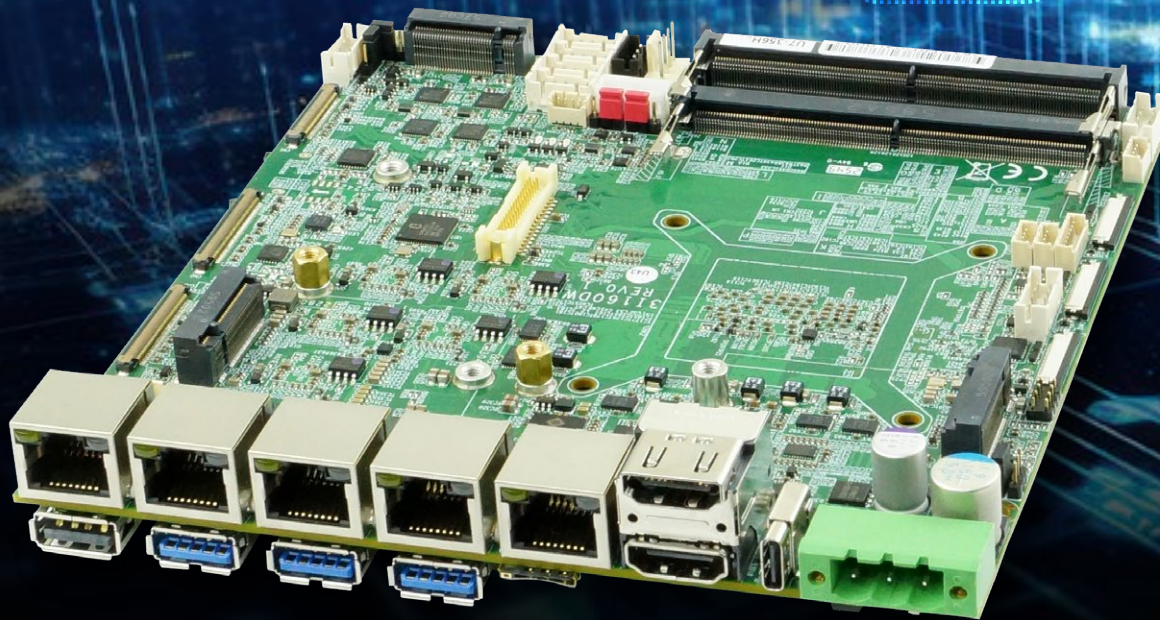


Empowering Edge AI with Intel® Core™ Ultra Series 3 Platform

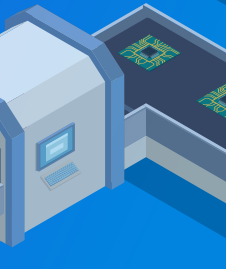
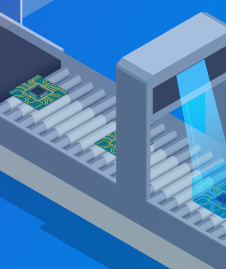
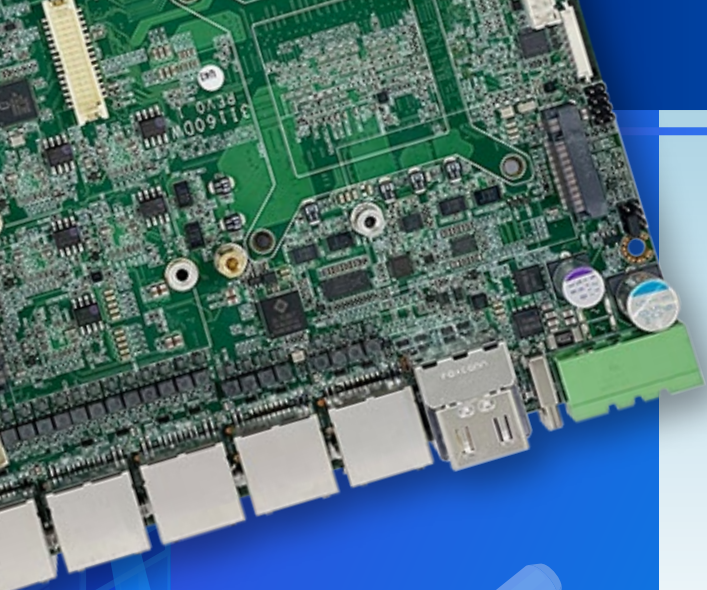


3I160DW



HAWK 3I160DW



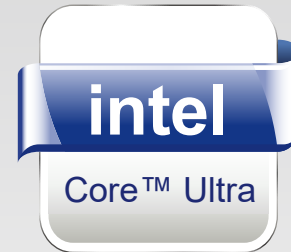


3I160DW

Empowering Edge AI with Intel® Core™ Ultra Series 3 Platform

Powered by Intel® Core™ Ultra series 3 (Panther Lake), the LEX SYSTEM 3I160DW is a high-performance 3.5" Plus SBC featuring an upgraded iGPU and integrated NPU for accelerated edge AI. Built with a rugged, fanless design compatible with an anti-vibration kit, it supports up to 128GB DDR5 memory, wide DC input, and versatile display interfaces. With rich I/O—including 5 x 2.5G LAN, 4 COM, and 3 x MIPI-CSI ports—alongside multiple M.2 slots and High-Speed Connectors (PCIe x2/x4), the 3I160DW delivers exceptional expandability for demanding applications in industrial automation, transportation, and smart manufacturing.

