

**Lex** SYSTEM[®]

Embedded Fanless System

Embedded Mainboard & SBC

Embedded Fanless PC

IP65/66/67/69K Panel PC / Box PC

Application Smart AI Camera System
AI & Edge computing
Railway / Intelligent Traffic / Transportation
Vehicle
NVR
Machine Vision / Motion Control
Automation
Industry 4.0
Video Solution
Medical
Digital Signage
Mobile Computers
IoT / Networking
Rugged & Military
ODM



www.lex.com.tw

LEX believes your success will be our success.



As the ideal platforms for a variety of applications, LEX SYSTEM provide multiple options of wide range DC power input, IP66/67 & IP69K rating waterproof, anti-vibration, rechargeable battery and hassle-free module expansion alternatives. With industrial-grade components, rugged thermal design and reliability validations, LEX SYSTEM products are able to meet the demands under various harsh operating environments.



Advantages



INTEGRATED

- Easy Installation without cable
- Multiple platform for efficient development



FLEXIBLE

- Support various expansions
- Easy customized to meet industry requirements



STABLE

- Extreme Temperature & Anti-Shock Ability
- IP66/IP67 & IP69K Water / Dust Proof



COMPACT

- Small form factor fanless system
- Ultra compact and slim solution

5G



Company Overview

Established in 1990, LEX Computech (TPEX: 7562) is a Taiwanese manufacturer and designer of industrial embedded systems and Edge AI/IoT solutions. LEX SYSTEM works closely with premier chip designers to deliver stable, reliable platforms. The products include high-quality computing platforms such as industrial motherboards and systems, rugged Panel PCs, and embedded Edge AI systems. LEX SYSTEM provides OEM/ODM services worldwide.

Combine mechanical designs with software and hardware integration, LEX SYSTEM also provide solution for visual inspection, video analysis, smart traffic, smart factory, factory automation, and intelligent medical application projects that require advanced computing in harsh environments.

Certified



LEX SYSTEM provides OEM/ODM services worldwide.

LEX Product Guide

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11th Gen Intel® Tiger Lake-UP3 CPU	
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8th Gen Intel® Whiskey Lake-U CPU	
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CI371D	24
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Intel® Apollo Lake CPU

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Embedded System

Fanless Ultra mini Box PC for 1.8" SBC

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Embedded System

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Embedded Fanless Panel PC

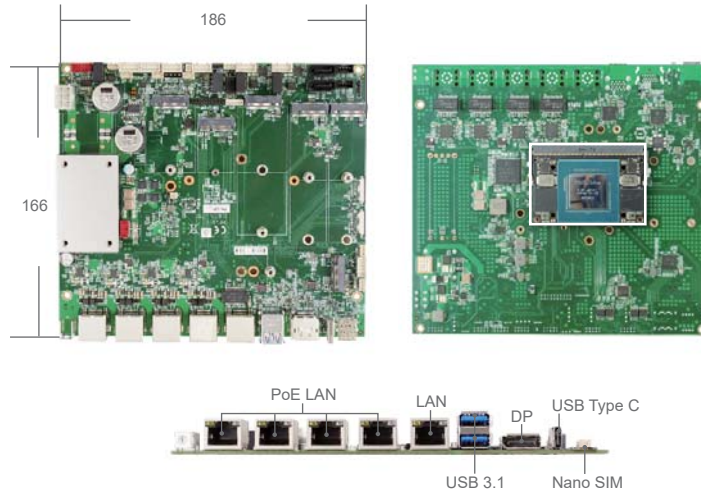
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Jetson Orin™



Model Name	ORIN-TW
Motherboard	NVIDIA Jetson Orin NX / Orin Nano (Super) + 2NOR01
CPU Platform	8-core Arm® Cortex®-A78AE 2.0 GHz 6-core Arm® Cortex®-A78AE 1.5 Ghz
GPU	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
AI Accelerator	NVIDIA Jetson Orin NX: 70 / 100 TOPs NVIDIA Jetson Orin Nano (Super): 20 / 40 TOPs
Memory	Jetson Orin NX: LPDDR5, 8 / 16GB Jetson Orin Nano (Super): LPDDR5, 4 / 8GB
Storage	1 x M.2 M key Type 3042 / 3080 (PCIe x 4), NVMe ; 2 x SATA 2 x M.2 B key Type 2242 / 2280 (SATA-SSD)
Display	1 x DP
Ethernet	5 x GbE (1 + 4 x PoE (I210-IT))
Audio	Support Line-out / Mic-in ; Two channel Class D Audio Amplifier 2W
M.2	1 x M.2 M key Type 3042 / 3080 (PCIe x 4) 1 x M.2 B key Type 3042 / 3052 (PCIe x 1 / USB 2.0 (OEM to USB 3.1)) 1 x M.2 B key Type 3042 / 3052 (USB 3.1 / 2.0) 1 x M.2 E key Type 2230 (PCIe x 1 / USB 2.0 / UART / I2S) 2 x M.2 B key Type 2242 / 2280 (SATA-SSD)
SIM	1 x Nano SIM
USB	1 x USB 3.1 Type C (external) ; 2 x USB 3.1 Type A (external) 1 x USB 2.0 (internal)
Serial IO	2 x ISO RS232 / 422 / 485 ; 1 x ISO CANBus
GPIO	8DI / 8DO
SPI / I ² C	SPI, I ² S, 3 x I ² C
Cameras Interface	2 x MIPI CSI-2 camera
Power Input	ISO Wide Range +9~36V, CPC-Ignition on/off delay control
Operating Temp.	-25°C~70°C (100% CPU Usage, not-underclocking)
Dimension (mm)	186 x 166 mm
Chassis	Box PC: HAWK
Expansion	NF212A M.2 B + M Key 2242 PCIe to GbE LAN NF212B M.2 B + M Key 3042 PCIe to Dual GbE LAN NF226A M.2 B + M Key 2242 PCIe to 2.5G LAN NF226B M.2 B + M Key 3042 PCIe to Dual 2.5G LAN CC007 USB to 4 x RS232 / 485 / 422

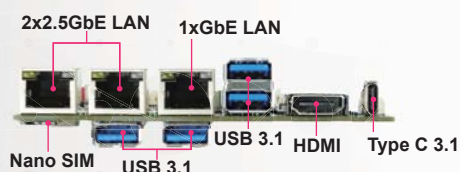
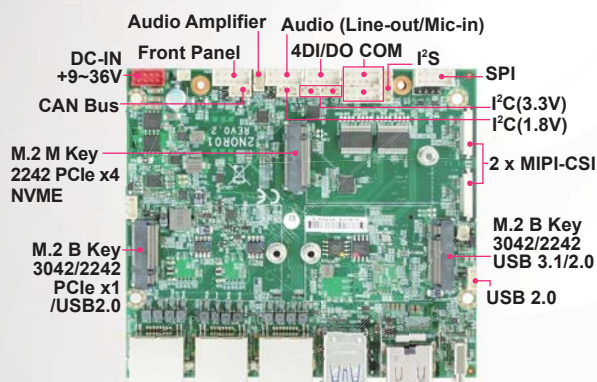


Jetson Orin™



Model Name	HAWK ORIN-TW	HAWK ORIN-TW (M12)
Motherboard	NVIDIA Jetson Orin NX / Orin Nano (Super) + ORIN-TW	NVIDIA Jetson Orin NX / Orin Nano (Super) + ORIN-TW
System Dimension (W x D X H)	220W x 172.6D x 80H mm	220W x 172.6D x 80H mm
Weight (incl. M/B)	3.6 kg	3.6 kg
CPU	8-core Arm® Cortex®-A78AE 2.0 GHz 6-core Arm® Cortex®-A78AE 1.5 GHz	8-core Arm® Cortex®-A78AE 2.0 GHz 6-core Arm® Cortex®-A78AE 1.5 GHz
GPU	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
AI Accelerator	NVIDIA Jetson Orin NX: 70 / 100 TOPs NVIDIA Jetson Orin Nano (Super): 20 / 40 TOPs	NVIDIA Jetson Orin NX: 70 / 100 TOPs NVIDIA Jetson Orin Nano (Super): 20 / 40 TOPs
Memory	Jetson Orin NX: LPDDR5, 8 / 16GB Jetson Orin Nano (Super): LPDDR5, 4 / 8GB	Jetson Orin NX: LPDDR5, 8 / 16GB Jetson Orin Nano (Super): LPDDR5, 4 / 8GB
Storage Space	M.2-SSD ; Mobile Rack x 1 (option)	M.2-SSD ; Mobile Rack x 1 (option)
Display	1 x DP	1 x DP
USB	1 x USB 3.1 Type C ; 2 x USB 3.1 Type A ; 1 x USB 2.0	1 x USB 3.1 Type C ; 2 x USB 3.1 Type A ; 1 x USB 2.0
COM / CANBus	2 x ISO RS232 / 422 / 485 ; 1 x ISO CANBus	2 x ISO RS232 / 422 / 485 ; 1 x ISO CANBus
M.2	1 x M.2 M key Type 3042 / 3080 (PCIe x 4) 1 x M.2 B key Type 3042 / 3052 (PCIe x 1 / USB 2.0 (OEM to USB 3.1) 1 x M.2 B key Type 3042 / 3052 (USB 3.1 / 2.0) 1 x M.2 E key Type 2230 (PCIe x 1 / USB 2.0 / UART / I2S) 2 x M.2 B key Type 2242 / 2280 (SATA-SSD)	1 x M.2 M key Type 3042 / 3080 (PCIe x 4) 1 x M.2 B key Type 3042 / 3052 (PCIe x 1 / USB 2.0 (OEM to USB 3.1) 1 x M.2 B key Type 3042 / 3052 (USB 3.1 / 2.0) 1 x M.2 E key Type 2230 (PCIe x 1 / USB 2.0 / UART / I2S) 2 x M.2 B key Type 2242 / 2280 (SATA-SSD)
SIM Card Holder	1 x Nano SIM	1 x Nano SIM
GPIO	8DI / 8DO (option)	8DI / 8DO (option)
Audio	Mic-in / Line-out	Mic-in / Line-out
Ethernet	5 x GbE (1 + 4 x PoE)	5 x GbE (1 + 4 x PoE)-M12 I/O
Power Input	ISO Wide Range +9~36V CPC-Ignition on/off delay control	ISO Wide Range +9~36V CPC-Ignition on/off delay control
Operating Temp.	-25°C to +60°C (100% CPU Usage, not-underclocking)	-25°C to +60°C (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	M.2 Module: 4G, 5G, PCIe, WiFi, GPS, Bluetooth, NVMe MIPI CSI-2 camera-Option	M.2 Module: 4G, 5G, PCIe, WiFi, GPS, Bluetooth, NVMe MIPI CSI-2 camera-Option

NVIDIA Jetson Orin CPU Board / carrier board



Model Name	NVIDIA Jetson Orin NX / Orin Nano (Super) + 2NOR01
CPU Platform	8-core Arm® Cortex®-A78AE 2.0 GHz 6-core Arm® Cortex®-A78AE 1.5 Ghz
GPU	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
AI Accelerator	NVIDIA Jetson Orin NX: 70 / 100 TOPs NVIDIA Jetson Orin Nano (Super): 20 / 40 TOPs
Memory	Jetson Orin NX: LPDDR5, 8 / 16GB Jetson Orin Nano (Super): LPDDR5, 4 / 8GB
Storage	1 x M.2 M key Type 2242 (PCIe x 4), NVMe
Display	1 x HDMI®
Ethernet	2 x Intel 2.5 GbE I226-IT ; 1 x GbE
Audio	Support Line-out / Mic-in Two channel Class D Audio Amplifier 2W
M.2	1 x M.2 M key Type 2242 (PCIe x 4), NVMe 1 x M.2 B key Type 3042 (PCIe x 1 / USB 2.0) ; 1 x M.2 B key Type 3042 (USB 3.1 / 2.0)
SIM	1 x Nano SIM
USB	4 x USB 3.1 (external) ; 1 x USB 2.0 (internal) 1 x USB 3.1 / 2.0 (Type C, OTG)
Serial IO	2 x RS232 (Option RS422) 1 x CANBus
GPIO	4DI / 4DO
SPI / I²C	SPI, I²S, I²C
Camera interface	2 x MIPI-CSI
Power Input	Wide Range +9~36V
Operating Temp.	-25°C~70°C (100% CPU Usage, not-underclocking)
Dimension (mm)	2.5" Plus (110 x 98 mm)
Chassis	Box PC: SKY 2, ROCK
Expansion	M.2 Module: 4G / 5G, WiFi+BT, GPS, SATA, PCIe NF212A: M.2 B + M Key 2242 PCIe to GbE LAN + PW351 NF212B: M.2 B + M Key 3042 PCIe to Dual GbE LAN + PW352 PW353: 4 port PoE Out (RJ45) (Option) PW354: 4 port PoE Out (M12) (Option) NF226A: M.2 B + M Key 2242 PCIe to 2.5G LAN + PW351 NF226B: M.2 B + M Key 3042 PCIe to Dual 2.5G LAN + PW352 CC007: USB to 4 x RS232 / 485 / 422

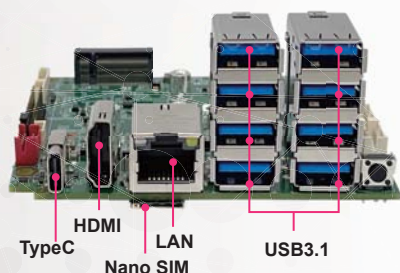


Model Name	SKY 2 - 2NOR01	ROCK - 2NOR01
Motherboard	NVIDIA Jetson Orin NX / Orin Nano (Super) + 2NOR01	NVIDIA Jetson Orin NX / Orin Nano (Super) + 2NOR01
System Dimension (W x D X H)	141W x 111.2D x 71.9H mm	173W x 130D x 85H mm
Weight (incl. M/B)	1.25 kg	2.6 kg
CPU	8-core Arm® Cortex®-A78AE 2.0 GHz 6-core Arm® Cortex®-A78AE 1.5 Ghz	8-core Arm® Cortex®-A78AE 2.0 GHz 6-core Arm® Cortex®-A78AE 1.5 Ghz
GPU	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
AI Accelerator & Memory	Jetson Orin NX: LPDDR5, 8 / 16GB Jetson Orin Nano (Super): LPDDR5, 4 / 8GB	Jetson Orin NX: LPDDR5, 8 / 16GB Jetson Orin Nano (Super): LPDDR5, 4 / 8GB
Storage Space	M.2 - SSD	M.2 - SSD
Display	1 x HDMI®	1 x HDMI®
USB	4 x USB 3.1 (external) ; 1 x USB 3.1 / 2.0 (Type C, OTG)	4 x USB 3.1 (external) ; 1 x USB 3.1 / 2.0 (Type C, OTG)
COM / CANBus	2 x RS232 (Option RS422) ; 1 x CANBus (Option)	2 x RS232 (Option RS422) ; 1 x CANBus (Option)
M.2	1 x M.2 M key Type 2242 (PCIe x 4), NVMe 1 x M.2 B key Type 3042 (PCIe x 1 / USB 2.0) ; 1 x M.2 B key Type 3042 (USB 3.1 / 2.0) ;	1 x M.2 M key Type 2242 (PCIe x 4), NVMe 1 x M.2 B key Type 3042 (PCIe x 1 / USB 2.0) ; 1 x M.2 B key Type 3042 (USB 3.1 / 2.0) ;
SIM Card Holder	1 x Nano SIM	1 x Nano SIM
GPIO	4DI / 4DO (option)	4DI / 4DO (option)
Audio	Mic-in / Line-out	Mic-in / Line-out
Ethernet	2 x Intel 2.5 GbE I226-IT ; 1 x GbE	2 x Intel 2.5 GbE I226IT ; 1 x GbE
Power Input	Wide Range +9~36V UPS Option: Super Cap (2S1P / 4S1P) Li-battery Option (2S1P / 2S3P) Pack Ignition Option: ignition by module Wide Range +9~36V	Wide Range +9~36V UPS Option: Super Cap (2S1P / 4S1P) Li-battery Option (2S1P / 2S3P) Pack Ignition Option: ignition by module Wide Range +9~36V
Operating Temp.	-25°C to +60°C (100% CPU Usage, not-underclocking)	-25°C to +60°C (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	M.2 Module: 4G, 5G, WiFi, GPS, Bluetooth, 1 x CANBus-Option	M.2 Module: 4G, 5G, PCIe, WiFi, GPS, Bluetooth, NVMe DIN Rail Mounting Kit, VESA Mounting Kit, Wall Mounting Kit

Fanless Edge AI Embedded System with NVIDIA® Jetson Orin™ Nano (Super) / NX SoM



Jetson Orin™



PALM



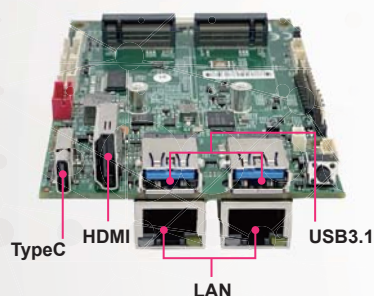
Model Name	NVIDIA Jetson Orin NX / Orin Nano (Super) + 2NOR02
CPU Platform	8-core Arm® Cortex®-A78AE 2.0 GHz 6-core Arm® Cortex®-A78AE 1.5 GHz
GPU	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
AI Accelerator	NVIDIA Jetson Orin NX: 70 / 100 TOPs NVIDIA Jetson Orin Nano(Super): 20 / 40 TOPs
Memory	Jetson Orin NX: LPDDR5, 8 / 16GB Jetson Orin Nano (Super): LPDDR5, 4 / 8GB
Storage	1 x M.2 M key Type 2242 (PCIe x 4), NVMe
Display	1 x HDMI®
Ethernet	1 x GbE
M.2	1 x M.2 M key Type 2242 (PCIe x 4), NVMe 1 x M.2 B key Type 3042 (PCIe x 1 / USB 2.0-OEM to USB 3.1)
SIM	1 x Nano SIM
USB	8 x USB 3.1 (external) ; 1 x USB 3.0 / 2.0 (Type C, OTG)
Serial IO	1 x RS232 (OEM to RS422)
URATSPI/I2C	URAT, 2 x I2C, I2S
Camera interface	N/A
Power Input	Wide Range DC-IN +9-24V
Operating Temp.	TBD (100% CPU Usage, not-underclocking)
Dimension (mm)	85 x 83 mm
Chassis	Box PC: PALM
Expansion	M.2 Module: M.2, PCIe

Motherboard	NVIDIA Jetson Orin NX / Orin Nano (Super) + 2NOR02
Dimension(WxDxH)	90W x 88D x 60.6H mm
Weight(Incl.M/B)	535 g
CPU	8-core Arm® Cortex®-A78AE 2.0 GHz 6-core Arm® Cortex®-A78AE 1.5 GHz
GPU	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
AI Accelerator & Memory	Jetson Orin NX: LPDDR5, 8 / 16GB Jetson Orin Nano (Super): LPDDR5, 4 / 8GB
Storage Space	M.2 - SSD
Display	1 x HDMI®
USB	8 x USB 3.1 (external) ; 1 x USB 3.0 / 2.0 (Type C, OTG)
M.2	1 x M.2 M key Type 2242 (PCIe x 4), NVMe 1 x M.2 B key Type 3042 (PCIe x 2 / USB 2.0-OEM to USB 3.1)
SIM	1 x Nano SIM
Ethernet	1 x GbE
UART / I2C / I2S	UART / 2 x I2C / I2S
Power Input	Wide Range DC-IN +9-24V
Operating Temp.	TBD (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing
Expansion	M.2 Module: PCIe, System Mounting Kit

Fanless Edge AI Embedded System with NVIDIA® Jetson Orin™ Nano (Super) / NX SoM



Jetson Orin™



PALM



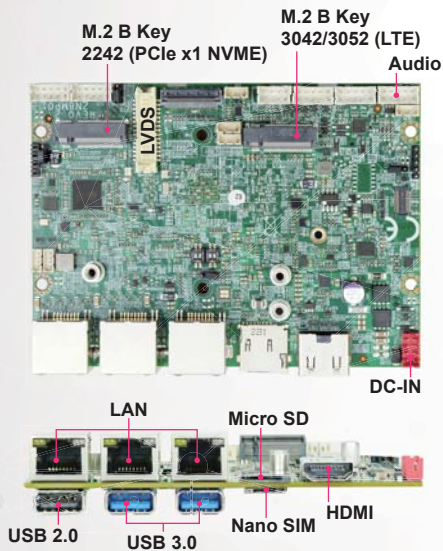
Model Name	NVIDIA Jetson Orin NX / Orin Nano (Super) + 2NOR03
CPU Platform	8-core Arm® Cortex®-A78AE 2.0 GHz 6-core Arm® Cortex®-A78AE 1.5 Ghz
GPU	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
AI Accelerator	NVIDIA Jetson Orin NX: 70 / 100 TOPs NVIDIA Jetson Orin Nano (Super): 20 / 40 TOPs
Memory	Jetson Orin NX: LPDDR5, 8 / 16GB Jetson Orin Nano (Super): LPDDR5, 4 / 8GB
Storage	1 x M.2 M key Type 2242 (PCIe x 4), NVMe
Display	1 x HDMI®
Ethernet	1 x GbE ; 1 x 2.5 GbE
M.2	1 x M.2 M key Type 2242 (PCIe x 4), NVMe 1 x M.2 B key Type 3042 (PCIe x 2)
SIM	N/A
USB	2 x USB 3.1 (external) ; 1 x USB 3.0 / 2.0 (Type C, OTG)
Serial IO	1 x RS232 (OEM to RS422)
URATSPI/I2C	URAT, 2 x I2C
Camera interface	2 x MIPI-CSI
Power Input	Wide Range DC-IN +9-24V
Operating Temp.	TBD (100% CPU Usage, not-underclocking)
Dimension (mm)	70 x 99.8 mm
Chassis	Box PC: PALM
Expansion	M.2 Module: M.2, PCIe

Motherboard	NVIDIA Jetson Orin NX / Orin Nano (Super) + 2NOR03
Dimension(WxDxH)	75W x 104.5D x 47.6H mm
Weight(Incl.M/B)	473 g
CPU	8-core Arm® Cortex®-A78AE 2.0 GHz 6-core Arm® Cortex®-A78AE 1.5 Ghz
GPU	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
AI Accelerator & Memory	Jetson Orin NX: LPDDR5, 8 / 16GB Jetson Orin Nano (Super): LPDDR5, 4 / 8GB
Storge Space	M.2 - SSD
Display	1 x HDMI®
USB	2 x USB 3.1 (external) ; 1 x USB 3.0 / 2.0 (Type C, OTG)
M.2	1 x M.2 M key Type 2242 (PCIe x 4), NVMe 1 x M.2 B key Type 3042 (PCIe x 2)
SIM	N/A
Ethernet	1 x GbE ; 1 x 2.5 GbE
UART / I2C / I2S	UART / 2 x I2C
Power Input	Wide Range DC-IN +9-24V
Operating Temp.	TBD (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing
Expansion	M.2 Module: PCIe, System Mounting Kit

Compact Machine Learning & Edge Gateway Box PC



i.MX8M Plus
ARM CORTEX 4x A53 + M7



Model Name	2N8MP01
CPU Platform	NXP i.MX8M Plus (Quad core) ARM Cortex-A53 + M7
GPU	Vivante GC7000UL
Memory	LPDDR4, 4GB / 8GB
Storage	64GB eMMC 5.1 expandable to 256GB ; 1 x Micro SD, M.2 SSD
Display	1 x HDMI®, 1 x LVDS, 1 x MIPI Display
Ethernet	2 x GbE (RTL8211) + 1 x LAN 7800
M.2	1 x M.2 B Key 3042 / 3052 (USB 3.0 / 2.0) 1 x M.2 E Key 2230 (SDIO) 1 x M.2 B Key 2242 (PCIe x1)
SIM	1 x Nano SIM
USB	2 x USB 3.0 (external) 1 x USB 2.0 (external) ; 2 x USB 2.0 (internal)
Audio	HD Audio with Amplifier
I/O	1 x RS422, 1 x RS485, 1 x CANBus
Camera interface	1 x MIPI (CSI)
GPIO	6 x DI / 6 x DO
Power Input	Wide Range DC IN +9~24V
Operating Temp.	-20°C~70°C (100% CPU Usage, not-underclocking)
Dimension (mm)	115.4 x 84.5 mm
Chassis	Box PC: NET-II

NET-II

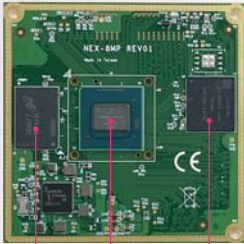


Motherboard	2N8MP01
Dimension (WxDxH)	120W x 90D x 55H mm
Weight (Incl.M/B)	0.5 KG
CPU	NXP i.MX8M Plus (Quad core) ARM Cortex-A53 + M7
GPU	Vivante GC7000UL
Memory	LPDDR4, 4GB / 8GB
Storage Space	64GB eMMC 5.1 expandable to 256GB ; 1 x Micro SD, M.2 SSD
Display	HDMI®
M.2	1 x M.2 B Key 3042 / 3052 (USB 3.0 / 2.0) 1 x M.2 E Key 2230 (SDIO) 1 x M.2 B Key 2242 (PCIe x1)
SIM	1 x Nano SIM
USB	2 x USB 3.0 ; 3 x USB 2.0
I/O	1 x RS422, 1 x RS485, 1 x CANBus (Option)
Ethernet	3 x GbE
Audio	Mic-in / Line-out
Power Input	Wide Range DC IN +9~24V
Operating Temp.	-20°C to +60°C (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing



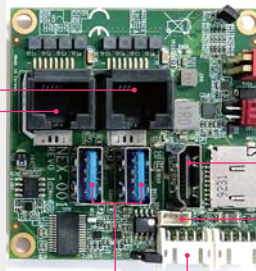
i.MX8M Plus
ARM CORTEX 4x A53 + M7

NEX-8MP

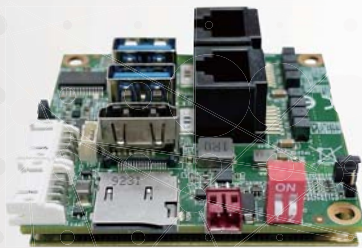


LPDDR4 8GB CPU eMMC 32GB

NEX-001



Software Settings
LAN2
LAN1
DC-IN
HDMI
Micro SD
Uart
USB3.0
CANBus x 2
RS232 x1
RS485 x1



Computer on Module w/c carrier board

Machine Learning & Vision, Edge Gateway

Model Name	NEX-8MP + NEX-001
CPU Platform	NXP i.MX8M Plus (Quad core) ARM Cortex-A53 upto 1.8GHz
GPU	Vivante GC7000UL
Memory	LPDDR4, 8GB / 4GB
Storage	32GB eMMC 5.1 ; expandable to 256GB, 1 x Micro SD
Display	HDMI®
Ethernet	2 x GbE
USB	2 x USB 3.0 / 2.0
I/O	1 x RS232, 1 x RS485 ; 2 x CANBus
Power Input	DC-IN 5V
Operating Temp.	-20°C~70°C (100% CPU Usage, not-underclocking)
Dimension (mm)	NEX-8MP: 58.42 x 58.42 mm NEX-001: 60 x 60 mm
Chassis	Box PC: PALM

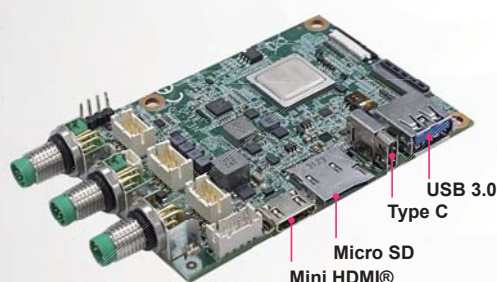
Compact Machine Learning & Edge Gateway Box PC with Computer on Module

Motherboard	NEX-8MP + NEX-001
System Dimension	71.4W x 71.4D x 29.5H mm
Weight (Incl.M/B)	258g
CPU	NXP i.MX8M Plus (Quad core) ARM Cortex-A53 upto 1.8GHz
GPU	Vivante GC7000UL
Memory	LPDDR4, 8GB / 4GB
Storage Space	32GB eMMC 5.1 ; expandable to 256GB, 1 x Micro SD
Display	HDMI®
USB	2 x USB 3.0 / 2.0
Serial IO	1 x RS232, 1 x RS485 ; 2 x CANBus
Ethernet	2 x GbE
Power Input	DC-IN 5V
Operating Temp.	-20°C to +60°C (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing



PALM

Computer on Module / carrier board with NXP i.MX8M Plus CPU & HAILO-8™ AI processor



