

Energy

Retail

Manufacture

Transportation

Healthcare

Empowering a **SMART FUTURE** Avalue IoT Ready



- ▶ Healthcare
- ▶ Retail
- ▶ Transportation
- ▶ Industry 4.0
- ▶ Digital Signage
- ▶ Communication
- ▶ Surveillance
- ▶ Automation
- ▶ In-Vehicle
- ▶ Gaming

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About Avalue

Founded in 2000, Avalue Technology Incorporation is one of the world's leading industrial computing providers, who is dedicated to developing the x86 and RISC architecture, including Industrial & Embedded Motherboard, Computing System, Panel PC, Computer on Module, and various IOT ready products.

Avalue's cutting-edge solutions enable the customer to optimize their industrial grade solutions with high performance and longevity features that will live up to our customers' expectations and contribute to the various applications of the markets. Such as Healthcare/Medical, Retail, Transportation, Manufacturing, Gaming and Energy.



Mission

We Provide

Provide solutions to different markets by delivering a complete range of Products and ODM Services to our customers...

Vision

We Become

Become a leading international enterprise by providing professional design and production services to the embedded industry.



Project Management

PLM/EOL/ECR Management
Revision Control



Component Engineering

Component Cost Reduction
Shorten Lead Time



Industrial Standard Certification

ISO-9000/14000/13485
UL/TS-16949



Global Logistic Support

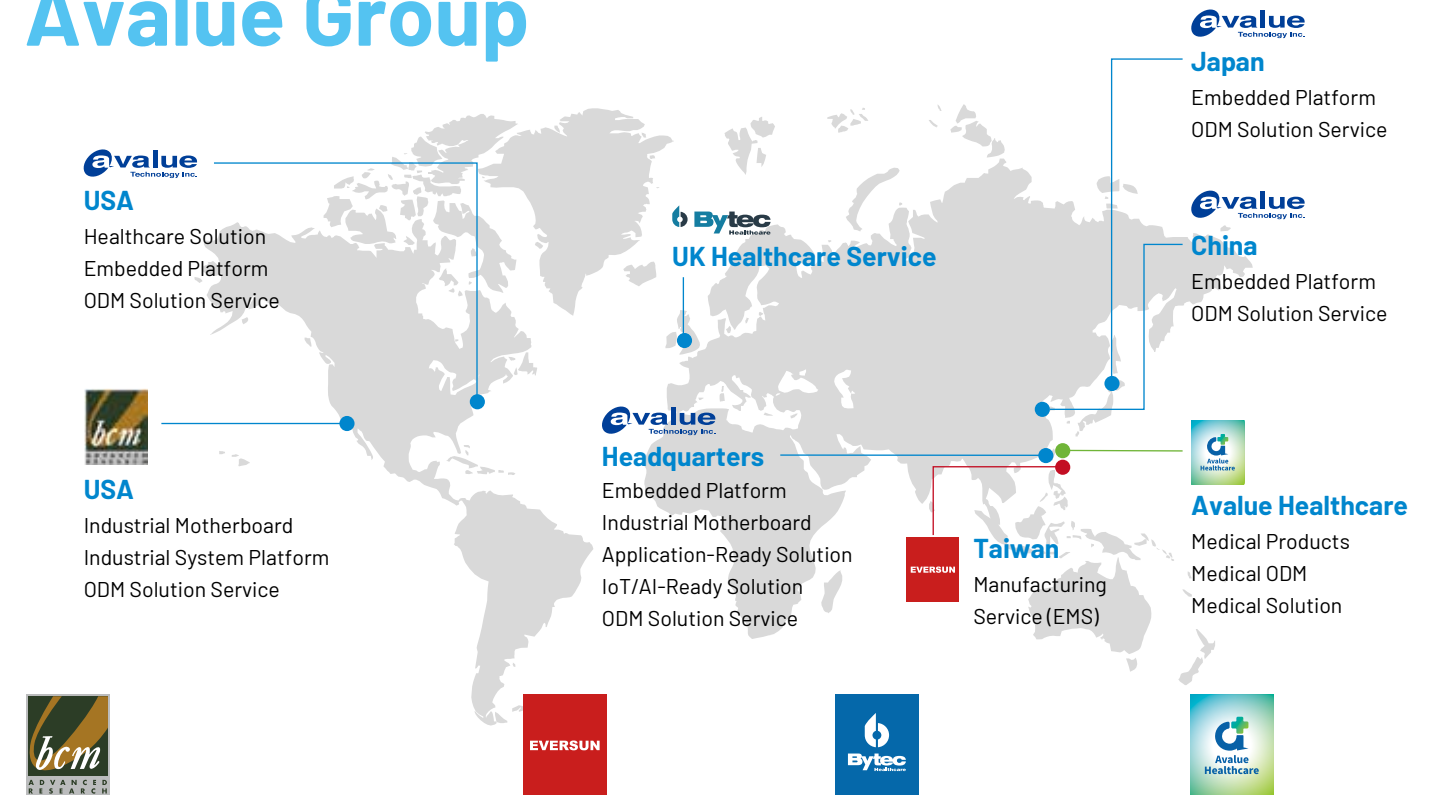
Supply Chain
Inventory
Warehousing
Materials Handling



Professional Document Management System (DMS)

Consolidation of ODM and EMS
Design Manufacturing Services

Avalue Group



2006

Merged operations with Avalue Technology, Inc. to combine engineering resources and pool purchasing power, creating an industrial board and system providers while maintaining a two-brand strategy.



2013

Avalue invests Eversun to unfolds complete Manufacturing Service (EMS)



2014

Providing mobile platforms that facilitate equipment, and clinical information access, patient-side.



2024

Providing Medical/Healthcare products and solutions

Applications

Avalue solutions can be used in a wide range of applications to help customers gain the benefits of high integration, high functionality, and fast time-to-market

Healthcare

Retail

Manufacturing

Transportation

Energy

Edge AI Servers Solutions for GenAI



Your GenAI Server, Your Way



Avalue GenAI Server

- Build your Comprehensive and Accurate Knowledge-base
- Domain-Specific Model Tuning
- ▶ Solution Flexibility (70B/70B-Lite/33B)
- ▶ Easy Deployment (4U Rackmount/Tower)
- ▶ NVIDIA AI Ready Solution
- ▶ Fine-Tune Expert Trial Version

What Avalue offers

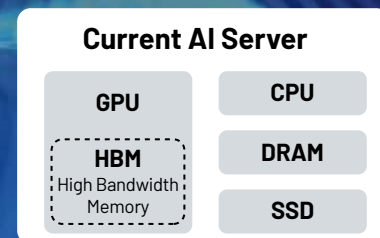
Balancing Efficiency with Affordability

Designed for Data-Intensive Workloads, it is ideal for any type of enterprise, government, or research organization looking to implement generative AI, and provides users with the storage, scalability, and processing power needed to meet data-intensive AI workloads.

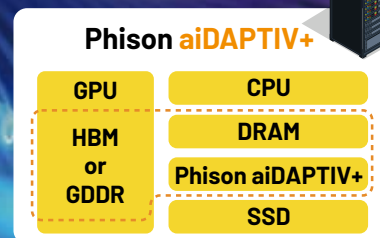
Affordable Innovation with aiDAPTIV+

How does aiDAPTIV+ work:

- Change the AI computing architecture.
- Seamlessly integrate with existing AI frameworks to optimize performance.
- Enhance the efficiency and effectiveness of AI model pre-training.



Use HBM on GPU for AI Computing



Use GPU DRAM + System DRAM + aiDAPTIV+ SSD for AI computing

GAI System Series

Benefits of Avalue On-Premise Server

- Balancing Efficiency with Affordability
- Secure Sensitive Data at the Edge
- Ready-to-Deploy / Scalability
- One-Stop Support and Customization for AI Workloads

Selection Guide

	GAI-ERS-70B	GAI-ERS-70B-Lite	GAI-ERS-33B
RAM	576GB	576GB	256GB
Phison SSD	2 x 2TB	2 x 2TB	1 x 2TB
Max. LLM Training Size	70B	70B	33B
GPU Cards	2 x Nvidia RTX6000 Ada/48GB	4 x Nvidia RTX4000 Ada/20GB	2 x Nvidia RTX4000 Ada/20GB
CPU	Intel Xeon 4510 (12C/24T) or Above		
Form Factor	Tower or 19" 4U Rackmount		
Power Solution	1300W		
Chipset	C741		
Pre-Loaded Software	DeepMentor's Fine-Tune Expert Trial Version		

What is Fine-Tune Expert?

No code LLM training platform for enterprise

Simplified, no-code AI training platform with integrated dataset management, visual training progress monitoring, local processing for privacy, and inclusive team training.

Fine-Tune Expert Key Benefits

- Ensuring Data Privacy**
Ensure the privacy and security of corporate confidential information & user personal data.
- Greatly Reduce Operational Costs**
Compared to expensive cloud inference costs, on-premise solution can greatly reduce operational costs.
- No Code Software Integration**
User-friendly and accessible, our included Fine-Tune Expert software is easy to use and requires no coding knowledge.

Industrial Rugged Panel Solution



ARC Series
12.1"/ 15" Rugged
Front IP65/ Rear IP41
Panel PC

13th Generation
Intel Raptor Lake PS LGA
Processor up to 10 core, 5.2GHz

Modular Cableless Expansion
Various of IET module for I/O
expansion without cable

Durable Rugged Design
Shock at 20Grms and
Vibration up to 3Grms

Seamless Network Communication
Various of 2.5G LAN and WIFI6,
Bluetooth, 5G integration

ARC Series Rugged Full Flat IP65 Monitor



Avalue's ARC Series monitors are designed to provide exceptional durability and versatility, offering a range of screen sizes from 10.1" to 21.5". These industrial-grade displays are IP65-certified, ensuring reliable protection against dust and water. Their robust construction makes them ideal for demanding environments.

The monitors are equipped with dual 5W speakers and user-friendly OSD controls, providing enhanced functionality. Flexible mounting options, including VESA and panel mounts, allow for versatile installation.

Customizable features include wide voltage input options and specialized screen coatings that offer anti-glare, anti-reflective, and UV/IR protection. The ARC Series is versatile and can be utilized in various applications, such as manufacturing facilities, interactive kiosks, and EV charging stations, ensuring reliable performance in demanding environments.

Extreme Waterproof Panel Solution

M12 Connectors
Waterproof IP67 connectors
for all I/O available

IP65/66/69K
Full size 6 faces IP65/66/69K
rating for whole systems

Auto Balance Internal Pressure
Preventing ingress of dust and water
and achieving pressure equalization

Easy to Clean
Smooth and glossy surface
which is Anti-adhesion



SPC Series
Full IP65/66/69K
Stainless Steel
Panel PC

OFP Series Open Frame Multi Touch Panel PC



Avalue's OFP Series, open frame panel PCs, are based on Intel® Celeron® N3350/J3455 and 11th Gen. Intel® Core™ Processors. These processors offer enhanced performance and cost-effectiveness, while also providing multiple OS support. The OFP Series is an ideal solution for factory automation, kiosk, self-service, and HMI applications.

The OFP Series combines robust engineering with versatile integration capabilities, making it the ideal choice for system integrators and OEMs requiring reliable, high-performance computing solutions in industrial environments. Its flexible architecture and industrial-grade construction ensure long-term reliability and simplified maintenance protocols.



