K4031-H is ideally suited for demanding applications across industrial automation, digital signage, and medical systems.

Key Features

Multi-4K / Dual-8K Output	Advanced Multi-Core GPU	High-Efficiency AI Boost	LVDS & eDP Display Suite	Intel® AI Edge Systems

Intel Products & Technology

Intel® Core™ Ultra Processors	Intel® Arc™ Graphics	OpenVINO™ Toolkit	Intel® oneAPI Toolkit	Intel® AI Boost