Model Name	NXP-HAI02
CPU Platform	NXP i.MX8M Plus (Quad core) ARM Cortex-A53 processor up to 1.8 GHz
GPU	Vivante GC7000UL
Memory	LPDDR4 8GB
AI Accelerator	Onboard Hailo-8™ AI processor
Storage	32GB eMMC 5.1 ; option 64 / 128 / 256GB ; 1 x Micro SD
Display	1 x Mini HDMI®
Ethernet	1 x GbE (M8 I/O)
USB	1 x USB 3.0 Type A, 1 x USB 3.0 Type C
Serial IO & DI/O	1 x RS485 + 2DI / 2DO (M8 I/O)
Camera input	2 x MIPI-CSI (Support Basler MIPI Camera & Sony MIPI Camera)
Power Input	Wide Range DC-IN 9-24V (M8 I/O)
Operating Temp.	40°C~65°C (100 % CPU Usage)
Dimension (mm)	60W x 86D x 20.08H mm
Chassis	(NEX-8MP: 58.42 x 58.42 mm) MINI, OEM Chassis

MINI NXP

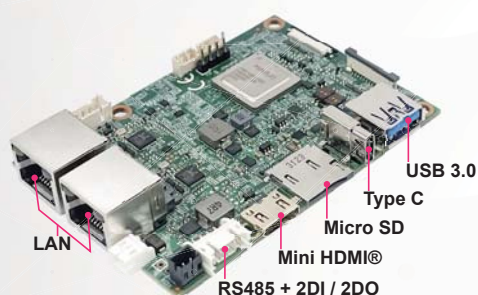


Model Name	MINI NXP-HAI02
Dimension(WxDxH)	66W x 94D x 30.8H mm
Weight(Incl.M/B)	290 g
CPU Platform	NXP i.MX8M Plus (Quad core) ARM Cortex-A53 processor up to 1.8 GHz
GPU	Vivante GC7000UL
Memory	LPDDR4 8GB
AI Accelerator	Onboard Hailo-8™ AI processor
Storage	32GB eMMC 5.1 ; option 64 / 128 / 256GB ; 1 x Micro SD
Display	1 x Mini HDMI®
Ethernet	1 x GbE (M8 I/O)
USB	1 x USB 3.0 Type A, 1 x USB 3.0 Type C
Serial IO & DI/O	1 x RS485 + 2DI / 2DO (M8 I/O)
Camera input (with ODM Chassis)	2 x MIPI-CSI (OEM Option with Camera)
Power Input	Wide Range DC-IN 9-24V (M8 I/O)
Operating Temp.	40°C~65°C (100 % CPU Usage) 5~95% @ 40°C, non-condensing

Computer on Module / carrier board with NXP i.MX8M Plus CPU & HAILO-8™ AI processor



i.MX8M Plus
ARM CORTEX 4x A53 + M7



Model Name	NXP-HAI03
CPU Platform	NXP i.MX8M Plus (Quad core) ARM Cortex-A53 processor up to 1.8 GHz
GPU	Vivante GC7000UL
Memory	LPDDR4 8GB
AI Accelerator	Onboard Hailo-8™ AI processor
Storage	32GB eMMC 5.1 ; option 64 / 128 / 256GB ; 1 x Micro SD
Display	1 x Mini HDMI®
Ethernet	2 x GbE
USB	1 x USB 3.0 Type A, 1 x USB 3.0 Type C
Serial IO & DI/O	1 x RS485 + 2DI / 2DO
Camera input	2 x MIPI-CSI (Support Basler MIPI Camera & Sony MIPI Camera)
Power Input	Wide Range DC-IN 9-24V
Operating Temp.	40°C~65°C (100 % CPU Usage)
Dimension (mm)	60W x 86D x 20.08H mm
Chassis	(NEX-8MP: 58.42 x 58.42 mm) MINI, OEM Chassis

MINI NXP



Model Name	MINI NXP-HAI03
Dimension(WxDxH)	66W x 94D x 30.8H mm
Weight(Incl.M/B)	290 g
CPU Platform	NXP i.MX8M Plus (Quad core) ARM Cortex-A53 processor up to 1.8 GHz
GPU	Vivante GC7000UL
Memory	LPDDR4 8GB
AI Accelerator	Onboard Hailo-8™ AI processor
Storage	32GB eMMC 5.1 ; option 64 / 128 / 256GB ; 1 x Micro SD
Display	1 x Mini HDMI®
Ethernet	2 x GbE
USB	1 x USB 3.0 Type A, 1 x USB 3.0 Type C
Serial IO & DI/O	1 x RS485 + 2DI / 2DO
Camera input (with ODM Chassis)	2 x MIPI-CSI (OEM Option with Camera)
Power Input	Wide Range DC-IN 9-24V
Operating Temp.	40°C~65°C (100 % CPU Usage) 5~95% @ 40°C, non-condensing



Edge AI Computing

SBCs and Systems with Hailo-8™ AI modules

LEX SYSTEM Edge AI Computing solutions features pre-installed compact Hailo-8™ AI accelerator modules, enabling breakthrough performance with compact, low power consumption and cost-effective Edge AI devices across industries which including surveillance and security, intelligent manufacturing, smart city and transportation.

Intel Core™ SBC

2I110AW

+ Hailo-8™ AI modules



2I110D

+ Hailo-8™ AI modules



2I110H

+ Hailo-8™ AI modules



3I110HW/B

+ Hailo-8™ AI modules



3I470HW

+ Hailo-8™ AI modules



3I370HW

+ Hailo-8™ AI modules



Intel ATOM™ SBC

2I640DW

+ Hailo-8™ AI modules



2I640HW

+ Hailo-8™ AI modules



Compact DIN-Rail Embedded Systems

- Dimension: 145W x 111.2D x 71.9H mm
- Compact & Excellent DIN-Rail System
- Robust & Powerful Fanless Embedded solution



Intel Core™ Systems

SKY 2 2I110AW

+ Hailo-8™ AI modules



SKY 2 2I110D

+ Hailo-8™ AI modules



SKY 2 2I640DW

+ Hailo-8™ AI modules



SKY 2 2I640CW

+ Hailo-8™ AI modules





Edge AI Computing with onboard Hailo-8™ AI Processor

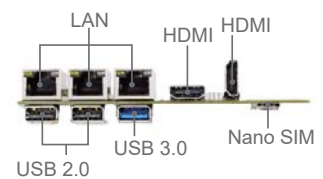


LEX SYSTEM Edge AI Computing solutions features onboard Hailo-8™ AI Processor, enabling breakthrough performance with compact, low power consumption and cost-effective Edge AI devices across industries which including surveillance and security, intelligent manufacturing, smart city and transportation.



Unit: mm

Model Name	NET-III 21640HL	SKY 2 21640HL
CPU Platform	Intel® Elkhart Lake ATOM x6413E 3.0 GHz (Quad Core) Intel® Elkhart Lake Celeron J6412 2.6 GHz (Quad Core)-OEM	
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
AI Accelerator	Onboard Hailo-8™ AI Accelerator	Onboard Hailo-8™ AI Accelerator
Memory	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB
Storage	M.2	M.2, SSD
Display	2 x HDMI® (1 x OEM to DP)	2 x HDMI® (1 x OEM to DP)
TPM	TPM 2.0 (Firmware) ; OEM Optional Hardware TPM 2.0	TPM 2.0 (Firmware) ; OEM Optional Hardware TPM 2.0
Ethernet	3 x Intel 2.5 GbE I226-IT (external)	3 x Intel 2.5 GbE I226-IT (external)
M.2	1 x M.2 B Key Type 2242 (PCIe x2 / USB 2.0) 1 x M.2 B Key Type 2242 / 3042 (SATA / PCIe / USB 2.0-OEM to USB 3.0)	1 x M.2 B Key Type 2242 (PCIe x2 / USB 2.0) 1 x M.2 B Key Type 2242 / 3042 (SATA / PCIe / USB 2.0-OEM to USB 3.0)
SIM Card Holder	1 x Nano SIM	1 x Nano SIM
USB	1 x USB 3.0, 2 x USB 2.0	1 x USB 3.0, 2 x USB 2.0
Serial IO	2 x RS232 / 422 / 485 *COM1, COM2 pin9 5V / 12V (Option)	2 x RS232 / 422 / 485 *COM1, COM2 pin9 5V / 12V (Option)
GPIO / WDT	Option	Option
Power Input	Wide Range DC IN +9~24V	Wide Range DC IN +9~24V
Operating Temp.	-40°C to +60°C (100% CPU Usage, not-underclocking)	-40°C to +60°C (100% CPU Usage, not-underclocking)
Dimension (mm)	135W x 110D x 40H mm	141W x 111.2D x 71.9H mm
Weight	0.75 kg	1.25 kg
Expansion	M.2 Module: 4G / 5G, WiFi + BT, SATA, PCIe By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card	



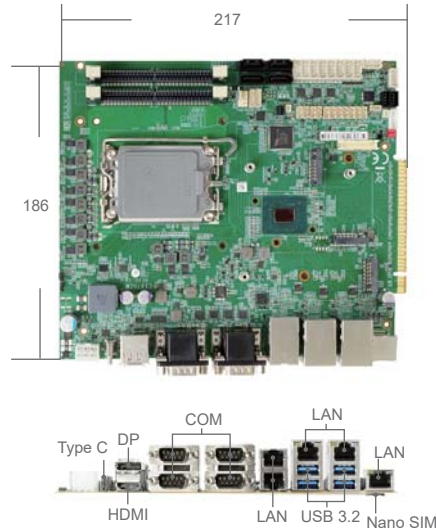
21640HL

Features:

- Intel® Elkhart Lake ATOM® x6413E / J6412 CPU (OEM)
- Onboard Hailo-8™ AI Accelerator
- 1 x DDR4 SODIMM socket, Max. 32GB
- Independent display:
2 x HDMI® (1 x OEM to DP), 1 x eDP
- 3 x Intel 2.5 GbE LAN, 1 x USB 3.0, 5 x USB 2.0
- 2 x COM, 4DI / 4DO, 2 x M.2, 1 x Nano SIM
- TPM 2.0 (Firmware), SMBus



AI • IoT
Automation



Unit: mm

Model Name	CI870CW
CPU Platform	Intel® Core™ Ultra 7/5 Series processors
Chipset	Intel® UHD Graphics
Memory	2 x DDR5 SODIMM, Max 64GB
Storage	4 x SATA, M.2-SSD NVMe
Display	1 x HDMI® ; 1 x DP ; 1 x Type C DP ALT, 1 x LVDS / eDP (eDP for OEM)
TPM	TPM 2.0
Ethernet	5 x Intel 2.5 GbE I226-IT (external)
Audio	HD Audio with Amplifier
PCIe	1 x PCIe x 16 golden finger
SIM Card Holder	1 x Nano SIM
M.2	1 x M.2 M key Type 3080 (PCIe x 4), Support NVMe, (OEM to Type 3042) 1 x M.2 B key Type 3042 (USB 3.2 Gne 1x1 / USB 2.0) (OEM to Type 3052) 1 x M.2 B key Type 3042 (PCIe x2 / USB 2.0)
USB	4 x USB 3.2 Gen 1 (external), 1 x Type C, USB 3.2 (external) 4 x USB 2.0 (internal)
Serial IO	4 x RS232 / 422 / 485 (external) ; 6 x RS232 / 422 / 485 (internal)
SMBus / I2C / I2S	1 x SMBus ; 6 x I2C ; 2 x I2S
GPIO / WDT	8DI / 8DO, WDT
Power Input	Wide Range +9~36V
Operating Temp.	TBD (under specific environmental & CPU power consumption conditions)
Dimension (mm)	186 x 217 mm
Chassis	Box PC: Twister, TINO
Expansion	PCIe: PoE, GbE, USB By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, WiFi 6 + BT, Hailo-8™ AI, SATA



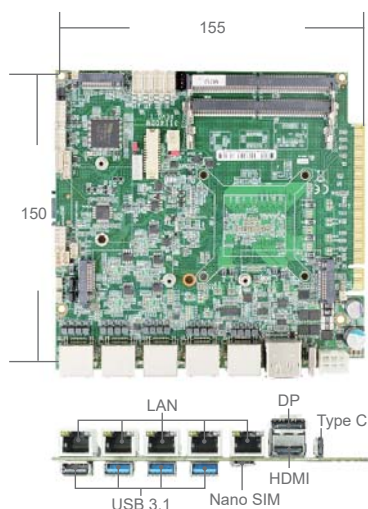
AI • IoT
Machine Vision Video AI



Meteor Lake



Arrow Lake



Unit: mm

Model Name	3I140DW
CPU Platform	15th / 14th Gen Intel® Core™ Ultra 7 / 5 processors
Chipset	Intel® Arc™ graphics ; Intel® UHD Graphics
Memory	2 x DDR5 SODIMM, Max 64GB
Storage	SATA, M.2-SATA, NVMe
Display	1 x HDMI® ; 1 x DP ; 1 x Type C DP ALT, 1 x LVDS / eDP (eDP for OEM)
TPM	TPM 2.0
Ethernet	5 x Intel 2.5 GbE I226-IT (external)
Audio	HD Audio with Amplifier
PCIe	1 x PCIe x 16 golden finger with PCIe x 8, PCIe x 4 signal-LEX definition
SIM Card Holder	1 x Nano SIM
M.2	1 x M.2 M key Type 2280 (PCIe x 4), Support NVMe, (OEM to Type 3042) 1 x M.2 B key Type 3042 (USB 3.2 Gne 1x1 / USB 2.0) (OEM to Type 3052) 1 x M.2 B key Type 3042 (PCIe x2 / USB 2.0)
USB	3 x USB 3.2 Gen 1x1 (external), 1 x Type C USB 3.2 1 x USB 2.0 (external) ; 2 x USB 2.0 (internal)
Serial IO	4 x RS232 / 422 / 485 (internal) ; *COM1~COM4 pin9 5V / 12V (Option)
CANBus	2 x CANBus
GPIO / WDT	4DI / 4DO, WDT
Power Input	Wide Range +9~36V
Operating Temp.	-40°C~70°C (under specific environmental & CPU power consumption conditions)
Dimension (mm)	155 x 150 mm
Chassis	Box PC: HAWK

Expansion

PCIe: PoE, GbE, USB

By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card

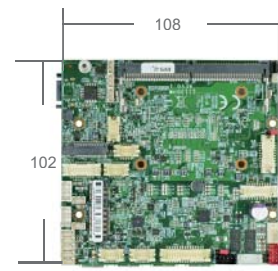
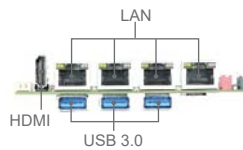
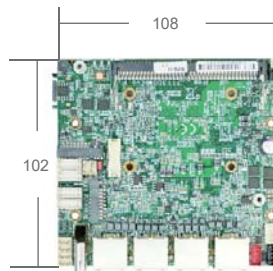
M.2 Module: 4G / 5G, WiFi 6 + BT, Hailo-8™ AI, SATA





AI • IoT • Deep Learning

AI • IoT • Deep Learning



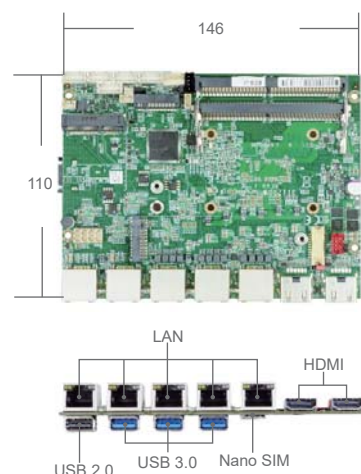
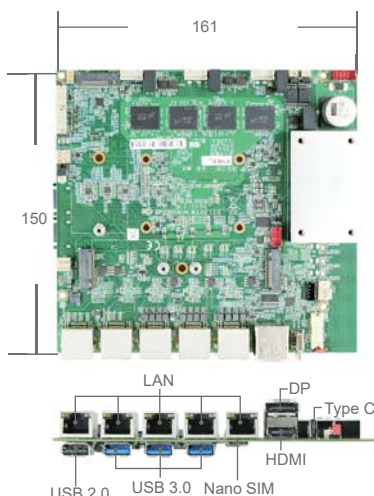
Unit: mm

Model Name	2I130DW	2I130HW
CPU Platform	13th Gen Intel® Raptor Lake-U, i7 / i5 / i3 CPU 12th Gen Intel® Alder Lake-U, i7 / i5 / i3 CPU	13th Gen Intel® Raptor Lake-P / Raptor Lake-U, i7 / i5 / i3 CPU 12th Gen Intel® Alder Lake-P / Alder Lake-U, i7 / i5 / i3 CPU
Chipset	Intel® Raptor Lake-U SoC Intel® Alder Lake-U SoC	Intel® Raptor Lake-P / U SoC Intel® Alder Lake-P / U SoC
Memory	1 x DDR5 SODIMM, Max 32GB	1 x DDR5 SODIMM, Max 32GB
Storage	SATA, M.2-SSD, NVMe	SATA, M.2-SSD, NVMe, Mini PCIe (SATA)
Display	HDMI®, eDP	HDMI®, eDP, Dual Channel, 48 bits LVDS
Touch	N/A	Touch Screen controller
TPM	TPM 2.0	TPM 2.0
Ethernet	4 x Intel 2.5 GbE I226-IT (external)	2 x Intel 2.5 GbE I226-IT (internal)
Audio	N/A	HD Audio with Amplifier
Mini-PCle	N/A	PCIe / SATA / USB 2.0
M.2	1 x M.2 M key Type 2280 (PCIe x4 / mSATA), Support NVMe ; 1 x M.2 B key Type 3042 (PCIe x2 / USB 3.2 / USB 2.0)	1 x M.2 B key Type 2242 (PCIe x2 / USB 2.0), Support NVMe
SIM Card Holder	1 x Nano SIM	N/A
USB	3 x USB 3.2 Gen 1 x 1 (TypeA-external), 4 x USB 2.0 (internal)	4 x USB 3.2 Gen 1 x 1 (TypeA-external), 4 x USB 2.0 (internal)
Serial IO	2 x RS232 / 422 / 485 (internal) ; *COM1, COM2 pin9 5V / 12V (Option)	2 x RS232 / 422 / 485 (internal) ; *COM1, COM2 pin9 5V / 12V (option)
GPIO / WDT	4DI / 4DO, WDT	4DI / 4DO, WDT
Power Input	Wide Range +9~36V	Wide Range +9~36V
Operating Temp.	-40°C~+70°C (under specific environmental & CPU power consumption conditions)	-40°C~+70°C (under specific environmental & CPU power consumption conditions)
Dimension (mm)	108 x 102 mm	108 x 102 mm
Chassis	Box PC: SKY 2 / ROCK	Waterproof System / OEM Chassis
Expansion	By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, WiFi + BT, Hailo-8™ AI, SATA, PCIe	Mini Card: GPS, WI-FI, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video, Hailo-8™ AI By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, WiFi + BT, Hailo-8™ AI, SATA, PCIe



In-vehicle • Railway
• Transportation

AI • IoT • Machine Vision



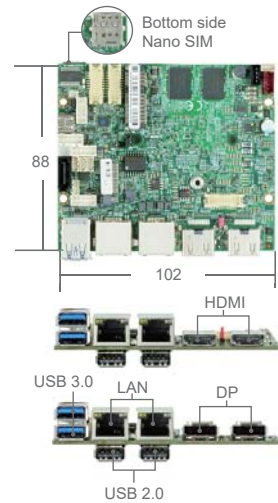
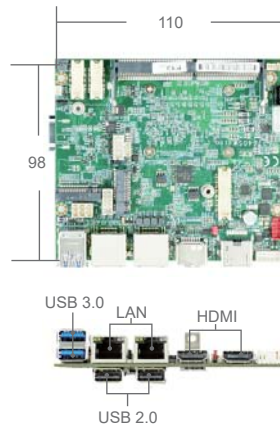
Unit: mm

Model Name	3I130TW	3I130DW
CPU Platform	13th Gen Intel® Raptor Lake-U, i7 / i5 / i3 CPU 12th Gen Intel® Alder Lake-U, i7 / i5 / i3 CPU	13th Gen Intel® Raptor Lake-P / Raptor Lake-U, i7 / i5 / i3 CPU 12th Gen Intel® Alder Lake-P / Alder Lake-U, i7 / i5 / i3 CPU
Chipset	Intel® Raptor Lake-U SoC Intel® Alder Lake-U SoC	Intel® Raptor Lake-P / U SoC Intel® Alder Lake-P / U SoC
Memory	Onboard LPDDR 5, 16GB / 32GB	2 x DDR5 SODIMM, Max 64GB
Storage	NVMe (Optional to M.2), 2 x SATA, M.2-SSD NVMe	SATA, M.2-SATA, NVMe
Display	1 x HDMI®, 1 x DP, 1 x eDP, 1 x Type C DP ALT Mode	2 x HDMI® (OEM DP), eDP
TPM	TPM 2.0	TPM 2.0
Ethernet	5 x Intel 2.5 GbE I226-IT (external)	5 x Intel 2.5 GbE I226-IT (external)
Audio	HD Audio with Amplifier	HD Audio with Amplifier
Mini-PCIe	N/A	PCIe / USB 2.0
M.2	1 x M.2 B key Type 3042 (PCIe x1 / USB 2.0), (Optional to Onboard NVMe) 1 x M.2 M Key Type 3042 / 3080 (PCIe x4) 1 x M.2 B key Type 3042 / 3052 (USB 3.2 Gen 1 x1 / USB 2.0)	1 x M.2 M key Type 2280 (PCIe x4), Support NVMe 1 x M.2 B key Type 3042 / 3052 (mSATA / USB 3.2 Gen 1 x1 / USB 2.0)
SIM Card Holder	1 x Nano SIM	1 x Nano SIM
USB	3 x USB 3.2 Gen 1 x1 (external), 1 x USB 2.0 (external), 2 x USB 2.0 (internal), 1 x Type C	3 x USB 3.2 Gen 1 x1 (external), 1 x USB 2.0 (external), 4 x USB 2.0 (internal)
Serial IO	2 x ISO RS232 / 422 / 485 (internal) ; 2 x ISO CANBus	2 x RS232 / 422 / 485 (internal) ; *COM1, COM2 pin9 5V / 12V (Option)
GPIO / WDT	4DI / 4DO, WDT	4DI / 4DO, WDT
Power Input	ISO Wide Range DC IN +9~36V ; CPC-Ignition on/off control Wide Range DC IN +18~75V (option), 1.5KVDC I/O isolation	Wide Range +9~36V
Operating Temp.	-40°C~+70°C (under specific environmental & CPU power consumption conditions)	-40°C~+70°C (under specific environmental & CPU power consumption conditions)
Dimension (mm)	161 x 150 mm	146 x 110 mm
Chassis	Box PC: HAWK	Box PC: SKY 3, HAWK, TASK (OEM)
Expansion	Mini Card: GPS, Wi-Fi, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video, Hailo-8™ AI By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, WiFi + BT, Hailo-8™ AI, SATA, PCIe	



Automation • Edge AI
Edge Gateway • Motion Control

Automation • Edge AI
Edge Gateway • Motion Control



Unit: mm

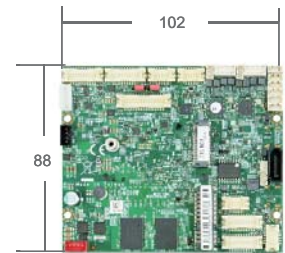
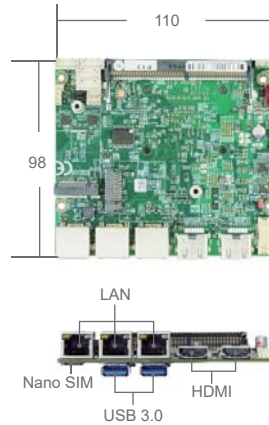
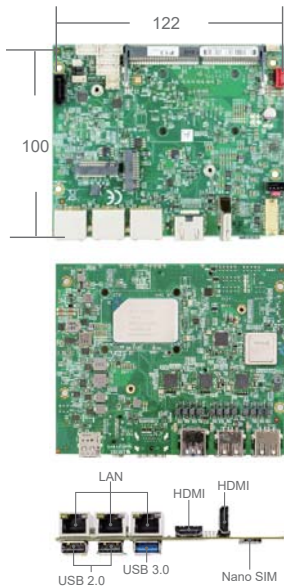
Model Name		2I640SW	2I640CW
CPU Platform		Intel® Elkhart Lake ATOM x6413E 3.0 GHz (Quad Core) Intel® Elkhart Lake Celeron J6412 2.6 GHz (Quad Core)	Intel® Elkhart Lake ATOM x6413E 3.0 GHz (Quad Core) Intel® Elkhart Lake Celeron J6412 2.6 GHz (Quad Core)
Chipset		Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory		1 x DDR4 SODIMM Max 32GB	Onboard LPDDR4 8GB / 4GB
Storage		M.2-SSD, SATA	SATA, M.2
Display		2 x HDMI® (1 can OEM to DP), 1 x LVDS / eDP	2 x HDMI® (OEM Option to DP), eDP
Touch		USB interface Touch Screen controller	USB interface Touch Screen controller
TPM		TPM 2.0 (Firmware) ; OEM Optional Hardware TPM 2.0	TPM (Firmware)
Ethernet		2 x Intel 2.5 GbE I226 (external)	2 x Intel 2.5 GbE I225 (external)
Audio		N/A	HD Audio with Amplifier
Mini-PCIe	Slot 1	N/A	USB 2.0 / PCIe
	Slot 2	N/A	N/A
M.2		1 x M.2 B Key Type 2242 / 3042 (PCIe x2 / USB 3.1 / USB 2.0) 1 x M.2 B Key Type 2242 / 3042 (PCIe / SATA-SSD / USB 2.0)	1 x M.2 B Key Type 3042 (SATA / USB 3.0 / 2.0-optional to PCIe x2)
SIM Card Holder		1 x Nano SIM	1 x Nano SIM
USB		2 x USB 3.1 (external) ; 2 x USB 2.0 (external) ; 3 x USB 2.0 (internal)	2 x USB 3.0 (external) ; 2 x USB 2.0 (external) ; 3 x USB 2.0 (internal)
Serial IO		4 x RS232 / 422 / 485 (internal)	1 x RS232 / 422 / 485 (internal) 3 x RS232 (internal) *COM1-4 pin9 5V / 12V (Option)
GPIO / WDT		4DI / 4DO, WDT	4DI / 4DO, WDT
Power Input		Wide Range +9~36V	Wide Range DC IN +9~24V
Operating Temp.		-20°C~70°C (100% CPU Usage, not-underclocking) ; -40°C by OEM	-20°C~70°C (100% CPU Usage, not-underclocking) ; -40°C by OEM
Dimension (mm)		2.5" Plus (110 x 98 mm)	102 x 88 mm
Chassis		Box PC: SKY 2 / TERA	Box PC: SKY 2 / TERA / NET-III
Expansion		By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, WiFi + BT, SATA, PCIe	PCIe (Type C) module Mini Card: GPS, WI-FI, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video, Hailo-8™ AI By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, WiFi + BT, Hailo-8™ AI, SATA, PCIe



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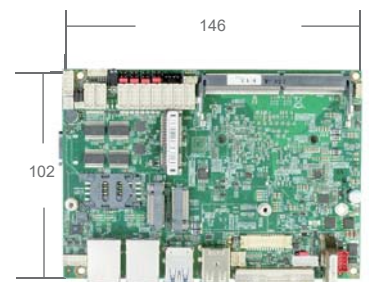
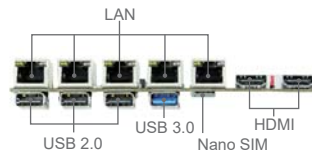
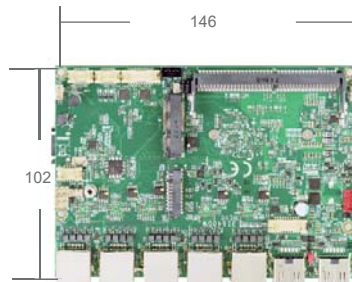
Unit: mm