Medical Solution



MAB Series Medical Grade Box PC



HID Series Medical Grade Panel PC

13th Generation

Intel Raptor Lake LGA Processor
up to 16 cores 24 threads hybrid

AI Ready

Support Nvidia PCIe16
graphics card for AI application

13th Generation

Intel Raptor Lake PS LGA
Processor up to 10 core, 5.2GHz

Medical Grade Certification

UL60601-1 medical certify with
anti-microbial finishing

Customizable & Expansion

Front plate customize and 4 full
size expansion slot available

Medical Grade Certification

UL60601-1 medical certify

Slim & Stylish Design

Various expansion to fix
different integration

Data & Access Security

TPM & NFC/RFID module provide
highest security and control



ARM-based Edge AI Solutions

Edge AI SDK, Sample Code, and Reference Design

NVIDIA Jetson Orin/AGX Orin Offer 20 to 275 TOPS

Multiple ARM Platform Options
Rockchip, NXP, MTK, Qualcomm

Multiple Form Factor Support
Box PC, Panel PC, SBC, SMARC, OSM

Wide Temp. & Longevity Support



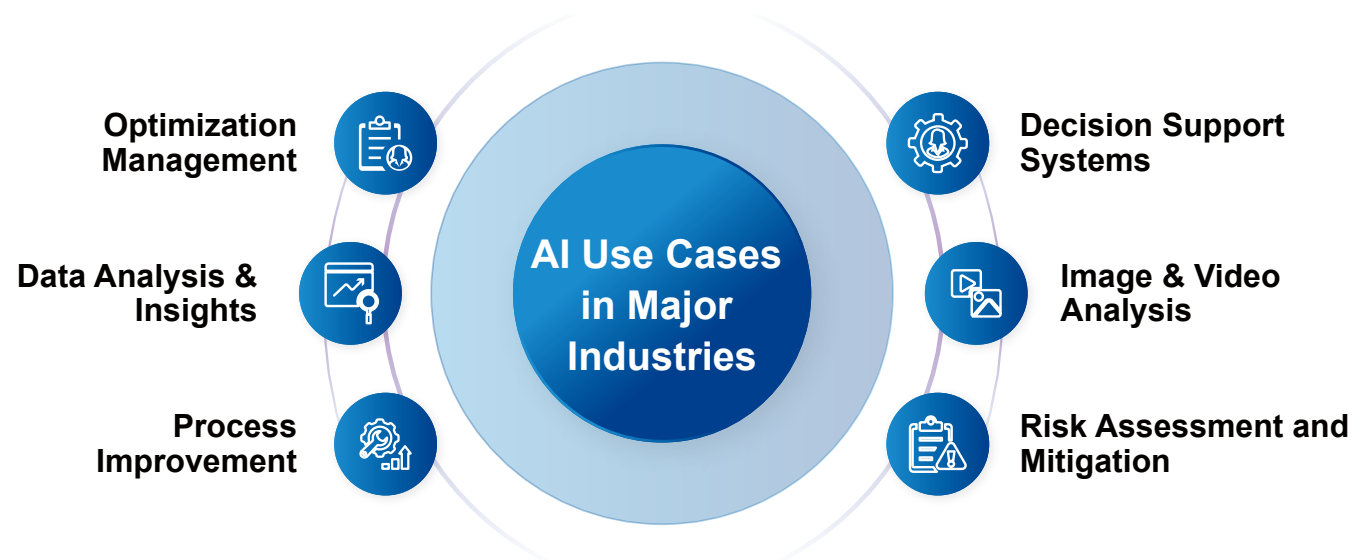
AIB Series



SMA/OSM Series



OFT/SID/VNS Series



OS Support List (Windows / Linux)

Vender	Platform	Series	Windows 10	Windows 11	Windows Server 2016	Windows Server 2019	Windows Server 2022	Windows Server 2025	Linux Kernel Version (or newer)	Ubuntu LTS (or newer)	
AMD		EPYC 8004 Series		V		V	V	V	Kernel 5.15	22.04.1 LTS	
Intel	Mobile/ Desktop	Bay Trail	V		V	V	V		Kernel 3.11	22.04.1 LTS	
		Skylake	V		V	V	V		Kernel 4.4	16.04 LTS	
		Apollo Lake	V						Kernel 4.8	16.04.3 LTS	
		Kaby Lake	V		V	V	V		Kernel 4.10	16.04.3 LTS	
		Coffee Lake	V	V	V	V	V		Kernel 4.13	16.04.5 LTS	
		Whiskey Lake	V	V	V	V	V		Kernel 4.18	18.04.5 LTS	
		Comet Lake	V	V		V	V		Kernel 5.3	20.04 LTS	
		Tiger Lake	V	V		V	V		Kernel 5.8	22.04.2 LTS	
		Elkhart Lake	V	V					Kernel 5.10	20.04.5 LTS	
		Alder Lake	V	V		V	V		Kernel 5.18	22.04.2 LTS	
		Alder Lake-N (Amston Lake)	V	V		V	V		Kernel 5.18	22.04.2 LTS	
		Raptor Lake	V	V		V	V		Kernel 5.18	22.04.2 LTS	
		Meteor Lake	V	V					Kernel 6.2	22.04.5 LTS	
		Arrow Lake-S	V	V					Kernel 6.X	Update Pending	
		Server	Skylake-SP	V	V		V	V		Kernel 4.10	16.04.3 LTS
			Cascade Lake	V	V		V	V	V	Kernel 4.18	18.04.5 LTS
Sapphire Rapids			V		V	V	V	Kernel 5.19	22.04.2 LTS		
Emerald Rapids					V	V	V	Kernel 6.X	Update Pending		

Avalue's Industrial & Embedded Motherboard series offers a wide range of popular form factors. This includes 3.5" single board computers, Pico-ITX, Thin Mini-ITX, Mini-ITX, Micro ATX, ATX, and ARM-based embedded boards, designed to meet diverse industrial and embedded computing needs.

Industrial & Embedded Motherboard



1.8" SBC

1.8" SBC embedded motherboard is designed for various applications with wide temperature range and low power consumption, effectively meeting customers' requirements.



2.5" SBC Pico-ITX

Pico-ITX, a small embedded Single Board Computer (SBC) at 100x72 mm, supports low power consumption and fanless operation, seamlessly integrated for compact embedded applications.



3.5" SBC

3.5" SBC embedded motherboards offer wide temperature and voltage ranges, low power consumption, and features to meet the needs of diverse applications.



ARM-based SBC

Based on embedded ARM processor, ARM-based SBCs meet the needs for power and performance optimization, including single board computers, panel PCs, box computers, and RISC design support services.



Mini-ITX

Ideal for various embedded solutions, Mini-ITX industrial motherboards are well suited for low-power, versatile applications.



Micro-ATX

Micro ATX are compatible-sized embedded computer boards, ideal for cost-sensitive applications, providing customers with fast, convenient, and simplified solutions.



ATX

ATX industrial motherboard offers high computing capability and rich I/O integration, providing an optimal embedded platform for various applications.



Embedded Peripheral

High-quality embedded peripherals, including power boards, display boards, and I/O communication interfaces, enable customers to build easy-to-use computing systems.

1.8" SBC



2.5" SBC Pico-ITX



Model Number	EZX-EHLP
Processor	Intel® Pentium®/ Celeron®/ Atom™ Processor
System Chipset	N/A
System Memory	Single Channel LPDDR4 4/ 8GB Memory Down
Expansion	1 x M.2 Key-B, 1 x Micro SIM to SIM Adapter by Option Onboard eMMC
Display	Intel® UHD Graphics for 10th Gen Intel® Processors Mini DP/ eDP
Resolution	Mini DP++ : 4096 x 2160 @ 60Hz eDP: 4096 x 2160 @ 60Hz LVDS: 1920 x 1080
Audio	N/A
Ethernet	1 x Intel® I210AT/ IT
USB/ SATA/ COM/ LAN	6/ 0/ 1/ 1
Power Requirement	+12V
Power Type	AT/ ATX
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F) -20°C ~ 60°C (-8°F ~ 140°F) for Wide Temperature CPU SKU
Dimension (L x W)	3.3" x 2.5" (85 x 65 mm)
Weight	0.66 lbs (0.3 kg)

	EPX-ASLP	EPX-EHLP	EPX-APLP
Processor	Intel® N-series & Atom® Processor X Series	Intel® Celeron®/ Atom™ SoC Processor	Intel® Celeron® SoC Processor
System Chipset	N/A	N/A	N/A
System Memory	1 x 262-pin DDR5 4800MHz SO-DIMM Supports up to 16GB	1 x 260-pin DDR4 2666MHz SO-DIMM Supports up to 32GB	1 x 204-pin DDR3L 1600 & 1333MHz SO-DIMM Supports up to 8GB
Expansion	1 x M.2 Key-B 1 x M.2 Key-E	1 x M.2 Key-B 1 x M.2 Key-E	1 x M.2 Key-B 1 x M.2 Key-E 1 x Micro SIM to SIM Adapter by Option
Display	Intel® UHD Graphics HDMI + DP + LVDS	Intel® UHD Graphics for 10th Gen Intel® Processors 2 x DP++/ LVDS	Intel® HD Graphics 500 HDMI + LVDS + DP++
Resolution	HDMI 2.0b Max Resolution 4096 x 2160 @ 60Hz eDP: 4096 x 2160 @ 60Hz DP 1.4a Max Resolution 4096 x 2160 @ 60Hz LVDS 1366 x 768 Single Channel 18/24-bits	DP++: 4096 x 2160 @ 60Hz LVDS: 1920 x 1080 (2 x DP++, LVDS)	HDMI 1.4b: 3840 x 2160 @ 30Hz 2560 x 1600 @ 30Hz DP 1.2a: 4096 x 2160 @ 60Hz LVDS: 1920 x 1800 @ 60Hz
Audio	N/A	N/A	Realtek Audio Codec 2 x 2W Audio Amplifier
Ethernet	2 x Intel® I226V/ IT	2 x Intel® I226LM/ IT	2 x Intel® I226LM
USB/ SATA/ COM/ LAN	6/ 1/ 2/ 2	6/ 0/ 2/ 2	6/ 1/ 1/ 2
Power Requirement	+12V	+12V	+12V
Power Type	AT/ ATX	AT/ ATX	ATX
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F) -40°C ~ 80°C (-8°F ~ 140°F) for Wide Temperature CPU SKU	0°C ~ 60°C (32°F ~ 140°F) -20°C ~ 60°C (-8°F ~ 140°F) for Wide Temperature CPU SKU	0°C ~ 60°C (32°F ~ 140°F)
Dimension (L x W)	3.93" x 2.83" (100 x 72 mm)	3.93" x 2.83" (100 x 72 mm)	3.93" x 2.83" (100 x 72 mm)
Weight	0.88 lbs (0.4 kg)	0.88 lbs (0.4 kg)	0.88 lbs (0.4 kg)

