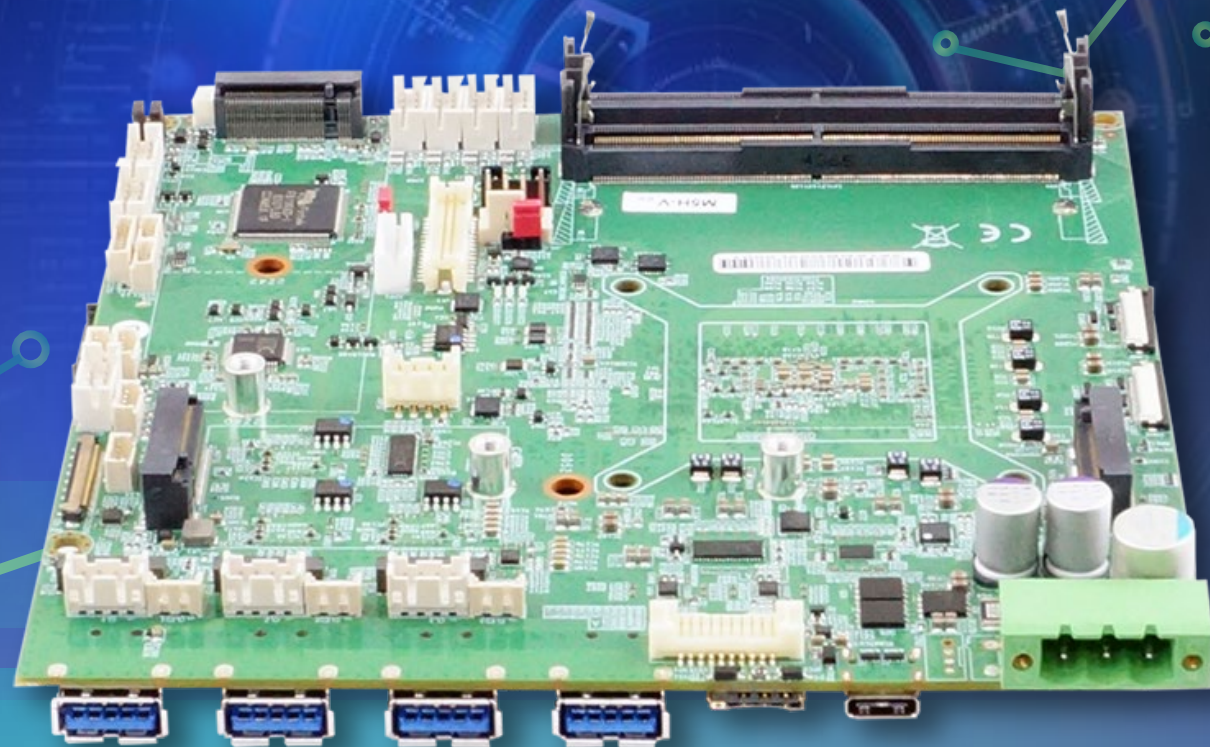


31140HW

Maximizing performance 3.5" SBC with Intel® Core™ Ultra Series Processor (Meteor Lake-U/H & Arrow Lake -U/H)