Model Name		2I640HL	2I640DW	2I640HW
CPU Platform		Intel® Elkhart Lake ATOM x6413E 3.0 GHz (Quad Core) Intel® Elkhart Lake Celeron J6412 2.6 GHz (Quad Core)		
Chipset		Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
AI Accelerator		Onboard Hailo-8™ AI Accelerator	N/A	N/A
Memory		1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB	Onboard LPDDR4 8GB
Storage		2 x M.2 ; 1 x SATA	2 x M.2	SATA, M.2
Display		2 x HDMI® (1 x OEM to DP), eDP	2 x HDMI® (OEM Option to DP), eDP	HDMI®, LVDS, eDP
Touch		N/A	N/A	USB interface Touch Screen controller
TPM		TPM 2.0 (Firmware) ; OEM Optional Hardware TPM 2.0	TPM 2.0 (Firmware) ; OEM Optional Hardware TPM 2.0	TPM 2.0 (Firmware) ; OEM Optional Hardware TPM 2.0
Ethernet		3 x Intel 2.5 GbE I226-IT (external)	3 x Intel 2.5 GbE I225 (external)	2 x Intel 2.5 GbE I225 (internal)
Audio		N/A	N/A	HD Audio with Amplifier
Mini-PCle	Slot 1	N/A	N/A	USB 2.0 / PCIe
	Slot 2	N/A	N/A	N/A
M.2		1 x M.2 B Key Type 2242 (PCIe x2 / USB 2.0), 1 x M.2 B Key Type 2242 / 3042 (SATA / PCIe / USB 2.0-OEM to USB 3.0)	1 x M.2 B Key Type 2242 / 3042 (PCIe x2 / USB 3.0 / USB 2.0), 1 x M.2 B Key Type 2242 (PCIe x2 / USB 2.0 / SATA)	1 x M.2 B Key Type 2242 / 3042 (SATA / USB 3.0 / 2.0)
SIM Card Holder		1 x Nano SIM	1 x Nano SIM	1 x Nano SIM
USB		1 x USB 3.0 (external) ; 2 x USB 2.0 (external) 3 x USB 2.0 (internal)	2 x USB 3.0 (external) ; 3 x USB 2.0 (internal)	1 x USB 3.0 (Type C-Lex define) ; 5 x USB 2.0 (internal)
Serial IO		2 x RS232 / 422 / 485 (internal) *COM1, COM2 pin9 5V / 12V (Option)	2 x RS232 / 422 / 485 (internal) *COM1, COM2 pin9 5V / 12V (Option)	1 x RS232 / 422 / 485 (internal) 3 x RS232 (internal) *COM1-4 pin9 5V / 12V (Option)
GPIO / WDT		4DI / 4DO, WDT	4DI / 4DO, WDT	4DI / 4DO, WDT
Power Input		Wide Range DC IN +9~24V	Wide Range DC IN +9~24V	Wide Range DC IN +9~36V
Operating Temp.		-40°C~70°C (100% CPU Usage, not-underclocking)	-20°C~70°C (100% CPU Usage, not-underclocking) -40°C by OEM	
Dimension (mm)		122 x 100 mm	110 x 98 mm	102 x 88 mm
Chassis		Box PC: SKY 2 / NET-III	Box PC: SKY 2 / TERA / NET-III	Waterproof System / Waterproof PPC
Expansion		Mini Card: GPS, Wi-Fi, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video, Hailo-8™ AI By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, Wi-Fi + BT, Hailo-8™ AI, SATA, PCIe		



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Unit: mm

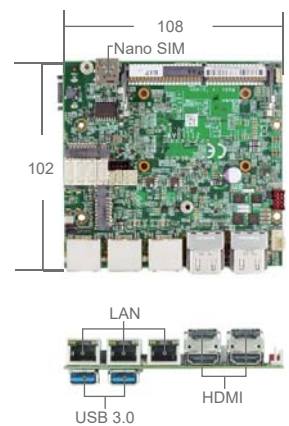
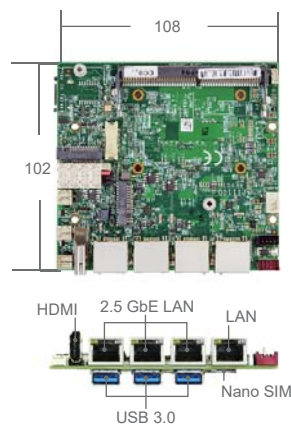
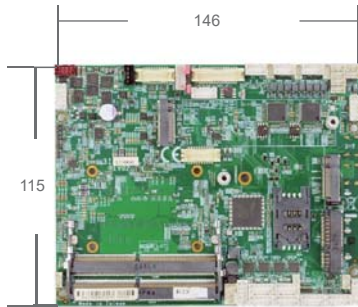
Model Name		3I640DW	3I640A/CW
CPU Platform		Intel® Elkhart Lake ATOM x6413E 3.0 GHz (Quad Core) Intel® Elkhart Lake Celeron J6412 2.6 GHz (Quad Core)	Intel® Elkhart Lake ATOM x6413E 3.0 GHz (Quad Core) Intel® Elkhart Lake Celeron J6412 2.6 GHz (Quad Core)
Chipset		Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory		1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB
Storage		SATA or Mini Card (OEM), M.2	SATA, M.2
Display		2 x HDMI® (OEM Option to DP), eDP	1 x HDMI®, 1 x DVI, LVDS
Touch		N/A	USB interface Touch Screen controller
TPM		TPM 2.0 (Firmware) ; OEM Optional Hardware TPM 2.0	TPM 2.0 (Firmware) ; OEM Optional Hardware TPM 2.0
Ethernet		5 x Intel 2.5 GbE I225 (external)	2 x Intel 2.5 GbE I225 (external)
Audio		HD Audio with Amplifier (Option)	HD Audio with Amplifier (3I640CW)
Mini-PCle	Slot 1	1 x USB 2.0 / PCIe- OEM to mSATA-share w/SATA	USB 2.0 / PCIe
	Slot 2	N/A	N/A
M.2		1 x M.2 B Key Type 3042 (SATA / USB 3.0 / 2.0)	1 x M.2 B Key Type 3042 (SATA / USB 3.0 / 2.0) 1 x M.2 Type 2242 (PCIe x2 / USB 2.0)
SIM Card Holder		1 x Nano SIM	1 x Mini SIM
USB		1 x USB 3.0 (external) ; 3 x USB 2.0 (external) + 4 x USB 2.0 (internal)	2 x USB 3.0 (external) ; 2 x USB 2.0 (external) + 2 x USB 2.0 (internal)
Serial IO		2 x RS232 / 422 / 485 (internal) *COM1, COM2 pin9 5V / 12V (Option)	2 x RS232 / 422 / 485 (internal) 4 x RS232 (internal) *COM1~COM4 pin9 5V / 12V (by Jumper) ; COM5 / COM6 (OEM Option)
GPIO / WDT		4DI / 4DO, WDT	8DI / 8DO, WDT
Power Input		Wide Range DC IN +9~36V	DC IN +12V or Wide Range DC IN +9~36V
Operating Temp.		-20°C~70°C (100% CPU Usage, not-underclocking) ; -40°C by OEM	
Dimension (mm)		146 x 102 mm	146 x 102 mm
Chassis		Box PC: Twitter	Box PC: Twitter Panel PC: Slim / SUPER / STAR / VITA Series PPC
Expansion		PCIe (Type C) module Mini Card: GPS, Wi-Fi, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video, Hailo-8™ AI By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, Wi-Fi + BT, Hailo-8™ AI, SATA, PCIe	



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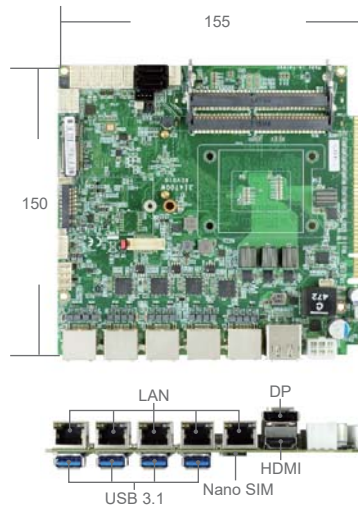


Unit: mm

Model Name		3I110HW / BW	2I110D	2I110AW
CPU Platform		11th Gen Intel®Tiger Lake-UP3, i7 / i5 / i3 / Celeron CPU		
Chipset		Intel® Tiger Lake-UP3 SoC	Intel® Tiger Lake-UP3 SoC	Intel® Tiger Lake-UP3 SoC
Memory		2 x DDR4 SODIMM, Max 64GB	1 x DDR4 SODIMM, Max 32GB	1 x DDR4 SODIMM, Max 32GB
Storage		2 x SATA ; 1 x M.2 B Key (share SATA 2) ; 1 x M.2 M Key (NVMe)	SATA, M.2	SATA, M.2
Display		VGA, HDMI® (or DP), eDP or Dual Channel, 48 bits LVDS	HDMI®, eDP	4 x HDMI®
Touch		USB interface Touch Screen controller	N/A	N/A
TPM		TPM 2.0 (Firmware) ; OEM Optional to Hardware TPM		TPM 2.0 (Firmware)
Ethernet		1 x Intel GbE I219LM (internal), 2 x Intel GbE I225 (internal)	1 x Intel GbE I219LM (external) 3 x Intel 2.5 GbE I225 (external)	3 x Intel 2.5 GbE I225 (external)
Audio		HD Audio with Amplifier	N/A	N/A
Mini-PCle	Slot 1	PCle / USB 2.0	N/A	N/A
	Slot 2	N/A	N/A	N/A
M.2		1 x M.2 B key Type 3042 (PCle x2 / mSATA / USB 3.2 / 2.0) 1 x M.2 M key Type 2280 (PCle x4), Support NVMe	1 x M.2 B key Type 3042 (PCle x2 / USB 3.2 / 2.0), 1 x M.2 M key Type 2242 (PCle x4 / SATA), Support NVMe	1 x M.2 B key Type 3042 (PCle x2 / USB 3.2 / 2.0), 1 x M.2 M key Type 2242 (PCle x4 / SATA), Support NVMe
SIM Card Holder		1 x Mini SIM	1 x Nano SIM	1 x Nano SIM
USB		6 x USB 2.0 (internal)	3 x USB 3.0 (Type A), 6 x USB 2.0 (internal)	2 x USB 3.0 (Type A), 4 x USB 2.0 (internal)
Serial IO		4 x RS232 / 422 / 485 (internal)	2 x RS232 / 422 / 485 (internal)	2 x RS232 / 422 / 485 (internal)
GPIO / WDT		4DI / 4DO, WDT	4DI / 4DO, WDT	4DI / 4DO, WDT
Power Input		Wide Range +9~36V ; Battery Charger function (3I110BW)	DC-IN +12V	Wide Range +9~36V
Operating Temp.		-40°C~70°C (Core i GRE series CPU) -20°C~70°C (Core i G7E / G7 series CPU) (100% CPU Usage, not-underclocking)		
Dimension (mm)		146 x 115 mm	108 x 102 mm	108 x 102 mm
Chassis		Waterproof System / OEM Chassis / ROCK	Box PC: SKY 2 / ROCK	Box PC: SKY 2 / ROCK
Expansion		Mini Card: GPS, Wi-Fi, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video, Hailo-8™ AI, By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, Wi-Fi + BT, Hailo-8™ AI, SATA, PCIe		



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Unit: mm

Model Name		3i470DW
CPU Platform		10th Gen Intel® Comet Lake-S i9 (35W) i7 / i5 / i3 / Celeron CPU
Chipset		Intel® Q470
Memory		2 x DDR4 SODIMM, Max. 64GB
Storage		mSATA, 2 x SATA, M.2
Display		HDMI®, DP, eDP
TPM		TPM 2.0
Ethernet		1 x Intel GbE I219LM (external), 4 x Intel 2.5 GbE (external)
Audio (OEM)		HD Audio
Mini-PCIe	Slot 1	PCIe / mSATA / USB 3.0 / USB 2.0
	Slot 2	N/A
PCIe		1 x PCIe x16
SIM Card Holder		1 x Nano SIM
SATA		2
M.2		1 x M.2 B key Type 3042 / 3052 (mSATA / PCIe x2 / USB 2.0 / USB 3.0) (Support NVME)
USB		4 x USB 3.1 (external) 4 x USB 2.0 (internal)
Serial IO		4 x RS232 / 422 / 485 (internal) (OEM option to 6 x COM w/o DIO)
GPIO / WDT		8DI / 8DO, WDT
Power Input		Wide Range +12~36V
Operating Temp.		-20°C~70°C (100% CPU Usage, not-underclocking)
Dimension (mm)		155 x 150 mm
Chassis		Box PC: APOLLO

Expansion

PCIe Card via riser Card: 2 x USB 3.1, 2 x 10 GbE LAN, 4 x PoE, 4 x GbE
Mini Card: GPS, WI-FI, 2 / 4 x LAN, 4 x COM, CAN Bus, SDI / AHD Video
By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card
M.2 Module: 4G / 5G, SATA, PCIe

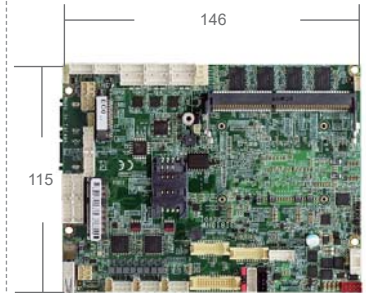
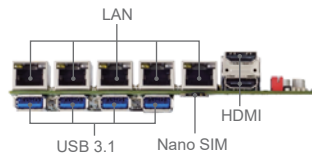
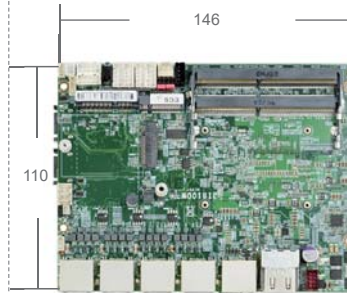
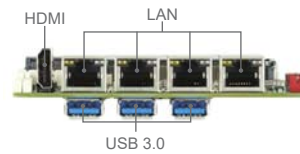
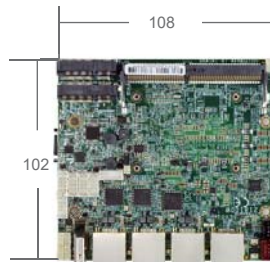




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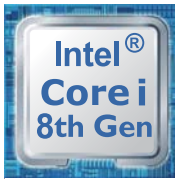


Unit: mm

Model Name		21810D	31810DW	31810HW / BW
CPU Platform		8th Gen Intel® Whiskey Lake-U i7 / i5 / i3 / Celeron CPU	8th Gen Intel® Whiskey Lake-U i7 / i5 / i3 / Celeron CPU	8th Gen Intel® Whiskey Lake-U i7 / i5 / i3 / Celeron CPU
Chipset		Intel® Whiskey Lake-U SoC	Intel® Whiskey Lake-U SoC	Intel® Whiskey Lake-U SoC
Memory		1 x DDR4 SODIMM, Max. 32GB	2 x DDR4 SODIMM, Max. 64GB	Onboard (OEM) DDR4 + 1 x SODIMM Max 32GB
Storage		2 x mSATA, SATA	2 x SATA, 2 x M.2	mSATA (share SATA 2), 1 x SATA, M.2
Display		VGA, HDMI®	2 x HDMI®	VGA, HDMI®, LVDS
Touch		N/A	N/A	USB interface Touch Screen controller
TPM		TPM 2.0 (Option)	TPM 2.0 (Option)	TPM 2.0 (Option)
Ethernet		1 x Intel GbE I219LM (external), 3 x Intel 2.5 GbE (external)	1 x Intel GbE I219LM (external), 4 x Intel 2.5 GbE (external)	1 x Intel GbE I219LM (internal), 2 x Intel 2.5 GbE (internal)
Audio		HD Audio (Option)	HD Audio with Amplifier (Option)	STD HD Audio with Amplifier
Mini-PCle	Slot 1	PCle / mSATA / USB 3.0 / USB 2.0	(PCle / USB), mSATA for OEM	PCle / mSATA / USB 3.0 / USB 2.0
	Slot 2	(Half Size) PCIe / mSATA / USB 3.0 / USB 2.0	N/A	N/A
M.2		N/A	1 x M.2 B Key, Type 2242 (mSATA / USB / PCIe x1); 1 x M.2 B Key, Type 3042 (USB 3.0 / 2.0 / PCIe x1*); *If 2242 M.2 adopts PCIe x2 signal, 3042 M.2 will support USB 3.0 / 2.0 signal only	1 x M.2 B key Type 3042 / 2242 (PCIe x2 / mSATA / USB 3.0 / USB 2.0)
SIM Card Holder		N/A	1 x Nano SIM	1 x SIM
USB		3 x USB 3.0 (external) 4 x USB 2.0 (internal)	4 x USB 3.1 (external) 3 x USB 2.0 (internal)	1 x USB 3.0 (external) 2 x USB 3.0 (internal), 4 x USB2.0 (internal)
Serial IO		2 x RS232 / 422 / 485 (internal)	2 x RS232 / 422 / 485 (internal)	6 x RS232 / 422 / 485 (internal)
GPIO / WDT		4DI / 4DO, WDT	8DI / 8DO, WDT	16DI / 16DO, WDT
PS2 KB / MS		N/A	YES	YES
Power Input		DC IN +12V ; (Option +9~36V by power module)	Wide Range +9~36V	Wide Range +9~36V (31810HW) Battery Charger function, DC +19V or +24V (31810BW)
Operating Temp.		-20°C~70°C (100% CPU Usage, not-underclocking)		
Dimension (mm)		108 x 102 mm	146 x 110 mm	146 x 115 mm
Chassis		Box PC: TERA(L), SKY 2	Box PC: TASK, SKY3	Waterproof System / Waterproof PPC
Expansion		Mini Card: GPS, WI-FI, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, SATA, PCIe		



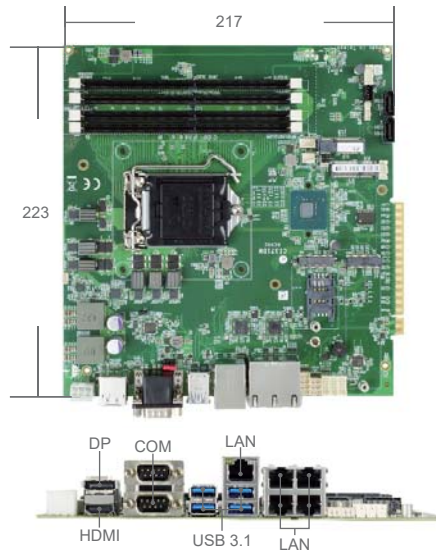
5G Communication



Coffee Lake-S



Coffee Lake-S



Unit: mm

Model Name		CI371D
CPU Platform		8th / 9th Gen Intel® Coffee Lake-S i9 (65W) i7 / i5 / i3 / Celeron CPU
Chipset		Intel® Q370
Memory		4 x DDR4 UDIMM, Max. 128GB
Storage		2 x mSATA, 2 x SATA, 2 x M.2
Display		HDMI®, DP
TPM		TPM 2.0
Ethernet		1 x Intel GbE I219LM (external), 4 x Intel GbE (external)
Audio (OEM)		HD Audio
Mini-PCle	Slot 1	PCle / mSATA / USB
	Slot 2	PCle / mSATA / USB
PCle		1 x PCIe x16
SIM Card Holder		1 (M.2 B Key)
SATA		2
M.2		1 x M.2 M key Type 2280 (PCle x4 + mSATA) 1 x M.2 B key Type 3042 / 3052 / 2280 (PCle x2 / mSATA / USB 3.0 / USB 2.0)
USB		4 x USB 3.1 (external) 7 x USB 2.0 (internal)
Serial IO		2 x RS232 / 422 / 485 (external)
GPIO / WDT		8DI / 8DO, WDT
Power Input		DC IN +24V
Operating Temp.		-20°C~70°C (100% CPU Usage, not-underclocking)
Dimension (mm)		217 x 223 mm
Chassis		Box PC: 1U

Expansion

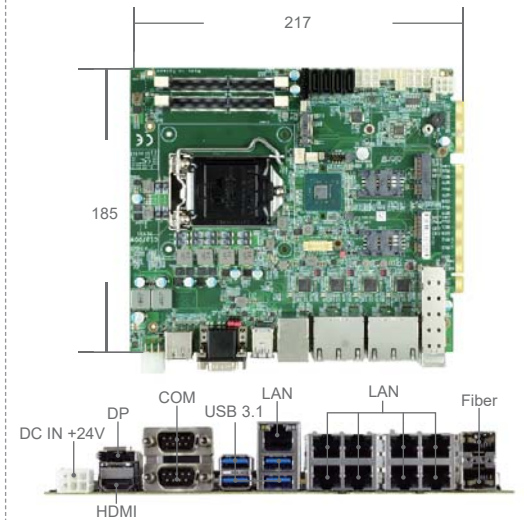
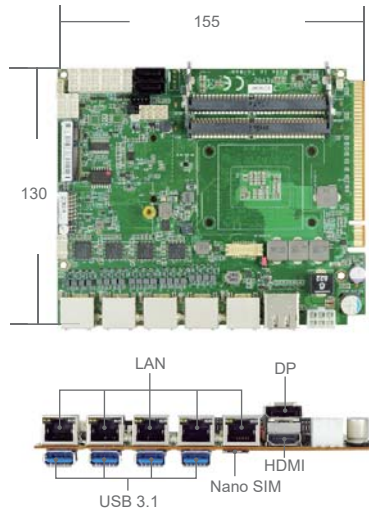
PCle Card via riser Card: 2 x USB 3.1, 2 x 10 GbE LAN, 4 x PoE, 4 x GbE
Mini Card: GPS, WI-FI, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video
By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card
M.2 Module: 4G / 5G, SATA, PCIe





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Video Solution



Unit: mm

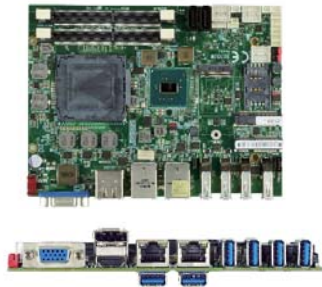
Model Name		3I370DW	CI370D
CPU Platform		8th / 9th Gen Intel® Coffee Lake-S i9 (35W) / i7 / i5 / i3 / Celeron CPU	8th / 9th Gen Intel® Coffee Lake-S i9 / i7 / i5 / i3 / Celeron CPU
Chipset		Intel® Q370	Intel® Q370
Memory		2 x DDR4 SODIMM, Max. 64GB	2 x DDR4 SODIMM, Max. 64GB
Storage		mSATA, 2 x SATA, M.2	2 x mSATA, 4 x SATA, M.2
Display		HDMI®, DP, eDP	HDMI®, DP, eDP
TPM		TPM 2.0	TPM 2.0
Ethernet		1 x Intel GbE I219LM (external), 4 x Intel 2.5 GbE (external)	1 x Intel GbE I219LM (external), 8 x Intel 2.5 GbE (external) 2 x Intel I210IS Fiber 10 / 100 / Giga bit
Audio (OEM)		HD Audio	HD Audio
Mini-PCIe	Slot 1	PCIe / mSATA / USB 3.0 / USB 2.0	PCIe / mSATA / USB
	Slot 2	N/A	PCIe / mSATA / USB
PCIe		1 x PCIe x16	1 x PCIe x16 (PCIe x16 + PCIe x4 Signal)
SIM Card Holder		1 x Nano SIM	2
SATA		2	4
M.2		1 x M.2 B Key, Type 3042 (mSATA / PCIe x2 / USB 3.0 / USB 2.0), (Support NVME)	1 x M.2 B Key, Type 2280 (PCIe / USB / PCIe x2)
USB		4 x USB 3.1 (external) 4 x USB 2.0 (internal)	4 x USB 3.1 (external) 7 x USB 2.0 (internal)
Serial IO		4 x RS232 / 422 / 485 (internal) (OEM option to 6 x COM w/o DIO)	2 x RS232 / 422 / 485 (external)
GPIO / WDT		8 x DI / 8 x DO, WDT	8DI / 8DO, WDT
Power Input		Wide Range +12~36V	DC IN +24V
Operating Temp.		-20°C~70°C (100% CPU Usage, not-underclocking)	
Dimension (mm)		155 x 130 mm	217 x 185 mm
Chassis		Box PC: Apollo-S, Apollo-RS	Box PC: TINO, TWISTER, 1U

Expansion

PCIe Card via riser Card: 2 x USB 3.1, 2 x 10 GbE LAN, 4 x PoE, 4 x GbE
Mini Card: GPS, Wi-Fi, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video
By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card
M.2 Module: 4G / 5G, SATA, PCIe



6th / 7th Gen Intel® Core™ i-3.5" Plus SBC



**USB
VISION**

3I170UW

6th / 7th Gen Intel® Core™ i-3.5" Plus SBC

- 6th / 7th Gen Intel® Skylake-S / Kaby Lake-S, i7 / i5 / i3 / Celeron CPU
- Intel® Q170 chipset
- 2 x DDR4 1866 / 2133 MHz SODIMM, Max. 64GB
- Multiple Independent display: VGA, HDMI® & DP
- 4 x USB 3.0 (4 x Renesas PCIe x 1) for USB vision Camera
- 2 x Intel GbE LAN, 2 x USB 3.0, 6 x USB 2.0, 1 x M.2
- 2 x COM, 8DI / 8DO, 2 x Mini PCIe, 1 x SIM, SMBus, TPM 2.0
- 160 x 122 mm



3I170NX

6th / 7th Gen Intel® Core™ i-3.5" Plus SBC

- 6th / 7th Gen Intel® Skylake-S / Kaby Lake-S, i7 / i5 / i3 / Celeron CPU
- Intel® Q170 chipset
- 2 x DDR4 1866 / 2133 MHz SODIMM, Max. 64GB
- Multiple Independent display: VGA & HDMI®
- 4 x PoE, 1 x Intel GbE LAN, 2 x USB 3.0, 8 x USB 2.0
- 2 x COM, 8DI / 8DO, 2 x Mini PCIe, 1 x SIM, SMBus, TPM 2.0
- 160 x 122 mm

6th / 7th Gen Intel® Core™ i-3.5" Plus SBC



3I170DW

6th / 7th Gen Intel® Core™ i-3.5" Plus SBC

- 6th / 7th Gen Intel® Skylake-S / Kaby Lake-S, i7 / i5 / i3 / Celeron CPU
- Intel® Q170 chipset
- 1 x DDR4 1866 / 2133 MHz SODIMM, Max. 32GB
- Multiple Independent display: VGA & HDMI®
- 5 x Intel GbE LAN, 2 x USB 3.0, 8 x USB 2.0
- 2 x COM, 8DI / 8DO, 2 x Mini PCIe, 1 x SIM, SMBus, TPM 2.0
- 146 x 110 mm

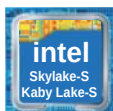


3I170HW

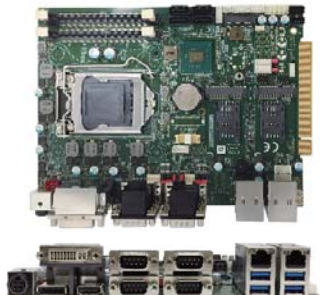
6th / 7th Gen Intel® Core™ i-3.5" Plus SBC

- 6th / 7th Gen Intel® Skylake-S / Kaby Lake-S, i7 / i5 / i3 / Celeron CPU
- Intel® Q170 chipset
- 2 x DDR4 1866 / 2133 MHz SODIMM, Max. 64GB
- Multiple Independent display: VGA, HDMI® & LVDS
- 5 x Intel GbE LAN, 2 x USB 3.0, 7 x USB 2.0
- 2 x COM, 8DI / 8DO, 1 x Mini PCIe, 1 x SIM, 1 x M.2, SMBus, TPM 2.0
- 160 x 122 mm

6th / 7th Gen Intel® Core™ i-Industrial SBC



**PCIe
16x/8x/4x/1x**



CI170A

6th / 7th Gen Intel® Core™ i-Industrial SBC

- 6th / 7th Gen Intel® Skylake-S / Kaby Lake-S, i7 / i5 / i3 / Celeron CPU
- Intel® Q170
- 2 x DDR4 1866 / 2133 MHz SODIMM, Max. 64GB
- Multiple Independent display: DP, DVI & HDMI®
- 2 x Intel GbE LAN, 4 x USB 3.0, 5 x USB 2.0, 8DI / 8DO
- 6 x COM, 2 x Mini PCIe, 1 x PCIe, 2 x SIM, SMBus, TPM 2.0 (Option)
- 207 x 150 mm



CI170C

6th / 7th Gen Intel® Core™ i-Industrial SBC

- 6th / 7th Gen Intel® Skylake-S / Kaby Lake-S, i7 / i5 / i3 / Celeron CPU
- Intel® Q170
- 2 x DDR4 1866 / 2133 MHz SODIMM, Max. 64GB
- Multiple Independent display: DP, DVI, HDMI® & LVDS
- 5 x Intel GbE LAN, 4 x USB 3.0, 5 x USB 2.0, 8DI / 8DO
- 10 x COM, 2 x Mini PCIe, 1 x PCIe, 2 x SIM, SMBus, TPM 2.0
- 207 x 150 mm

6th / 7th Gen Intel® Core™ i-2.5" Plus SBC



2i612CW

6th / 7th Gen Intel® Core™ i-2.5" Plus SBC

- 6th / 7th Gen Intel® Skylake-U / Kaby Lake-U, i7 / i5 / i3 / Celeron CPU
- 1 x DDR4 SODIMM socket, Max up to 32GB
- Multiple Independent display: 2 x HDMI® (OEM to DP), eDP
- 2 x Intel GbE LAN, 4 x USB 3.0, 3 x USB 2.0, 2 x COM
- 2 x Mini PCIe, 4DI / 4DO, SMBus, TPM 2.0 (Optional)
- 110 x 92 mm