3.5" SBC



Model Number	ECM-MTL	ECM-RPL	ECM-TGU
Processor	Onboard Intel® Core™ Ultra 7/ Ultra 5 BGA Processor, Supports TDP 15/ 28W	Onboard 13th Intel® Gen Core™ i7/ i5/ i3/ Pentium®/ Celeron® BGA Processor, Supports TDP 15/ 28W	Onboard BGA 11th Gen Intel® Core™ Processors U-series & Celeron®
System Chipset	N/A	N/A	N/A
System Memory	1 x 262-pin DDR5 5600MHz SO-DIMM Supports up to 48GB	1 x 262-pin DDR5 4800MHz SO-DIMM Supports up to 32GB	1 x 260-pin DDR4 3200MHz SODIMM, Supports up to 32GB (non ECC Supported)
Watchdog Timer	H/W Reset, 1 sec. ~ 65535 sec. and 1 sec./step or 1 min./step	H/W Reset, 1 sec. ~ 65535 sec. and 1 sec./step or 1 min./step	H/W Reset, 1 sec. ~ 65535 sec. and 1 sec./step or 1 min./step
Expansion	1 x M.2 (2242) B-Key 1 x M.2 (2230) E-Key 1 x M.2 (2280) M-Key	1 x M.2 (2242) B-Key 1 x M.2 (2230) E-Key 1 x M.2 (2280) M-Key	1 x M.2 (2242) B-Key 1 x M.2 (2230) E-Key 1 x M.2 (2260 for 2242) M-Key
Storage	1 x M.2 B Key (2242) 1 x M.2 (2280) M-Key 1 x SATA III	1 x M.2 B Key (2242) 1 x M.2 (2280) M-Key 1 x SATA III	1 x M.2 (2242) B-Key 1 x M.2 (2260 for 2242) M-Key 1 x SATA III
I/O	4 x USB 2.0, 3 x USB 3.2, 1 x USB Type C Support DP/ USB 3.2 Gen 1, 5V x 3A 2 x RS-232, 2 x RS-232/422/485 1 x 8bit GPIO, 1 x SPI, 1 x e-SPI	4 x USB 2.0, 3 x USB 3.2 2 x RS-232/422/485 1 x 8bit GPIO, 1 x SPI, 1 x e-SPI	4 x USB 2.0, 4 x USB 3.1 Gen2 1 x SATA III, 4 x RS-232 2 x RS-232/422/485 1 x 8bit GPIO, 1 x LPC, 1 x SPI
Display Chipset	Intel® Xe LPG Graphics 1 x HDMI, 1 x DP, 1 x 2CH LVDS/ eDP 1 x USB Type C Support DP Supports Four Display	Intel® Iris® Xe/ UHD Graphics (Dependent on CPU) 1 x HDMI, 1 x DP++, 1 x 2CH LVDS/ eDP, 1 x USB Type C Support DP Supports Four Display	Intel® 11th Up3 SoC Processor Integrated 2 x DP++, 1 x 2CH LVDS, 1 x eDP Supports Four Display
Resolution	HDMI: 4096 x 2160 @ 60Hz DP: 7680 x 4320 @ 60Hz LVDS: 1920 x 1080 @ 60Hz or eDP 1920 x 1080 @ 60Hz 2 Lanes USB Type C Support DP: 4096 x 2160 @ 60Hz	HDMI: 4096 x 2160 @ 60Hz DP++: 4096 x 2304 @ 60Hz LVDS: 1920 x 1080 @ 60Hz or eDP 1920 x 1080 @ 60Hz 2 Lanes USB Type C Support DP: 4096 x 2304 @ 60Hz	2 x DP++: 4096 x 2304 @ 60Hz Dual Channel 18/24bits LVDS Max. Resolution 1920 x 1080 @ 60Hz eDP: 4096 x 2160 @ 60Hz
Audio Chipset	Realtek Audio Codec Mic-in, Line-in, Line-out 2 x 2W Audio Amplifier	Realtek Audio Codec Mic-in, Line-in, Line-out 2 x 2W Audio Amplifier	Realtek Audio Codec Mic-in, Line-in, Line-out 2 x 2W Audio Amplifier
Ethernet Chipset	1 x Intel® I226V 1 x Intel® I226LM	2 x Intel® I226LM/ IIT	3 x Intel® I226LM/IIT
Power Requirement	+12V ~ +24V	+9V ~ 36V or USB Type C Adapter (20V) Note: DCIN & USB Type C Adapter Can Only Use Either One.	+12V ~ +24V
Power Type	AT/ ATX	AT/ ATX	AT/ ATX
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F) -40°C ~ 70°C (-40°F ~ 158°F) for Wide Temperature CPU SKU	0°C ~ 60°C (32°F ~ 140°F) -20°C ~ 60°C (-4°F ~ 140°F) for Wide Temperature CPU SKU
Dimension (L x W)	5.7" x 4" (146 x 101 mm)	5.7" x 4" (146 x 101 mm)	5.7" x 4" (146 x 101 mm)

3.5" SBC



Model Number	ECM-TGUC	ECM-ADLS	ECM-CFS	ECM-ASL
Processor	Onboard BGA 11th Gen. Intel® Core™ Processors U-series i5/ i3	Intel® LGA1700 Socket Supports 12th Gen Intel® Core™ i9/ i7/ i5/ i3/ Pentium®/ Celeron® Processors, up to 35W Max	8/ 9th Gen Intel® Core™ i7/ i5/ i3/ Celeron® rPGA Processor	Onboard Intel® Processor N97, Intel® Core™ i3-N305 Processor, and Intel Atom® x7000RE Series Processors
System Chipset	N/A	Intel® R680E/ Q670E/ H610E Chipset	Intel® Q370/ H310 Express Chipset	N/A
System Memory	1 x 260-pin DDR4 3200MHz SO-DIMM Supports up to 32GB (Non ECC Supported)	1 x 262-pin DDR5 4800MHz SO-DIMM Supports up to 32GB	1 x 260-Pin DDR4 2400MHz SO-DIMM Supports up to 32GB	1 x 262-pin DDR5 4800MHz SO-DIMM Supports up to 16GB
Watchdog Timer	H/W Reset, 1 sec. ~ 65535 sec. and 1 sec./step or 1 min./step	H/W Reset, 1 sec. ~ 65535 sec. and 1 sec./step or 1 min./step	H/W Reset, 1 sec. ~ 65535 sec. and 1 sec./step or 1 min./step	H/W Reset, 1 sec. ~ 65535 sec. and 1 sec./step or 1 min./step
Expansion	1 x M.2 (2242) B-Key 1 x M.2 (2230) E-Key 1 x M.2 (2280) M-Key	1 x M.2 (2230) E-Key	1 x Mini PCIe Supports mSATA (Q370 Support mPCIe/ mSATA/ USB2.0 Device, H310 Support mSATA/ USB 2.0 Device)	1 x M.2 (2242) B-Key 1 x M.2 (2230) E-Key
Storage	1 x M.2 (2242) B-Key 1 x M.2 (2280) M-Key 1 x SATA III	1 x M.2 (2280) M-Key	1 x mSATA Supported from Mini PCIe	1 x M.2 (2242) B-Key 1 x SATA III
I/O	5 x USB 2.0, 3 x USB 3.2 1 x SATA III, 5 x RS-232 1 x RS-232/422/485 1 x 8bit GPIO, 1 x SPI, 1 x e-SPI	4 x USB 2.0, 4 x USB 3.2 (H610E USB 3.2 Support Gen 1 Only) 2 x RS-232/422/485 1 x 8bit GPIO, 1 x SPI, 1 x e-SPI	2 x USB 2.0, 4 x USB 3.1 2 x SATA III, 2 x RS-232 1 x RS-232/422/485 1 x 8bit GPIO, 1 x LPC 1 x SPI	4 x USB 2.0, 3 x USB 3.2 1 x SATA III, 3x RS-232 1 x RS-232/422/485 1 x 8bit GPIO, 1 x e-SPI
Display Chipset	Intel® 11th Up3 SoC Processor Integrated 2 x DP++, 1 x 2CH LVDS/eDP (Default LVDS) Supports Triple Display	Intel® 12th Gen. CPU Integrated HDMI, DP++, 1 x 2CH LVDS/ eDP Supports Triple Display	Intel® UHD Graphics 630 Intel® UHD Graphics 610 H310 Only Support Dual Display: LVDS + HDMI 1 (Default LVDS Enable) or HDMI 1+ HDMI 2 (LVDS Disabled) Q370 Support Triple Display	Integrated Intel® UHD Graphics 1 x HDMI, 1 x DP, 1 x 2CH LVDS/eDP Supports Triple Display
Resolution	2 x DP++: 4096 x 2304 @ 60Hz Dual Channel 18/24bits LVDS: 1920 x 1080 @ 60Hz eDP: 4096 x 2160 @ 60Hz	HDMI: 4096 x 2304 @ 60Hz DP++: 4096 x 2304 @ 60Hz LVDS: 1920 x 1080 @ 60Hz or eDP 1920 x 1080 @ 60Hz 2 Lanes	Dual HDMI: 4096 x 2304 @ 30Hz LVDS: 1920 x 1080 @ 60Hz	HDMI: 4096 x 2160 @ 60Hz DP: 4096 x 2160 @ 60Hz LVDS: 1920 x 1080 @ 60Hz eDP: 4096 x 2160 @ 60Hz
Audio Chipset	Realtek Audio Codec Mic-in, Line-in, Line-out 2 x 2W Audio Amplifier	Realtek Audio Codec Mic-in, Line-in, Line-out	Realtek Audio Codec Mic-in, Line-in, Line-out	Realtek Audio Codec Mic-In, Line-In, Line-Out
Ethernet Chipset	1 x Intel® I225V 1 x Intel® I219LM	2 x Intel® I226LM	1 x Intel® I210AT 1 x Intel® I219LM	2 x Intel® I226V/IIT
Power Requirement	+12V ~ +24V	+12V	+12V	+9V ~ +36V
Power Type	AT/ ATX	AT/ ATX	AT/ ATX	AT/ ATX
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F) -40°C ~ 80°C (-40°F ~ 176°F) for Wide Temperature CPU SKU
Dimension (L x W)	5.7" x 4" (146 x 101 mm)	5.7" x 4" (146 x 101 mm)	5.7" x 4" (146 x 101 mm)	5.7" x 4" (146 x 101 mm)

3.5" SBC



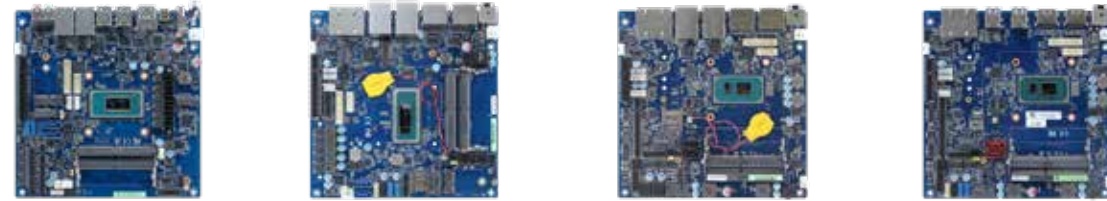
Model Number	ECM-EHL3	ECM-EHL	ECM-APL
Processor	Onboard Intel® Pentium®/Celeron®/ Atom™ SoC BGA Processor (with CPU Bottom Mounted)	Onboard Intel® Pentium®/Celeron®/ Atom™ SoC BGA Processor (with CPU Bottom Mounted)	Intel® Pentium®/ Celeron®/ Atom™ SoC Processor
System Chipset	N/A	N/A	N/A
System Memory	1 x 260-pin DDR4 3200MHz SODIMM, Supports up to 32GB (Non ECC Supported)	1 x 260-pin DDR4 3200MHz SODIMM, Supports up to 32GB (Non ECC Supported)	1 x 204-pin DDR3L 1600 & 1333MHz SO-DIMM Supports up to 8 GB SDRAM (Non-ECC)
Watchdog Timer	H/W Reset, 1 sec. ~ 65535 sec. and 1 sec./step or 1 min./step	H/W Reset, 1 sec. ~ 65535 sec. and 1 sec./step or 1 min./step	H/W Reset, 1 sec. ~ 65535 sec. and 1 sec./step or 1 min./step
Expansion	1 x M.2 (2242) B-Key 1 x M.2 (2230) E-Key 1 x M.2 (2260 for 2242) M-Key	1 x M.2 (2242) B-Key 1 x M.2 (2230) E-Key	1 x Mini PCIe (for PCIe & USB2.0) 1 x M.2 (2242) B-Key
Storage	1 x M.2 (2242) B-Key 1 x M.2 (2260 for 2242) M-Key 1 x SATA III	1 x M.2 (2242) B-Key 1 x SATA III	1 x M.2 (M.2 support SATA or PCIe x1/ USB)
I/O	6 x USB 2.0, 2 x USB 3.1 Gen2 1 x SATA III, 4 x RS-232 2 x RS-232/422/485 1 x 8bit GPIO, 1 x e-SPI, 1 x SPI	4 x USB 2.0, 2 x USB 3.1 Gen2 1 x SATA III, 3 x RS-232 1 x RS-422/485 1 x 8bit GPIO, 1 x e-SPI	1 x USB 2.0, 4 x USB 3.0 1 x SATA III, 5 x RS-232 1 x RS-232/422/485 1 x Micro SIM Card Slot 1 x 8bit GPIO, 1 x LPC, 1 x SPI
Display Chipset	Intel® UHD Graphics for 10th Gen Intel® Processors 2x DP++, 1x 2CH LVDS/ eDP (Default LVDS) Supports Triple Display	Intel® UHD Graphics for 10th Gen Intel® Processors HDMI, DP, eDP Supports Triple Display	Intel® HD Graphics 500 Supports Triple Display
Resolution	2 x DP++: 4096 x 2304 @ 60Hz Dual Channel 18/ 24bits LVDS: 1920 x 1080 @ 60Hz eDP: 4096 x 2160 @ 60Hz	HDMI: 4096 x 2160 @ 24Hz DP: 4096 x 2160 @ 60Hz eDP: 4096 x 2160 @ 60Hz	Dual HDMI: 3840 x 2160 @ 30Hz LVDS: 1920 x 1080 @ 60Hz
Audio Chipset	Realtek Audio Codec Mic-in, Line-in, Line-out 2 x 2W Audio Amplifier	Realtek Audio Codec Mic-in, Line-in, Line-out	Realtek Audio Codec Mic-in, Line-in, Line-out
Ethernet Chipset	1 x Intel® I226LM 2 x Intel® I210AT	2 x Intel® I226LM/ IT	2 x Intel® I210AT
Power Requirement	+9V ~ +36V	+9V ~ +36V	+12V ~ +24V
Power Type	AT/ ATX	AT/ ATX	AT/ ATX
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F) -40°C ~ 85°C (-40°F ~ 185°F) for Wide Temperature CPU SKU	0°C ~ 60°C (32°F ~ 140°F) -40°C ~ 85°C (-40°F ~ 185°F) (Optional for Wide Temperature)
Dimension (L x W)	5.7" x 4" (146 x 101 mm)	5.7" x 4" (146 x 101 mm)	5.7" x 4" (146 x 101 mm)

