

2I642DW

Compact Edge Gateway: LEX SYSTEM

2I642DW with Intel® Atom® Elkhart Lake SoC



USB



COM



M.2 SSD



Nano SIM



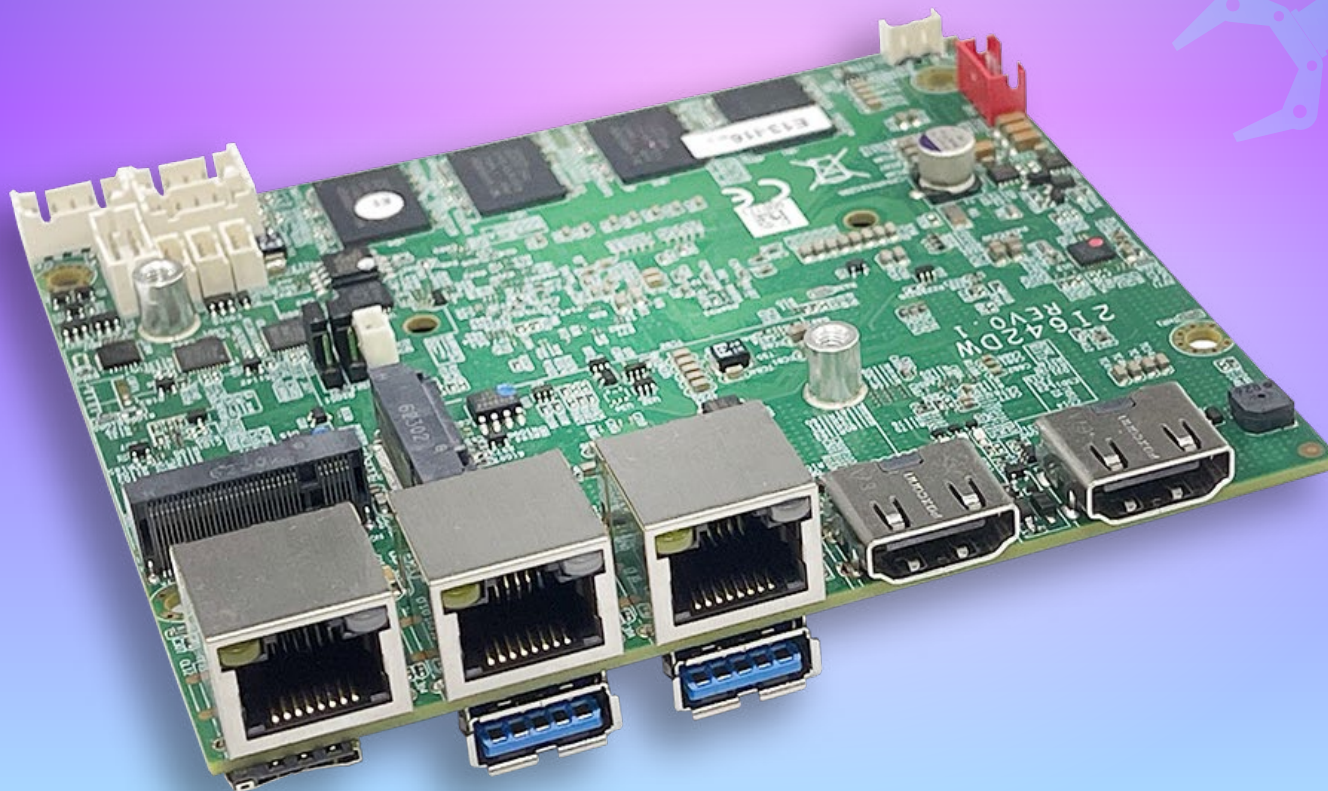
2.5 GbE



HDMI