2i610DW

6th / 7th Gen Intel® Core™ i-2.5" Plus SBC

- 6th / 7th Gen Intel® Skylake-U / Kaby Lake-U, i7 / i5 / i3 / Celeron CPU
- 1 x DDR4 SODIMM socket, Max. 32GB
- Independent display: VGA
- 3 x Intel GbE LAN, 3 x USB 3.0, 3 x USB 2.0
- 2 x COM, 4DI / 4DO, 2 x Mini PCIe, SMBus
- 102 x 88 mm

6th / 7th Gen Intel® Core™ i-2.5" Plus SBC



2i610HW

6th / 7th Gen Intel® Core™ i-2.5" Plus SBC

- 6th / 7th Gen Intel® Skylake-U / Kaby Lake-U, i7 / i5 / i3 / Celeron CPU
- 1 x DDR4 SODIMM socket, Max. 32GB
- Multiple Independent display: VGA, HDMI® & LVDS
- 2 x Intel GbE LAN, 2 x USB 3.0, 4 x USB 2.0, 1 x Micro USB 3.0 (OEM)
- 2 x COM, 4DI / 4DO, Touch Screen, 2 x Mini PCIe, SMBus
- 102 x 88 mm

6th / 7th Gen Intel® Core™ i-3.5" SBC



3i610NM

6th / 7th Gen Intel® Core™ i-3.5" Plus SBC

- 6th / 7th Gen Intel® Skylake / Kaby Lake U, i7 / i5 / i3 / Celeron CPU
- Onboard DDR4 (OEM), expand extra 32GB (max) via SODIMM
- Multiple Independent display: VGA & HDMI®
- 4 x PoE, 1 x Intel GbE LAN, 2 x USB 3.0, 5 x USB 2.0
- 2 x COM, 16DI / 16DO, 2 x Mini PCIe, 2 x SIM, 1 x NVME M.2
- Wide Range 9~48V DC Input, Ignition delay on/off Control, SMBus, TPM 2.0 (Optional)
- 146 x 130 mm

6th / 7th Gen Intel® Core™ i-3.5" SBC



3i610NX

6th / 7th Gen Intel® Core™ i-3.5" SBC

- 6th / 7th Gen Intel® Skylake-U / Kaby Lake-U, i7 / i5 / i3 / Celeron CPU
- 2 x DDR4 SODIMM socket, Max. 64GB
- Multiple Independent display: VGA & HDMI®
- 4 x PoE, 1 x Intel GbE LAN, 2 x USB 3.0, 6 x USB 2.0
- 2 x COM, 16DI / 16DO, 2 x Mini PCIe, SMBus, TPM 2.0 (Optional)
- 146 x 102 mm



3i610DW

6th / 7th Gen Intel® Core™ i-3.5" SBC

- 6th / 7th Gen Intel® Skylake-U / Kaby Lake-U, i7 / i5 / i3 / Celeron CPU
- 2 x DDR4 SODIMM socket, Max. 64GB
- Multiple Independent display: 2 x HDMI® & eDP
- 5 x Intel GbE LAN, 4 x USB 3.0, 3 x USB 2.0, 4DI / 4DO
- 2 x COM, 2 x Mini PCIe, 1 x Nano SIM, LEX eIO, SMBus, TPM 2.0 (Optional)
- 146 x 102 mm

6th / 7th Gen Intel® Core™ i-3.5" SBC



3I610HW/BW

6th / 7th Gen Intel® Core™ i-3.5" SBC

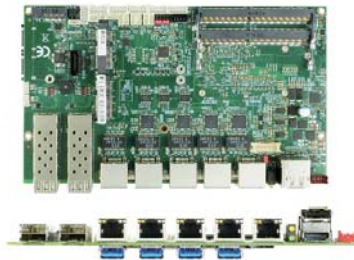
- 6th / 7th Gen Intel® Skylake-U / Kaby Lake-U, i7 / i5 / i3 / Celeron CPU
- 2 x DDR4 SODIMM socket, Max. 64GB
- Multiple Independent display: VGA, HDMI® & LVDS
- 3 x Intel GbE LAN, 2 x USB 3.0, 4 x USB 2.0
- 6 x COM, 16DI / 16DO, 2 x Mini PCIe, 1 x SIM, Battery Charger Function, SMBus, TPM 2.0 (Optional)
- 146 x 102 mm

3I610CW

6th / 7th Gen Intel® Core™ i-3.5" SBC

- 6th / 7th Gen Intel® Skylake-U / Kaby Lake-U, i7 / i5 / i3 / Celeron CPU
- 1 x DDR4 SODIMM socket, Max. 32GB
- Multiple Independent display: VGA, DVI & LVDS
- 2 x Intel GbE LAN, 4 x USB 3.0, 3 x USB 2.0
- 6 x COM, 16DI / 16DO, 2 x Mini PCIe, 1 x SIM, SMBus, TPM 2.0 (Optional)
- 146 x 102 mm

6th / 7th Gen Intel® Core™ i-3.5" Plus SBC



3I612DW

6th / 7th Gen Intel® Core™ i-3.5" Plus SBC

- 6th / 7th Gen Intel® Skylake-U / Kaby Lake-U, i7 / i5 / i3 / Celeron CPU
- 2 x DDR4 SODIMM socket, Max. 64GB
- Multiple Independent display: DP, HDMI® & eDP
- 5 x Intel GbE LAN, 2 x Fiber, 4 x USB 3.0, 4 x USB 2.0
- 2 x COM, 4DI / 4DO, 1 x M.2, 2 x Mini PCIe, 1 x Nano SIM, SMBus, TPM 2.0 (Optional)
- 190 x 112 mm

Intel® Bay Trail Atom™ -1.8" SBC



1I386H

Intel® Bay Trail Atom™ -1.8" SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Multiple Independent display: VGA & eDP
- 1 x Intel GbE LAN, 1 x USB 3.0, 2 x USB 2.0
- 1 x COM, 4DI / 4DO, 1 x Mini PCIe, SMBus
- 1 x M.2, Touch Screen
- 90 x 56 mm

1I385A

Intel® Bay Trail Atom™ -1.8" SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Multiple Independent display: VGA
- 1 x Intel GbE LAN, 1 x USB 3.0, 2 x USB 2.0
- 2 x COM, 4DI / 4DO, 1 x Mini PCIe, SMBus
- 84 x 55 mm

Intel® Bay Trail Atom™-2.5" Plus SBC



2I385BW

Intel® Bay Trail Atom™-2.5" Plus SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Independent display: VGA, mini HDMI® (Option) & LVDS
- 1 x Intel GbE LAN, 1 x USB 3.0, 2 x USB 2.0
- 1 x COM, 4DI / 4DO, 1 x Mini PCIe, SMBus
- 1 x M.2, 1 x Micro SD, 1 x Micro SIM
- Battery Charger Function
- 102 x 83 mm

Intel® Bay Trail Atom™-2.5" SBC



2I385HW

Intel® Bay Trail Atom™-2.5" SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Multiple Independent display: VGA, eDP & LVDS
- 2 x Intel GbE LAN, 1 x USB 3.0, 4 x USB 2.0
- 4 x COM, 4DI / 4DO, 2 x Mini PCIe, SMBus
- 102 x 73 mm

Intel® Bay Trail Atom™-2.5" Plus SBC



2I382DW

Intel® Bay Trail Atom™-2.5" Plus SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Independent display: VGA
- 3 x Intel GbE LAN, 1 x USB 3.0, 3 x USB 2.0
- 2 x COM, 1 x Mini PCIe, 1 x M.2, 1 x Nano SIM (option), SMBus
- 4DI / 4DO
- 102.35 x 81.25 mm



2I380NX

Intel® Bay Trail Atom™-2.5" Plus SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Independent display: VGA
- 2 x PoE, 1 x Intel GbE LAN, 1 x USB 3.0, 3 x USB 2.0
- 2 x COM, 4DI / 4DO, 2 x Mini PCIe, 1 x Micro SIM, SMBus
- 102 x 83 mm

Intel® Bay Trail Atom™-2.5" Plus SBC



2I380D

Intel® Bay Trail Atom™-2.5" Plus SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Independent display: VGA
- 3 x Intel GbE LAN, 1 x USB 3.0, 3 x USB 2.0
- 2 x COM, 1 x Mini PCIe, 1 x M.2, SMBus
- 90.8 x 76.25 mm



2I385D

Intel® Bay Trail Atom™-2.5" Plus SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Independent display: VGA
- 3 x Intel GbE LAN, 1 x USB 2.0, 1 x mini USB 2.0
- 2 x RS485 (Optional to LAN 1 & LAN 2)
- 90.8 x 75.95 mm

Intel® Bay Trail Atom™-2.5" SBC



21385A

Intel® Bay Trail Atom™-2.5" SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Independent display: VGA
- 2 x Intel GbE LAN, 4 x USB 2.0
- 4 x COM, 2 x Mini PCIe, SMBus
- 102 x 73 mm

21385CW

Intel® Bay Trail Atom™-2.5" SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Multiple Independent display: VGA & LVDS
- 2 x Intel GbE LAN, 4 x USB 2.0, Touch Screen
- 4 x COM, 4DI / 4DO, 2 x Mini PCIe, SMBus
- 102 x 73 mm

Intel® Bay Trail Atom™-2.5" SBC



21385EW

Intel® Bay Trail Atom™-2.5" SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Independent display: VGA
- 2 x Intel GbE LAN, 4 x USB 2.0
- 4 x COM, 4DI / 4DO, 2 x Mini PCIe, SMBus, I2C
- LEX eIO expansion
- 102 x 73 mm

21386EW

Intel® Bay Trail Atom™-2.5" Plus SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- 1 x DDR3L 1066 / 1333 MHz SODIMM, Max. 8GB
- Independent display: VGA
- 2 x Intel GbE LAN, 1 x USB 3.0, 3 x USB 2.0
- 4 x COM, 4DI / 4DO, 2 x Mini PCIe, SMBus
- LEX eIO expansion
- 102 x 83 mm

Intel® Bay Trail Atom™-2.5" SBC



21385S(W)

Intel® Bay Trail Atom™-2.5" SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Multiple Independent display: VGA, HDMI, mini HDMI®
- 2 x Intel GbE LAN, 1 x USB 3.0, 1 x USB 2.0, 1 x Micro USB 2.0
- 2 x Mini PCIe, SMBus
- 102 x 73 mm

21380A

Intel® Bay Trail Atom™-2.5" SBC

- Intel® Bay Trail Atom™ E3825 / E3845, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Multiple Independent display: VGA & HDMI®
- 1 x Intel GbE LAN, 1 x USB 3.0, 4 x USB 2.0, 1 x COM
- 2 x Mini PCIe, SMBus
- 102 x 73 mm

Intel® Bay Trail Atom™-3.5" SBC



31385AW

Intel® Bay Trail Atom™-3.5" SBC

- Intel® Bay Trail Atom™ E3845, Celeron® J1900 CPU
- 1 x DDR3L SODIMM, Max. 8GB
- Multiple Independent display: VGA & DVI
- 2 x Intel GbE LAN, 4 x USB 3.0, 1 x USB 2.0
- 6 x COM, 8DI / 8DO, 2 x Mini PCIe, 1 x SIM, SMBus
- 146 x 102 mm

31385CW

Intel® Bay Trail Atom™-3.5" SBC

- Intel® Bay Trail Atom™ E3845, Celeron® J1900 CPU
- 1 x DDR3L SODIMM, Max. 8GB
- Multiple Independent display: VGA, DVI, & LVDS
- 2 x Intel GbE LAN, 4 x USB 3.0, Touch Screen
- 6 x COM, 8DI / 8DO, 2 x Mini PCIe, 1 x SIM
- 146 x 102 mm

Intel® Bay Trail Atom™-3.5" SBC



31380NX

Intel® Bay Trail Atom™-3.5" SBC

- Intel® Bay Trail Atom™ E3845 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- Multiple Independent display: VGA, HDMI® & LVDS (Optional)
- 4 x PoE, 1 x USB 3.0, 4 x USB 2.0, 4 x COM, 1 x Micro SD
- 8DI / 8DO, 2 x Mini PCIe, 1 x SIM, SMBus
- 146 x 102 mm

31380D

Intel® Bay Trail Atom™-3.5" SBC

- Intel® Bay Trail Atom™ E3815, Celeron® J1900 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB (31380D-I12)
- 1 x DDR3L SODIMM, Max. 8GB (31380D-D90)
- Multiple Independent display: VGA (Optional to COM) & HDMI®
- 4 x Intel GbE LAN, 1 x USB 3.0, 4 x USB 2.0
- 2 x COM, 2 x Mini PCIe, 1 x SIM, SMBus
- 146 x 102 mm

Intel® Bay Trail Atom™-3.5" SBC



31380A / 31380CW

Intel® Bay Trail Atom™-3.5" SBC

- Intel® Bay Trail Atom™ E3825 / E3845 CPU
- On Board DDR3L 1066 / 1333 MHz 2GB / 4GB
- 1 x DDR3L SODIMM, Max. 8GB (OEM)
- Multiple Independent display: VGA, HDMI® & LVDS
- 2 x Intel GbE LAN, 1 x USB 3.0, 3 x USB 2.0, Touch Screen
- 6 x COM, 8DI / 8DO, 2 x Mini PCIe, 1 x SIM, SMBus
- 146 x 102 mm

21390CW

Intel® Apollo Lake Atom™-2.5" SBC

- Intel® Apollo Lake E3950 / N4200 / N3350 CPU
- On Board DDR3L 1600 MHz 2GB / 4GB
- Multiple Independent display: DVI, HDMI® & eDP
- 2 x Intel GbE LAN, 2 x USB 3.0, 3 x USB 2.0
- 2 x COM, 4DI / 4DO, 2 x Mini PCIe, SMBus
- LEX eIO expansion
- 102 x 73 mm

Intel® Apollo Lake Atom™-2.5" Plus SBC



2I392CW

Intel® Apollo Lake Atom™-2.5" Plus SBC

- Intel® Apollo Lake E3950 / N4200 / N3350 CPU
- 1 x DDR3L 1600 MHz SODIMM, Max. 8GB
- Multiple Independent display: 2 x HDMI® (OEM to DP) & LVDS
- 2 x Intel GbE LAN, 4 x USB 3.0, 2 x USB 2.0
- 2 x COM, 4DI / 4DO, 2 x Mini PCIe, SMBus
- LEX eIO expansion
- TPM (Optional)
- 102 x 83 mm

Intel® Apollo Lake Atom™-3.5" SBC



3I393NX

Intel® Apollo Lake Atom™-3.5" SBC

- Intel® Apollo Lake E3950 / N4200 / N3350 CPU
- 1 x DDR3L SODIMM socket, Max. 8GB
- Multiple Independent display: VGA / DP (share same signal), HDMI® & eDP
- 4 x PoE LAN, 1 x Intel GbE, 2 x USB 3.0, 4 x USB 2.0
- 2 x COM, 8DI / 8DO, 2 x Mini PCIe, SMBus
- TPM 2.0 (Optional)
- 146 x 102 mm

Intel® Apollo Lake Atom™-3.5" SBC



3I390NX

Intel® Apollo Lake Atom™-3.5" SBC

- Intel® Apollo Lake E3950 / N4200 / N3350 CPU
- On Board DDR3L 1600 MHz 2GB / 4GB
- Multiple Independent display: VGA / DP (share same signal), HDMI® & eDP
- 4 x PoE LAN, 1 x Intel GbE, 2 x USB 3.0, 4 x USB 2.0
- 2 x COM, 8DI / 8DO, 2 x Mini PCIe, SMBus
- TPM 2.0 (Optional)
- 146 x 102 mm



3I390AW

Intel® Apollo Lake Atom™-3.5" SBC

- Intel® Apollo Lake E3950 / N4200 / N3350 CPU
- 1 x DDR3L SODIMM socket, Max. 8GB
- Multiple Independent display: VGA & DVI
- 2 x Intel GbE LAN, 4 x USB 3.0, 2 x USB 2.0
- 6 x COM, 8DI / 8DO, 2 x Mini PCIe, 1 x SIM, SMBus
- TPM 2.0 (Optional)
- 146 x 102 mm

AMD® Ryzen™-3.5" Plus SBC



3A100DW-V

AMD® Ryzen™-3.5" Plus SBC

- AMD® Ryzen™ Embedded V1807B / V1404I SoC CPU
- 2 x DDR4 SODIMM socket, Max. 32GB
- Multiple Independent display: 2 x HDMI®, 2 x DP
- 3 x Intel GbE, 2 x USB 3.1, 5 x USB 2.0, 2 x COM
- 8DI / 8DO, 1 x Mini PCIe, 2 x M.2, 1 x PCIe, 2 x SIM, SMBus
- TPM 2.0 (Optional)
- 155x 130 mm



3A100DW-R

AMD® Ryzen™-3.5" Plus SBC

- AMD® Ryzen™ Embedded R1505G SoC CPU
- 2 x DDR4 SODIMM socket, Max. 32GB
- Multiple Independent display: 2 x HDMI®, 1 x DP
- 3 x Intel GbE, 2 x USB 3.1, 5 x USB 2.0, 2 x COM
- 8DI / 8DO, 1 x Mini PCIe, 1 x M.2, 1 x PCIe, 1 x SIM, SMBus
- 1 x Nano SIM, TPM 2.0 (Optional)
- 155x 130 mm

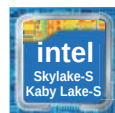
6th / 7th Gen Intel® Core™ i-CPU Card



PM610DW

6th / 7th Gen Intel® Core™ i-CPU Card

- 6th / 7th Gen Intel® Skylake / Kaby Lake U, i7 / i5 / i3 / Celeron CPU
- 2 x DDR4 SODIMM socket, Max. 64GB
- Multiple Independent display: VGA & HDMI®
- 3 x Intel GbE LAN, 4 x USB 3.0, 3 x USB 2.0, 8DI / 8DO
- 2 x COM, 2 x Mini PCIe, 1 x SIM, 1 x PCIe, SMBus
- TPM 2.0 (Optional)
- 156 x 125 mm



PM170DW

6th / 7th Gen Intel® Core™ i-CPU Card

- 6th / 7th Gen Intel® Skylake-S / Kaby Lake-S, i7 / i5 / i3 / Celeron CPU
- Intel® Q170 chipset
- 2 x DDR4 1866 / 2133 MHz SODIMM, Max. 64GB
- Multiple Independent display: VGA & HDMI®
- 5 x Intel GbE LAN, 4 x USB 3.0, 6 x USB 2.0, 16DI / 16DO
- 4 x COM, 2 x Mini PCIe, 1 x PCIe, 2 x SIM, 1 x M.2, SMBus
- TPM 2.0
- 220 x 125 mm

Intel® Apollo Lake Atom™-CPU Card



PM390CW

Intel® Apollo Lake Atom™-CPU Card

- Intel® Apollo Lake E3950 / N4200 / N3350 CPU
- 1 x DDR3L SODIMM socket, Max. 8GB
- Multiple Independent display: VGA, HDMI® & eDP
- 2 x Intel GbE, 2 x USB 3.0, 3 x USB 2.0, 5 x COM
- 8DI / 8DO, 2 x Mini PCIe, 1 x M.2, 1 x PCIe, SMBus
- TPM 2.0 (Optional)
- 156 x 125 mm

6th / 7th Gen Intel® Core™ i-LEX SMART Computer on Module



ST610W

6th / 7th Gen Intel® Core™ i-LEX SMART Computer on Module

- 6th / 7th Gen Intel® Skylake / Kaby Lake U, i7 / i5 / i3 / Celeron CPU
- 2 x DDR4 SODIMM socket, Max. 64GB
- Multiple Independent display: VGA, HDMI® & LVDS
- 2 x Intel GbE LAN, 2 x USB 3.0, 5 x USB 2.0, 8DI / 8DO
- 4 x COM, 4 x PCIe
- 88 x 110 mm

Intel® Bay Trail Atom™-LEX SMART Computer on Module



ST385W

Intel® Bay Trail Atom™-LEX SMART Computer on Module

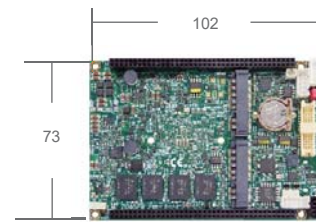
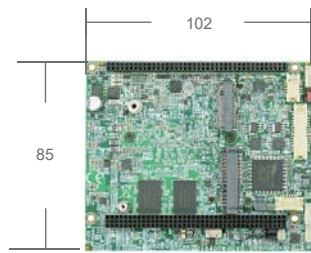
- Intel® Bay Trail Atom™ E3845 CPU
- 1 x DDR3L SODIMM, Max. 8GB
- Multiple Independent display: VGA, HDMI® or LVDS
- 2 x Intel GbE LAN, 1 x USB 3.0, 7 x USB 2.0, 8DI / 8DO
- 4 x COM, 2 x PCIe
- 88 x 82 mm



Application

Automation
Vehicle • Military

Automation
Vehicle • Military



Unit: mm

Model Name		2I640PW	2I385PW
CPU Platform		Intel® Elkhart Lake ATOM x6413E 3.0 GHz (Quad Core) Intel® Elkhart Lake Celeron J6412 2.6 GHz (Quad Core)	Intel Bay Trail-I E3845 1.91 GHz (Quad Core)
Chipset		Intel® Elkhart Lake SoC	Intel® Bay Trail SoC
Memory		On Board LPDDR4, 4GB or 8GB	DDR3L, 4GB
Storage		M.2-SSD, SATA	2 x mSATA, SATA (Optional to mSATA)
Display		VGA, HDMI®, LVDS	VGA, HDMI®, LVDS
Touch		USB interface Touch Screen controller	COM interface Touch Screen controller
Ethernet		2 x Intel 2.5 GbE I226	2 x Intel GbE
Audio		HD Audio with Amplifier	HD Audio with Amplifier
Mini-PCle	Slot 1	USB 2.0 / PCIe	PCIe / USB / mSATA
	Slot 2	N/A	mSATA
PCIe		1 x PCIe x1, 1 x PCIe x2 (Pico-Express expanded via 200-pin connector)	1 (IO expanded via 160-pin connector)
M.2		1 x M.2 B Key Type 3042 (USB 2.0 / PCIe / SATA)	N/A
USB		2 x USB 3.0 ; 5 x USB 2.0	1 x USB 3.0 / 2.0, 5 x USB 2.0
Serial IO		4 x RS232 / 422 / 485	N/A
GPIO / WDT		4DI / 4DO, WDT	4DI / 4DO, WDT
Power Input		Wide Range +9~36V	Wide Range +9~36V
Operating Temp.		-20°C~70°C (100% CPU Usage, not-underclocking) ; -40°C by OEM	-20°C~70°C (100% CPU Usage, not-underclocking)
Dimension (mm)		102 x 85 mm	102 x 73 mm
Chassis		Box PC: SKY 2 / OEM Design	Box PC: Light, TINO, TWIN ARK-I, ARK-II
Expansion		Carrier board : DK008: I/O: 1 x HDMI, 2 x RJ45, 2 x USB 3.0, 3 x USB 2.0, VGA (wafer), HD Audio (wafer) 4 x COM, 1 x Mini PCIe, 1 x M.2, 1 x SIM	IO expanded via 160-pin connector Carrier Boards: (Detailed SPEC on Page 74) DK001, DK002, DK006, DK007, DM002



Model Name	PALM-I	PALM-I
Motherboard	11385A + CN051	11385A
System Dimension (W x D X H)	92.4W x 61.1D x 28H mm	92.4W x 61.1D x 28H mm
Weight (incl. M/B)	155 g	155 g
CPU	Intel® Bay Trail-I E3825 1.33 GHz (Dual Core) (Optional J1900 ; E3845)	Intel® Bay Trail-I E3825 1.33 GHz (Dual Core) (Optional J1900 ; E3845)
Chipset	Intel® Bay Trail SoC	Intel® Bay Trail SoC
Memory	DDR3L, 2GB (Optional 4GB)	DDR3L, 2GB (Optional 4GB)
Storage	mSATA	mSATA
Display	VGA	VGA
USB	4 x USB 2.0	1 x USB 2.0
COM	1 x RS232, 1 x RS485	1 x RS232, 1 x RS485
Mini-PCIe	1 x PCIe / mSATA / USB -Optional to CN051	1 x PCIe / mSATA / USB
Ethernet	2 x Intel GbE	1 x Intel GbE
Power Input	DC IN +5V	DC IN +5V
Operating Temp.	-20°C~70°C for mSATA (100% CPU Usage, not-underclocking)	-20°C~70°C for mSATA (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing

Expansion	Mini Card: GPS, 4G / 5G, WI-FI, SATA RAID, CANBus, SDI / AHD Video By Cable: Bluetooth, Digital I/O, 4 x USB mini card
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Model Name	TWIN	TWIN	TWIN(L)
Motherboard	2I380A	2I385A	2I385PW + DK007
System Dimension (W x D X H)	145W x 84D x 35H mm	145W x 84D x 35H mm	145W x 136.5D x 35H mm
Weight (incl. M/B)	0.7 KG	0.7 KG	0.9 KG
CPU	Intel Bay Trail-I E3825 1.33 GHz (Dual Core) Intel Bay Trail-I E3845 1.91 GHz (Quad Core) (Optional J1900)		Intel Bay Trail-I E3845 1.91 GHz (Quad Core)
Chipset	Intel® Bay Trail SoC	Intel® Bay Trail SoC	Intel® Bay Trail SoC
Memory	DDR3L, 2 / 4GB	DDR3L, 2 / 4GB	DDR3L, 4GB
Storage Space	mSATA	mSATA	mSATA
Display	VGA, HDMI®	VGA	VGA (M12), Mini HDMI®
USB	1 x USB 3.0 ; 3 x USB 2.0	2 x USB 2.0	2 x USB 2.0
COM	1	1	1
Mini-PCIe	1 x PCIe / mSATA / USB 1 x (Half size) mSATA / USB	1 x PCIe / mSATA / USB 1 x (Half size) mSATA / USB	1 x PCIe / mSATA / USB 1 x (Half size) mSATA / USB
SIM Card Holder	N/A	N/A	2
Ethernet	1 x Intel GbE	2 x Intel GbE	2 x PoE
Audio	Line-out / Mic-in (OEM)	N/A	N/A
Power Input	DC IN +12V ; +9~36V (Optional)	DC IN +12V ; +9~36V (Optional)	Wide Range +9V~36V
Operating Temp.	-20°C~70°C for mSATA (100% CPU Usage, not-underclocking)	-20°C~70°C for mSATA (100% CPU Usage, not-underclocking)	-20°C~70°C for mSATA (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing

Expansion

Mini Card: GPS, 4G / 5G, WI-FI, SATA RAID, CANBus, SDI / AHD Video
By Cable: Bluetooth, Digital I/O, 4 x USB mini card





Model Name	TERA	TERA	TERA
Motherboard	2I640DW	2I640CW	2I640SW
System Dimension (W x D X H)	145W x 102.4D x 56.5H mm	145W x 102.4D x 56.5H mm	145W x 102.4D x 56.5H mm
Weight (incl. M/B)	0.88 KG	0.9 KG	0.9 KG
CPU	Intel® Elkhart Lake ATOM x6413E Quad Core 3.0 GHz CPU Intel® Elkhart Lake Celeron J6412 Quad Core 2.6 GHz CPU		
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	1 x DDR4 3200 MHz SODIMM, Max. 32GB	On Board 4 / 8GB LPDDR4	1 x DDR4 SODIMM, Max 32GB
Storage Space	M.2	M.2, SSD	M.2, SSD
Display	2 x HDMI® (OEM to DP)	2 x HDMI® (OEM to DP)	2 x HDMI® (1 can OEM to DP)
USB	2 x USB 3.0, 2 x USB 2.0	2 x USB 3.0, 2 x USB 2.0	2 x USB 3.1, 2 x USB 2.0
COM	2 x RS232 / 422 / 485	1 x RS232 / 422 / 485 ; 3 x RS232	3 x RS232 / 422 / 485
Mini-PCIe	N/A	1 x USB 2.0 / PCIe	N/A
M.2	1 x M.2 B Key Type 2242 / 3042 (PCIe x2 / USB 3.0 / USB 2.0) 1 x M.2 B Key Type 2242 (PCIe x2 / USB 2.0 / SATA)	1 x M.2 B Key Type 3042 (USB 2.0 / SATA / USB 3.0-optional to PCIe x2)	1 x M.2 B Key Type 2242 / 3042 (PCIe x2 / USB 3.1 / USB 2.0) 1 x M.2 B Key Type 2242 / 3042 (PCIe / USB 2.0 / SATA-SSD)
SIM Card Holder	1 x Nano SIM	1 x Nano SIM	1 x Nano SIM
GPIO	4DI / 4DO (Option)	4DI / 4DO (Option)	4DI / 4DO (Option)
Ethernet	3 x Intel 2.5 GbE	2 x Intel 2.5 GbE	2 x Intel 2.5GbE (external)
Power Input	Wide Range +9~24V	Wide Range +9~24V	Wide Range +9~24V
Operating Temp.	-20°C to +60°C (X6413E CPU) 0°C to +60°C (J6412 CPU) (100% CPU Usage, not-underclocking) ; -40°C by OEM		
Operating Humidity	5~95% @ 40°C, non-condensing		