Mini-ITX



Model Number	EMX-W880P	EMX-R680P	EMX-C246P
Processor	LGA1851 Socket Supports Core™ Ultra Processors	LGA1700 Socket Supports 12/ 13th Gen. Intel® Core™ i9/ i7/ i5/ i3/ Pentium®/ Celeron® Processors	LGA1151 Socket Supports 8/ 9th Gen. Intel® Core™ i7/ i5/ i3/ Pentium®/ Celeron® Processors
System Chipset	Intel® W880 Chipsets	Intel® R680E Chipsets	Intel® C246 Chipset
System Memory	2 x 262-pin DDR5 6400MHz SO-DIMM Supports up to 64GB	2 x 262-pin DDR5 4800MHz SO-DIMM Supports up to 64GB	2 x 260-pin DDR4 2400/2666MHz SO-DIMM Supports up to 64GB (ECC Memory Supported by CPU)
Expansion	1 x PCI-e x16 2 x M.2 M-Key 1 x M.2 E-Key	1 x PCI-e x16 1 x M.2 M-Key 1 x M.2 E-Key	1 x PCI-e x16 1 x M.2 M-Key 1 x M.2 E-Key
Display	Intel® Xe LPG Graphics Architecture CPU Integrated 1 x HDMI, 2 x DP (1 from Type C), LVDS/ eDP	Intel® 12/13th Gen. CPU Integrated 1 x HDMI, 2 x DP++, eDP, LVDS	Intel® 8/ 9th Gen. CPU Integrated VGA + HDMI + LVDS VGA + HDMI + HDMI
Resolution	DP 2.1: 7680 x 4320 @ 60Hz USB4 Type C at I/O with DP-alt Mode HDMI 2.1: 8K @ 60Hz Dual Channel 18/24bits LVDS: 1920 x 1080 or eDP: 1920 x 1080 @ 60Hz	HDMI 2.1b: 8K @ 60Hz DP++: 4096 x 2160 @ 60Hz Dual Channel 18/24bits LVDS: 1920 x 1080 eDP: 1920 x 1080 @ 60Hz	VGA: 2048 x 1536 @ 60Hz HDMI: 3840 x 2160 @ 30Hz 2560 x 1600 @ 30Hz Dual Channel 18/24-bits LVDS (Chrontel CH7511B eDP to LVDS) by BOM Option
Audio	Realtek Audio Codec Mic-in, Line-out 2 x 3W Audio Amplifier	Realtek Audio Codec Mic-in, Line-out 2 x 2W Audio Amplifier	Realtek Audio Code 6W Audio Amplifier
Ethernet	1 x Intel® I210AT 1 x Intel® I226LM 2 x Intel® I226V	4 x Intel® I219LM	1 x Intel® I219LM 3 x Intel® I210AT
USB/ SATA/ COM/ LAN	12/ 2/ 5/ 4	12/ 2/ 5/ 4	13/ 4/ 6/ 4
Power Requirement	+12V/ +5V/ 5VSB/ +3.3V/ -12V	+12V/ +5V/ 5VSB/ +3.3V/ -12V	+12V/ +5V/ 5VSB/ +3.3V/ -12V
Power Type	AT/ ATX	AT/ ATX	AT/ ATX
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 55°C (32°F ~ 131°F)	0°C ~ 60°C (32°F ~ 140°F)
Dimension (L x W)	6.69" x 6.69" (170 x 170 mm)	6.69" x 6.69" (170 x 170 mm)	6.69" x 6.69" (170 x 170 mm)
Weight	0.88 lbs (0.4 kg)	0.88 lbs (0.4 kg)	0.88 lbs (0.4 kg)

Mini-ITX



Model Number	EMX-MTLP	EMX-RPLP	EMX-TGLP	EMX-TGLC
Processor	Onboard Intel® Core™ Ultra 7/ Ultra 5 BGA Processor, Supports TDP 15/28W	Onboard BGA 13th Gen. Intel® Core™ Processors P-series	Onboard BGA 11th Gen. Intel® Core™ Processors U-series	Onboard BGA 11th Gen. Intel® Core™ Processors U-series & Celeron®
System Chipset	N/A	N/A	N/A	N/A
System Memory	2 x 262-pin DDR5 5600MHz SO-DIMM Supports up to 96GB (Depending on Selected Memory Module)	2 x 262-pin DDR5 4800MHz SO-DIMM Supports up to 64GB	2 x 260-pin DDR4 3200MHz SO-DIMM Supports up to 64GB	2 x 260-pin DDR4 3200MHz SO-DIMM Supports up to 64GB
Expansion	1 x M.2 B-Key 1 x M.2 E-Key 2 x M.2 M-Key	1 x M.2 B-Key 1 x M.2 E-Key	1 x M.2 B-Key 1 x M.2 E-Key	1 x PCI-e x4 1 x M.2 B-Key 1 x M.2 E-Key
Display	Intel® Xe LPG Graphics 2 x HDMI, 2 x DP (1 via Type C), 1 x LVDS, 1 x eDP (Maximum: 6 for Quadruple Independent Displays)	Intel® Iris® Xe/ UHD Graphics (Dependent on CPU) 2 x DP++, 2 x DP, eDP, LVDS (Maximum: 6 for Quadruple Independent Displays)	Intel® 11th Up3 SoC Processor Integrated 2 x DP++, 2 x DP, eDP, LVDS (Maximum: 6 for Quadruple Independent Displays)	Intel® 11th Up3 SoC Processor Integrated 2 x DP++, eDP, LVDS Triple Display
Resolution	2 x HDMI 2.0: 3840 x 2160 @ 60Hz 1 x DP1.4a: Max: 7680 x 4320 @ 60Hz 1 x USB Type C SUPPORT dp 1.4a: 4096 x 2160 @ 60Hz Dual Channel 18/24bits LVDS eDP: 3840 x 2169 @ 60Hz	2 x DP++ (DP1+DP2): 1920 x 1080 @ 60Hz 2 x DP (DP3+DP4): 5120 x 3200 @ 60 Hz (2 x DP++, 2 x DP, eDP, LVDS) Dual Channel 18/24bits LVDS: 1920 x 1080Hz eDP: 3840 x 2169 @ 60Hz	2 x DP++: 4096 x 2304 @ 60Hz DP: 4096 x 2304 @ 60Hz (2 x DP++, 2 x DP, eDP, LVDS) Dual Channel 18/24bits LVDS: 1920 x 1080Hz eDP: 4096 x 2304 @ 60Hz	2 x DP++: 4096 x 2304 @ 60Hz (2 x DP++, eDP, LVDS) Dual Channel 18/24bits LVDS: 1920 x 1080Hz eDP: 4096 x 2304 @ 60Hz
Audio	Realtek Audio Codec Mic-in, Line-out 2 x 6W Audio Amplifier	Realtek Audio Codec Mic-in, Line-out 2 x 6W Audio Amplifier	Realtek Audio Codec Mic-in, Line-out 2 x 6W Audio Amplifier	Realtek Audio Codec Mic-in, Line-out 2 x 6W Audio Amplifier
Ethernet	1 x Intel® I226LM 1 x Intel® I226V	3 x Intel® I226LM/IT 1 x Intel® I219LM	1 x Intel® I226LM/IT 1 x Intel® I219LM 2 x Intel® I210AT	1 x Intel® I226LM 1 x Intel® I219LM
USB/ SATA/ COM/ LAN	11/ 2/ 6/ 2	8/ 2/ 6/ 4	8/ 2/ 6/ 4	8/ 2/ 6/ 2
Power Requirement	+12V ~ 24V	+12V ~ 24V	+12V ~ 24V	+12V ~ 24V
Power Type	DC-in	AT/ ATX	AT/ ATX	AT/ ATX
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F) -20°C ~ 60°C (-4°F ~ 140°F) for Wide Temperature CPU SKU	0°C ~ 60°C (32°F ~ 140°F) -20°C ~ 60°C (-4°F ~ 140°F) for Wide Temperature CPU SKU	0°C ~ 60°C (32°F ~ 140°F) -20°C ~ 60°C (-4°F ~ 140°F) for Wide Temperature CPU SKU	0°C ~ 60°C (32°F ~ 140°F)
Dimension (L x W)	6.69" x 6.69" (170 x 170 mm)	6.69" x 6.69" (170 x 170 mm)	6.69" x 6.69" (170 x 170 mm)	6.69" x 6.69" (170 x 170 mm)
Weight	0.88 lbs. (0.4 kg)	0.88 lbs. (0.4 kg)	0.88 lbs. (0.4 kg)	0.88 lbs. (0.4 kg)

Mini-ITX



Model Number	EMX-ASLP	EMX-EHLP	MX610HD	MX610H
Processor	Onboard BGA Intel® Processor N97, Intel® Core™ i3-N305 & Intel® Atom® x7000RE Series Processors	Intel® Pentium®/ Celeron®/ Atom™ SoC Processor	LGA1700 Socket Supports 12/ 13/14th Gen. Intel® Core™ i9/ i7/ i5/ i3/ Pentium®/ Celeron® Processors	LGA1700 Socket Supports 12/ 13/14th Gen. Intel® Core™ i9/ i7/ i5/ i3/ Pentium®/ Celeron® Processors
System Chipset	N/A	N/A	Intel® H610E Chipset	Intel® H610E Chipset
System Memory	1 x 262-pin DDR5 4800MHz SO-DIMM Supports up to 16GB	1 x 260-pin DDR4 3200MHz SO-DIMM Supports up to 32GB (Only Atom® x6000 Series Processors Support IBCEC)	2 x 262-pin DDR5 4800MHz SO-DIMM Supports up to 64GB	2 x 262-pin DDR5 4800MHz SO-DIMM Supports up to 64G
Expansion	1 x M.2 B-Key 1 x M.2 E-Key 1 x M.2 M-Key	1 x M.2 B-Key 1 x M.2 E-Key	1 x PCI-e x16 1 x M.2 M-Key 1 x M.2 E-Key	1 x PCI-e x16 1 x M.2 M-Key 1 x M.2 E-Key
Display	Intel® UHD Graphics Integrated 1 x HDMI, 1 x DP, 1 x DP++, eDP, LVDS Triple Display	Intel® UHD Graphics for 10th Gen Intel® Processors Triple Display DP++, HDMI, LVDS (eDP by BOM Option)	Intel® Integrated UHD Graphic with Xe Architecture (CPU Dependent) HDMI + DP + LVDS	Intel® Integrated UHD Graphic with Xe Architecture (CPU Dependent) HDMI, DP++, LVDS
Resolution	1 x HDMI 2.0b: 4096 x 2160 @ 60Hz 1 x DP: 4096 x 2160 @ 60Hz 1 x DP++: 1920 x 1080 @ 60Hz Dual Channel 18/24bits LVDS: 1920 x 1080Hz Co-lay eDP: 1920 x 1080 @ 60Hz	HDMI 2.0b: 4096 x 2160 @ 60Hz DP++: 4096 x 2160 @ 60Hz Dual Channel 18/24bits LVDS: 1920 x 1080 eDP: 4096 x 2160 @ 60Hz (BOM Optional)	HDMI: 3840 x 2160 @ 30Hz DP: 4096 x 2304 @ 60Hz Dual Channel 18/24-bits LVDS: 1920 x 1080 @ 60Hz	HDMI: 3840 x 2160 @ 30Hz DP: 4096 x 2304 @ 60Hz Dual Channel 18/24-bits LVDS: 1920 x 1080 @ 60 Hz
Audio	Realtek Audio Codec Mic-in, Line-out 2 x 2W Audio Amplifier	Realtek Audio Code Mic-in, Line-out 2 x 6W Audio Amplifier	Realtek Audio Code 3W Audio Amplifier	Realtek Audio Code 3W Audio Amplifier
Ethernet	1 x Intel® I226V or 1 x Intel® I226IT	4 x Intel® i226LM/IT	1 x Intel® I219V 1 x Intel® I225LM	1 x Intel® I219LM 1 x Intel® I225V
USB/ SATA/ COM/ LAN	9/ 1/ 6/ 2	8/ 2/ 6/ 4	8/ 2/ 3/ 2	10/ 3/ 4/ 2
Power Requirement	+12V ~ 24V	+12V ~ 24V	+12V ~ 24V	+12V/ +5V/ 5VSB/ +3.3V/ -12V
Power Type	AT/ ATX	AT/ ATX	AT/ ATX	AT/ ATX
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F) -20°C ~ 60°C (-8°F ~ 140°F) for Wide Temperature CPU SKU	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F)
Dimension (L x W)	6.69" x 6.69" (170 x 170 mm)	6.69" x 6.69" (170 x 170 mm)	6.69" x 6.69" (170 x 170 mm)	6.69" x 6.69" (170 x 170 mm)
Weight	0.53 lbs (0.24 kg)	0.88 lbs (0.4 kg)	0.88 lbs (0.4 kg)	0.88 lbs (0.4 kg)