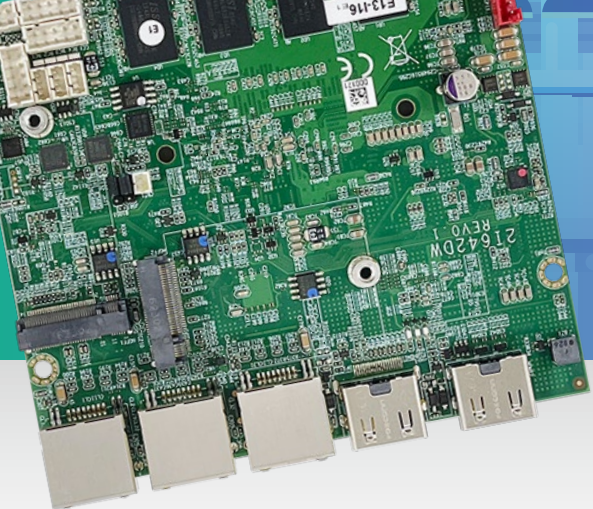


DP



Lex SYSTEM®

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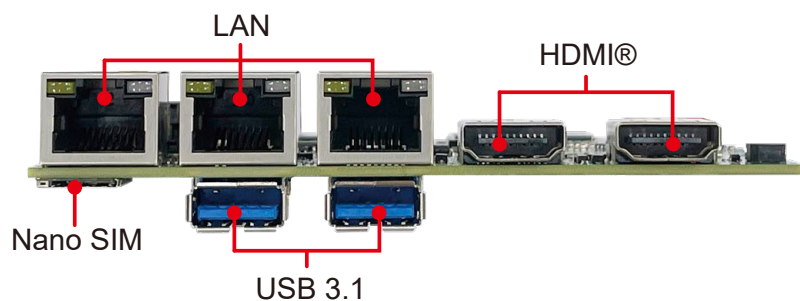
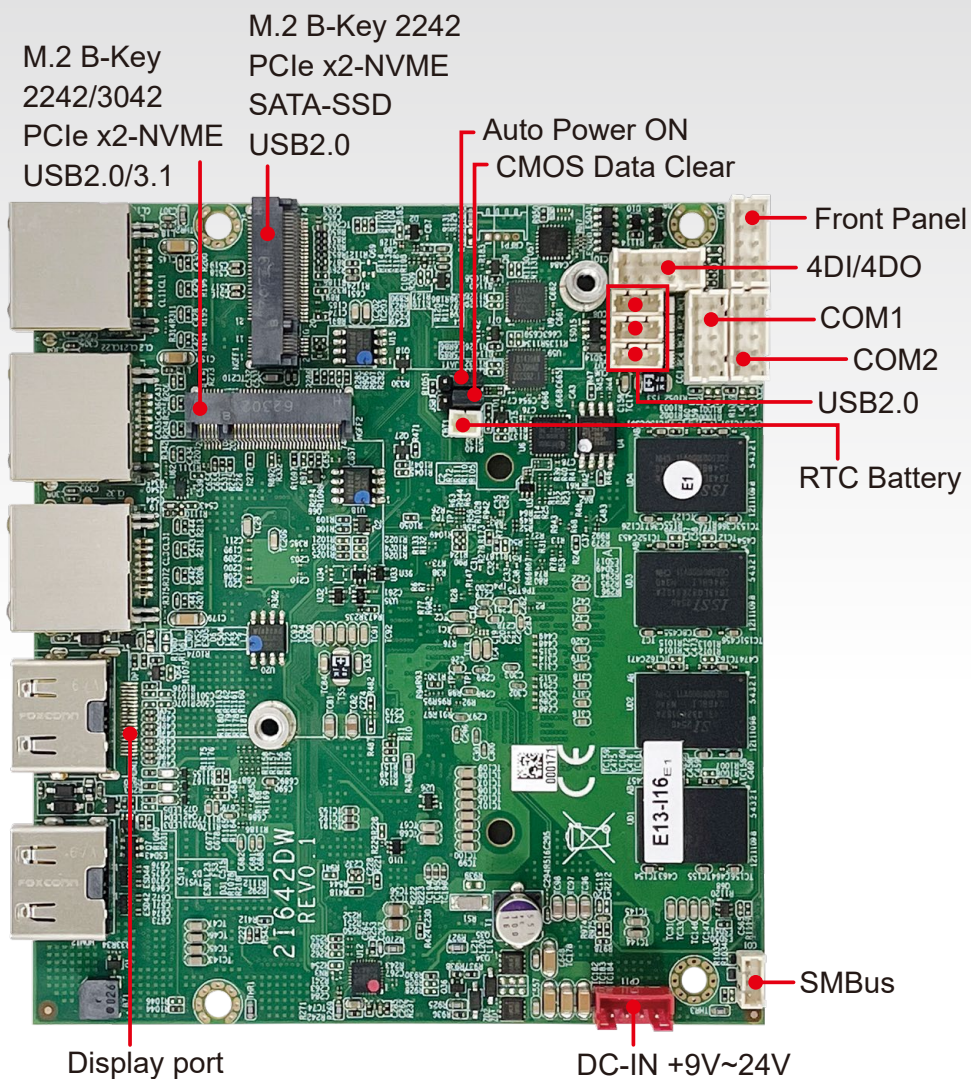
2I642DW