Expansion

M.2 Module: 4G / 5G, SATA, PCIe
By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card





Model Name	TERA(L)	TERA	TERA
Motherboard	2I810D	2I610DW	2I612CW
System Dimension (W x D X H)	145W x 126.2D x 56.5H mm	145W x 106.2D x 56.5H mm	145W x 106.2D x 56.5H mm
Weight (incl. M/B)	1.2 KG	0.9 KG	0.9 KG
CPU	8th Gen Intel® Whiskey Lake-U	6th / 7th Gen Intel® Skylake-U / Kaby Lake-U	6th / 7th Gen Intel® Skylake-U / Kaby Lake-U
Chipset	Intel® Whiskey Lake-U SoC	Intel® Skylake-U / Kaby Lake-U SoC	Intel® Skylake-U / Kaby Lake-U SoC
Memory	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB
Storage Space	mSATA, SSD	mSATA, SSD	mSATA, SSD
Display	VGA (Option), HDMI®	VGA	2 x HDMI® (OEM to DP)
USB	3 x USB 3.0	3 x USB 3.0	4 x USB 3.0
COM	2 x RS232 / 422 / 485	2 x RS232 / 422 / 485	2 x RS232 / 422 / 485
Mini-PCIe	1 x PCIe / mSATA / USB 3.0 / USB 2.0 1 (Half Size) x PCIe / mSATA / USB 3.0 / USB 2.0	1 x USB / mSATA 1 x PCIe / USB 2.0	1 x USB / mSATA 1 x PCIe / USB 3.0 / USB 2.0
GPIO	4DI / 4DO (Option)	4DI / 4DO (Option)	4DI / 4DO (Option)
Ethernet	4 x Intel 2.5 GbE	3 x Intel GbE	2 x Intel GbE
Power Input	DC IN +12V (Option +9~36V by power module)	Wide Range +9V~36V	Wide Range +9V~36V
Operating Temp.	-20°C to +60°C (Core i5 / Celeron CPU) -20°C to +50°C (Core i7 CPU) (100% CPU Usage, not-underclocking)		
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	Mini Card: GPS, 4G / 5G, WI-FI, SATA RAID, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video By Cable: Bluetooth, Digital I/O, 2 / 4 x PoE, 4 x USB mini card		



◆ HAWK 31130TW (M12)



Model Name	HAWK	HAWK	TASK
Motherboard	31130TW	31130DW	31130DW
System Dimension (W x D X H)	220W x 180D x 80H mm	220W x 180D x 80H mm	210W x 125D x 77H mm
Weight (incl. M/B)	3.6 KG	3.6 KG	1.9 KG
CPU	13th Gen Intel® Raptor Lake-U, i7 / i5 / i3 CPU 12th Gen Intel® / Alder Lake-U, i7 / i5 / i3 CPU	13th Gen Intel® Raptor Lake-P / U, i7 / i5 / i3 CPU 12th Gen Intel® Alder Lake-P / U, i7 / i5 / i3 CPU	
Chipset	Intel® Raptor Lake-U SoC Intel® Alder LakeU SoC	Intel® Raptor Lake-P / U SoC Intel® Alder Lake-P / U SoC	Intel® Raptor Lake-P / U SoC Intel® Alder Lake-P / U SoC
Memory	On Board LPDDR 5, 16GB / 32GB	2 x DDR5 SODIMM, Max 64GB	2 x DDR5 SODIMM, Max 64GB
Storage Space	NVMe (Optional to M.2), 2 x Mobile Rack	M.2, SSD, 1 x Mobile Rack (Option)	M.2, SSD HDD
Display	1 x HDMI®, 1 x DP, 1 x Type C DP ALT Mode	2 x HDMI® (OEM to DP)	2 x HDMI® (OEM to DP)
TPM	TPM 2.0	TPM 2.0	TPM 2.0
USB	3 x USB 3.2 Gen 1 x 1 ; 1 x USB 2.0 ; 1 x Type C	3 x USB 3.2 Gen 1 x 1 (external) 1 x USB 2.0 (external)	3 x USB 3.2 Gen 1 x 1 (external) 1 x USB 2.0 (external)
COM	2 x ISO RS232 / 422 / 485 optional to 2 x ISO CANBus	2 x RS232 / 422 / 485	2 x RS232 / 422 / 485
Mini-PCIe	N/A	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe
M.2	1 x M.2 B key Type 3042 (PCIe x1 / USB 2.0), (Optional to Onboard NVMe) 1 x M.2 M Key Type 3042 / 3080 (PCIe x 4) 1 x M.2 B key Type 3042 / 3052 (USB 3.2 Gen1 x 1 / USB 2.0)	1 x M.2 M key Type 2280 (PCIe x4), Support NVMe 1 x M.2 B key Type 3042 / 3052 (USB 3.2 Gen1 x 1 / USB 2.0 / mSATA)	1 x M.2 M key Type 2280 (PCIe x4), Support NVMe 1 x M.2 B key Type 3042 / 3052 (USB 3.2 Gen1 x 1 / USB 2.0 / mSATA)
SIM Card Holder	1 x Nano SIM	1 x Nano SIM	1 x Nano SIM
GPIO	4DI / 4DO (Option)	4DI / 4DO (Option)	4DI / 4DO (Option)
Ethernet	5 x Intel 2.5 GbE I226-IT (M12 / RJ45)	5 x Intel 2.5 GbE I226-IT	5 x Intel 2.5 GbE I226-IT
Audio	Line-out / Mic-in	Line-out / Mic-in	Option
Power Input	ISO Wide Range DC IN +9~36V ; CPC-Ignition on/off control Wide Range DC IN +18~75V (option), 1.5KVDC I/O isolation	Wide Range +9~36V	Wide Range +9~36V
Operating Temp.	-40°C~+70°C (under specific environmental & CPU power consumption conditions)	-40°C~+70°C (under specific environmental & CPU power consumption conditions)	-40°C~+70°C (under specific environmental & CPU power consumption conditions)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	M.2 Module: 4G / 5G, WiFi , BT, SATA, PCIe By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card		



Model Name	TASK	TASK
Motherboard	3I810DW	3I170DW
System Dimension (W x D X H)	210W x 125D x 77H mm	210W x 125D x 77H mm
Weight (incl. M/B)	1.9 KG	1.9 KG
CPU	8th Gen Intel® Whiskey Lake-U i7 / i5 / i3 / Celeron CPU	6th / 7th Gen Intel® Skylake-S / Kaby Lake-S i7 / i5 / i3 / Celeron CPU
Chipset	Intel® Whiskey Lake-U SoC	Intel® Q170
Memory	2 x DDR4 SODIMM, Max. 64GB	1 x DDR4 SODIMM, Max. 32GB
Storage Space	1 x SATA, 2 x M.2	mSATA, SSD
Display	2 x HDMI®	VGA, HDMI®
TPM	TPM 2.0 (Optional)	TPM 2.0
USB	4 x USB 3.1	2 x USB 3.0, 2 x USB 2.0
COM	2	2
Mini-PCIe	(PCIe / USB), mSATA for OEM	1 x PCIe / mSATA / USB 1 (Half Size) x PCIe / mSATA / USB
M.2	1 x M.2 B Key, Type 2242 (mSATA / USB / PCIe x1) 1 x M.2 B Key, Type 3042 (USB 3.0 / 2.0 / PCIe x1*) *If 2242 M.2 adopts PCIe x 2 signal, 3042 M.2 will support USB 3.0 / 2.0 signal only	N/A
SIM Card Holder	1 x Nano SIM	1
GPIO	8DI / 8DO (Optional)	8DI / 8DO (Optional)
Ethernet	5 x Intel GbE	5 x Intel GbE
Audio	Optional	Line-out / Mic-in (OEM)
Power Input	Wide Range +9~36V	Wide Range DC IN +9V~36V
Operating Temp.	-20°C to +60°C (Core i5 / Celeron CPU) -20°C to +50°C (Core i7 CPU) (100% CPU Usage, not-underclocking)	-20°C to +60°C (Core i5 / Celeron CPU) -20°C to +50°C (Core i7 CPU) (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	Mini Card: GPS, Wi-Fi, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, SATA, PCIe	



Model Name	TWITTER	TWITTER
Motherboard	3I640DW	3I640A
System Dimension (W x D X H)	210W x 121D x 55H mm	210W x 121D x 55H mm
Weight (incl. M/B)	1.2 KG	1.2 KG
CPU	Intel® Elkhart Lake ATOM x6413E Quad Core 3.0 GHz CPU Intel® Elkhart Lake Celeron J6412 Quad Core 2.6 GHz CPU	Intel® Elkhart Lake ATOM x6413E Quad Core 3.0 GHz CPU Intel® Elkhart Lake Celeron J6412 Quad Core 2.6 GHz CPU
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB
Storage Space	M.2, SSD HDD	M.2, SSD HDD
Display	2 x HDMI® (OEM to DP)	1 x DVI, 1 x HDMI®
TPM	TPM 2.0 (Firmware) ; OEM Optional Hardware TPM 2.0	TPM 2.0 (Firmware) ; OEM Optional Hardware TPM 2.0
USB	1 x USB 3.0 3 x USB 2.0	2 x USB 3.0 2 x USB 2.0
COM	2 x RS232 / 422 / 485	2 x RS232 / 422 / 485 2 x RS232 2 x RS232 (Front Panel-OEM Option)
Mini-PCle	1 x USB 2.0 / PCIe-OEM to mSATA-share w/SATA	1 x USB 2.0 / PCIe
M.2	1 x M.2 B Key Type 3042 (SATA / USB 2.0 / USB 3.0)	1 x M.2 B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x M.2 B Key Type 2242 (PCIe x2 / USB 2.0), support NVMe
SIM Card Holder	1 x Nano SIM	1 x Mini SIM
GPIO	4DI / 4DO (Option)	8DI / 8DO (OEM Option)
Ethernet	5 x Intel 2.5 GbE	2 x Intel 2.5 GbE
Power Input	Wide Range +9~36V	DC-IN +12V
Operating Temp.	-20°C to +60°C with SSD (100% CPU Usage, not-underclocking)	-20°C~60°C for mSATA / SSD HDD (100% CPU Usage, not-underclocking) ; -40°C by OEM
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing

Expansion

Mini Card: 4G / 5G, WiFi, BT, SATA, PCIe

By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card





31380A



♦ BRIK system will be OEM system with MOQ.

Model Name	BRIK	BLOK
Motherboard	31380A / 31380CW	31385AW
System Dimension (W x D X H)	187W x 130D x 52H mm	195W x 138D x 70H mm
Weight (incl. M/B)	1.3 KG	1.4 KG
CPU	Intel Bay Trail-I E3825 1.33 GHz (Dual Core) Intel Bay Trail-I E3845 1.91 GHz (Quad Core)	Intel Bay Trail-DJ1900 2.0 GHz (Quad Core) Intel Bay Trail-E3845 1.91 GHz (Quad Core)
Chipset	Intel® Bay Trail SoC	Intel® Bay Trail SoC
Memory	DDR3L, 2 / 4GB	1 x DDR3L SODIMM, Max. 8GB
Storage Space	mSATA, SSD	mSATA, SSD
Display	VGA, HDMI®	VGA, DVI, HDMI®
USB	1 x USB 3.0 + 3 x USB 2.0	4 x USB 3.0
COM	2	6
Mini-PCIe	1 x PCIe / mSATA / USB 1 x PCIe / USB	1 x PCIe / mSATA / USB 1 x PCIe / USB
SIM Card Holder	1	1
GPIO	8DI / 8DO (Optional)	4DI / 4DO (Optional)
Ethernet	2 x Intel GbE	2 x Intel GbE
Audio	Mic-in / Line-out (OEM)	Optional
Power Input	DC IN +12V ; +9~36V (31380CW)	Wide Range DC IN +9V~36V
Operating Temp.	-20°C~60°C for mSATA / SSD HDD (100% CPU Usage, not-underclocking)	-20°C~60°C for mSATA / SSD HDD (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing

Expansion

Mini Card: GPS, 4G / 5G, WI-FI, SATA RAID, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video
By Cable: Bluetooth, Digital I/O, 2 / 4 x PoE, 4 x USB mini card





Model Name	TWISTER(L)	TWISTER	TWISTER
Motherboard	CI370D	CI170A	CI170C
System Dimension (W x D X H)	300W x 262D x 85H mm	300W x 200D x 85H mm	300W x 200D x 85H mm
Weight (incl. M/B)	5.6 kg	2.9 kg	2.9 kg
CPU	8th / 9th Gen Intel® Coffee Lake-S i7 / i5 / i3 / Celeron CPU	Intel Skylake-S / Kaby Lake-S i7 / i5 / i3 / Celeron CPU	Intel Skylake-S / Kaby Lake-S i7 / i5 / i3 / Celeron CPU
Chipset	Intel® Q370	Intel® Q170	Intel® Q170
Memory	2 x DDR4 SODIMM, Max. 64GB	2 x DDR4 SODIMM, Max. 64GB	2 x DDR4 SODIMM, Max. 64GB
Storage Space	mSATA, M.2, SSD	mSATA, M.2, SSD	mSATA, M.2, SSD
Display	DP, HDMI®	DP, HDMI®, DVI	DP, HDMI®, DVI
TPM	TPM 2.0	TPM 2.0 (Optional)	TPM 2.0
USB	4 x USB 3.1	4 x USB 3.0	4 x USB 3.0
COM	2	6	6 up to 10
PCI / PCIe	1 x PCIe x16	1 x PCIe x16	1 x PCIe x16
Mini-PCIe	1 x PCIe / mSATA / USB 1 x PCIe / mSATA / USB	1 x PCIe / mSATA / USB 1 x PCIe / USB	1 x PCIe / mSATA / USB 1 x PCIe / USB
M.2	1 x M.2 B Key, Type 2280 (PCIe / USB)	1 x M.2 B key Type 2242 (mSATA / PCIe)	1 x M.2 B key Type 2242 (mSATA / PCIe)
SIM Card Holder	2	2	2
GPIO	8DI / 8DO (Optional)	8DI / 8DO (Optional)	8DI / 8DO (Optional)
Ethernet	8 x Intel 2.5 GbE 1 x Intel GbE ; 2 x SFP Fiber	2 x Intel GbE	5 x Intel GbE
Power Input	DC IN +24V	DC IN +12V	DC IN +12V
Operating Temp.	-20°C to +50°C (Core i7 6700 TE) -20°C to +40°C (Core i7 6700) (100% CPU Usage, not-underclocking)		
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing

Expansion

PCIe Card via riser Card: 2 x USB 3.1, 2 x 10 GbE LAN, 4 x PoE, 4 x GbE
Mini Card: GPS, Wi-Fi, 2 / 4 x LAN, 4 x COM, CAN Bus, SDI / AHD Video
By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card
M.2 Module: 4G / 5G, SATA, PCIe





optional



Model Name	TINO 2PCI	TINO	TINO(L)
Motherboard	CI170C	3I612DW	CI370D
System Dimension (W x D X H)	268W x 180.2D x 110H mm	245W x 177D x 68H mm	245W x 220D x 68H mm
Weight (incl. M/B)	6 kg	2.7 kg	3.4 kg
CPU	Intel Skylake-S / Kaby Lake-S i7 / i5 / i3 / Celeron CPU	6th / 7th Gen Intel® Skylake-U / Kaby Lake-U i7 / i5 / i3 / Celeron CPU	8th / 9th Gen Intel® Coffee Lake-S i7 / i5 / i3 / Celeron CPU
Chipset	Intel® Q170	Intel® Skylake-U / Kaby Lake-U SoC	Intel® Q370
Memory	2 x DDR4 SODIMM, Max. 64GB	2 x DDR4 SODIMM, Max. 64GB	2 x DDR4 SODIMM, Max. 64GB
Storage Space	mSATA, M.2, SSD	mSATA, M.2, SSD	mSATA, M.2, SSD
Display	DP, HDMI®, DVI	DP, HDMI®	DP, HDMI®
TPM	TPM 2.0	TPM 2.0 (Optional)	TPM 2.0
USB	4 x USB 3.0	4 x USB 3.0	4 x USB 3.1
COM	7 (expand up to 10)	2	2
PCI / PCIe	2 x PCIe x8	N/A	N/A
Mini-PCIe	1 x PCIe / mSATA / USB 1 x PCIe / USB	1 x PCIe / mSATA / USB 1 x PCIe / USB 2.0 (Optional USB 3.0)	1 x PCIe / mSATA / USB 1 x PCIe / mSATA / USB
M.2	1 x M.2 B key Type 2242 (mSATA / PCIe)	1 x M.2 B key Type 2242 (mSATA)	1 x M.2 B Key, Type 2280 (PCIe / USB)
SIM Card Holder	2	1 x Nano SIM	2
GPIO	8DI / 8DO (Optional)	4DI / 4DO (Optional)	8DI / 8DO (Optional)
Ethernet	5 x Intel GbE	5 x Intel GbE ; 2 x SFP Fiber	8 x Intel 2.5 GbE 1 x Intel GbE ; 2 x SFP Fiber
Power Input	DC IN +12V	Wide Range +12~48V	DC IN +24V
Operating Temp.	-20°C to +50°C (Core i7 6700 TE) -20°C to +40°C (Core i7 6700) (100% CPU Usage, not-underclocking)		
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing

Expansion

PCIe Card via riser Card: 2 x USB 3.1, 2 x 10 GbE LAN, 4 x PoE, 4 x GbE
Mini Card: GPS, Wi-Fi, 2 / 4 x LAN, 4 x COM, CAN Bus, SDI / AHD Video
By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card
M.2 Module: 4G / 5G, SATA, PCIe





OEM



Model Name	1U Fanless	1U Half Fanless	1U with FAN
Motherboard	CI170C + 2 x E691A	3I380D	3I612DW
System Dimension (W x D X H)	440W x 360D x 44.3H mm	483.7W x 257.3D x 44.3H mm	230 W x 215D x 44H mm
Weight (incl. M/B)	6 kg	3.5 kg	1.259 kg
CPU	Intel Skylake-S / Kaby Lake-S i7 / i5 / i3 / Celeron CPU	Intel Bay Trail-I E3815 1.46 GHz (Single Core) Intel Bay Trail-D J1900 2.0 GHz (Quad Core)	6th / 7th Gen Intel® Skylake-U / Kaby Lake-U i7 / i5 / i3 / Celeron CPU
Chipset	Intel® Q170	Intel® Bay Trail SoC	Intel® Skylake-U / Kaby Lake-U SoC
Memory	2 x DDR4 SODIMM, Max. 64GB	1 x DDR3L SODIMM, Max. 8GB (3I380D-D90) DDR3L, 2GB (3I380D-I12)	2 x DDR4 SODIMM, Max. 64GB
Storage Space	mSATA, M.2, SSD	mSATA, SSD	mSATA, M.2, SSD
Display	DP, HDMI®, DVI	VGA (Optional with COM port), HDMI®	DP, HDMI®
TPM	TPM 2.0	N/A	TPM 2.0 (Optional)
USB	4 x USB 3.0	3 x USB 2.0	4 x USB 3.0
COM	4	1	2
PCI / PCIe	2 x PCIe x8 (Optional)	N/A	N/A
Mini-PCIe	1 x PCIe / mSATA / USB 1 x PCIe / USB	1 x USB 1 x mSATA / USB	1 x (PCIe / mSATA / USB) 1 x (PCIe / USB 2.0-Optional USB 3.0)
M.2	1 x M.2 B key Type 2242 (mSATA / PCIe)	N/A	1 x M.2 B key Type 2242 (mSATA)
SIM Card Holder	2	1 (Push-Push)	1 x Nano SIM
GPIO	8DI / 8DO (Optional)	4DI / 4DO (Optional)	4DI / 4DO
Ethernet	5 x Intel GbE, 8 x PoE LAN (2 x E691A)	4 x Intel GbE	5 x Intel GbE ; 2 x SFP Fiber
Power Input	DC IN +12V	DC IN +12V	Wide Range +12~48V
Operating Temp.	-20°C to +50°C (Core i7 6700 TE) -20°C to +40°C (Core i7 6700) (100% CPU Usage, not-underclocking)	-20°C~60°C for mSATA / SSD HDD (100% CPU Usage, not-underclocking)	-20°C to +50°C (Core i7 6700 TE) -20°C to +40°C (Core i7 6700) (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	PCIe Card via riser Card: 2 x USB 3.1, 2 x 10 GbE LAN, 4 x PoE, 4 x GbE Mini Card: GPS, Wi-Fi, 2 / 4 x LAN, 4 x COM, CAN Bus, SDI / AHD Video By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, SATA, PCIe		

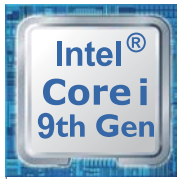


Model Name	APOLLO-RS
Motherboard	31470DW
System Dimension (W x D X H)	230 x 89 x 173 mm
Weight (incl. M/B)	4 kg
CPU	10th Gen Intel® Comet Lake-S i9 (35W) i7 / i5 / i3 / Celeron CPU
Chipset	Intel® Q470
Memory	2 x DDR4 SODIMM, Max. 64GB
Storage Space	mSATA, HDD / SSD, M.2
Display	HDMI®, DP
TPM	TPM 2.0
USB	4 x USB 3.1 (external)
COM	2
PCI / PCIe	1 x PCIe x16
Mini-PCIe	1 x PCIe / mSATA / USB 3.0 / USB 2.0
M.2	1 x M.2 B Key, Type 3042 / 3052 (mSATA / PCIe x2 / USB 3.0 / USB 2.0) (Support NVME)
GPIO	Optional
Ethernet	5 x Intel 2.5 GbE
Power Input	Wide Range +12V~36V
Operating Temp.	-20°C to +50°C (Core i7 CPU) (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing

Expansion	PCIe: GPU Card, 2 / 4 x LAN, 4 x PoE LAN, 2 x USB 3.1 Mini Card: GPS, 4G / 5G, WI-FI, SATA RAID, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video By Cable: CFAST, Bluetooth, Digital I/O, 4 x USB mini card, 2 / 4 x PoE GPS 4G/5G Bluetooth WIFI 2/4xPoE 2/4xLAN 4xCOM 4xUSB mini card CAN Bus SDI Video AHD
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Model Name	APOLLO-RS (OEM-L)	APOLLO-RS (OEM)
Motherboard	3I370DW	3I370DW
System Dimension (W x D X H)	360W x 145D x 173H mm	230W x 109D x 173H mm
Weight (incl. M/B)	7.35 kg	3.8 kg
CPU	9th / 8th Gen Intel® Coffee Lake-S i9 (35W) / i7 / i5 / i3 / Celeron CPU	9th / 8th Gen Intel® Coffee Lake-S i9 (35W) / i7 / i5 / i3 / Celeron CPU
Chipset	Intel® Q370	Intel® Q370
Memory	2 x DDR4 SODIMM, Max. 64GB	2 x DDR4 SODIMM, Max. 64GB
Storage Space	mSATA, SSD, M.2	mSATA, SSD, M.2, CFAST (Option)
Display	HDMI®, DP	HDMI®, DP
TPM	TPM 2.0	TPM 2.0
USB	4 x USB 3.1 (external)	4 x USB 3.1 (external)
COM	Optional	2~4
PCI / PCIe	1 x (PCIe x16)	1 x Slot (PCIe x16)
Mini-PCIe	1 x PCIe / mSATA / USB 3.0 / USB 2.0	1 x PCIe / mSATA / USB 3.0 / USB 2.0
SIM Card Holder	1 x Nano SIM	1 x Nano SIM
M.2	1 x M.2 B Key, Type 3042 (mSATA / PCIe x2 / USB 3.0 / USB 2.0), (Support NVME)	1 x M.2 B Key, Type 3042 (mSATA / PCIe x2 / USB 3.0 / USB 2.0), (Support NVME)
GPIO	Optional	Optional
Ethernet	5 x Intel 2.5 GbE	5 x Intel 2.5 GbE
Audio	Mic-in / Line-out (OEM)	Mic-in / Lin-out (OEM)
Power Input	DC IN +24V (RS815 Riser Card)	Wide Range +12V~36V
Operating Temp.	-20°C~50°C (Core i7 CPU) (100% CPU Usage, not-underclocking)	-20°C~50°C (Core i7 CPU) (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	PCIe: Support max 500W GPU Card	PCIe: GPU Card



Coffee Lake-S



Coffee Lake-S



Model Name	APOLLO-S	APOLLO-RS
Motherboard	3I370DW	3I370DW
System Dimension (W x D X H)	230W x 99D x 173H mm	230W x 89D x 173H mm
Weight (incl. M/B)	3.8 kg	3.7 kg
CPU	9th / 8th Gen Intel® Coffee Lake-S i9 (35W) / i7 / i5 / i3 / Celeron CPU	9th / 8th Gen Intel® Coffee Lake-S i9 (35W) / i7 / i5 / i3 / Celeron CPU
Chipset	Intel® Q370	Intel® Q370
Memory	2 x DDR4 SODIMM, Max. 64GB	2 x DDR4 SODIMM, Max. 64GB
Storage Space	mSATA, SSD, M.2, CFAST (Option)	mSATA, SSD, M.2
Display	HDMI®, DP	HDMI®, DP
TPM	TPM 2.0	TPM 2.0
USB	4 x USB 3.1 (external)	4 x USB 3.1 (external)
COM	2~4	2
PCI / PCIe	N/A	1 x (PCIe x16)
Mini-PCIe	1 x PCIe / mSATA / USB 3.0 / USB 2.0	1 x PCIe / mSATA / USB 3.0 / USB 2.0
SIM Card Holder	1 x Nano SIM	1 x Nano SIM
M.2	1 x M.2 B Key, Type 3042 (mSATA / PCIe x2 / USB 3.0 / USB 2.0), (Support NVME)	1 x M.2 B Key, Type 3042 (mSATA / PCIe x2 / USB 3.0 / USB 2.0), (Support NVME)
GPIO	Optional	Optional
Ethernet	5 x Intel 2.5 GbE	5 x Intel 2.5 GbE
Audio	Mic-in / Line-out (OEM)	Mic-in / Lin-out (OEM)
Power Input	Wide Range +12V~36V	Wide Range +12V~36V
Operating Temp.	-20°C~50°C (Core i7 CPU) (100% CPU Usage, not-underclocking)	-20°C~50°C (Core i7 CPU) (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	PCIe Card via riser Card: 2 x USB 3.1, 2 x 10 GbE LAN, 4 x PoE, 4 x GbE Mini Card: GPS, Wi-Fi, 2 / 4 x LAN, 4 x COM, CAN Bus, SDI / AHD Video By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, SATA, PCIe	