Micro-ATX



Model Number	RX680R	ERX-W480P
Processor	Intel® LGA1700 Socket Supports 12/13/14th Gen. Intel® Core™ i9/i7/i5/i3/ Pentium®/ Celeron® Processors, up to 65W Max	Intel® LGA1200 Socket Supports 10th Gen. Intel® Xeon® (Workstation)/ Core™, Pentium®/ Celeron® Processors (Max. TDP at 95W)
System Chipset	Intel® R680E Chipsets	Intel® W480E Chipset
System Memory	4 x DIMM up to 128GB Max Dual Channel DDR5 4400 MHz with ECC Support (ECC Memory Supported by CPU)	4 x 288-pin DDR4 2400 ~ 2933MHz DIMM Supports up to 128GB (ECC Memory Supported by CPU)
Expansion	1 x Gen 5 PCIe x16 2 x Gen 4 PCIe x4 1 x Gen 3 PCIe x4 Open Ended	2 x PCI-e x16 (1 x PCI-e x16 or 2 x PCI-e x8), 2 x PCI-e x4
Display	Intel® 12/13th Gen. CPU Integrated DP++/ LVDS Four Independent Displays	Intel® 10th Gen. CPU Integrated VGA/ HDMI/DP++ / LVDS Triple Display
Resolution	4 x DP (1.4a): Max Resolution 4K @ 60Hz LVDS: 1920 x 1080Hz Dual Channel 18/24-bits	VGA: 2048 x 1536 @ 60Hz HDMI 2.0a: 4096 x 2304 @ 60Hz DP++: 4096 x 2304 @ 60Hz LVDS: 1920 x 1080 Dual Channel 18/24-bits
Audio	Realtek Audio Code Mic-in, Line-out 3W Amplifier	Realtek Audio Code Line-in, Mic-in, Line-out 6W Amplifier
Ethernet	2 x Intel® i225-LM	1 x Intel® i219LM 1 x Intel® i210AT 2 x Intel® i225LM
USB/ SATA/ COM/ LAN	17/ 4/ 6/ 2	14/ 4/ 6/ 4
Power Requirement	+12V/ +5V/ 5VSB/ +3.3V/ -12V	+12V/ +5V/ 5VSB/ +3.3V/ -12V
Power Type	AT/ ATX	AT/ ATX
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F)
Dimension (L x W)	9.6" x 9.6" (243.84 x 243.84 mm)	9.6" x 9.6" (243.84 x 243.84 mm)
Weight	1.45 lbs (0.66 kg)	1.35 lbs (0.6 kg)

ATX



Model Number	BC680R	EAX-R680FP	EAX-W480P	EAX-C246P
Processor	Intel® LGA1700 Socket Supports 12/13/14th Gen. Intel® Core™ i9/i7/i5/i3/ Pentium®/ Celeron® Processors, up to 65W Max	12/13/14th Gen. Intel® Core™ i9/i7/i5/i3 Processors, Supports LGA 1700 CPU up to 125W Max	Intel® LGA1200 Socket Supports 10th Gen. Intel® Xeon® (Workstation)/ Core™, Pentium®/ Celeron® Processors	Intel® LGA1151 Socket Supports 8/9th Gen. Intel® Xeon® (Workstation)/Core™, Pentium®/ Celeron® Processors
System Chipset	Intel® R680E Chipset	Intel® R680E Chipset	Intel® W480E Chipset	Intel® C246 Chipset
System Memory	4 x DIMM up to 128GB Max Dual Channel DDR5 4400MHz with ECC Support (ECC Memory Supported by CPU)	4 x 288-Pin DDR4 3200MHz U-DIMM Socket Supports Up to 128GB (ECC Memory Support by CPU)	4 x 288-pin DDR4 400~2933MHz DIMM Supports up to 128GB (ECC Memory Supported by CPU)	4 x 288-pin DDR4 400/2666MHz DIMM Supports up to 128GB (ECC Memory Supported by CPU)
Expansion	1 x Gen 5 PCIe x16 2 x Gen 4 PCIe x4 1 x Gen 3 PCIe x4 1 x Gen 3 PCIe x1 2 x Gen 3 PCIe x1 Open Ended	2 x PCIe x16 Slots for 1 x PCIe x16 (Gen5) Default or 2 x PCIe x8 (Gen5) 2 x PCIe x4 Gen4 1 x PCIe x4 Gen3 1 x PCIe x4 slot for 1 x PCIe x2 (Gen3)	1 x PCI-e x16 or 2 x PCI-e x8 4 x PCI-e x4	1 x PCI, 1 x PCI-e x16 or 2 x PCI-e x8 by BOM 1 x PCI-e x4, 3 x PCI-e x1 1 x M.2 M-Key, 1 x M.2 A-Key
Display	Intel® 12/13th Gen. CPU Integrated DP++/ HDMI Four Independent Displays	Intel® 12th/13/14th Generation CPU Integrated DP++/ HDMI Triple Display	Intel® 10th Gen. CPU Integrated DVI-D + DP++ + DP++	Intel® 8/ 9th Gen. CPU Integrated VGA + HDMI + DP
Resolution	2 x DP (1.4a): Max Resolution 4K @ 60Hz 2 x HDMI (2.0b): 4K @ 60Hz	2 x DP (DP1.4a): Max (Combined): 7680 x 4320 @ 60Hz (DP++ Via dongle: 1920 x 1080 @ 60 Hz) 1 x HDMI (HDMI 2.0b): Max Resolution 4K x 2K @ 60Hz (With HDR)	DVI-D: 2048 x 1536 @ 60Hz DP++: 3840 x 2160 @ 60Hz	VGA: 2048 x 1536 @ 60Hz HDMI: 3840 x 2160 @ 30Hz, 2560 x 1600 @ 30Hz DP: 4096 x 2304 @ 60Hz
Audio	Realtek Audio Code Mic-in, Line-out 6W Amplifier	Realtek Audio Code Mic-in, Line-out 6W 8Ω Amplifier	N/A	Realtek Audio Code Mic-in, Line-in, Line-out 1 x 6W Audio Amplifier
Ethernet	2 x Intel® i225-LM	2 x Intel® i225LM	1 x Intel® i225V 1 x Intel® i219LM 1 x Intel® i210AT	1 x Intel® i219LM 1 x Intel® i210AT
USB/ SATA/ COM/ LAN	17/ 4/ 6/ 2	14/ 4/ 6/ 2	12/ 4/ 10/ 3	14/ 6/ 10/ 2
Power Requirement	+12V/ +5V/ 5VSB/ +3.3V/ -12V	+12V/ +5V/ 5VSB/ +3.3V/ -12V	+12V/ +5V/ 5VSB/ +3.3V/ -12V	+12V/ +5V/ 5VSB/ +3.3V/ -12V
Power Type	AT/ ATX	AT/ ATX	AT/ ATX	AT/ ATX
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 55°C (32°F ~ 131°F)	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F)
Dimension (L x W)	12" x 9.6" (304.8 x 243.84 mm)	12" x 9.6" (304.8mm x 243.84mm)	12" x 9.6" (304.8 x 243.84 mm)	12" x 9.6" (304.8 x 243.84 mm)
Weight	1.85lbs (0.84 kg)	1.54lbs (0.7 kg)	1.32 lbs (0.6 kg)	1.32 lbs (0.6 kg)

ARM-based SBC



Model Number	RSC-IMX8M	RSC-IMX61	RSC-3576	RSC-3568J
Processor	NXP i.MX8M Cortex-A53 Quad Core 1.3GHz; Cortex-M4 Core Processor	NXP i.MX 6 Dual Lite NXP i.MX 6 Quad Core	Rockchip RK3576 Quad-core Cortex-A72 and Quad-core Cortex-A53	Rockchip RK3568J Quad-core Cortex-A55 1.8GHz
System Memory	2GB DDR4 (4GB Optional)	1GB/ 2GB DDR3	4GB (8G/ 16G Optional)	2GB/ 4GB LPDDR4
Storage	16GB eMMC (Expandable to 64GB Max)	8GB eMMC	32GB (16 ~ 128G Optional)	32GB/ 64GB eMMC
External I/O Connector	1x USB 3.0 Type A 2x Gigabit LAN 1x HDMI 2.0 In 1x USB 3.0 Type C (Data Only) 1x Micro SD Slot 1x Headphone Jack 1x Reset 1x Power LED 1x DC Jack + 1x 1x2P Connector Power Connector Type	1x DC Jack 1x HDMI 2.0 In 1x Line-out 1x Micro SD Slot 1x Power LED 1x Reset 2x USB 2.0 Type A 1x Jack for I/R Extender Cable, Co-design (Optional)	2 x RJ45 (10/100/1000M) 1x HDMI 1x USB3.0 Type A 1x USB2.0 Type A 1x SATA 3.0 1x SATA Power 1x M.2 1x Speaker 1x Micro Sim Slot 1x Micro SD	1x DC Jack 1x HDMI 2.0 In 1x Reset 1x RS232/422/485 DB9 1x USB 3.0 Type A 1x USB 3.0 Type A OTG 2 x 10/100/1000 RJ45 LAN
Internal I/O Connector	1x Front Panel 1x Backlight 1x TAG 1x MIPI CSI 1x LVDS 1x I2C 1x USB2.0 (1x5P Header) 2 x M.2 Key E Socket (For WIFI/ BT)/ M.2 Key B Socket + SIM Socket (For LTE) 2 x Speaker out (1x2P Header) 1x Line-out 1x Power LED 1x RTC Battery 1x SIM Card Slot 1x Mic-in 1x Extend Connector (for Option Expansion I/O Board (EX:RS232/ 485/ GPIO/ CAN)	1x Backlight 1x CAN 1x I2C 1x Line-out 1x LVDS 1x Micro USB 1x RS232 1x RS232/422/485 Debug 1x RTC Battery 1x SATA 1x USB 2.0 1x USB 2.0 Type B OTG 1x USB Touch Interface	WiFi IEEE 802.11b/g/n/ac BT4.2 (Optional 5.0) 1x 3G/4G LTE Mini PCIE (Optional) 2 x RS232 2 x RS485 1x CAN 1x GPIO 1x LVDS 1x eDP 1x Backlight 2 x USB 2.0 1x I2C for TP 1x WiFi + BT Antenna	1x Backlight 2 x CAN 1x Debug 1x eDP 5 x GPIO 1x I2C 1x LVDS 1x M.2 2230 E-Key 1x M.2 3042 B-Key 1x Micro SD Slot 1x MIPI DSI 3 x RS232 1x RS232/422/485 1x RTC Battery 1x SD Card Slot 1x SIM Card Slot 1x Speaker 1x Touch Button 2 x USB 2.0 1x 4Pin DC PHD 2.0
Power Requirement	DC 12V ~ 24V	DC 12V ~ 26V	DC 9 ~ 24V	DC 12V ~ 24V
Operating Temperature	-40 ~ 85°C	-20 ~ 85°C	-5 ~ 70°C -40 ~ 85°C (optional)	-40 ~ 85°C
Storage Temperature	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C
Dimension (L x W)	146 x 102 mm	146 x 102 mm	146 x 101 mm	146 x 101 mm
Weight	0.15 kg	0.15 kg	0.16 kg	0.16 kg
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B
Software Support	Android 9.0/ 10 Yocto 2.5	Android 4.4/ 6.0 Yocto 2.1	Andriod/ Yocto/ Debian	Android 13 Debian 11