Compact Edge Gateway: LEX SYSTEM

2I642DW with Intel® Atom® Elkhart Lake SoC

The LEX SYSTEM 2I642DW is a compact 2.5" Plus SBC (110 x 98 mm) powered by Intel® Atom® x6000E and Celeron® processors, featuring onboard LPDDR4 memory and up to 256GB eMMC storage. Engineered for advanced Edge AI and gateway applications, this platform offers versatile connectivity, including three 2.5 GbE LAN ports, dual HDMI (one OEM-configurable to DP), five USB, two COM, dual M.2 slots, and a Nano SIM slot. Supporting a wide-range 9-24V DC input and OpenVINO-based AI accelerators, the 2I642DW is the ultimate, high-performance solution for industrial control, IoT, and factory automation.

Function Map



2I642DW

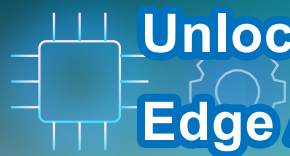
Compact solution for Edge Gateway Appliance

- Intel®Elkhart Lake ATOM® x6413E / J6412 CPU
- Onboard LPDDR4, 4GB / 8GB / 16GB
- eMMC 5.1 32GB~256GB
- Independent display: 2 x HDMI® (1 can OEM to DP)
- 3 x Intel 2.5 GbE LAN, 2 x USB 3.0, 3 x USB 2.0
- 2 x COM, 4DI/4DO, 2 x M.2, 1 x Nano SIM
- PM 2.0 , Wide Range DC-IN+9~24V

[Data Sheet](#)

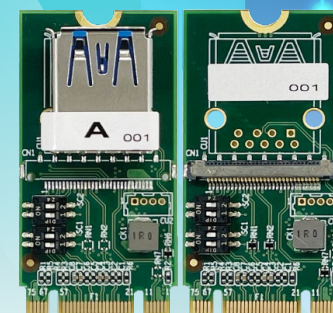
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Unlocking Infinite Versatility: Flexible Expansion for Your Edge AI Solutions

Engineered for ultimate adaptability, the motherboard supports a wide range of modular expansion combinations via CN073 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

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).

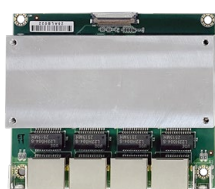
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Tailor your system effortlessly to conquer demanding industrial environments and complex AI inferencing!

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

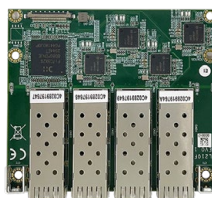
- Supports PCIe or USB signal via SSL connector with Micro Coaxial Cable



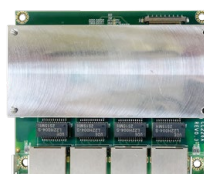
CL210A



CL210P



CL210F



CL226A



ME225A



CN063



CU006-S

Powered by Intel® Atom® x7000 processors and onboard LPDDR4 memory, LEX SYSTEM' s fanless DIN-Rail systems (NET-III 2I642DW / SKY 2 2I642DW) and compact TERA 2I642DW integrate versatile wireless connectivity with rich industrial I/O. These platforms deliver high-performance Edge AI and advanced gateway solutions for truly seamless communication.



TERA 2I642DW

Dimension: 145W x 102.4D x 56.5H mm

- Compact & Excellent heat-dissipated
Fanless Embedded System



NET-III + 2I642DW

Dimension: 135W x 110D x 35H mm

- Compact & Excellent DIN-Rail System



SKY 2 2I642DW

Dimension: 141W x 111.2D x 71.9H mm

- Excellent heat-dissipated Fanless
DIN-Rail 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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