OEM



Model Name	APOLLO-C	APOLLO-RS	APOLLO	APOLLO
Motherboard	PM390CW + BPM002	PM170DW + RS701	PM170DW + BPM001	PM610DW + BPM002
System Dimension (W x D X H)	200W x 103.75D x 173H mm	231W x 93D x 173H mm	260W x 142.5D x 173H mm	200W x 103.75D x 173H mm
Weight (incl. M/B)	1.75 kg	3.82 kg	4.2 kg	1.75 kg
CPU	Intel Apollo Lake N4200 2.5 GHz (Quad Core) N3350 2.4 GHz (Dual Core) E3950 2.0 GHz (Quad Core)	6th / 7th Gen Intel® Skylake-S / Kaby Lake-S i7 / i5 / i3 / Celeron CPU		6th / 7th Gen Intel® Skylake-U / Kaby Lake-U i7 / i5 / i3 / Celeron CPU
Chipset	Intel® Apollo Lake SoC	Intel® Q170		Intel® Skylake-U / Kaby Lake-U SoC
Memory	1 x DDR3L SODIMM, Max. 8GB	2 x DDR4 SODIMM, Max. 64GB		2 x DDR4 SODIMM, Max. 64GB
Storge Space	mSATA, SSD, M.2	mSATA, SSD, M.2	mSATA, SSD, M.2	mSATA, SSD
Display	VGA, HDMI®	VGA, HDMI®	VGA, HDMI®	VGA, HDMI®
TPM	TPM 2.0 (Optional)	TPM 2.0	TPM 2.0	TPM 2.0 (Optional)
USB	2 x USB 3.0 2 x USB 2.0	4 x USB 3.0	4 x USB 3.0	4 x USB 3.0
COM	3	2	3	2
PCI / PCIe	2 x Slots (PCIe x4 + PCIe x1)	1 x Slot (PCIe x16)	2 x Slots (PCIe x16 + PCIe x4)	2 x Slots (PCIe x4 + PCIe x1)
Mini-PCIe	1 x PCIe / USB 1 x PCIe / mSATA / USB	1 x mSATA / USB 1 x PCIe / USB	1 x mSATA / USB 1 x PCIe / USB	1 x mSATA / USB 1 x PCIe / USB
M.2	1 x M.2 B Key, Type 2242 / 2280 (mSATA / PCIe)	1 x M.2 B Key, Type 2242 (mSATA / PCIe)	1 x M.2 B Key, Type 2242 (mSATA / PCIe)	N/A
SIM Card Holder	1	2	2	1
GPIO	8DI / 8DO (Option)	16DI / 16DO (Option)	16DI / 16DO (Option)	8DI / 8 DO (Option)
Ethernet	2 x Intel GbE	5 x Intel GbE	4 x Intel GbE	3 x Intel GbE
Power Input	Wide Range +9V~36V	Wide Range +12V~36V		Wide Range +9V~36V
Operating Temp.	-20°C~60°C for mSATA / SSD HDD (100% CPU Usage, not-underclocking)	-20°C to +60°C (Core i6700 TE) 0°C to +50°C (Core i6700) (100% CPU Usage, not-underclocking)		-20°C~50°C for mSATA / SSD HDD (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing			
Expansion	PCle Card via riser Card: 2 x USB 3.1, 2 x 10 GbE LAN, 4 x PoE, 4 x GbE Mini Card: GPS, WI-FI, 2 / 4 x LAN, 4 x COM, CAN Bus, SDI / AHD Video By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, SATA, PCIe			



Model Name	SKY 2	ROCK
Motherboard	2I130DW	2I130DW
System Dimension (W x D X H)	141W x 111.2D x 71.9H mm	173W x 130D x 85H mm
Weight (incl. M/B)	1.25 kg	2.2 kg
CPU	13th Gen Intel® Raptor Lake-U, i7 / i5 / i3 CPU 12th Gen Intel® Alder Lake-U, i7 / i5 / i3 CPU	13th Gen Intel® Raptor Lake-U, i7 / i5 / i3 CPU 12th Gen Intel® Alder Lake-U, i7 / i5 / i3 CPU
Chipset	Intel® Raptor Lake-U SoC Intel® Alder Lake-U SoC	Intel® Raptor Lake-U SoC Intel® Alder Lake-U SoC
Memory	1 x DDR5 SODIMM, Max 32GB	1 x DDR5 SODIMM, Max 32GB
Storage Space	M.2-SSD, HDD / SSD	M.2-SSD, HDD / SSD
Display	HDMI®	HDMI®
TPM	TPM 2.0	TPM 2.0
USB	3 x USB 3.2 Gen 1 x 1 ; 2 x USB 2.0	3 x USB 3.2 Gen 1 x 1 ; 2 x USB 2.0
COM	2 x RS232 / 422 / 485	2 x RS232 / 422 / 485
M.2	1 x M.2 M key Type 2280 (mSATA / PCIe x 4), Support NVMe 1 x M.2 B key Type 3042 (PCIe x2 / USB 3.2 / 2.0)	1 x M.2 M key Type 2280 (mSATA / PCIe x 4), Support NVMe 1 x M.2 B key Type 3042 (PCIe x2 / USB 3.2 / 2.0)
SIM Card Holder	1 x Nano SIM	1 x Nano SIM
GPIO	4DI / 4DO (Option)	4DI / 4DO (Option)
Ethernet	4 x Intel 2.5 GbE I226-IT	4 x Intel 2.5 GbE I226-IT
Power Input	Wide Range +9~36V	Wide Range +9~36V
Operating Temp.	-40°C~+60°C (under specific environmental & CPU power consumption conditions)	-40°C~+70°C (under specific environmental & CPU power consumption conditions)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	M.2 Module: 4G / 5G, SATA, PCIe By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card    	



Model Name	SKY 2	SKY 2	SKY 2
Motherboard	21640DW	21640CW	21640SW
System Dimension (W x D X H)	141W x 111.2D x 71.9H mm	141W x 111.2D x 71.9H mm	141W x 111.2D x 71.9H mm
Weight (incl. M/B)	1.25 kg	1.36 kg	1.36 kg
CPU	Intel® Elkhart Lake ATOM x6413E 3.0 GHz (Quad Core) Intel® Elkhart Lake Celeron J6412 2.6 GHz (Quad Core)		
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	1 x DDR4 SODIMM, Max. 32GB	On Board 4 / 8GB LPDDR4	1 x DDR4 SODIMM, Max 32GB
Storage Space	M.2	M.2, SSD	M.2, SSD
Display	2 x HDMI® (OEM to DP)	2 x HDMI® (OEM to DP)	2 x HDMI® (1 can OEM to DP)
USB	2 x USB 3.0, 3 x USB 2.0	2 x USB 3.0, 4 x USB 2.0	2 x USB 3.1, 4 x USB 2.0
COM	2 x RS232 / 422 / 485	1 x RS232 / 422 / 485 ; 3 x RS232	4 x RS232 / 422 / 485
Mini-PCle	N/A	1 x USB 2.0 / PCIe	N/A
M.2	1 x M.2 B Key Type 2242 / 3042 (PCIe x2 / USB 3.0 / USB 2.0) 1 x M.2 B Key Type 2242 (PCIe x2 / USB 2.0 / SATA)	1 x M.2 B Key Type 3042 (USB 2.0 / SATA / USB 3.0 -optional to PCIe x2)	1 x M.2 B Key Type 2242 / 3042 (PCIe x2 / USB 3.1 / USB 2.0) 1 x M.2 B Key Type 2242 / 3042 (PCIe / USB 2.0 / SATA-SSD)
SIM Card Holder	1 x Nano SIM	1 x Nano SIM	1 x Nano SIM
GPIO	4DI / 4DO (Option)	4DI / 4DO (Option)	4DI / 4DO (Option)
Ethernet	3 x Intel 2.5 GbE (external)	2 x Intel 2.5 GbE (external)	2 x Intel 2.5 GbE (external)
Power Input	Wide Range DC IN +9~24V	Wide Range DC IN +9~24V	Wide Range DC IN +9~24V
Operating Temp.	-20°C to +60°C (X6413E) 0°C to +60°C (J6412) ; -40°C by OEM (100% CPU Usage, not-underclocking)		
Operating Humidity	5~95% @ 40°C, non-condensing		
Expansion	M.2 Module: 4G / 5G, SATA, PCIe By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card    		



Model Name	SKY 2	SKY 2
Motherboard	2I110D	2I110AW
System Dimension (W x D X H)	141W x 111.2D x 71.9H mm	141W x 111.2D x 71.9H mm
Weight (incl. M/B)	1.25 kg	1.46 kg
CPU	11th Gen Intel®Tiger Lake-UP3, i7 / i5 / i3 / Celeron CPU	11th Gen Intel®Tiger Lake-UP3, i7 / i5 / i3 / Celeron CPU
Chipset	Intel® Tiger Lake-UP3 SoC	Intel® Tiger Lake-UP3 SoC
Memory	1 x DDR4 SODIMM, Max 32GB	1 x DDR4 SODIMM, Max. 32GB
Storage Space	M.2-SSD	M.2-SSD
Display	HDMI®	4 x HDMI®
USB	3 x USB 3.0, 2 x USB 2.0	2 x USB 3.0, 2 x USB 2.0
COM	2 x RS232 / 422 / 485	2 x RS232 / 422 / 485
M.2	1 x M.2 B key Type 3042 (PCIe x2 / USB 3.2 / 2.0), 1 x M.2 M key Type 2242 (PCIe x4 / SATA), Support NVMe	1 x M.2 B key Type 3042 (PCIe x2 / USB 3.2 / 2.0), 1 x M.2 M key Type 2242 (PCIe x4 / SATA), Support NVMe
SIM Card Holder	1 x Nano SIM	1 x Nano SIM
GPIO	4DI / 4DO (Option)	4DI / 4DO (Option)
Ethernet	1 x Intel GbE ; 3 x Intel 2.5 GbE	3 x Intel 2.5 GbE
Power Input	DC IN +12V (Option 9~36V by power module)	Wide Range +9~36V
Operating Temp.	-40°C to +60°C (Core i7 1185GRE) (100% CPU Usage, not-underclocking)	-40°C to +60°C (Core i7 1185GRE) (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing

Expansion

M.2 Module: 4G / 5G, SATA, PCIe
By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card





Model Name	SKY 2	SKY 2	SKY 2
Motherboard	2I810D	2I610DW	2I612CW
System Dimension (W x D X H)	141W x 111.2D x 71.9H mm	141W x 111.2D x 71.9H mm	141W x 111.2D x 71.9H mm
Weight (incl. M/B)	1.24 kg	1.36 kg	1.36 kg
CPU	8th Gen Intel® Whiskey Lake-U i7 / i5 / i3 / Celeron CPU	6th / 7th Gen Intel® Skylake-U / Kaby Lake-U i7 / i5 / i3 / Celeron CPU	6th / 7th Gen Intel® Skylake-U / Kaby Lake-U i7 / i5 / i3 / Celeron CPU
Chipset	Intel® Whiskey Lake-U SoC	Intel® Skylake-U / Kaby Lake-U SoC	Intel® Skylake-U / Kaby Lake-U SoC
Memory	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB
Storage Space	mSATA, SSD	mSATA, SSD	mSATA, SSD
Display	VGA (Optional), HDMI®	VGA	2 x HDMI® (OEM to DP)
USB	3 x USB 3.0	3 x USB 3.0	4 x USB 3.0
COM	2	2	2
Mini-PCIe	1 x PCIe / mSATA / USB 3.0 / USB 2.0 1 x (Half Size) PCIe / mSATA / USB 3.0 / USB 2.0	1 x mSATA / USB 1 x PCIe / USB 2.0	1 x mSATA / USB 1 x PCIe / USB 2.0
GPIO	4DI / 4DO (Option)	4DI / 4DO (Option)	4DI / 4DO (Option)
Ethernet	4 x Intel 2.5 GbE	3 x Intel GbE	2 x Intel GbE
Power Input	DC IN +12V (Option 9~36V by power module)	Wide Range +9V~36V	Wide Range +9V~36V
Operating Temp.	-20°C to +60°C (Core i5 Celeron CPU) -20°C to +50°C (Core i7 CPU) (100% CPU Usage, not-underclocking)	-20°C to +60°C (Celeron CPU) -20°C to +50°C (Core i7 / i5 CPU) (100% CPU Usage, not-underclocking)	-20°C to +60°C (Celeron CPU) -20°C to +50°C (Core i7 / i5 CPU) (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing

Expansion

Mini Card: GPS, 4G / 5G, WI-FI, SATA RAID, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video
By Cable: Bluetooth, Digital I/O, 2 / 4 x PoE, 4 x USB mini card





Model Name	SKY 3
Motherboard	31130DW
System Dimension (W x D X H)	183W x 142.2D x 83.9H mm
Weight (incl. M/B)	2.8 kg
CPU	13th Gen Intel® Raptor Lake-P / Raptor Lake-U, i7 / i5 / i3 CPU 12th Gen Intel® Alder Lake-P / Alder Lake-U, i7 / i5 / i3 CPU
Chipset	Intel® Raptor Lake-P / U SoC Intel® Alder Lake-P / U SoC
Memory	2 x DDR5 SODIMM, Max. 64GB
Storage Space	M.2, SSD HDD
Display	2 x HDMI® (OEM to DP)
USB	3 x USB 3.2 Gen 1 x 1 (external) 1 x USB 2.0 (external)
COM	2 x RS232 / 422 / 485
Mini-PCIe	1 x USB 2.0 / PCIe
M.2	1 x M.2 M key Type 2280 (PCIe x4), Support NVMe 1 x M.2 B key Type 3042 / 3052 (USB 3.2 Gen1 / USB 2.0 / mSATA)
SIM Card Holder	1 x Nano SIM
GPIO	4DI / 4DO (Option)
Ethernet	5 x Intel 2.5 GbE
Power Input	Wide Range +9~36V
Operating Temp.	-40°C~+70°C (under specific environmental & CPU power consumption conditions)
Operating Humidity	5~95% @ 40°C, non-condensing
Expansion	Mini Card: 4G / 5G, WiFi , BT, SATA, PCIe By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card



Model Name	SKY 3	SKY 3	SKY 3
Motherboard	31810DW	31170UW	31170NX
System Dimension (W x D X H)	183W x 142.2D x 82.4H mm	183W x 142.2D x 66.9H mm	183W x 142.2D x 66.9H mm
Weight (incl. M/B)	2.8 kg	2.8 kg	2.8 kg
CPU	8th Gen Intel® Whiskey Lake-U i7 / i5 / i3 / Celeron CPU	6th / 7th Gen Intel® Skylake-S / Kaby Lake-S i7 / i5 / i3 / Celeron CPU	6th / 7th Gen Intel® Skylake-S / Kaby Lake-S i7 / i5 / i3 / Celeron CPU
Chipset	Intel® Whiskey Lake-U SoC	Intel® Q170	Intel® Q170
Memory	2 x DDR4 SODIMM, Max. 64GB	2 x DDR4 SODIMM, Max. 64GB	2 x DDR4 SODIMM, Max. 64GB
Storage Space	mSATA, 2 x M.2, SSD	M.2, 2 x mSATA, SSD	mSATA, SSD
Display	2 x HDMI®	VGA, DP, HDMI®	VGA, HDMI®
USB	4 x USB 3.1	4 x Renesas USB 3.0 with max. 2A output current ; 2 x USB 3.0	2 x USB 3.0
COM	2	2	2
SIM Card Holder	1 x Nano SIM	1	1
Mini-PCIe	1 x PCIe / USB	1 x PCIe / mSATA / USB, (Half size) 1 x PCIe / mSATA / USB	1 x PCIe / mSATA / USB (Half size) 1 x PCIe / mSATA / USB
M.2	1 x M.2 B Key, Type 2242 (mSATA / USB / PCIe x1) 1 x M.2 B Key, Type 3042 (USB 3.0 / 2.0 / PCIe x1*) *If 2242 M.2 adopts PCIe x2 signal, 3042 M.2 will support USB 3.0 / 2.0 signal only.	1 x M.2 B Key (SATA / PCIe)	N/A
GPIO	8DI / 8DO (Option)	8DI / 8DO (Option)	8DI / 8DO ; 16DI / 16DO (Option)
Ethernet	5 x Intel 2.5 GbE	2 x Intel GbE	5 x Intel GbE (4 port PSE)
Power Input	Wide Range DC IN +9~36V	Wide Range DC IN +9~36V	Wide Range DC IN +12~36V
Operating Temp.	-20°C to +50°C (Core i7 CPU) (100% CPU Usage, not-underclocking)	-20°C to +50°C (Core i7 CPU) (100% CPU Usage, not-underclocking)	-20°C to +50°C (Core i7 CPU) (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	PCIe Card via riser Card: 2 x USB 3.1, 2 x 10 GbE LAN, 4 x PoE, 4 x GbE Mini Card: GPS, Wi-Fi, 2 / 4 x LAN, 4 x COM, CAN Bus, SDI / AHD Video By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card M.2 Module: 4G / 5G, SATA, PCIe		



Model Name	SKY 3	SKY 3	SKY 3
Motherboard	3I612DW	3I610NX	3I610NM
System Dimension (W x D X H)	223W x 142.2D x 66.9.9H mm	183W x 142.2D x 83.9H mm	183W x 142.2D x 83.9H mm
Weight (incl. M/B)	3 kg	2.8 kg	2.8 kg
CPU	6th / 7th Gen Intel® Skylake-U / Kaby Lake-U i7 / i5 / i3 / Celeron CPU	6th / 7th Gen Intel® Skylake-U / Kaby Lake-U i7 / i5 / i3 / Celeron CPU	6th / 7th Gen Intel® Skylake-U / Kaby Lake-U i7 / i5 / i3 / Celeron CPU
Chipset	Intel® Skylake-U / Kaby Lake-U SoC	Intel® Skylake-U / Kaby Lake-U SoC	Intel® Skylake-U / Kaby Lake-U SoC
Memory	2 x DDR4 SODIMM, Max. 64GB	2 x DDR4 SODIMM, Max. 64GB	On board DDR4 (OEM) + 1 x SODIMM (Max 32GB)
Storage Space	M.2, mSATA, SSD	mSATA, SSD	mSATA, SSD, M.2
Display	DP, HDMI®	HDMI®	HDMI®
USB	4 x USB 3.0	2 x USB 3.0	2 x USB 3.0
COM	2	2	2
SIM Card Holder	1 x Nano SIM	Optional	2
Mini-PCIe	1 x PCIe / mSATA / USB 1 x PCIe / USB 2.0 (Optional USB 3.0)	1 x mSATA / USB 1 x PCIe / USB 2.0	1 x PCIe / USB 2.0 (Half size) 1 x PCIe / mSATA / USB
M.2	1 x M.2 B Key Type 2242 (mSATA)	N/A	1 x M.2 B key Type 3042 (PCIe x2 / mSATA / USB 2.0 / USB 3.0)
GPIO	4DI / 4DO (Option)	16DI / 16DO (Option)	16DI / 16DO (Option)
Ethernet	5 x Intel GbE ; 2 x SFP Fiber	5 x Intel GbE (4 port PSE)	5 x Intel GbE (4 port PSE)
Power Input	Wide Range DC IN +12~48V	Wide Range DC IN +9~36V	Wide Range DC IN +9~36V
Operating Temp.	-20°C to +60°C (Celeron CPU) -20°C to +50°C (Core i7 / i5 CPU) (100% CPU Usage, not-underclocking)	-20°C to +60°C (Celeron CPU) -20°C to +50°C (Core i7 / i5 CPU) (100% CPU Usage, not-underclocking)	-20°C to +60°C (Celeron CPU) -20°C to +50°C (Core i7 / i5 CPU) (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing

Expansion

PCIe Card via riser Card: 2 x USB 3.1, 2 x 10 GbE LAN, 4 x PoE, 4 x GbE
Mini Card: GPS, Wi-Fi, 2 / 4 x LAN, 4 x COM, CAN Bus, SDI / AHD Video
By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card
M.2 Module: 4G / 5G, SATA, PCIe





Model Name	NET-III	NET-III	NET-III
Motherboard	2I640DW	2I640CW	2I640SW
System Dimension (W x D X H)	135W x 110D x 35H mm	135W x 110D x 40H mm	135W x 110D x 40H mm
Weight (incl. M/B)	0.75 KG	0.75 KG	0.75 KG
CPU	Intel® Elkhart Lake ATOM x6413E Quad Core 3.0 GHz CPU Intel® Elkhart Lake Celeron J6412 Quad Core 2.6 GHz CPU		
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	1 x DDR4 SODIMM, Max. 32GB	On Board 4GB / 8GB LPDDR4	1 x DDR4 SODIMM, Max 32GB
Storage Space	M.2	M.2	M.2, SSD
Display	2 x HDMI® (OEM to DP)	2 x HDMI® (OEM to DP)	2 x HDMI® (1 can OEM to DP)
USB	2 x USB 3.0	2 x USB 3.0, 2 x USB 2.0	2 x USB 3.1, 2 x USB 2.0
COM	2 x RS232 / 422 / 485	1 x RS232 / 422 / 485 ; 3 x RS232	4 x RS232 / 422 / 485
SIM Card Holder	1 x Nano SIM	1 x Nano SIM	1 x Nano SIM
Mini-PCle	N/A	1 x USB 2.0 / PCIe	N/A
M.2	1 x M.2 B Key Type 2242 / 3042 (PCIe x2 / USB 3.0 / USB 2.0) 1 x M.2 B Key Type 2242 (PCIe x2 / USB 2.0 / SATA)	1 x M.2 B Key Type 3042 (USB 2.0 / SATA / USB 3.0 -optional to PCIe x2)	1 x M.2 B Key Type 2242 / 3042 (PCIe x2 / USB 3.1 / USB 2.0) 1 x M.2 B Key Type 2242 / 3042 (PCIe / USB 2.0 / SATA-SSD)
GPIO	4DI / 4DO (Option)	4DI / 4DO (Option)	4DI / 4DO (Option)
Ethernet	3 x Intel 2.5 GbE	2 x Intel 2.5 GbE	2 x Intel 2.5GbE (external)
Power Input	Wide Range +9~24V	Wide Range +9~24V	Wide Range +9~36V
Operating Temp.	-20°C to +60°C (X6413E CPU) 0°C to +60°C (J6412 CPU) ; -40°C by OEM (100% CPU Usage, not-underclocking)	-20°C to +60°C (X6413E CPU) 0°C to +60°C (J6412 CPU) ; -40°C by OEM (100% CPU Usage, not-underclocking)	-20°C to +60°C (X6413E) ; -40°C by OEM Option, 0°C to +60°C (J6412) *With wide range temperature memory & storage
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing

Expansion

M.2 Module: 4G / 5G, WiFi + BT, SATA, PCIe,
By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card





Model Name	ARK-I	ARK-I (waterproof)
Motherboard	2I640PW + DM003	2I640PW + DM003
System Dimension (W x D X H)	142W x 128D x 56H mm	133W x 150D x 57H mm
Weight (incl. M/B)	875 g	1.4 KG
CPU	Intel® Elkhart Lake ATOM x6413E Quad Core 3.0 GHz CPU Intel® Elkhart Lake Celeron J6412 Quad Core 2.6 GHz CPU	Intel® Elkhart Lake ATOM x6413E Quad Core 3.0 GHz CPU Intel® Elkhart Lake Celeron J6412 Quad Core 2.6 GHz CPU
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	On Board 4 / 8GB LPDDR4	On Board 4GB / 8GB LPDDR4
Storage Space	M.2, SSD	M.2, SSD
Display	1 x VGA (M12), 1 x Mini HDMI®	1 x VGA (M12)
USB	4 x USB 2.0 (2 x M12), 1 x USB 3.0	4 x USB 2.0 (2 x M12)
COM	4 x COM (M12 x 2)	4 x COM (M12 x 2)
Mini-PCIe	1 x Full-size Mini Card (PCIe / USB 2.0)	1 x Full-size Mini Card (PCIe / USB 2.0)
M.2	1 x M.2 B Key Type 3042 (USB 2.0 / PCIe / SATA) 1 x M.2 B Key Type 3042 (PCIe x 2)	1 x M.2 B Key Type 3042 (USB 2.0 / PCIe / SATA) 1 x M.2 B Key Type 3042 (PCIe x 2)
SIM Card Holder	1 x SIM (push-push)	N/A
SMUBS / I2C / SPI	SMUBS / I2C / SPI (M12)	SMUBS / I2C / SPI (M12)
Ethernet	2 x Intel 2.5 GbE (M12)	2 x Intel 2.5 GbE (M12)
Audio	Line-out / Mic-in (M12)	Line-out / Mic-in (M12)
Power Input	Wide Range +9V~36V (M12)	Wide Range +9V~36V (M12)
Operating Temp.	-20°C to +60°C (X6413E CPU) 0°C to +60°C (J6412 CPU) (100% CPU Usage, not-underclocking)	-20°C to +60°C (X6413E CPU) 0°C to +60°C (J6412 CPU) (100% CPU Usage, not-underclocking)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing

Expansion

M.2 Module: 4G / 5G, WiFi + BT, SATA, PCIe,
By Cable: Bluetooth, Digital I/O, 2 / 4 PoE, 4 x USB mini card





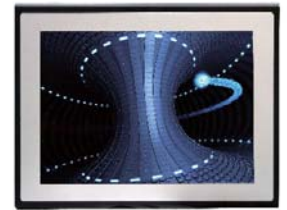
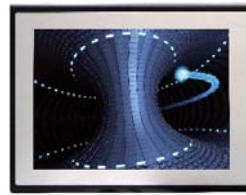
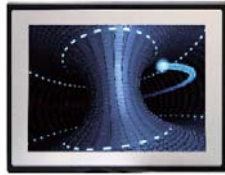
Model Name	SHARK 7" Box PC	SHARK 10.1" Box PC
Motherboard	7" Box PC + 2I385HW	10.1" Box PC + 2I385HW
System Dimension (W x D X H)	184.7W x 40H x 122.5D mm	250W x 40H x 168D mm
Weight (incl. M/B)	2 Kg	2.5 Kg
Storage Space	mSATA, SSD	mSATA, SSD
MB	2I385HW	2I385HW
CPU	Intel Bay Trail-I E3825 1.33 GHz (Dual Core) Intel Bay Trail-I E3845 1.91 GHz (Quad Core) (Optional J1900)	Intel Bay Trail-I E3825 1.33 GHz (Dual Core) Intel Bay Trail-I E3845 1.91 GHz (Quad Core) (Optional J1900)
Chipset	Intel® Bay Trail SoC	Intel® Bay Trail SoC
Memory	DDR3L, 2GB (Optional 4GB)	DDR3L, 2GB (Optional 4GB)
Display	VGA (Selectable M12 I/O)	VGA (Selectable M12 I/O)
USB	5 (Selectable M12 I/O)	5 (Selectable M12 I/O)
COM	4 (Selectable M12 I/O)	4 (Selectable M12 I/O)
Mini PCIe	1 x PCIe / USB / mSATA 1 x (Half Size) USB / mSATA	1 x PCIe / USB / mSATA 1 x (Half Size) USB / mSATA
Ethernet	2 x Intel GbE (Selectable M12 I/O)	2 x Intel GbE (Selectable M12 I/O)
Audio	Line-out / Mic-in (Optional)	Line-out / Mic-in (Optional)
Power Input	Wide Range +9~36V	Wide Range +9~36V
Battery	Optional (3200~9600 mAh)	Optional (3200~9600 mAh)
Mounting	VESA 75 & Panel Mount	VESA 75 & Panel Mount
Panel frame water proof	IP66 / IP67	IP66 / IP67
Operating Temp.	-20°C~60°C for mSATA / SSD HDD, (100% CPU Usage, not-underclocking)	
Operating Humidity	5~95% @ 40°C, non-condensing	
Expansion	Mini Card: GPS, 4G / 5G, WI-FI, SATA RAID, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video By Cable: Bluetooth, Digital I/O, 2 / 4 x PoE, 4 x USB mini card	



Model Name	SUPER 7"	SUPER 10.1"
Motherboard	7" + 3I640CW	10.1" + 3I640CW
System Dimension (W x D X H)	66.1H x 225.3W x 166.87D mm	66.79H x 293.4W x 210.4D mm
Weight (incl. M/B)	1.2 Kg	1.6 Kg
Storage Space	SSD, M.2	SSD, M.2
LCD size	7 inch, 16:9	10.1 inch, 16:9
Max Resolution	1024 x 600	1280 x 800
Luminance (cd/m2)	500	300
Contrast Ratio	700:1	1300:1
Viewing Angle (H-V)	75 / 75 / 70 / 75CR ≥ 10 (L / R / U / D)	85 / 85 / 85 / 85CR ≥ 10 (L / R / U / D)
Backlight	LED	LED
Touch Screen	Resistive touch screen optional capacitive touch	Resistive touch screen optional capacitive touch
MB	3I640CW	3I640CW
CPU	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB
Display	DVI, HDMI®	DVI, HDMI®
USB	2 x USB 3.0 ; 2 x USB 2.0	2 x USB 3.0 ; 2 x USB 2.0
COM	2 x RS232 / 422 / 485 1 x RS232	2 x RS232 / 422 / 485 1 x RS232
Mini PCIe	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe
M.2	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), Support NVMe	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), Support NVMe
SIM Card Holder	1 x Mini SIM	1 x Mini SIM
Ethernet	2 x 2.5G Intel GbE	2 x 2.5G Intel GbE
Audio	Line-out / Mic-in	Line-out / Mic-in
Power Input	Wide Range +9~36V	Wide Range +9~36V
Mounting	VESA 75 / Wall mount	VESA 75 / Wall mount
Panel frame water proof	IP65	IP65
Optional MB	3I385CW-Intel ATOM BayTrail CPU	3I385CW-Intel ATOM BayTrail CPU
Operating Temp.	-20°C~50°C for M.2 / SSD (100% CPU Usage, not-underclocking)	
Operating Humidity	5~95% @ 40°C, non-condensing	
Expansion	4G / 5G, WiFi + BT, AI Accelerator, GPS, Wi-Fi, 2 / 4 PoE, COM CANBus, SDI / AHD Video, Digital I/O, 4 x USB mini card	



