

Product Roadmap

- Embedded Mainboard & SBC
- Embedded Fanless PC
- IP65/66/67/69 Panel PC / Box PC

Contents

- LEX System Features & Advantages
- Embedded Solution Overview
- Embedded Solution Case Study
- Product Development Timeline
- Contact Information

Features & Advantages

Flexible

Diverse Expansion interfaces and modules for various Vertical Applications



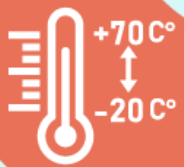
Integrated

Accelerating Customer Development Speed for Cross-Platform products



Stable

Wide Temperature, Wide Voltage & Shock Resistance, IP66/IP67 & IP69K Waterproof Design



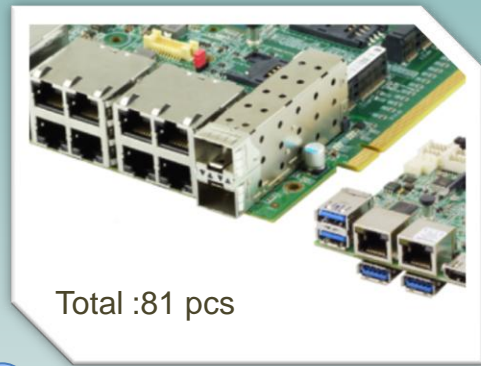
Innovation

Fanless small Form Factor Embedded tailored products or space-constrained solutions



LEX SYSTEM – Embedded Solution

LEX offers design and manufacturing of industrial motherboards, industrial computers, expansion boards, and customized industrial computers, including edge computing systems and AI intelligent application platforms. Our in-house developed products cover four major categories:



Total :81 pcs

1 Embedded IPC Board

- Femto-ITX 1.8" : 3pcs
- 3.5"SBC :30 pcs
- Computer On Module : 5 pcs
- UPS board : 4 pcs
- Pico-ITX 2.5" : 28 pcs
- 5 ¼ " (200 x 150mm) : 4 pcs
- CPU board : 3 pcs
- ARM based : 4 pcs



2 Customized Motherboard & Chassis

Innovating Research & Integration Services for Global OEM/ODM and System Integrators

• Applications



AI / Visual Analytics



Smart Manufacturing /
Machine Vision



IoT / IIoT



Smart Healthcare/
AI Medical Imaging



Smart Transportation
& Railways



Maritime Shipping
& Navigation



Defense / Military
Robust Computers



Networking/
Communication Equipment



Edge Computing
Edge Gateway Control

LEX SYSTEM – Embedded Solution



3 Fanless Rugged Panel PC,
Fanless Embedded Systems, Servers



4 Expansion Boards/Cards &
Related Accessories

Fanless Rugged Panel PC



•SUPER series (7" /10.1" /10.4" /15")



•VITA series (10.1" /15" /21.5" /23.8")



•SHARK IP66/67 waterproof (10.1" /13.3")



•STAR IP66/67 waterproof (10.4" /12.1" 15.1")



•Stainless IP66/IP67/IP69K waterproof

(10.4" /15.1" /19")

Fanless Embedded System



•Rugged /Waterproof System

•In-vehicle System



•DIN Rail System

•1U server



•AI image Analysis & Machine Vision

•Ultra Compact / Compact System

•High-Speed Ethernet Network Card / PoE / Fiber Card

•4G / 5G / WiFi / Bluetooth Module

•Video Capture Car

•USB / SIM / COM / Display Conversion Card

•M.2 / eIO Expansion Card

•Storage Card

•Digital IO Card

•Carriers and Converter Boards

•Power Boards and Charger Modules

Embedded Solution— Case Study



Spain
Intelligent Transportation
Surveillance System



China
Highway ETC smarting
billing system



Germany
3D Surgery Navigation



China
Servotronic EtherCAT
Robot Motion Control

Embedded Solution— Case Study



Kiosk-Self Service
Harsh outdoor Panel PC
for Winter Olympics



Video Analysis
Metro Real-time
Surveillance System



Poland
Railway in-train
communication



Netherlands
Fleet management

2024 Q1 Product Development timeline



13th Gen Intel® Core™ Raptor Lake-P/U



21130HW - EVT

Intel® 13th Gen Raptor Lake-U/P CPU
 1 x DDR5 SODIMM (Max. 32GB)
 HDMI, eDP, LVDS
 2 x Intel 2.5 GbE, 4 x USB 3.0
 4 x USB 2.0, 2 x COM, 4DI / 4DO,
 HD Audio, 1 x Mini PCIe, 1 x M.2
 108 x 10mm