Function Map



M.2 B-key 3042/3052
(USB 3.2/2.0)

PCIe x4 High Speed connector

PCIe x2 High Speed connector

USB2.0

SATA

Front Panel

EXT battery

M.2 M Key 3042/3080
(PCIe x2)

SMBus wafer

COM

+12V/+5V Power output

CPU FAN

Inverter power

DDR5 SODIMM

I2C Bus

I2S Bus

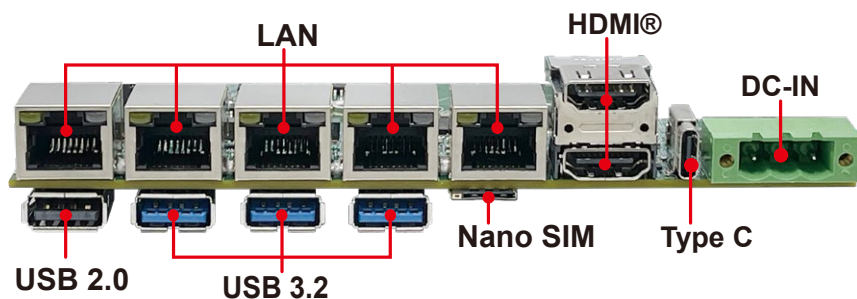
Audio

Audio amplifier wafer

GSPI

MIPI CSI-2 Camera

M.2 B-key 3042
(PCIe x2/USB 2.0)



31160DW

High Performance Edge AI Appliance

- Intel® Core™ Ultra 300 Series (Panther Lake) processors
- Revamped iGPU and integrated NPU
- 2 x DDR5 SODIMM, Max 128GB
- Multiple Independent display:
 - 2 x HDMI®, 1 x LVDS or eDP (BIOS), 1 x Type C DP ALT
- 5 x Intel 2.5 GbE LAN, 3 x USB 3.2 Gen 1x1, 5 x USB 2.0
- 1 x M.2 M Key, 2 x M.2 B Key, 1 x Nano SIM, 1 x PCIe x2, 2 x PCIe x4
- 4 x COM, 4DI / 4DO, 3 x MIPI-CSI, HD Audio
- Wide Range DC-IN 9~36V

 Data Sheet

Lex SYSTEM®

www.lex.com.tw

Unlocking Infinite Versatility: Flexible Expansion for Your Edge AI Solutions

Engineered for ultimate adaptability, the motherboard supports a wide range of modular expansion combinations via CN073 / CN075 M.2 modules. Utilizing the SSL connector, users can seamlessly connect to various expansion boards (via PCIe or USB signals) to satisfy diverse application demands:



CN073



CN075

Advanced Multi-LAN:

Choose from 4 x GbE (CL210A), 4 x PoE (CL210P), 4 x 2.5GbE (CL226A), or 4 x Fiber LAN (CL210F).

Robust 4G/5G Wireless:

Deploy via the 4-Port M.2 B-Key + 4-Port Micro SIM module (CN063).

Multimedia Integration:

Support real-time video analytics via the HDMI® video capture card (ME225-S).

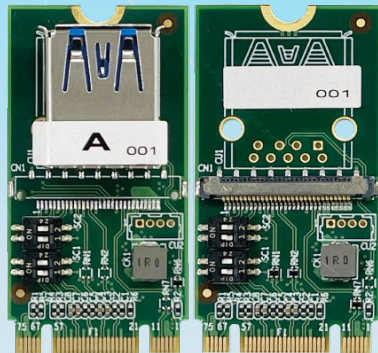
I/O Enrichment:

Expand versatile connectivity with 4 x USB 3.0 ports (CU006-S).



Tailor your system effortlessly to conquer demanding industrial environments and complex AI inferencing!

CN073



M.2 2242 B+M Key to PCIe/USB 3.0 Signal Adapter Board

- Supports PCIe or USB signal via SSL connector with Micro Coaxial Cable

CN075



M.2 2280 B+M Key to PCIe Signal Adapter Board

- Supports PCIe signal via SSL connector with Micro Coaxial Cable



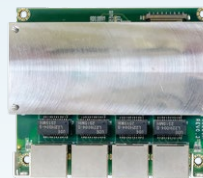
CL210A



CL210P



CL210F



CL226A



ME225A



CN063



CU006-S

The HAWK 3I160DW is a highly rugged and expandable fanless Edge AI system that can be paired with an anti-vibration kit, offering rich I/O and versatile expansion options for flexible deployment in demanding industrial environments.



HAWK-3I160DW

Dimension: 200W x 172.6D x 80H mm

- Rugged & Expandable Fanless Embedded System

About LEX Computech

Established in 1990, LEX Computech is an industrial computer manufacturer, provides LEX SYSTEM embedded solutions include designing and manufacturing of industrial motherboards, fanless embedded systems, rugged panel PC, in-vehicle fanless PC, network appliances, machine vision and automation controllers & IoT related solutions.

LEX SYSTEM's R&D team consisted with electronics, layout, system, mechanical, BIOS, firmware as well as software engineers, plus with experienced project management, in-house manufacturing and after sales service provides ODM /OEM customized products for various application-oriented projects.

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