Model Name	SUPER 10.4"	SUPER 15.1"
Motherboard	10.4" + 3I640CW	15.1" + 3I640CW
System Dimension (W x D X H)	296W x 250.4D x 66.79H mm	404.1W x 335D x 68.7H mm
Weight (incl. M/B)	1.9 Kg	3.5 Kg
Storage Space	SSD, M.2	SSD, M.2
LCD size	10.4 inch, 4:3	15.1 inch, 4:3
Max Resolution	1024 x 768	1024 x 768
Luminance (cd/m2)	500	450
Contrast Ratio	1000:1	800:1
Viewing Angle (H-V)	80 / 80 / 80 / 80 CR ≥ 10 (L / R / U / D)	80 / 80 / 80 / 80 CR ≥ 10 (L / R / U / D)
Backlight	LED	LED
Touch Screen	Resistive touch screen optional capacitive touch	Resistive touch screen optional capacitive touch
MB	3I640CW	3I640CW
CPU	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB
Display	DVI, HDMI®	DVI, HDMI®
USB	2 x USB 3.0 ; 2 x USB 2.0	2 x USB 3.0 ; 2 x USB 2.0
COM	2 x RS232 / 422 / 485 1 x RS232	2 x RS232 / 422 / 485 1 x RS232
Mini PCIe	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe
M.2	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), support NVMe	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), support NVMe
SIM Card Holder	1 x Mini SIM	1 x Mini SIM
Ethernet	2 x 2.5G Intel GbE	2 x 2.5G Intel GbE
Audio	Line-out / Mic-in	Line-out / Mic-in
Power Input	Wide Range +9~36V	Wide Range +9~36V
Mounting	VESA 75 / Wall mount	VESA 75 / Wall mount
Panel frame water proof	IP65	IP65
Optional MB	3I385CW-Intel ATOM BayTrail CPU	3I385CW-Intel ATOM BayTrail CPU
Operating Temp.	-20°C~50°C for M.2 / SSD (100% CPU Usage, not-underclocking)	
Operating Humidity	5~95% @ 40°C, non-condensing	
Expansion	4G / 5G, WiFi + BT, AI Accelerator, GPS, WI-FI, 2 / 4 PoE, COM CANBus, SDI / AHD Video, Digital I/O, 4 x USB mini card	



Model Name	Slim 10.4"	Slim 12.1"	Slim 15"
Motherboard	10.4" + 3I640CW	12.1" + 3I640CW	15" + 3I640CW
System Dimension (W x D X H)	287.6W x 245D x 60.9H mm	320.3W x 275D x 60.9H mm	384W x 312D x 70.5H mm
Weight (incl. M/B)	2.8 Kg	3.4 Kg	4 Kg
Storage Space	M.2, SSD	M.2, SSD	M.2, SSD
LCD size	10.4 inch, 4:3	12.1 inch, 4:3	15 inch, 4:3
Max Resolution	1024 x 768	1024 x 768	1024 x 768
Luminance (cd/m2)	500	500	450
Contrast Ratio	1000:1	700:1	800:1
Viewing Angle (H-V)	80(U), 80(D), 80(R), 80(L)	80(U), 80(D), 80(R), 80(L)	80(U), 80(D), 80(R), 80(L)
Backlight	LED	LED	LED
Touch Screen	Resistive touch screen	Resistive touch screen	Resistive touch screen
MB	3I640CW	3I640CW	3I640CW
CPU	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)		
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB
Display	DVI, HDMI®	DVI, HDMI®	DVI, HDMI®
USB	2 x USB 3.0 2 x USB 2.0	2 x USB 3.0 2 x USB 2.0, expand up to 4 x USB 2.0	2 x USB 3.0 2 x USB 2.0, expand up to 4 x USB 2.0
COM	2 x RS232 / 422 / 485 2 x RS232	2 x RS232 / 422 / 485 2 x RS232	2 x RS232 / 422 / 485 4 x RS232
Mini PCIe	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe
M.2 / PCIe	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), support NVMe		
SIM Card Holder	1 x Mini SIM	1 x Mini SIM	1 x Mini SIM
Ethernet	2 x 2.5G Intel GbE	2 x 2.5G Intel GbE	2 x 2.5G Intel GbE
Audio	Line-out / Mic-in	Line-out / Mic-in	Line-out / Mic-in
Power Input	Wide Range +9~36V	Wide Range +9~36V	Wide Range +9~36V
Mounting	VESA 75 / 100 & Wall mount	VESA 75 / 100 & Wall mount	VESA 75 / 100 & Wall mount
Panel frame water proof	IP65	IP65	IP65
Operating Temp.	-20°C~60°C for M.2 / SSD (100% CPU Usage, not-underclocking)		
Operating Humidity	5~95% @ 40°C, non-condensing		
Expansion	4G / 5G, WiFi + BT, AI Accelerator, GPS, WI-FI, 2 / 4 PoE, COM CANBus, SDI / AHD Video, Digital I/O, 4 x USB mini card		



Model Name	Slim 15"	Slim 17"
Motherboard	15" + CI170C	17" + 3I640CW
System Dimension (W x D X H)	384W x 312H x 80.5D mm	413W x 343H x 64.5D mm
Weight (incl. M/B)	4.2 Kg	4.89 Kg
Storage Space	mSATA, M.2, SSD	M.2, SSD
LCD size	15 inch, 4:3	17 inch, 4:3
Max Resolution	1024 x 768	SXGA 1280 x 1024
Luminance (cd/m2)	450	350
Contrast Ratio	800:1	1000:1
Viewing Angle (H-V)	80(U), 80(D), 80(R), 80(L)	80(U), 80(D), 85(R), 85(L)
Backlight	LED	LED
Touch Screen	Resistive touch screen	Resistive touch screen
MB	CI170C	3I640CW
CPU	Intel Skylake-S / Kaby Lake-S i7 / i5 / i3 / Celeron CPU	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)
Chipset	Intel® Q170	Intel® Elkhart Lake SoC
Memory	2 x DDR4 SODIMM, Max. 64GB	1 x DDR4 SODIMM, Max. 32GB
Display	DP, HDMI®, DVI	DVI, HDMI®
USB	Built-in 4 x USB, expand up to 9 x USB	2 x USB 3.0 2 x USB 2.0, expand up to 4 x USB 2.0
COM	Built-in 4 x COM, expand up to 10 x COM	2 x RS232 / 422 / 485 4 x RS232
Mini PCIe	1 x PCIe / mSATA / USB 1 x PCIe / USB	1 x PCIe / USB 2.0
M.2 / PCIe	1 x M.2 B Key, Type 2242 (mSATA / PCIe) 1 x PCIe, expand up to 2 x PCI / PCIe	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), support NVMe
SIM Card Holder	2	1 x Mini SIM
Ethernet	4 x Intel GbE	2 x 2.5G Intel GbE
Audio	Optional	Line-out / Mic-in
Power Input	DC IN +12V	Wide Range +9~36V
Mounting	VESA 75 / 100 & Wall Mount	VESA 75 / 100 & Wall Mount
Panel frame water proof	IP65	IP65
Operating Temp.	-20°C~60°C for mSATA / M.2 / SSD (100% CPU Usage, not-underclocking)	-20°C~60°C for mSATA / SSD (100% CPU Usage)
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	4G / 5G, WiFi + BT, AI Accelerator, GPS, WI-FI, 2 / 4 PoE, COM CANBus, SDI / AHD Video, Digital I/O, 4 x USB mini card	



Model Name	STAR 10.4"	STAR 12.1"
Motherboard	10.4" + 3I640CW	12.1" + 3I640CW
System Dimension (W x D X H)	279.5W x 54H x 231D mm	323.5W x 54H x 268D mm
Weight (incl. M/B)	2.67 Kg	3.4 Kg
Storage Space	M.2, SSD	M.2, SSD
LCD size	10.4 inch, 4:3	12.1 inch, 4:3
Max Resolution	1024 x 768	1024 x 768
Luminance (cd/m2)	500	500
Contrast Ratio	1000:1	700:1
Viewing Angle (H-V)	80(U), 80(D), 80(R), 80(L)	80(U), 80(D), 80(R), 80(L)
Backlight	LED	LED
Touch Screen	Resistive touch screen	Resistive touch screen
MB	3I640CW	3I640CW
CPU	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB
Display	DVI, HDMI®	DVI, HDMI®
USB	2 x USB 3.0 2 x USB 2.0	2 x USB 3.0 2 x USB 2.0
COM	2 x RS232 / 422 / 485 2 x RS232	2 x RS232 / 422 / 485 2 x RS232
Mini PCIe	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe
M.2	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), Support NVMe	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), Support NVMe
SIM Card Holder	1 x Mini SIM	1 x Mini SIM
Ethernet	2 x 2.5G Intel GbE	2 x 2.5G Intel GbE
Audio	Line-out / Mic-in	Line-out / Mic-in
Power Input	Wide Range +9~36V	Wide Range +9~36V
Battery	Option (3200~9600 mAh)	Option (3200~9600 mAh)
Mounting	VESA 75 & Wall Mount	VESA 75 / Wall mount
Panel frame water proof	IP65	IP65
Operating Temp.	-20°C~60°C for M.2 / SSD (100% CPU Usage, not-underclocking)	
Operating Humidity	5~95% @ 40°C, non-condensing	
Expansion	4G / 5G, WiFi + BT, AI Accelerator, GPS, WI-FI, 2 / 4 PoE, COM CANBus, SDI / AHD Video, Digital I/O, 4 x USB mini card	



Model Name	STAR 15.1"	STAR 21.5"
Motherboard	15.1" + 3I640CW	21.5" + 3I640CW
System Dimension (W x D X H)	385.5W x 55.9H x 317.5D mm	548W x 64H x 328.6D mm
Weight (incl. M/B)	4.89 Kg	5.19 Kg
Storage Space	M.2, SSD	M.2, SSD
LCD size	15.1 inch, 4:3	21.5 inch, 16:9
Max Resolution	1024 x 768	1920 x 1080
Luminance (cd/m2)	450	250
Contrast Ratio	800:1	1000:1
Viewing Angle (H-V)	80(U), 80(D), 80(R), 80(L)	80(U), 80(D), 80(R), 85(L)
Backlight	LED	LED
Touch Screen	Resistive touch screen	Capacitive touch screen
MB	3I640CW	3I640CW
CPU	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB
Display	DVI, HDMI®	DVI, HDMI®
USB	2 x USB 3.0 2 x USB 2.0	2 x USB 3.0 2 x USB 2.0
COM	2 x RS232 / 422 / 485 2 x RS232	2 x RS232 / 422 / 485 2 x RS232
Mini PCIe	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe
M.2	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), Support NVMe	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), Support NVMe
SIM Card Holder	1 x Mini SIM	1 x Mini SIM
Ethernet	2 x 2.5G Intel GbE	2 x 2.5G Intel GbE
Audio	Line-out / Mic-in	Line-out / Mic-in
Power Input	Wide Range +9~36V	Wide Range +9~36V
Battery	Optional (3200~9600 mAh)	Optional (3200~9600 mAh)
Mounting	VESA 75 & Wall Mount	VESA 75 / Wall mount
Panel frame water proof	IP65	IP65
Operating Temp.	-20°C~60°C for mSATA / SSD HDD (100% CPU Usage, not-underclocking)	
Operating Humidity	5~95% @ 40°C, non-condensing	
Expansion	4G / 5G, WiFi + BT, AI Accelerator, GPS, WI-FI, 2 / 4 PoE, COM CANBus, SDI / AHD Video, Digital I/O, 4 x USB mini card	



Model Name	VITA 10.1"	VITA 15"
Motherboard	10.1" + 3I640CW	15" + 3I640CW
System Dimension (W x D X H)	260.67W x 183.37D x 70.8H mm	364.03W x 290.93D x 72.8H mm
Weight (incl. M/B)	2.5 Kg	4 Kg
Storage Space	M.2, SSD	M.2, SSD
LCD size	10.1 inch, 16:9	15 inch, 4:3
Max Resolution	1280 x 800	1024 x 768
Luminance (cd/m2)	500	350
Contrast Ratio	1300:1	800:1
Viewing Angle (H-V)	85(U), 85(D), 85(R), 85(L)	80(U), 80(D), 80(R), 80(L)
Backlight	LED	LED
Touch Screen	Capacitive touch screen	Capacitive touch screen
MB	3I640CW	3I640CW
CPU	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB
Display	DVI, HDMI®	DVI, HDMI®
USB	2 x USB 3.0 ; 2 x USB 2.0	2 x USB 3.0 ; 2 x USB 2.0
COM	2 x RS232 / 422 / 485 2 x RS232	2 x RS232 / 422 / 485 2 x RS232
Mini PCIe	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe
M.2	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), Support NVMe	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), Support NVMe
SIM Card Holder	1 x Mini SIM	1 x Mini SIM
Ethernet	2 x 2.5G Intel GbE	2 x 2.5G Intel GbE
Audio	Line-out / Mic-in	Line-out / Mic-in
Power Input	Wide Range +9~36V	Wide Range +9~36V
Battery	Optional	Optional
Mounting	VESA 75 / 100 & Wall mount	VESA 75 / 100 & Wall mount
Panel frame water proof	IP65	IP65
Optional MB	3I385CW-Intel ATOM Bay Trail CPU ; 3I610CW-6th / 7th Gen Intel® Core i CPU	
Operating Temp.	-20°C~60°C for mSATA / SSD HDD (100% CPU Usage, not-underclocking)	
Operating Humidity	5~95% @ 40°C, non-condensing	
Expansion	4G / 5G, WiFi + BT, AI Accelerator, GPS, WI-FI, 2 / 4 PoE, COM CANBus, SDI / AHD Video, Digital I/O, 4 x USB mini card	



Model Name	VITA 21.5"	VITA 23.8"
Motherboard	21.5" + 3I640CW	23.8" + 3I640CW
System Dimension (W x D X H)	519.91W x 314.92D x 83.4H mm	575.06W x 347D x 83.8H mm
Weight (incl. M/B)	5.45 Kg	6.8 Kg
Storage Space	M.2, SSD	M.2, SSD
LCD size	21.5 inch, 16:9	23.8 inch, 16:9
Max Resolution	1920 x 1080	1920 x 1080
Luminance (cd/m2)	250	250
Contrast Ratio	1000:1	3000:1
Viewing Angle (H-V)	89(U), 89(D), 89(R), 89(L)	89(U), 89(D), 89(R), 89(L)
Backlight	LED	LED
Touch Screen	Capacitive touch screen	Capacitive touch screen
MB	3I640CW	3I640CW
CPU	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	1 x DDR4 SODIMM, Max. 32GB	1 x DDR4 SODIMM, Max. 32GB
Display	DVI, HDMI®	DVI, HDMI®
USB	2 x USB 3.0 ; 2 x USB 2.0	2 x USB 3.0 ; 2 x USB 2.0
COM	2 x RS232 / 422 / 485 2 x RS232	2 x RS232 / 422 / 485 2 x RS232
Mini PCIe	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe
M.2	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), Support NVMe	1 x B Key Type 3042 (SATA / USB 2.0 / USB 3.0) 1 x B Key Type 2242 (PCIe x2 / USB 2.0), Support NVMe
SIM Card Holder	1 x Mini SIM	1 x Mini SIM
Ethernet	2 x 2.5G Intel GbE	2 x 2.5G Intel GbE
Audio	Line-out / Mic-in	Line-out / Mic-in
Power Input	Wide Range +9~36V	Wide Range +9~36V
Battery	Optional	Optional
Mounting	VESA 75 / 100 & Wall mount	VESA 75 / 100 & Wall mount
Panel frame water proof	IP65	IP65
Optional MB	3I385CW-Intel ATOM Bay Trail CPU ; 3I610CW-6th / 7th Gen Intel® Core i CPU	
Operating Temp.	-20°C~60°C for mSATA / SSD HDD (100% CPU Usage, not-underclocking)	
Operating Humidity	5~95% @ 40°C, non-condensing	
Expansion	4G / 5G, WiFi + BT, AI Accelerator, GPS, WI-FI, 2 / 4 PoE, COM CANBus, SDI / AHD Video, Digital I/O, 4 x USB mini card	



Waterproof Panel PC



Model Name	SHARK 7"	SHARK 10.1"	SHARK 10.1"
Motherboard	7" + 2I385CW	10.1" + 2I385CW	10.1" + 2I385HW
System Dimension (W x D X H)	184.7W x 40H x 122.5D mm	250W x 40H x 168D mm	250W x 40H x 168D mm
Weight (incl. M/B)	2 Kg	2.3 Kg	2 Kg
Storage Space	mSATA	mSATA, SSD	mSATA, SSD
LCD size	7 inch, 16:9	10.1 inch, 16:9	10.1 inch, 16:9
Max Resolution	1024 x 600	1280 x 800	1280 x 800
Luminance (cd/m2)	500	300	300
Contrast Ratio	700:1	1300:1	1300:1
Viewing Angle (H-V)	75 / 75 / 70 / 75 CR ≥ 10 (L / R / U / D)	85 / 85 / 85 / 85 CR ≥ 10 (L / R / U / D)	85 / 85 / 85 / 85 CR ≥ 10 (L / R / U / D)
Backlight	LED	LED	LED
Touch Screen	Resistive touch screen	Resistive touch screen	Resistive touch screen
MB	2I385CW	2I385CW	2I385HW
CPU	Intel Bay Trail-I E3845 1.91 GHz (Quad Core) (Optional J1900 ; E3825)		Intel Bay Trail-I E3825 1.33 GHz (Dual Core) Intel Bay Trail-I E3845 1.91 GHz (Quad Core) (Optional J1900)
Chipset	Intel® Bay Trail SoC	Intel® Bay Trail SoC	Intel® Bay Trail SoC
Memory	DDR3L, 4GB (Optional 2GB)	DDR3L, 4GB (Optional 2GB)	DDR3L, 2GB (Optional 4GB)
Display	VGA, LVDS	VGA, LVDS	VGA (Selectable M12 I/O)
USB	2 x USB 2.0	4 x USB 2.0	5 (Selectable M12 I/O)
COM	1	1	4 (Selectable M12 I/O)
Mini PCIe	1 x PCIe / mSATA / USB 1 x (Half size) mSATA / USB	1 x PCIe / mSATA / USB 1 x (Half size) mSATA / USB	1 x PCIe / USB / mSATA 1 x (Half Size) USB / mSATA
GPIO	4DI / 4DO (Optional)	4DI / 4DO (Optional)	4DI / 4DO (Optional)
Ethernet	2 x Intel GbE	2 x Intel GbE	2 x Intel GbE (Selectable M12 I/O)
Audio	N/A	N/A	Line-out / Mic-in (Optional)
Power Input	Wide Range +9~36V	Wide Range +9~36V	Wide Range +9~36V
Battery	Optional	Optional	Optional (3200~9600 mAh)
Mounting	VESA 75	VESA 75	VESA 75 & Wall Mount
Panel frame water proof	IP65	IP65	IP66 / IP67
Operating Temp.	-20°C~60°C for mSATA / SSD HDD (100% CPU Usage, not-underclocking)		
Operating Humidity	5~95% @ 40°C, non-condensing		
Expansion	Mini Card: GPS, 4G / 5G, Wi-Fi, SATA RAID, 2 / 4 x LAN, 4 x COM, CANBus, SDI / AHD Video By Cable: Bluetooth, Digital I/O, 2 / 4 x PoE, 4 x USB mini card		



Model Name	STAR 10.4"	STAR 12.1"	STAR 15.1"
Motherboard	10.4" + 2I640HW	12.1" + 2I640HW	15.1" + 2I640HW
System Dimension (W x D X H)	279.5W x 54H x 231D mm	323.5W x 54H x 268D mm	385W x 55.9H x 317.5D mm
Weight (incl. M/B)	2.67 Kg	3.4 Kg	4.89 Kg
Storage Space	M.2, SSD	M.2, SSD	M.2, SSD
LCD size	10.4 inch, 4:3	12.1 inch, 4:3	15.1 inch, 4:3
Max Resolution	1024 x 768	1024 x 768	1024 x 768
Luminance (cd/m2)	500	500	450
Contrast Ratio	1000:1	700:1	800:1
Viewing Angle (H-V)	80(U), 80(D), 80(R), 80(L)	80(U), 80(D), 80(R), 80(L)	80(U), 80(D), 80(R), 80(L)
Backlight	LED	LED	LED
Touch Screen	Resistive touch screen	Resistive touch screen	Resistive touch screen
MB	2I640HW	2I640HW	2I640HW
CPU	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)		
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	On Board LPDDR4, upto 8GB	On Board LPDDR4, upto 8GB	On Board LPDDR4, upto 8GB
USB	6 (Selectable M12 I/O)	6 (Selectable M12 I/O)	6 (Selectable M12 I/O)
COM	4 (Selectable M12 I/O)	4 (Selectable M12 I/O)	4 (Selectable M12 I/O)
Mini PCIe	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe
M.2	1 x M.2 B Key 2242 / 3042 (SATA / USB 3.0 / 2.0)		
SIM Card Holder	1 x Nano SIM	1 x Nano SIM	1 x Nano SIM
Ethernet	2 x Intel 2.5 GbE (Optional M12 I/O)	2 x Intel 2.5 GbE (Optional M12 I/O)	2 x Intel 2.5 GbE (Optional M12 I/O)
Power Input	Wide Range +9~36V (M12 I/O)	Wide Range +9~36V (M12 I/O)	Wide Range +9~36V (M12 I/O)
Battery	Optional (3200~9600 mAh)	Optional (3200~9600 mAh)	Optional (3200~9600 mAh)
Mounting	VESA 75 & Panel Mount	VESA 75 & Panel Mount	VESA 75 & Panel Mount
Panel frame water proof	IP66 / IP67	IP66 / IP67	IP66 / IP67 / IP69K
Operating Temp.	-20°C~60°C for M.2 / SSD (100% CPU Usage, not-underclocking)		
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	4G / 5G, WiFi + BT, AI Accelerator, GPS, Wi-Fi, 2 / 4 PoE, COM CANBus, SDI / AHD Video, Digital I/O, 4 x USB mini card		



Model Name	Stainless 10.4"	Stainless 15.1"	Stainless 19"
Motherboard	10.4" + 2I640HW	15.1" + 2I640HW	19" + 2I640HW
System Dimension (W x D X H)	308W x 45H x 259.4D mm	414W x 45H x 346.1D mm	476.4W x 45H x 404.6D mm
Weight (incl. M/B)	3.35 Kg	6.13Kg	7.5 Kg
Storage Space	M.2, SSD	M.2, SSD	M.2, SSD
LCD size	10.4 inch, 4:3	15 inch, 4:3	19 inch, 4:3
Max Resolution	1024 x 768	1024 x 768	1280 x 1024
Luminance (cd/m2)	500	450	350
Contrast Ratio	1000:1	800:1	1000:1
Viewing Angle (H-V)	80(U), 80(D), 80(R), 80(L)	80(U), 80(D), 80(R), 80(L)	60(U), 80(D), 80(R), 80(L)
Backlight	LED	LED	LED
Touch Screen	Resistive touch screen	Resistive touch screen	Capacitive touch screen
MB	2I640HW	2I640HW	2I640HW
CPU	Intel Elkhart Lake x6413E 3.0 GHz (Quad Core) Intel Elkhart Lake J6412 2.6 GHz (Quad Core)		
Chipset	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC	Intel® Elkhart Lake SoC
Memory	On Board LPDDR4, upto 8GB	On Board LPDDR4, upto 8GB	On Board LPDDR4, upto 8GB
USB	6 (Selectable M12 I/O)	6 (Selectable M12 I/O)	6 (Selectable M12 I/O)
COM	4 (Selectable M12 I/O)	4 (Selectable M12 I/O)	4 (Selectable M12 I/O)
Mini PCIe	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe	1 x USB 2.0 / PCIe
M.2	1 x M.2 B Key 2242 / 3042 (SATA / USB 3.0 / 2.0)		
SIM Card Holder	1 x Nano SIM	1 x Nano SIM	1 x Nano SIM
Ethernet	2 x Intel 2.5 GbE (Optional M12 I/O)	2 x Intel 2.5 GbE (Optional M12 I/O)	2 x Intel 2.5 GbE (Optional M12 I/O)
Power Input	Wide Range +9~36V (M12 I/O)	Wide Range +9~36V (M12 I/O)	Wide Range +9~36V (M12 I/O)
Battery	Optional (3200~9600 mAh)	Optional (3200~9600 mAh)	Optional (3200~9600 mAh)
Mounting	VESA 100 & Panel Mount	VESA 100 & Panel Mount	VESA 100 & Panel Mount
Panel frame water proof	IP66 / IP67	IP66 / IP67	IP66 / IP67 / IP69K
Operating Temp.	-20°C~60°C for M.2 / SSD (100% CPU Usage, not-underclocking)		
Operating Humidity	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing	5~95% @ 40°C, non-condensing
Expansion	4G / 5G, WiFi + BT, AI Accelerator, GPS, WI-FI, 2 / 4 PoE, COM CANBus, SDI / AHD Video, Digital I/O, 4 x USB mini card		



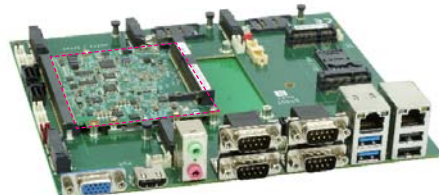
	Touch Monitor
Model Name	21.5"
Dimension	64H x 548W x 328.6D mm
Case Material	Aluminum
Weight	7.83 Kg
Mounting Spec.	VESA 75 / Wall Mount
Panel Frame Water Proof	IP65
Luminance (cd/m2)	250
Max Resolution	1920 x 1080
Color Support	16.7M (RGB 6 bit + Hi_FRC)
Max Sync Rate (V x H)	60 Hz x 80 kHz
Response Time	3.8 ms (Falling time) 1.2 ms (Raising time)
Backlight Life	30,000 hours
Touch Screen	Projected Capacitive Touch screen
Image Aspect Ratio	16:9
Contrast Ratio	1000:1
H-View Angle	170°
V-View Angle	165°
Signal Interfaces	HDMI® / VGA / DVI, USB Touch, COM Touch (Optional)
Voltage Required	DC 12V
Power Consumption Operational	15.534W (Typ.)
Operating Temperature	0°C~50°C
Operation Humidity Range	5~90% RH @ 39°C, non-condensing
Storage Temperature	-20°C~+60°C
Storage Humidity Range	5~90% RH @ 39°C, non-condensing
Optional Accessory	Wall Mount Kit / Stand



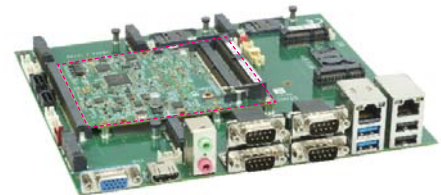
	Touch Monitor	Touch Monitor	Touch Monitor	Touch Monitor
Model Name	7"	10.1"	10.4"	15.1"
Dimension	37.9H x 225.3W x 166.8D mm	38.6H x 293.4W x 210.4D mm	38.6H x 296W x 250.4D mm	40.5H x 404.1W x 335D mm
Case Material	ABS front frame + housing	ABS front frame + housing	ABS front frame + housing	ABS front frame + housing
Weight	570 g	950 g	1.4 Kg	2.2 Kg
Mounting Spec.	VESA 75 / Wall Mount	VESA 75 / Wall Mount	VESA 75 / Wall Mount	VESA 75 / Wall Mount
Panel Frame Water Proof	IP65	IP65	IP65	IP65
Optional Accessory	Wall Mount Kit / Stand	Wall Mount Kit / Stand	Wall Mount Kit / Stand	Wall Mount Kit / Stand
Max Resolution	1024 x 600	1280 x 800	1024 x 768	1024 x 768
Color Support	116.2M / 262K colors	116.2M / 262K colors	116.2M / 262K colors	116.2M / 262K colors
Max Sync Rate (V x H)	60 Hz x 80 kHz	60 Hz x 80 kHz	60 Hz x 80 kHz	60 Hz x 80 kHz
Response Time	10 ms (Falling time) 15 ms (Raising time)	10 ms (Falling time) 15 ms (Raising time)	11 ms (Falling time) 14 ms (Raising time)	2.3 ms (Falling time) 5.7 ms (Raising time)
Touch Screen	Resistive touch screen optional capacitive touch	Resistive touch screen optional capacitive touch	Resistive touch screen optional capacitive touch	Resistive touch screen optional capacitive touch
Image Aspect Ratio	16:9	16:9	4:3	4:3
Brightness	500	500	350	450
Contrast Ratio	800:1	800:1	1200:1	800:1
H-View Angle	150°	150°	176°	160°
V-View Angle	145°	145°	176°	150°
Signal Interfaces	VGA / DVI, USB Touch, COM Touch (Optional)	VGA / DVI, USB Touch, COM Touch (Optional)	VGA / DVI, USB Touch, COM Touch (Optional)	VGA / DVI, USB Touch, COM Touch (Optional)
Voltage Required	DC9~36V	DC9~36V	DC9~36V	DC9~36V
Power Consumption Operational	0.57A max.	0.57A max.	0.6A max.	1.02A max.
Operating Temperature	-20°C~60°C	-20°C~60°C	-20°C~60°C	-20°C~60°C
Operation Humidity Range	5~90% RH @ 39°C, non-condensing	5~90% RH @ 39°C, non-condensing	5~90% RH @ 39°C, non-condensing	5~90% RH @ 39°C, non-condensing
Storage Temperature	-30°C~+80°C	-30°C~+80°C	-30°C~+80°C	-20°C~+65°C
Storage Humidity Range	5~90% RH @ 39°C, non-condensing			