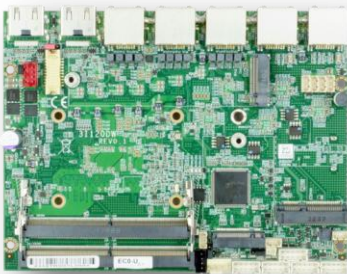


21130DW - EVT

Intel® 13th Gen Raptor Lake-U CPU
 1 x DDR5 SODIMM (Max. 32GB)
 HDMI, eDP
 4 x Intel 2.5 GbE, 3 x USB 3.0
 4 x USB 2.0, 2 x COM, 4DI / 4DO,
 2 x M.2, 1 x Nano SIM
 108 x 10mm



SKY 2 21130DW



31130DW- EVT

Intel® 13th Gen Raptor Lake-P / U CPU
 2 x DDR5 SODIMM (Max. 64GB)
 2 x HDMI, eDP
 5 x Intel 2.5 GbE, 3 x USB 3.0, 5 x USB 2.0
 1 x Mini PCIe, 2 x M.2, 1 x Nano SIM
 2 x COM, 4DI / 4DO
 146 x 110 mm



31130TW - EVT

Intel® 13th Gen Raptor Lake- U CPU
 On-board LPDDR5 (16GB/32 GB)
 HDMI,DP, eDP, 5 x Intel 2.5 GbE,
 3 x USB 3.0, 5 x USB 2.0, 3 x M.2 ,
 1 x Nano SIM ,2 x ISO-COM, HD Audio
 2 x ISO- CANBus, 4DI / 4DO , onboard NVMe
 CPC -Ignition Delay on/off control
 146 x 150 mm



HAWK 31130DW



SKY 3 31130DW



HAWK 31130TW



2024 Q1 Product Development timeline



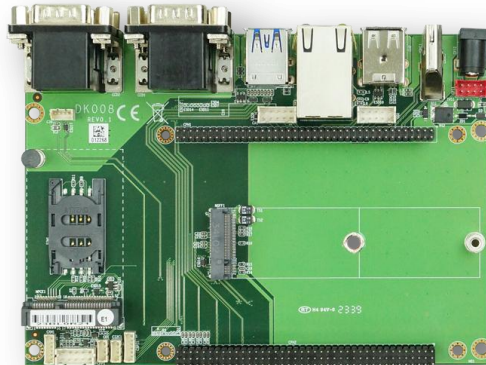
Intel® Elkhart Lake ATOM /Celeron processor

2I640PW - EVT

Pico Express Computer on Module



Intel® Elkhart Lake ATOM® x6413E / J6412 CPU
On Board LPDDR4 4GB or 8GB
Independent display: 1 x HDMI, 1 x LVDS, 1 x VGA
2 x Intel 2.5 GbE LAN, 2 x USB 3.0, 5 x USB 2.0
4 x COM, 1 x Mini PCIe, 1 x M.2
1 x PCIe x2 (Pico-Express)
Touch Screen, HD Audio, 4DI / 4DO
102 X 85 mm



DK008 - EVT

Evaluation Board for 2I640PW

I/O: 1 x HDMI, 2 x RJ45 , 2 x USB 3.0, 2 x USB 2.0
4 x COM, 1 x Mini PCIe, 1 x M.2, 1 x PCIe x1,
4DI / 4DO, Wide Range DC -IN
104 x 146 mm



2024 Q1 Product Development timeline

NVIDIA Jetson Orin Nano/ NX SOM Carrier Board



JETSON
Orin™ NX

JETSON
Orin™ Nano



2NOR01 - EVT

NVIDIA® Jetson Orin™ Nano / Orin™ NX
2 x HDMI 2 x 2.5GbE, 1 x GbE
4 x USB 3.1, 1 x Type C USB 3.1 / 2.0 (OTG), 1 x USB 2.0
Mic-in / Line-out ; AMP 2W
2 x RS232 (Option RS422 / 485), 1 x CANBus
1 x M.2 M key 2 x M.2 B key, 1 x SIM, 4DI / 4DO
4 x MIPI CSI-2 camera, Internal wafer: SPI, I2S, I2C, USB 2.0



CPU Board:

NVIDIA Jetson NX: 8 / 16GB LPDDR5, 70 / 100 TOPs
NVIDIA Jetson Nano: 4 / 8GB LPDDR5, 20 / 40 TOPs
AI Accelerator: NVIDIA® Jetson Orin™ Nano / Orin™ NX