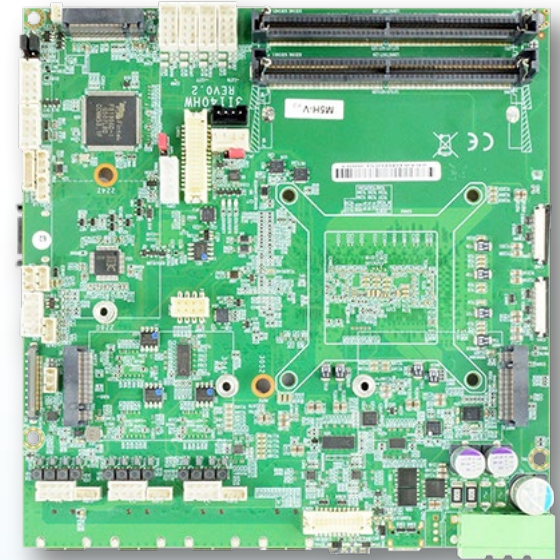


Lex SYSTEM®

www.lex.com.tw

3I140HW

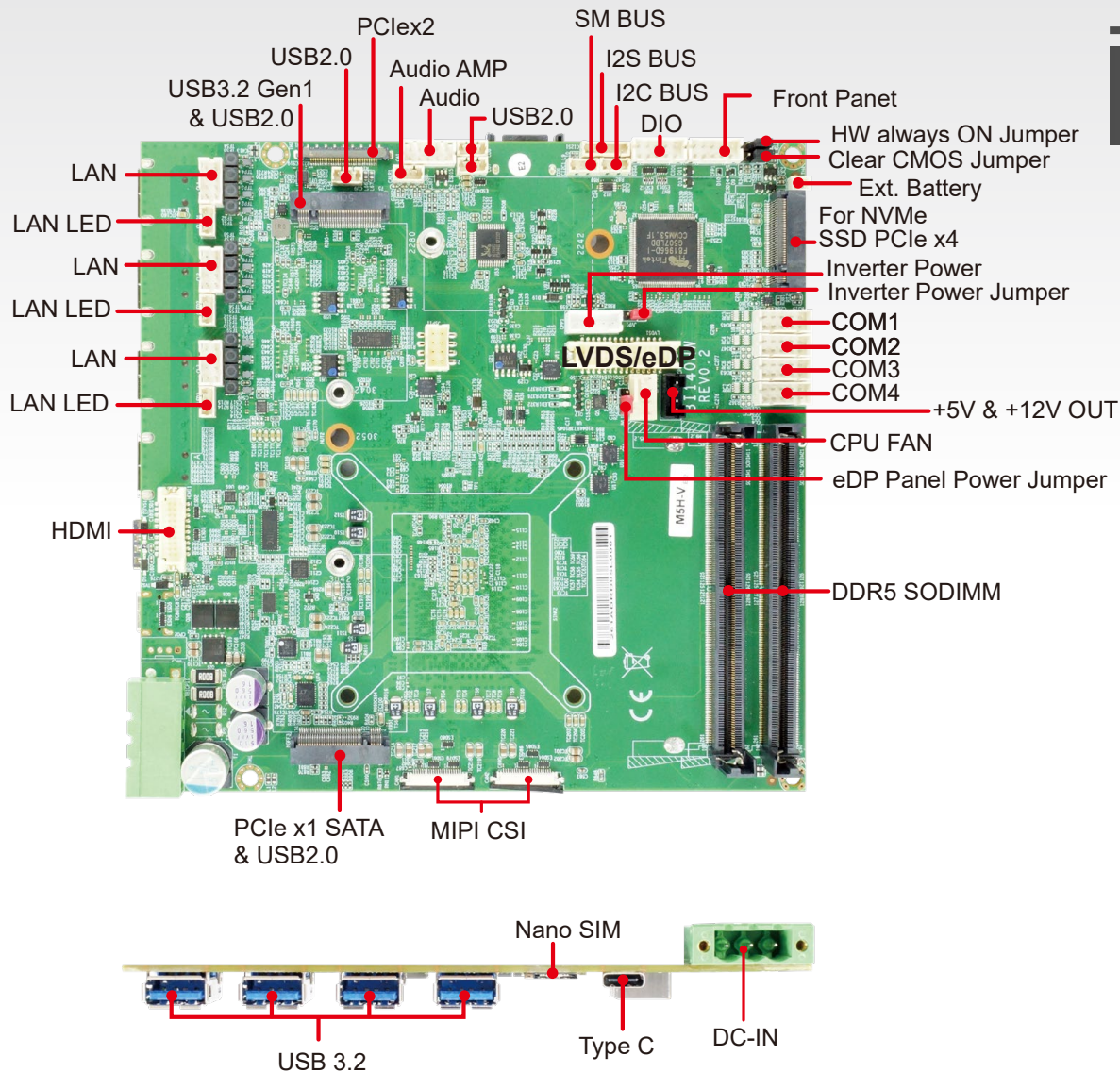
Maximizing performance 3.5" SBC with Intel® Core™ Ultra Series Processor (Meteor Lake-U/H & Arrow Lake -U/H)