ARM-based SBC

» 2.5" SBC Pico-ITX

» 1.8" SBC



Model Number	ACP-IMX6POS	ACP-3588	ACP-06490	ACP-3566-PI	ACP-IMX8-PI
Processor	NXP i.MX 6 Dual Lite NXP i.MX 6 Quad Core	RockChip RK3588 Quad-core Cortex-A76 and Quad-core Cortex-A55	QCS6490 Qualcomm® Kryo™ 670, 8 cores, up to 2.7 GHz, 12 TOPS(INT8)	RockChip RK3566 Quad-core Cortex-A55	NXP i.MX8Mmini Quad Core Cortex-A53
System Memory	1GB/ 2GB DDR3	4GB/ 8GB/ 16GB/ 32GB DDR4	DDR4, 8GB (4GB to 16GB Optional)	2 GB	2 GB
Storage	4GB eMMC	32 GB eMMC	Support UFS 3.1, Default 128 GB	16 GB eMMC	8 GB eMMC
External I/O Connector	2 x 10/100/1000 RJ45 Powered LAN 1x DC Jack 1x HDMI 2.0 In 1x Micro SD Slot 1x Mini USB 2 x RS232/422/485 DB9 2 x USB 2.0 Type A	1x 10/100/1000 RJ45 Powered LAN 1x HDMI 2.0 In 2 x HDMI 2.0 Out 4 x RS-232/422/485 Debug 3 x USB 2.0 Type A 1x USB 2.0 Type C OTG 1x USB 3.0 Type A	1 x M.2 B Key 3052 Reference RM520N-GL Quectel 1x Nano SIM Slot 1x RJ45 (10/100/1000M) 2 x USB 3.1 Type A 3 x USB 2.0 TypeA 1x USB 3 Type C (Download Only) 1x HDMI 1.4 1x Line-out/ Mic-in/ Speaker	1 x 10/100/1000 RJ45 Powered LAN 1x HDMI 2.0 Out 2 x USB 2.0 Type B 1x USB 2.0 Type B OTG 1x USB 3.0 Type A 1x PWR IN	1 x 10/100/1000 RJ45 Powered LAN 1x Audio Jack TRS 1x HDMI 2.0 Out 4 x USB 2.0 Type B 1x USB 3.0 Type C 1x DC in
Internal I/O Connector	N/A	1x EDP 2 x 20P GPIO (GPIO/ UART/ SPI/ I2C) 1x LVDS 1x M.2 Key M 1x MIPI CSI 1x MIPI DSI 2 x SATA 1x SPDIF 1x 30 pin Audio Interface 1x Speaker Header 2 x WiFi/ BT Antenna 2 x I2C	WiFi 802.11ax Wifi and BT 5.2 1x RS-232 1x RS485 1x GPIO 16-bit DIO 1x I2C 1x uSD3.0 Card 2 x MIPI-CSI2 for 4-lanes Camera, Reference to IMX577 1x UART	1x BT4.0 28 x GPIO 1x TF Card 1x WiFi 802.11 a/b/g/n/ac 1x MIPI CSI 1x MIPI DSI	1x BT4.0 40 x GPIO 1x MIPI CSI 1x MIPI DSI 1x USB Wifi/ BT Port
Power Requirement	DC 12V ~ 24V	DC 12V	DC 12V	DC 5V	DC 5V
Operating Temperature	-20 ~ 85°C	-5 ~ 70°C	-20 ~ 70°C	-5 ~ 60°C	-20 ~ 85°C
Storage Temperature	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C
Dimension (L x W)	175 x 110 mm	150 x 125 mm	100 x 72 mm	85 x 55 mm	85 x 55 mm
Weight	0.16 kg	0.16 kg	0.1 kg	0.16 kg	0.16 kg
Certification	CE, FCC Class B	CE, FCC, Class B	CE, FCC Class B	CE, FCC, Class B	CE, FCC, Class B
Software Support	Android 4.4 Yocto 1.7	Andriod 11	Ubuntu/ Yocto/ Debian/ Andriod	Debian 11	Yocto 4.0

CPU List

Intel® Desktop Processors

SKUs (with Intel ARK Link)	TDP (W)	Total Cores	Total Threads	Processor Base Frequency	Performance-core Base Frequency	Efficient-core Base Frequency	Max Turbo Frequency		BC680R	EAX-R680FP	EAX-W480P	EAX-C246P	RX680R	ERX-W480P	MX610HD	MX610H	EMX-W880P	EMX-R680P	EMX-C246P	ECM-ADLS	ECM-CFS
Intel® Core™ i9 processor 14901KE	125W	8	16	-	3.8GHz	-	5.8GHz		-	V	-	-	-	-	-	-	-	-	-	-	-
Intel® Core™ i9 processor 14901E	65W	8	16	-	2.8GHz	-	5.6GHz		-	V	-	-	-	-	V	V	-	-	-	-	-
Intel® Core™ i9 processor 14901TE	45W	8	16	-	2.3GHz	-	5.5GHz		-	V	-	-	-	-	V	V	-	-	-	-	-
Intel® Core™ i7 processor 14701E	65W	8	16	-	2.6GHz	-	5.4GHz		-	V	-	-	-	-	V	V	-	-	-	-	-
Intel® Core™ i7 processor 14701TE	45W	8	16	-	2.1GHz	-	5.2GHz		-	V	-	-	-	-	V	V	-	-	-	-	-
Intel® Core™ i5 processor 14501E	65W	6	12	-	3.3GHz	-	5.2GHz		-	V	-	-	-	-	V	V	-	-	-	-	-
Intel® Core™ i5 processor 14501TE	45W	6	12	-	2.2GHz	-	5.1GHz		-	V	-	-	-	-	V	V	-	-	-	-	-
Intel® Core™ i5 processor 14401E	65W	6	12	-	2.5GHz	-	4.7GHz		-	V	-	-	-	-	V	V	-	-	-	-	-
Intel® Core™ i5 processor 14401TE	45W	6	12	-	2.0GHz	-	4.5GHz		-	V	-	-	-	-	V	V	-	-	-	-	-
Intel® Core™ i9 processor 14900K	125W	24	32	-	3.2GHz	2.4GHz	6.0GHz		-	V	-	-	-	-	-	-	-	-	-	-	-
Intel® Core™ i9 processor 14900	65W	24	32	-	2.0GHz	1.5GHz	5.8GHz		V	V	-	-	V	-	V	V	-	-	-	-	-
Intel® Core™ i9 processor 14900T	35W	24	32	-	1.1GHz	0.8GHz	5.5GHz		V	V	-	-	V	-	V	V	-	-	-	-	-
Intel® Core™ i7 processor 14700	65W	20	28	-	2.1GHz	1.5GHz	5.4GHz		V	V	-	-	V	-	V	V	-	-	-	-	-
Intel® Core™ i7 processor 14700T	35W	20	28	-	1.3GHz	0.9GHz	5.2GHz		V	V	-	-	V	-	V	V	-	-	-	-	-
Intel® Core™ i5 processor 14500	65W	14	20	-	2.6GHz	1.9GHz	5.0GHz		V	V	-	-	V	-	V	V	-	-	-	-	-
Intel® Core™ i5 processor 14500T	35W	14	20	-	1.7GHz	1.2GHz	4.8GHz		V	V	-	-	V	-	V	V	-	-	-	-	-
Intel® Core™ i5 processor 14400	65W	10	16	-	2.5GHz	1.8GHz	4.7GHz		V	V	-	-	V	-	V	V	-	-	-	-	-
Intel® Core™ i5 processor 14400T	35W	10	16	-	1.5GHz	1.1GHz	4.5GHz		V	V	-	-	V	-	V	V	-	-	-	-	-
Intel® Core™ i3 processor 14100	60W	4	8	-	3.5GHz	-	4.7GHz		V	V	-	-	V	-	V	V	-	-	-	-	-
Intel® Core™ i3 processor 14100T	35W	4	8	-	2.7GHz	-	4.4GHz		V	V	-	-	V	-	V	V	-	-	-	-	-
Intel® Processor 300	46W	2	4	-	3.9GHz	-	-		V	V	-	-	V	-	-	-	-	-	-	-	-
Intel® Processor 300T	35W	2	4	-	3.4GHz	-	-		V	V	-	-	V	-	-	-	-	-	-	-	-
Intel® Core™ i9-13900K Processor	125W	24	32	-	3.0GHz	2.2GHz	5.8GHz		-	V	-	-	-	-	-	-	-	V	-	-	-
Intel® Core™ i9-13900 Processor	65W	24	32	-	2.0GHz	1.5GHz	5.6GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i9-13900E Processor	65W	24	32	1.8GHz	1.8GHz	1.3GHz	5.2GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i9-13900TE Processor	35W	24	32	1.0GHz	1.0GHz	0.8GHz	5.0GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i7-13700 Processor	65W	16	24	-	2.1GHz	1.5GHz	5.2GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i7-13700E Processor	65W	16	24	1.9GHz	1.9GHz	1.3GHz	5.1GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i7-13700T Processor	35W	16	24	-	1.4GHz	1.0GHz	4.9GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i7-13700TE Processor	35W	16	24	-	1.1GHz	0.8GHz	4.8GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i5-13500 Processor	65W	14	20	-	2.5GHz	1.8GHz	4.8GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i5-13500E Processor	65W	14	20	2.4GHz	2.4GHz	1.5GHz	4.6GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i5-13500T Processor	35W	14	20	-	1.6GHz	1.2GHz	4.6GHz		V	V	-	-	V	-	V	V	-	V	-	V	-
Intel® Core™ i5-13500TE Processor	35W	14	20	1.3GHz	1.3GHz	1.1GHz	4.5GHz		V	V	-	-	V	-	V	V	-	V	-	V	-
Intel® Core™ i5-13400 Processor	65W	10	16	-	2.5GHz	1.8GHz	4.6GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i5-13400E Processor	65W	10	16	2.4GHz	2.4GHz	1.5GHz	4.6GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i3-13100 Processor	60W	4	8	-	3.4GHz	-	4.5GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i3-13100F Processor	58W	4	8	-	3.4GHz	-	4.5GHz		-	V	-	-	-	-	-	-	-	V	-	-	-
Intel® Core™ i3-13100T Processor	35W	4	8	-	2.5GHz	-	4.2GHz		V	V	-	-	V	-	V	V	-	V	-	V	-
Intel® Core™ i3-13100TE Processor	35W	4	8	2.4GHz	2.4GHz	-	4.1GHz		V	V	-	-	V	-	V	V	-	V	-	V	-
Intel® Core™ i3-13100E Processor	60W	4	8	3.3GHz	3.3GHz	-	4.4GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i9-12900K Processor	125W	16	24	-	3.2GHz	2.4GHz	5.2GHz		-	V	-	-	-	-	-	-	-	V	-	-	-
Intel® Core™ i9-12900 Processor	65W	16	24	-	2.4GHz	1.8GHz	5.1GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i9-12900E Processor	65W	16	24	-	2.3GHz	1.7GHz	5.0GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i9-12900TE Processor	35W	16	24	-	1.1GHz	1.0GHz	4.8GHz		V	V	-	-	V	-	V	V	-	V	-	V	-
Intel® Core™ i7-12700 Processor	65W	12	20	-	2.1GHz	1.6GHz	4.9GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i7-12700E Processor	65W	12	20	-	2.1GHz	1.6GHz	4.8GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i7-12700TE Processor	35W	12	20	-	1.4GHz	1.0GHz	4.6GHz		V	V	-	-	V	-	V	V	-	V	-	V	-
Intel® Core™ i5-12500 Processor	65W	6	12	-	3.0GHz	-	4.6GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i5-12500E Processor	65W	6	12	-	2.9GHz	-	4.5GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i5-12500TE Processor	35W	6	12	-	1.9GHz	-	4.3GHz		V	V	-	-	V	-	V	V	-	V	-	V	-

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Please note the board specifications might not comply with Intel Cores/Threads/Frequency, but depending on Avalue board specifications.