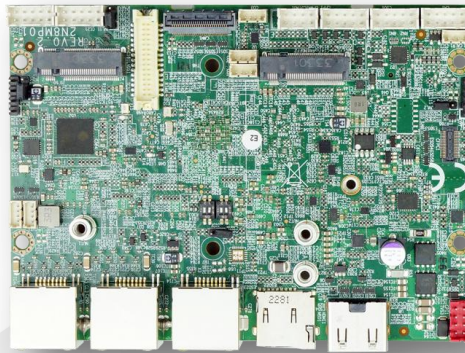
SKY 2 2NOR01



PALM 2NOR01

2024 Q1 Product Development timeline

NXP i.MX8M Plus /ARM Cortex-A53



2N8MP01 - EVT

NXP i.MX8M Plus (Quad core)
ARM Cortex A53 + M7 CPU
LPDDR4, 4GB / 8GB
Independent display: 1 x HDMI, LVDS, 1 x MIPI Display
3 x GbE LAN, 2 x USB 3.0, 3 x USB 2.0
2 x COM, 3 x M.2, 1 x Nano SIM
4DI / 4DO, 1 x MIPI (CSI), 1 x CANBus
115.4 x 84.5 mm



NET 2N8MP01



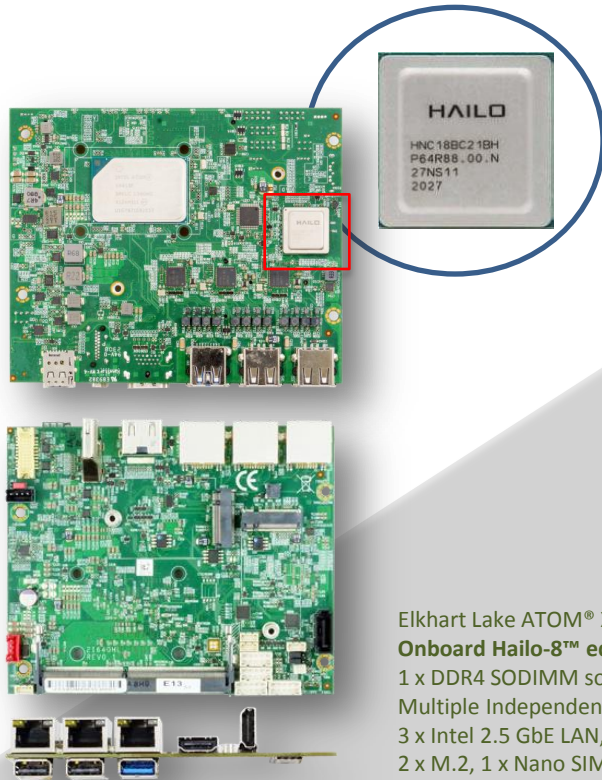
PALM -NEX001 (MP)

NXP i.MX8M Plus (Quad core)
ARM Cortex A53 CPU
LPDDR4, 8GB (NEX-8MP)
32GB eMMC 5.1 (NEX-8MP),
expandable to 256GB
HDMI ; 2 x GbE ; 2 x USB 3.0 / 2.0
1 x Micro SD, 1 x RS232, 1 x RS485
DC input : +5V
71.4W x 71.4D x 29.5H mm

2024 Q1 Product Development timeline



Edge AI System + onboard Hailo-8™ edge AI processor



SKY 2 2I640HL



NET-II 2I640HL

Elkhart Lake ATOM® X6413E CPU
Onboard Hailo-8™ edge AI Processor
1 x DDR4 SODIMM socket, Max. 32GB
Multiple Independent display: 2 x HDMI ,eDP
3 x Intel 2.5 GbE LAN, 1 x USB 3.0, 5 x USB 2.0, 2 x COM
2 x M.2, 1 x Nano SIM, 4 DI / 4DO

2024 Q1 Product Development timeline

Expansion Card and Modules



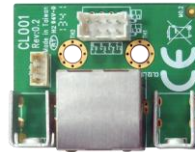
NF226A

M.2 2242 B key to
1 x Intel I226IT 2.5GbE



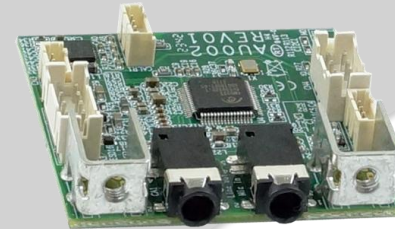
NF212A

M.2 2242 B key to
1 x Intel I210IT GbE



CL001

1 x RJ45 I/O board



AU002

USB to Line-out / Mic -in
With Amp
With Line-in

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