The LEX SYSTEM 3I140HW is a 3.5-inch (146 x 150 mm) single-board computer (SBC) powered by Intel® Core™ Ultra Series processors (supporting both Meteor Lake-U/H and Arrow Lake-U/H platforms), delivering high-performance edge and AI computing. Featuring Intel's latest graphics architecture and up to 64GB of SODIMM DDR5 memory, the 3I140HW ensures enhanced graphics and computing performance. It offers 3 x 2.5GbE LAN ports, wide-range 9–36VDC input, HDMI, LVDS/eDP, 1 x Type C , 2 x MIPI-CSI-2, HD Audio, 4 x USB 3.2 (Type A), 3 x USB 2.0, 4 x serial ports, 3 x M.2 slots, and 1 x high-speed PCIe x2 connector.

The motherboard features flexible wafer-type I/Os that seamlessly pair with rugged M12 connectors, making it ideal for waterproof and shockproof applications. This design simplifies integration into a variety of mechanical enclosures, providing a versatile and hassle-free embedded solution.

Function Map



3I140HW

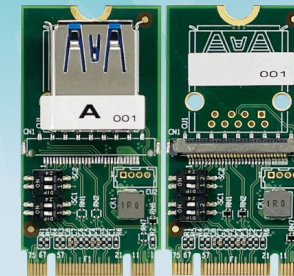
high performance solution for harsh environments

- Intel® Core™ Ultra 7/5 Series processors
(Meteor Lake-U/H) (Arrow Lake-U/H)
- 2 x DDR5 SODIMM (Max.64GB)
- Multiple Independent display:
1 x HDMI®, 1 x LVDS or eDP (BIOS), 1 x USB 3.2 Type C DP ALT
- 3 x Intel 2.5 GbE LAN, 4 x USB 3.2 Gen 1x1, 3 x USB 2.0
- 1 x M.2 M Key, 2 x M.2 BKey, 1 x Nano SIM, 4 x COM
- 1 x High Speed Connector (PCIe x2), 4DI/4DO, Audio
- 2 x MIPI-CSI-2, TPM 2.0, SMBus, I2C
- Wide Range DC-IN +9 ~36V



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:

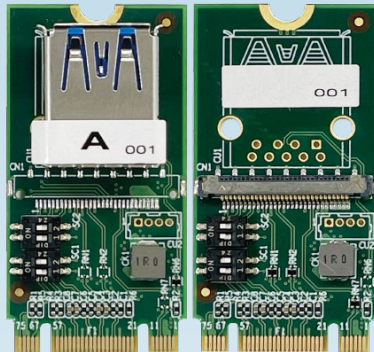
Support real-time video analytics via the HDMI® video capture card (ME225-S).

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

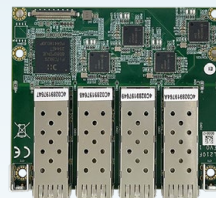
- Supports PCIe signal via SSL connector with Micro Coaxial Cable



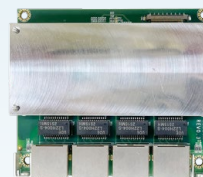
CL210A



CL210P



CL210F



CL226A



ME225A



CN063



CU006-S

SealPro 3- 3I140HW IP67- rated fanless rugged system

The SealPro 3-3I140HW is an IP67-rated, fanless rugged computer powered by Intel Core Ultra processors and equipped with up to 13 customizable M12 connectors, offering dual MIPI-CSI-2 and 4G/5G connectivity to deliver fail-safe edge AI performance for mission-critical military, railway, and heavy industrial applications.



SealPro 3-3I140HW

Dimension: 180W x 155D x 80H mm

Rugged heat-dissipating IP67-rated

Embedded system

HAWK 3I140HW+ 8CH GMSL with Anti-vibration

The HAWK 3I140HW-8 CH GMSL is a rugged, fanless embedded computer powered by Intel Core Ultra processors and equipped with 8-channel GMSL camera inputs, featuring M12 connectors and anti-vibration design to serve as the ideal platform for edge AI vision applications in harsh environments like in-vehicle systems, AMRs, and factory automation.



HAWK 3I140HW

Dimension: 220W x 172.6D x 80H mm

300W x 216D x 106.8H mm

(Anti-vibration Kit)

Rugged heat-dissipating 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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