CPU List

Intel® Desktop Processors

SKUs (with Intel ARK Link)	TDP (W)	Total Cores	Total Threads	Processor Base Frequency	Performance-core Base Frequency	Efficient-core Base Frequency	Max Turbo Frequency		BC680R	EAX-R680FP	EAX-W480P	EAX-C246P	RX680R	ERX-W480P	MX610HD	MX610H	EMX-W880P	EMX-R680P	EMX-C246P	ECM-ADLS	ECM-CFS
Intel® Core™ i5-12400 Processor	65W	6	12	-	2.5GHz	-	4.4GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i3-12100 Processor	60W	4	8	-	3.3GHz	-	4.3GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i3-12100E Processor	60W	4	8	-	3.2GHz	-	4.2GHz		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Core™ i3-12100TE Processor	35W	4	8	-	2.1GHz	-	4.0GHz		V	V	-	-	V	-	V	V	-	V	-	V	-
Intel® Pentium® Gold G7400E Processor	46W	2	4	-	3.6GHz	-	-		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Pentium® Gold G7400TE Processor	35W	2	4	-	3.0GHz	-	-		V	V	-	-	V	-	V	V	-	V	-	V	-
Intel® Pentium® Gold G7400 Processor	46W	2	4	-	3.7GHz	-	-		-	V	-	-	-	-	-	-	-	V	-	-	-
Intel® Pentium® Gold G7400T Processor	35W	2	4	-	3.1GHz	-	-		-	V	-	-	-	-	-	-	-	V	-	V	-
Intel® Celeron® Processor G6900	46W	2	2	-	3.4GHz	-	-		-	V	-	-	-	-	-	-	-	V	-	-	-
Intel® Celeron® Processor G6900T	35W	2	2	-	2.8GHz	-	-		-	V	-	-	-	-	V	V	-	V	-	V	-
Intel® Celeron® Processor G6900E	46W	2	2	-	3.0GHz	-	-		V	V	-	-	V	-	V	V	-	V	-	-	-
Intel® Celeron® Processor G6900TE	35W	2	2	-	2.4GHz	-	-		V	V	-	-	V	-	V	V	-	V	-	V	-
Intel® Xeon® W-1290E Processor	95W	10	20	3.5GHz	-	-	4.8GHz		-	-	V	-	-	V	-	-	-	-	-	-	-
Intel® Xeon® W-1270E Processor	80W	8	16	3.4GHz	-	-	4.8GHz		-	-	V	-	-	V	-	-	-	-	-	-	-
Intel® Xeon® W-1250E Processor	80W	6	12	3.5GHz	-	-	4.7GHz		-	-	V	-	-	V	-	-	-	-	-	-	-
Intel® Xeon® W-1250TE Processor	35W	6	12	2.4GHz	-	-	3.8GHz		-	-	V	-	-	V	-	-	-	-	-	-	-
Intel® Xeon® W-1270TE Processor	35W	8	16	2.0GHz	-	-	4.4GHz		-	-	V	-	-	V	-	-	-	-	-	-	-
Intel® Xeon® W-1290TE Processor	35W	10	20	1.8GHz	-	-	4.5GHz		-	-	V	-	-	V	-	-	-	-	-	-	-
Intel® Core™ i9-10900TE Processor	35W	10	20	1.8GHz	-	-	4.5GHz		-	-	V	-	-	v	-	-	-	-	-	-	-
Intel® Core™ i9-10900E Processor	65W	10	20	2.8GHz	-	-	4.7GHz		-	-	V	-	-	v	-	-	-	-	-	-	-
Intel® Core™ i7-10700TE Processor	35W	8	16	2.0GHz	-	-	4.4GHz		-	-	V	-	-	v	-	-	-	-	-	-	-
Intel® Core™ i7-10700E Processor	65W	8	16	2.9GHz	-	-	4.5GHz		-	-	V	-	-	v	-	-	-	-	-	-	-
Intel® Core™ i5-10500TE Processor	35W	6	12	2.3GHz	-	-	3.7GHz		-	-	V	-	-	v	-	-	-	-	-	-	-
Intel® Core™ i5-10500E Processor	65W	6	12	3.1GHz	-	-	4.2GHz		-	-	V	-	-	v	-	-	-	-	-	-	-
Intel® Core™ i3-10100E Processor	65W	4	8	3.2GHz	-	-	3.8GHz		-	-	V	-	-	-	-	-	-	-	-	-	-
Intel® Core™ i3-10100TE Processor	35W	4	8	2.3GHz	-	-	3.6GHz		-	-	V	-	-	-	-	-	-	-	-	-	-
Intel® Pentium® Gold G6400E Processor	58W	2	4	3.8GHz	-	-	-		-	-	V	-	-	V	-	-	-	-	-	-	-
Intel® Pentium® Gold G6400TE Processor	35W	2	4	3.2GHz	-	-	-		-	-	V	-	-	-	-	-	-	-	-	-	-
Intel® Celeron® Processor G5900E	58W	2	2	3.2GHz	-	-	-		-	-	V	-	-	V	-	-	-	-	-	-	-
Intel® Celeron® Processor G5900TE	35W	2	2	3.0GHz	-	-	-		-	-	V	-	-	V	-	-	-	-	-	-	-
Intel® Xeon® E-2278GEL Processor	35 W	8	16	2.0GHz	-	-	3.9GHz		-	-	-	V	-	-	-	-	-	-	V	-	-
Intel® Xeon® E-2226GE Processor	80 W	6	6	3.4GHz	-	-	4.6GHz		-	-	-	V	-	-	-	-	-	-	V	-	-
Intel® Xeon® E-2124G Processor	71 W	4	4	3.4GHz	-	-	4.5GHz		-	-	-	V	-	-	-	-	-	-	V	-	-
Intel® Xeon® E-2176G Processor	80 W	6	12	3.7GHz	-	-	4.7GHz		-	-	-	V	-	-	-	-	-	-	V	-	-
Intel® Core™ i7-9700TE Processor	35 W	8	8	1.8GHz	-	-	3.8GHz		-	-	-	V	-	-	-	-	-	-	V	-	V
Intel® Core™ i7-9700E Processor	65 W	8	8	2.6GHz	-	-	4.4GHz		-	-	-	V	-	-	-	-	-	-	V	-	-
Intel® Core™ i7-8700T Processor	35 W	6	12	2.4GHz	-	-	4.0GHz		-	-	-	V	-	-	-	-	-	-	V	-	V
Intel® Core™ i7-8700 Processor	65 W	6	12	3.2GHz	-	-	4.6GHz		-	-	-	V	-	-	-	-	-	-	V	-	-
Intel® Core™ i5-9500TE Processor	35 W	6	6	2.2GHz	-	-	3.6GHz		-	-	-	V	-	-	-	-	-	-	V	-	V
Intel® Core™ i5-9500E Processor	65 W	6	6	3.0GHz	-	-	4.2GHz		-	-	-	V	-	-	-	-	-	-	V	-	-
Intel® Core™ i5-8500T Processor	35 W	6	6	2.1GHz	-	-	3.5GHz		-	-	-	V	-	-	-	-	-	-	V	-	V
Intel® Core™ i5-8500 Processor	65 W	6	6	3.0GHz	-	-	4.1GHz		-	-	-	V	-	-	-	-	-	-	V	-	-
Intel® Core™ i3-9100TE Processor	35 W	4	4	2.2GHz	-	-	3.2GHz		-	-	-	V	-	-	-	-	-	-	V	-	V
Intel® Core™ i3-9100E Processor	65 W	4	4	3.1GHz	-	-	3.7GHz		-	-	-	V	-	-	-	-	-	-	V	-	-
Intel® Core™ i3-8100T Processor	35 W	4	4	3.1GHz	-	-	-		-	-	-	V	-	-	-	-	-	-	V	-	V
Intel® Core™ i3-8100 Processor	65 W	4	4	3.6GHz	-	-	-		-	-	-	V	-	-	-	-	-	-	V	-	-
Intel® Celeron® G4900 Processor	54 W	2	2	3.1GHz	-	-	-		-	-	-	V	-	-	-	-	-	-	V	-	-
Intel® Celeron® G4900T Processor	35 W	2	2	2.9GHz	-	-	-		-	-	-	V	-	-	-	-	-	-	V	-	V
Intel® Pentium® Gold G5400 Processor	58 W	2	4	3.7GHz	-	-	-		-	-	-	V	-	-	-	-	-	-	V	-	-
Intel® Pentium® Gold G5400T Processor	35 W	2	4	3.1GHz	-	-	-		-	-	-	V	-	-	-	-	-	-	V	-	V

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CPU List

Intel® Core™ Ultra Processors, Intel® Core™ Processors, Intel® Processor, Intel® Processor U-series, Intel® Celeron® Processor 6000 Series