Evaluation board for LEX SMART Computer on Modules

ST001



ST001+ST385W

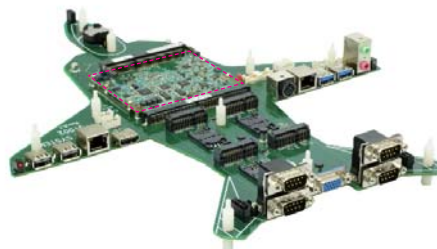


ST001+ST610W

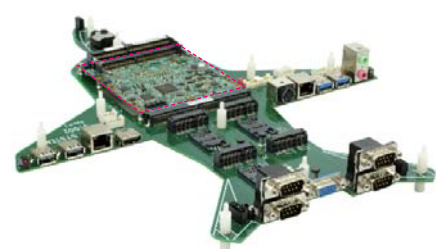
Evaluation board for ST385W / ST610W:

- IO: 1 x VGA, 1 x HDMI®, 7 x mini PCIe
- 4 x COM, 2 x GbE, Line-out, Mic-in
- 3 x SIM holder, 2 x USB 3.0, 2 x USB 2.0
- 200 x 180 mm

ST002 concept sample



ST002+ST385W



ST002+ST610W

Concept Sample Evaluation board for ST385W / ST610W:

- IO: 1 x VGA, 1 x HDMI® or DP
- 4 x COM, 2 x GbE, Line-out, Mic-in
- 4 x mini PCIe, 3 x SIM holder, 2 x USB 3.0, 2 x USB 2.0
- 362 x 301 mm

ST004 concept sample



ST004+ST385W



ST004+ST610W

Concept Sample Evaluation board for ST385W / ST610W:

- IO: 1 x VGA, LVDS, Touch, 1 x SATA
- (Optional to M12 type IO)
- 1 x GbE, 1 x COM, 1 x USB 2.0
- 110 x 94.5 mm



Evaluation board for LEX PICO Express® Computer on Modules

DK001



Evaluation board for 2I385PW:

- IO: 4 x Mini PCIe, 4 x SIM, 1 x USB 3.0, 4 x USB 2.0, 1 x VGA, 1 x DVI
- 4 x COM, HD Audio, 2 x RJ45, 1 x HDMI®
- 146 x 102 mm

DK002



Evaluation board for 2I385PW:

- IO: 2 x Mini PCIe, 2 x SIM, 1 x USB 3.0, 4 x USB 2.0, 1 x VGA
- 4 x COM, Line-out, Mic-in, 2 x RJ45, 1 x HDMI®
- 146 x 102 mm

DK006



Evaluation board for 2I385PW:

- IO: 4 x BNC, 1 x USB 3.0, 4 x USB 2.0, 1 x VGA
- 4 x COM, HD Audio, 2 x RJ45
- 146 x 102 mm

DK007



Evaluation board for 2I385PW:

- IO: 2 x RJ45 (PoE), 1 x VGA, 2 x Mini PCIe, 2 x SIM
- 2 x USB 2.0, 4 x COM, HD Audio
- 102 x 96 mm

DK008



Evaluation Board for 2I640PW:

- I/O: 1 x HDMI, 2 x RJ45, 2 x USB 3.0, 3 x USB 2.0, VGA (wafer), HD Audio (wafer)
- 4 x COM, 1 x Mini PCIe, 1 x M.2, 1 x SIM
- 146 x 104 mm

DM002



Evaluation board for 2I385PW:

- IO: 1 x USB 3.0, 4 x USB 2.0 (M12), 4 x COM (2 x wafer + 2 x M12)
- 2 x GbE (M12), 1 x VGA (M12), HD Audio, 1 x mini HDMI®
- 1 x Mini PCIe, 1 x SIM
- 102 x 73 mm



L2L001+2I386EW

Motion control / Robot / IoT

- eIO extension SBCs with multi-function extension cards provide faster development schedules in an efficient and cost-effective way.

LEX eIO extension solutions cover 3.5" SBC, Pico-ITX SBC, various expansion modules, as well as full systems for complete embedded solutions.

eIO Expansion Card

L2L001



Features:

- 5 x PCIe Giga LAN (Intel I210IT)
- 1 x USB Mini PCI Express socket.
- 1 x SIM (Push-Push)
- 102 x 73 mm

L2L004



Features:

- 2 x PoE Giga LAN M12 type
- 1 x Fiber LAN (Optional)
- 1 x Full Size Mini card USB interface
- 1 x SIM socket
- Wide Range +9V~+36V
- 102 x 73 mm

L2L002



Features:

- 4 x PCIe Giga LAN (Intel I210IT)
- 1 x Fiber (Intel I210IS) 1000 Base-SX
- 1 x USB Mini PCI Express socket.
- 1 x SIM (Push-Push)
- 102 x 73 mm

L2L004



Features:

- 2 x PoE Giga LAN RJ45 type
- 1 x Fiber LAN (Optional)
- 1 x Full Size Mini card USB interface
- 1 x SIM socket
- Wide Range +9V~+36V
- 102 x 73 mm

L2L003



Features:

- 4 x PoE Giga LAN Switch
- 1 x Fiber (Intel I210IS) 1000 Base-SX
- Wide Range +9V~36V
- 102 x 73 mm

L2M001



Features:

- 4 x (Full Size) USB / PCIe Mini PCIe socket
- 4 x SIM (Push-Push)
- 117 x 73 mm



PCIe Cards for Expansion

E142U



2 x USB 3.1

Features:

- PCIe x 4 Compliant
- 2 x USB 3.1 Type A ports
- 76 x 79.3 mm

E550A



2 x 10 GbE LAN

Features:

- PCIe x 4 Compliant
- Intel X550 Chipset
- 150 x 76 mm

E214B



4 x GbE LAN

Features:

- PCIe x 1 Compliant
- 4 x Intel I210 IT Chipset
- Support LAN Bypass (option)
- 120 x 101 mm

E691A



4 x PoE 802.3 AF / AT

Features:

- PCIe x 1 Compliant
- 4 x Intel I210 IT Chipset
- Support 802.3 AF/AT
Max 60 watt
- 120 x 101 mm

E694A



4 x PoE 802.3 AF / AT

Features:

- PCIe x 4 Compliant
- 4 x Intel I210 IT Chipset
- Support 802.3 AF/AT
Max 60 watt
- 120 x 101 mm

Mini PCIe Cards for Expansion

CN065 CL225A



2 x 2.5 GbE LAN

Features:

- Mini PCIe expansion card
- Intel I225-V LAN chip
- 50.95 x 30 mm (CN065)
- 59 x 55 mm (CL225A)

M212A CL001/CL002



1~2 x GbE LAN

Features:

- 1~2 Intel I210IT Chipset
- Work with CL001 / CL002
- 50.95 x 30 mm
- **CL001:** 1 x RJ45 connector
- **CL002:** 2 x RJ45 connector
(LAN Bypass-option)

M202A UB006 / UB007



2 x USB 3.0

Features:

- USB Power 5V / 12V (OEM)
- Work with UB006 / UB007
- 61.15 x 31 mm
- **UB006:** 2 x USB 3.0 Type A
- **UB007:** 2 x USB 3.0 Type B



Mini PCIe Cards for Expansion

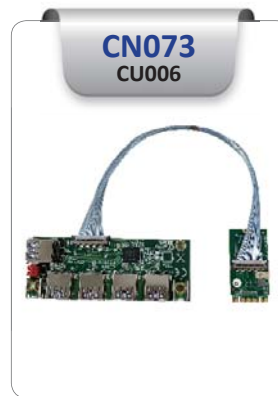


1 x Fiber LAN

Features:

- Intel I210IS Chipset
- Work with CN052
- 50.95 x 30 mm
- **CN052:** 1 x Fiber connector

M.2 Cards for Expansion



4 x USB 3.0 high speed connector

Features:

- M.2 2280 Convert to High Speed Connector
- 1 to 4 Port USB 3.2 Gen 1x1 type A to high speed connector
- CN073: 22 x 42 mm
- CU006: 35 x 90 mm

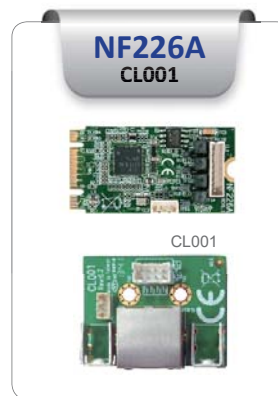
M.2 Cards for Expansion



1 x GbE LAN

Features:

- M.2 B+M Key 2242 PCIe to 1 x GbE LAN
- Intel I210-IT LAN Chip
- Work with CL001
- 22 x 42mm
- **CL001:** 1 x RJ45 Connector



1 x GbE LAN

Features:

- M.2 B+M Key 2242 PCIe to 1 x 2.5GbE LAN
- Intel I226-IT LAN Chip
- Work with CL001
- 22 x 42mm
- **CL001:** 1 x RJ45 Connector



2 x 2.5 GbE LAN

Features:

- M.2 B+M key 3042 PCIe to 2 x GbE LAN
- 1 x Intel I210-IT LAN Chip
- 1 x Work with CL002
- 30 x 42 mm
- **CL002:** 2 x RJ45 Connector



2 x 2.5 GbE LAN

Features:

- M.2 B+M key 3042 PCIe to 2 x 2.5GbE LAN
- 1 x Intel I226-IT LAN Chip
- 1 x Work with CL002
- 30 x 42 mm
- **CL002:** 2 x RJ45 Connector



M.2 B+M key to 4 x RS232 / RS485 / RS422

Features:

- M.2 B+M-key Type 2242 PCIe
- PCI Express base spec 1.1 compliant
- 22 x 42 mm



Mini PCIe Cards for Expansion

M504B



4 x COM RS232 / 422 / 485 Isolation

Features:

- RS232 / 422 / 485 Isolation board
- 4 x RS232 / 422 / 485 selected by DIP Switch
- 50.95 x 30 mm

M954C



4 x COM RS232 / 422 / 485

Features:

- 4 x RS232 / 422 / 485 selected by DIP Switch
- 50.95 x 30 mm

CN030



1 x Mini PCIe + 1 x SIM

Features:

- PCIe / USB interface
- 61.15 x 30 mm

CN047



4 x Mini PCIe + 2 x Micro SIM

Features:

- MPCE1: mSATA / PCIe / USB interface
- MPCE2, 3, 4: USB interface
- 61.15 x 36 mm

CN048



2 x Mini PCIe + 1 x M.2

Features:

- 2 x Mini PCI-e (Half size)
- 1 x M.2 B key (mSATA)
- 2 x USB 2.0
- 50.95 x 30 mm

CN049



3 x Mini PCIe + 1 x USB 2.0

Features:

- 3 x Mini PCI-e + 1 x USB 2.0 or 2 x Mini PCI-e + 2 x USB 2.0
- 50.95 x 30 mm

CN051



1 x Mini PCIe + 1 x RJ45 LAN + 3 x USB 2.0

Features:

- 1 x Mini PCI-e (half size) for mSATA
- 1 x RJ45 LAN
- 3 x USB 2.0
- Work with 1I385A
- 50.95 x 42.6 mm

Wi-Fi Module



Wi-Fi Module

Features:

- 802.11 b / g / n / ac
- 50.95 x 30 mm

M061R



2 x SATA RAID 0/1

Features:

- 2 x SATA 3.0
- Hardware RAID 0 / 1 Function
- 50.95 x 30 mm

M113A



Mini card to 32 GPIO

Features:

- Fintek F75113 Chipset support 32 GPIO
- Work with LEX CIO Board (CIO116 / CIO108 / CIO208)
- SMBus or LPC Interface
- 50.95 x 30 mm



Embedded Function Cards

AU001



USB to 4 CH Line-out / Mic-in, AMP

- USB HUB to 4 CH Line-out / Mic-in wafer
- 2.1W Audio Amplifier
- 40 x 70 mm

AU002



USB to Line-out / Line-in / Mic-in, AMP

- USB wafer to Line-out / Mic-in phone jack ; Line-in
- 2.1W Audio Amplifier
- 40 x 40 mm

CN059



USB to Line-out / Mic-in

- USB wafer to Line-out / Mic-in phone jack
- 40 x 30 mm

CN060



M.2 extension board

- CN060-42: 1 x M.2 B key 2242
- CN060-52: 1 x M.2 B key 2252 (5G LTE)
- 2 x Nano SIM socket (option)
- 22 x 66 mm

CN061



2 x M.2 USB extension board

- 2 x M.2 B key 3042
- 2 x Micro SIM socket
- 67.5 x 37 mm

CN063



4 x M.2 USB extension board

- 4 x M.2 B key 3042 / 3052
- 4 x Micro SIM socket
- 75 x 72 mm

CN064



M.2 extension board

- M.2 B key 2242 converter to M.2 E Key 2230
- 22 x 42 mm

CN066



M.2 extension board

- MiniPCle converter to M.2 E Key 2230
- 30 x 50.95 mm

CN067



M.2 extension board

- M.2 B key 2242 converter to M.2 B Key 2252
- 22 x 66 mm

CN069



M.2 extension board

- M.2 3042 B + M key converter to Mini PCIe + SIM
- 30 x 42 mm
- M.2 3080 B + M key converter to Mini PCIe + SIM
- 30 x 80 mm



Embedded Function Cards

CIO308



DI/O Board

Features:

- 4 Digital Input + 4 Digital Output
- 4 Optocoupler DI / 2 SSR DO + 2 Relay DO
- DO Support 5V output
- 77 x 35 mm

CIO116



DI/O Board

Features:

- Digital Input & Digital Output Isolation
- CIO116-B: 8 Digital Input + 8 Digital Output
- CIO116-G: 8 Digital Input + 8 Digital Output & F75111N (programmed GPIO pins)
- 84 x 35 mm

CIO016



DI/O Board

Features:

- CIO016-I: 16 Digital Input Isolation
- CIO016-O: 16 Digital Output Isolation
- 84 x 35 mm

CIO208



DI/O Board

Features:

- Digital Input & Digital Output Isolation
- 8 x Digital Input or 8 x Digital Output or 4 x Digital Input + 4 x Digital Output
- 65 x 30 mm

CIO108



DI/O Board

Features:

- Digital Input & Digital Output Isolation
- 8 Digital Input or 8 Digital Output or 4 Digital Input + 4 Digital Output (2 Power Relay + 2 SSR)
- 72 x 35 mm

M465A



USB to SD Card Reader

Features:

- NO support OS boot
- USB to SD interface
- 55 x 35 mm

CF006



SATA to CFast slot

Features:

- Support +3.3V
- Support CFast Card Type I / II
- 53 x 67 mm

FB001



USB to 10 / 100M Fiber

Features:

- USB 2.0 to 1 x 10 / 100M Fiber
- 35 x 65 mm

CF007



SATA to 2 x CFast RAID 0 / 1

Features:

- Support +3.3V
- Support CFast Card Type I / II
- 93 x 56 mm



Embedded Function Cards

CN041



USB to 2 x Mini PCIe + 2 x SIM

Features:

- 2 x Mini PCIe (Full size)
- 2 x SIM socket (Push-push)
- SIM card for GPRS / 3G / 3.5G
- 65 x 37 mm

CN045



4 x RS232 at RJ45 connector

Features:

- 4 x RS232 2 x 5 pin 2.00mm Wafer
- Convert to 4 x RJ45 type connector
- 90.6 x 23 mm

CN053



USB to 4 x Mini PCIe + 4 x SIM

Features:

- 4 x Mini PCIe (Full size)
- 4 x Micro SIM socket (Push-push)
- 75 x 57 mm

CN054



VGA Surge Protector

Features:

- VGA against lightning surge
- 30 x 31 mm

CN058



Power on (Auto Boot) module



Features:

- Module input voltage: +9~36V (depends on MB)
- SBC turns on automatically when plugged in
- 30 x 30 mm

DP001



eDP to VGA board

Features:

- eDP to VGA
- 31 x 30 mm

eDP001



eDP to LVDS module

Features:

- Module Input voltage: +5V to +12V
- eDP to LVDS 24bits / Dual channel output.
- 35 X 35 mm

eDP003



eDP to DVI converter board

Features:

- eDP to DVI
- 25 x 40.5 mm

eDP004



eDP to HDMI

Features:

- eDP to HDMI®
- 44 x 45 mm



Embedded Function Cards

ME225



Video Capture Card (from HDMI® device)

Features:

- 4K@30 RAW or 4K@60fps MJPEG video Capture Card
- 1 to 4 Port USB 3.0 type A to high speed connector
- 59 x 55 mm

M303A



USB to 1 x RS232 / RS485

Features:

- M303A-232: USB to RS232
- M303A-485: USB to RS485
- 30.81 x 15 mm

M422A+ Light Sensor



Light Sensor Control board

Features:

- USB to I2C interface + Light Sensor
- 31 x 30 mm

CC004



RS232 to RS422 / RS485

Features:

- CC004-2T4: RS232 to RS422 / 485
- CC004-2T5: RS232 to RS485
- 31 x 25 mm

CC007



USB 2.0 to 4 x RS232 / 422 / 485

Features:

- 4 x RS232 / 422 / 485 switched by SW
- Pin 9 RI / 5V / 12V selectable by jumper
- 65 x 30 mm

CC102



RS232 to ISO RS232

Features:

- RS232 to Isolator RS232 TX / RX / GND
- 31 x 25 mm

CC104



RS232 to ISO RS422 / 485

Features:

- RS232 to Isolator RS422 / 485
- 31 x 25 mm

CC105



RS232 to ISO RS485

Features:

- RS232 to Isolator RS485
- 36.8 x 25 mm



Power Board

PW201



60W Wide Range DC-IN & Power ON / OFF Delay Module

Features:

- DC IN: +9V~+36V
- Surge / under voltage protection
- DC Out: 12V / 5A
- PW201-WV: Wide range power input
- Adjustable power ON / OFF delay time
- CPC Hardware and Software
- PW201-CP: Wide range power input & CPC function
- 60 x 35 mm

PW202



120W Wide Range DC-IN & Power ON / OFF Delay Module

Features:

- DC IN: +15V~+36V
- Surge / under voltage protection
- DC Out: 12V / 10A
- PW202-S: For Slave CPC function
- Adjustable power ON / OFF delay time
- CPC Hardware and Software
- PW202-M: For Master CPC function
- 60 x 35 mm

PW204



200W Wide Range Power Board

Features:

- DC IN: +9~+36V
- DC Out: 12V / 20A (200W)
- 60 x 90 mm

PW205



Ignition delay on/off Control Module

Features:

- DC IN: Depend on MB Max 36V
- CPC Hardware and Software control
- Surge protection
- Under input voltage protection: +9V
- 55 x 35 mm

PW206



DC Input Redundant Power Board

Features:

- Input voltage: Dual DC IN 12V or 24V
- DC OUT depends on DC IN
- Power Input balance of redundant function
- 75 x 35 mm

PW505



Isolated wide-range DC power board with ignition delay

Features:

- 1.6KVDC I/O isolation
- PW505-36: 9-36V in, 12V out, max 60W
- PW505-75: 18-75V in, 12V out, max 60W
- Protections: Short circuit, overload, overvoltage, overtemp, undervoltage lockout
- 45 x 73 mm

PW208



60W Wide Range & Surge Stopper Power Board

Features:

- 9-36V wide Range DC-IN
- Surge voltage protection
- Reverse input protection
- 36.2 x 27 mm



Power Board

PW301



802.3 AF / AT PD Module

Features:

- Compliant IEEE 802.3 af / at type2
- Isolation DC to DC converter
- 60 x 35 mm

PW303



802.3 BT PD Module

Features:

- Compliant IEEE 802.3 af / at / bt
- Isolation DC to DC converter
- Input: +48V~57V (PoE)
- Auxiliary Power Input voltage: +12V to +36V.
- Output voltage: +12V / 6A (72W)
- 100 x 48 mm

PW351



1 x PoE OUT board

Features:

- Input voltage: +9V to +36V (Typical DC 12V or DC 24V)
- Output voltage: +52V
- Compliant IEEE802.3 af / at type 2 up to 34.2W
- AT or AF type set by DIP Switch
- 60 x 35 mm

PW354



4 x PoE OUT board (M12)

Features:

- Input voltage: +9V to +36V (Typical DC 12V or DC 24V)
- Output voltage: +52V
- Compliant IEEE802.3 af type 2 up to 15.4W
- 102 x 35 mm

PW353



4 x PoE OUT board (RJ45)

Features:

- Input voltage: +9V to +36V (Typical DC 12V or DC 24V)
- Output voltage: +52V
- Compliant IEEE802.3 af type 2 up to 15.4W
- 102 x 35 mm

PW407



Battery Charger Board

Features:

- Smart battery control by MCU
- Battery shutdown mode support
- Low battery level protection
- Over temperature / over charge protection
- Input: DC IN 12V or 24V
- Output: DC +12V (max 60 watt)
- Charge Current Limit: 2000mA/h
- Support 2S1P & 2S3P Battery Pack
- 80 x 35 mm

PW352



2 x PoE OUT board

Features:

- Input voltage: +9V to +36V (Typical DC 12V or DC 24V)
- Output voltage: +52V
- Compliant IEEE802.3 af type 2 up to 15.4W
- 72 x 35 mm

Rechargeable Li-ion Battery

2S1P (60 watt)



2S1P Battery Pack (60 watt)

Features:

- Rating: DC 7.2V, 3300 mAh
- Work with PW407
- 20 x 65 x 40 mm

2S3P (60 watt)



2S3P Battery Pack(60 watt)

Features:

- Rating: DC 7.2V, 9900 mAh
- Work with PW407
- 20 x 120 x 65 mm



Power Board

PW501



Isolated Wide Range Power board

Features:

- Input: DC IN 18V~36V / 18V~75V / 9V~36V
- Output: 4 x +12V DC output (Optional to 24V DC output)
- Power: 120W
- 73 x 45 mm

PW504



Isolated power with CPC

Features:

- Delta 1 / 8 brick module
- CPC function onboard
- eIO output (Option)
- 93 x 45 mm

PW502



Isolated Wide range Power board

Features:

- Input Voltage: 18V~75V, 9V~36V or 16.8V~137.5V
- Output: 4 x +12V DC output (Optional to 24V)
- Operating base plate temperature -40°C to +100°C
- Isolation voltage: 3000V
- Power: 200W
- 102 x 73 mm

PW503



Isolated Wide range Power board

Features:

- Input Voltage: 43V~160V
- Output: 5 x +12V DC output
- Operating base plate temperature -40°C to +100°C
- Isolation voltage: 3000V
- Power: 200W
- 102 x 73 mm

PW601-4S1P



Supercapacitor 4S1P power backup module

- Super capacitor-based, -40°C to 65°C wide temperature operation
- Control board / battery pack board
- Up to 10 years lifespan and 500000 charging / discharging cycles
- High / low voltage protection
- 4S1P battery pack
- 120 x 95 mm

PW601-2S1P



Supercapacitor 2S1P power backup module

- Super capacitor-based, -40°C to 65°C wide temperature operation
- Control board / battery pack board
- Up to 10 years lifespan and 500000 charging / discharging cycles
- High / low voltage protection
- 2S1P battery pack
- 110 x 95 mm

Anti-Vibration Kit & Mounting Kit

Anti-Vibration Kit



Features:

- VESA Mount 75
- Wall Mount 70 x 150
- 288(W) x 166(D) x 23.81(H) mm

VESA Mounting Kit



Features:

- VESA 75 / 100
- 110 x 110 mm

System Wall Mount Kit



Features:

- 70 x 150 mm

DIN Rail Mount Kit



Features:

- For MIRO-2 / MIRO-3 / SKY-2 / SKY-3 / NET-I / NET-II
- 40 x 144 mm



Backplanes & Riser Card

BPM001



PCIe to 2 x PCIe Slot

Features:

- PCIe (x16 / x4) interface to 2 x PCIe Slot (PCIe x16 + PCIe x4)
- Backplanes for PM170DW
- 78 x 176 mm

RS601



eIO to 1 x PCIe slot

Features:

- eIO to 1 x PCIe x1, 1 x mini card
- 66 x 30 mm

BPM002



PCIe to 2 x PCIe Slot

Features:

- PCIe (x8) interface to 2 x PCIe Slot (PCIe x1 + PCIe x4)
- Backplanes for PM610DW / PM390DW
- 78 x 176 mm

RS602



eIO to 2 x PCIe slot

Features:

- eIO to 2 x PCIe x1, 1 x mini card
- 66 x 45 mm

BPM003



PCIe to 2 x PCIe Slot

Features:

- PCIe (x16 / x4) interface to 2 x PCIe Slot (PCIe x8 + PCIe x8)
- Backplanes for PM170DW
- 78 x 176 mm

RS603



eIO to 1 x PCIe + 1 x PCI slot

Features:

- eIO to 1 x PCIe x1 + 1 x PCI, 1 x mini card (USB)
- 104 x 45 mm

BPM004



PCIe to 1 x M.2 + 1 x PCI slot

- PCIe x8 to 1 x PCI slot & 1 x M.2 key M 2280 / 2242 socket
- Backplanes for PM610DW / PM390CW
- 55 x 154 mm

RS701



PCIe to 1 x PCIe Slot

Features:

- PCIe (x16) interface to 1 x PCIe Slot (PCIe x16)
- Backplanes for PM170DW
- 53 x 173.5 mm

BPM005



PCIe to 3 x PCIe Slot

Features:

- PCIe x16 + PCIe x8 to 2 x PCIe x8 + 1 x PCIe x4
- Backplanes for PM170DW
- 98 x 176 mm

RS815



PCIe to 1 x PCIe Slot w/power

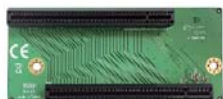
Features:

- PCIe (x16) interface to 1 x PCIe Slot (PCIe x16)
- Input voltage range: 24 V
- Output voltage: 12V
- Maximum output current: about 40A (500watt)
- Riser Card for 3I370DW
- 74 x 250 mm



Riser Card

RS501



PCIe to 1 x PCIe Slot

Features:

- PCIe (x16) interface to 1 x PCIe (x16) Slot
- Riser Card for Twister CI170A/C
- 121 x 52 mm

RS505



PCIe to 1 x PCI Slot

Features:

- PCIe (x16) interface to 1 x PCI
- 121 x 52 mm

RS502



PCIe to 2 x PCIe Slot

Features:

- PCIe (x16) interface to 2 x PCIe (x8) Slot
- Riser Card for TINO CI170A/C
- 73 x 59 mm

RS506



PCIe to 2 x PCI Slot

Features:

- PCIe (x16) interface to 2 x PCI
- 73 x 99 mm

RS503



PCIe to 1 x PCIe Slot

Features:

- PCIe (x16) interface to 1 x PCIe (x16) Slot
- Riser Card for 1U CI170A/C
- 115 x 39.5 mm

RS507



PCIe to 1 x PCI Slot

Features:

- PCIe (x16) interface to 1 x PCI Slot
- Riser Card for 1U CI170A/C
- 115 x 39.5 mm

RS504



PCIe to 2 x PCIe Slot

Features:

- PCIe (x16) interface to 2 x PCIe (x8) Slot
- Riser Card for 1U CI170A/C
- 115 x 39.5 mm

RS803



PCIe to 2 x PCIe Slot

Features:

- PCIe (x16) interface to 2 x PCIe Slot (PCIe x16 + PCIe x4)
- Riser Card for 1U CI370D
- 140 x 39.5 mm

RS802



PCIe to 2 x PCIe Slot

Features:

- PCIe (x16) interface to 2 x PCIe Slot (PCIe x16 + PCIe x4)
- Riser Card for TINO CI370D
- 140 x 75 mm

RS804



PCIe to 1 x PCIe slot

Features:

- PCIe x16 to 1 x PCIe x16
- 45 x 110 mm

RS806



PCIe to 2 x PCIe Slot

Features:

- PCIe (x16) interface to PCIe x8 for Meteor Lake-H series CPU
- Riser Card for HAWK 3I140DW
- 110 x 36 mm

RS807



PCIe to 1 x PCIe slot

Features:

- PCIe (x16) interface to PCIe x4 for Meteor Lake-U/H series CPU
- Riser Card for HAWK 3I140DW
- 110 x 36 mm

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