SKUs (with Intel ARK Link)	TDP (W)	Total Cores	Total Threads	Processor Base Frequency	Performance-core Base Frequency	Efficient-core Base frequency	Max Turbo Frequency		EMX-MTLP	EMX-RPLP	EMX-TGLP	EMX-TGLC	ECM-MTL	ECM-RPL	ECM-TGU	ECM-TGUC	ESM-RPL	ESM-TGH	ESM-RPLC
Intel® Core™ Ultra 7 Processor 165H	28W	16	22	-	1.4GHz	0.9GHz	5.0GHz		V	-	-	-	V	-	-	-	-	-	-
Intel® Core™ Ultra 7 Processor 155H	28W	16	22	-	1.4GHz	0.9GHz	4.8GHz		V	-	-	-	V	-	-	-	-	-	-
Intel® Core™ Ultra 5 Processor 135H	28W	14	18	-	1.7GHz	1.2GHz	4.6GHz		V	-	-	-	V	-	-	-	-	-	-
Intel® Core™ Ultra 5 Processor 125H	28W	14	18	-	1.2GHz	0.7GHz	4.5GHz		V	-	-	-	V	-	-	-	-	-	-
Intel® Core™ Ultra 7 Processor 165U	15W	12	14	-	1.7GHz	1.2GHz	4.9GHz		V	-	-	-	V	-	-	-	-	-	-
Intel® Core™ Ultra 7 Processor 155U	15W	12	14	-	1.7GHz	1.2GHz	4.8GHz		V	-	-	-	V	-	-	-	-	-	-
Intel® Core™ Ultra 5 Processor 135U	15W	12	14	-	1.6GHz	1.1GHz	4.4GHz		V	-	-	-	V	-	-	-	-	-	-
Intel® Core™ Ultra 5 Processor 125U	15W	12	14	-	1.3GHz	0.8GHz	4.3GHz		V	-	-	-	V	-	-	-	-	-	-
Intel® Core™ i7-1365UE Processor	15W	10	12	1.7GHz	-	-	4.9GHz		-	V	-	-	-	V	-	-	-	-	V
Intel® Core™ i5-1335UE Processor	15W	10	12	1.3GHz	-	-	4.5GHz		-	V	-	-	-	V	-	-	-	-	V
Intel® Core™ i3-1315UE Processor	15W	6	8	1.2GHz	-	-	4.5GHz		-	V	-	-	-	V	-	-	-	-	V
Intel® Processor U300E	15W	5	6	1.1GHz	-	-	4.3GHz		-	V	-	-	-	V	-	-	-	-	V
Intel® Core™ i7-1365URE Processor	15W	10	12	1.7GHz	-	-	4.9GHz		-	V	-	-	-	V	-	-	V	-	V
Intel® Core™ i5-1345URE Processor	15W	10	12	1.4GHz	-	-	4.6GHz		-	V	-	-	-	V	-	-	-	-	V
Intel® Core™ i3-1315URE Processor	15W	6	8	1.2GHz	-	-	4.5GHz		-	V	-	-	-	V	-	-	-	-	V
Intel® Core™ i7-1370PE Processor	28W	14	20	1.9GHz	-	-	4.8GHz		-	-	-	-	-	V	-	-	-	-	-
Intel® Core™ i5-1340PE Processor	28W	12	16	1.8GHz	-	-	4.5GHz		-	V	-	-	-	V	-	-	V	-	V
Intel® Core™ i3-1320PE Processor	28W	8	12	1.7GHz	-	-	4.5GHz		-	V	-	-	-	V	-	-	-	-	-
Intel® Core™ i7-1370PRE Processor	28W	14	20	1.9GHz	-	-	4.8GHz		-	-	-	-	-	V	-	-	V	-	V
Intel® Core™ i5-1350PRE Processor	28W	12	16	1.8GHz	-	-	4.6GHz		-	V	-	-	-	V	-	-	V	-	V
Intel® Core™ i3-1320PRE Processor	28W	8	12	1.7GHz	-	-	4.5GHz		-	V	-	-	-	V	-	-	-	-	V
Intel® Core™ i5-13600HE Processor	45W	12	16	2.7GHz	-	-	4.8GHz		-	V	-	-	-	-	-	-	V	-	-
Intel® Core™ i5-13600HRE Processor	45W	12	16	2.7GHz	-	-	4.8GHz		-	-	-	-	-	-	-	-	V	-	-
Intel® Core™ i7-1185G7E Processor	12-28W	4	8	1.8GHz	-	-	4.4GHz		-	-	V	-	-	-	V	-	-	-	-
Intel® Core™ i7-1185GRE Processor	12-28W	4	8	1.8GHz	-	-	4.4GHz		-	-	V	-	-	-	V	-	-	-	-
Intel® Core™ i5-1135G7 Processor	12-28W	4	8	0.9GHz*	-	-	4.2GHz		-	-	-	V	-	-	-	V	-	-	-
Intel® Core™ i5-1145G7E Processor	12-28W	4	8	1.5GHz	-	-	4.1GHz		-	-	V	-	-	-	V	-	-	-	-
Intel® Core™ i5-1145GRE Processor	12-28W	4	8	1.5GHz	-	-	4.1GHz		-	-	V	-	-	-	V	-	-	-	-
Intel® Core™ i3-1115G4 Processor	12-28W	2	4	1.7GHz*	-	-	4.1GHz		-	-	-	V	-	-	-	V	-	-	-
Intel® Core™ i3-1115G4E Processor	12-28W	2	4	2.2GHz	-	-	3.9GHz		-	-	-	V	-	-	-	V	-	-	-
Intel® Core™ i3-1115GRE Processor	12-28W	2	4	2.2GHz	-	-	3.9GHz		-	-	-	V	-	-	-	V	-	-	-
Intel® Celeron® 6305E Processor	15W	2	2	1.8GHz	-	-	-		-	-	-	V	-	-	-	V	-	-	-
Intel® Core™ i7-11850HE Processor	45W	8	16	2.1GHz*	-	-	4.7GHz		-	-	-	-	-	-	-	-	-	V	-
Intel® Core™ i5-11500HE Processor	45W	6	12	2.1GHz*	-	-	4.5GHz		-	-	-	-	-	-	-	-	-	V	-
Intel® Core™ i3-11100HE Processor	45W	4	8	1.9GHz*	-	-	4.4GHz		-	-	-	-	-	-	-	-	-	V	-
Intel® Celeron® 6600HE Processor	35W	2	2	2.6GHz*	-	-	-		-	-	-	-	-	-	-	-	-	V	-
Intel® Xeon® W-11865MRE Processor	45W	8	16	2.1GHz*	-	-	4.7GHz		-	-	-	-	-	-	-	-	-	V	-
Intel® Xeon® W-11155MRE Processor	45W	4	8	1.9GHz*	-	-	4.4GHz		-	-	-	-	-	-	-	-	-	V	-

CPU information is based on Intel ARK, subject to change by Intel without notice.
Please note the board specifications might not comply with Intel Cores/Threads/Frequency, but depending on Avalue board specifications.

CPU List

Intel Atom® Processor, Intel® Pentium® Processor J/N Series, Intel® Celeron® Processor J/N Series

SKUs (with Intel ARK Link)	TDP (W)	Total Cores	Total Threads	Processor Base Frequency*	Max Turbo Frequency	EMX-ASLP	EMX-EHLP	ECM-ASL	ECM-EHL3		ECM-EHL	ECM-APL	EPX-ASLP	EPX-EHLP	EPX-APLP	EZX-EHLP	ESM-ASLC	ESM-EHLC	ESM-APLC	ESM-APLM	EQM-EHL	EQM-APL
Intel Atom® x7211RE Processor	9W	2	-	1.0GHz	3.2GHz	V	-	V	-		-	-	V	-	-	-	V	-	-	-	-	-
Intel Atom® x7213RE Processor	9W	2	-	1.7GHz	3.4GHz	V	-	V	-		-	-	V	-	-	-	V	-	-	-	-	-
Intel Atom® x7433RE Processor	9W	4	-	1.5GHz	3.4GHz	V	-	V	-		-	-	-	-	-	-	V	-	-	-	-	-
Intel Atom® x7835RE Processor	12W	8	-	1.3GHz	3.6GHz	V	-	V	-		-	-	V	-	-	-	V	-	-	-	-	-
Intel® Processor N97	6W	4	-	2.0GHz	3.6GHz	V	-	V	-		-	-	V	-	-	-	-	-	-	-	-	-
Intel® Core™ i3-N305 Processor	15W	8	8	1.0GHz	3.8GHz	V	-	V	-		-	-	-	-	-	-	-	-	-	-	-	-
Intel Atom® x6425RE Processor	12 W	4	4	1.9GHz	-	-	V	-	V		V	-	-	-	-	-	-	V	-	-	-	-
Intel Atom® x6414RE Processor	9 W	4	4	1.5GHz	-	-	-	-	-		V	-	-	-	-	-	-	V	-	-	-	-
Intel Atom® x6212RE Processor	6 W	2	2	1.2GHz	-	-	-	-	-		-	-	-	-	-	V	-	-	-	-	-	-
Intel Atom® x6211E Processor	6 W	2	2	1.3GHz	-	-	-	-	V		V	-	-	V	-	V	-	-	-	-	V	-
Intel Atom® x6425E Processor	12 W	4	4	2.0GHz	-	-	-	-	V		V	-	-	-	-	-	-	V	-	-	-	-
Intel Atom® x6413E Processor	9 W	4	4	1.5GHz	-	-	V	-	V		V	-	-	V	-	V	-	V	-	-	V	-
Intel® Pentium® Processor J6426	10 W	4	4	2.0GHz	-	-	-	-	V		V	-	-	-	-	-	-	-	-	-	-	-
Intel® Pentium® Processor N6415	6.5 W	4	4	1.2GHz	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	V	-
Intel® Celeron® Processor J6412	10 W	4	4	2.0GHz	-	-	V	-	V		V	-	-	V	-	V	-	V	-	-	-	-
Intel® Celeron® Processor J6413	10 W	4	4	1.8GHz	-	-	V	-	V		V	-	-	V	-	V	-	V	-	-	-	-
Intel® Celeron® Processor N6210	6.5 W	2	2	1.2GHz	-	-	-	-	-		V	-	-	-	-	-	-	-	-	-	-	-
Intel® Celeron® Processor N6211	6.5 W	2	2	1.2GHz	-	-	-	-	-		V	-	-	-	-	-	-	-	-	-	V	-
Intel Atom® x7-E3950 Processor	12 W	4	4	1.6GHz	-	-	-	-	-		-	V	-	-	-	-	-	-	-	-	-	-
Intel Atom® x5-E3940 Processor	9.5 W	4	4	1.6GHz	-	-	-	-	-		-	V	-	-	-	-	-	-	-	-	-	-
Intel Atom® x5-E3930 Processor	6.5 W	2	2	1.3GHz	-	-	-	-	-		-	V	-	-	-	-	-	-	-	-	-	-
Intel® Pentium® Processor N4200	6 W	4	4	1.1GHz	-	-	-	-	-		-	V	-	-	-	-	-	-	V	V	-	V
Intel® Celeron® Processor J3455	10 W	4	4	1.5GHz	-	-	-	-	-		-	V	-	-	V	-	-	-	V	-	-	V
Intel® Celeron® Processor N3350	6 W	2	2	1.1GHz	-	-	-	-	-		-	V	-	-	V	-	-	-	V	V	-	V

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Embedded Peripheral



Windows 10 IoT

With a full line of products, Avalue peripherals can provide everything that you need to build a system or solution. If the item is not covered by our standard product offerings, our purchasing team can help source any part based on a customer's specified vendor and product.

In short, the ultimate goal of us is to provide customers the most efficient services, the best quality products, and the shortest shipment lead time.

Embedded Peripheral				
No	Embedded Peripherals	Description		
1	Power Board	EPM-1712 Vehicle 100Watt Smart DC/DC Converter		
		EPM-1715 Super Cap Power Module		
		EPM-1721 Railway 60W Power Board		
		EPM-1722 DC to DC 60W Marine Power Module		
2	Display Board	EPM-1502 eDP to VGA Converter		
3	IO Board	EPM-1601 mPCIe to 4-RS-232 Module		
		EPM-1602 mPCIe to 4-RS-422/485 Module		
		EPM-1603 USB to 4-RS-232/422/485 Module		
		EPM-1604 4 Port USB 2.0 Hub		
		EPM-1605 USB to mPCIe Module		
		EPM-1606 mPCIe to M.2 Transfer Board		
		EPM-1607 M.2 2242/2260/2280 to 4-RS-232 Module		
		EPM-1608 M.2 2242/2260/2280 Dual 2.5 GbE LAN Module		
		EPM-1609 M.2 2280 B/M Key 2.5GbE Module		
		4	Industrial Storage	SSD: 2.5", mSATA, M.2, CFAST, CF, DOM HDD: 2.5", 3.5" M.2: 2242, 2280
		5	Industrial Module	Type: SO-DIMM, Long-DIMM Capacity: Max. Up to 32GB Temperature: Standard or Industrial Temperature
6	Wi-Fi Module	Form Factor: mPCIe/ M.2 Bluetooth Supported		
7	4G/ 5G Module	Type: 4G/ 5G Module Interface: mCPIE, M.2		
8	Capture Card	Mini SDI/ HDV Capture Card w/ H.264 High Profile Encoding		
9	Mini LAN Port	2-port 10/100/1000 Ethernet Board		
10	Power Adapter	AC DC Adapter 60W/ 84W/ 120W/ 200W/ 220W		
11	Microsoft Windows Embedded OS	Avalue Provides Embedded Software to Customers Who Integrated Avalue's Hardware Products. Windows 10 IoT Enterprise Windows 11 IoT Enterprise		

Embedded Peripheral



EPM-1502

eDP to VGA Converter

- Input Interface 40pin eDP Signal
- Output Interface DB-Sub VGA
- Industrial Temperature (W/T Temp. -40 ~ 85°C) Operation
- Support VESA and CEA Timing Standards up to 1920 x 1200 @ 60Hz



EPM-1601

mPCIe to 4-RS-232 Module

- Input Interface PCI-Express. 2.0
- Output Interface 4 x RS-232
- Industrial Temperature (W/T Temp. -40 ~ 85°C) Operation
- Support Ring Wake Function (Optional)



EPM-1602

mPCIe to 4-RS-422/485 Module

- Input Interface PCI-Express. 2.0
- Output Interface 4 x RS-422/285
- Industrial Temperature (W/T Temp. -40 ~ 85°C) Operation
- Support Auto Flow Control
- Cable for mPCIe to Four DB-9 Connectors



EPM-1603

USB to 4-RS-232/422/485 Module

- Input Interface USB2.0
- Output Interface 4 x RS232/422/485
- 2 x USB 2.0 w/ Type A Connector
- Industrial Temperature (W/T Temp. -40 ~ 85°C) Operation



EPM-1604

4-Port USB 2.0 Hub

- 4 x Port USB Hub, Open Bare-board Design
- 4 x Internal USB2.0 Type A Female Connector for Down Port
- 1 x Internal Wafer 2pin Connector for DC-input (+12V, Max 1A)
- Compliant with Universal Serial Bus Specification Revision 2.0 (Data Rate 1.5/12/480Mbps), USB 1.1 Compatible



EPM-1605

USB to mPCIe Module with USIM

- Input Interface USB 2.0
- Output Interface USB 2.0
- Operation Temperature : 0 ~ 60°C
- 1x USIM Slot Expansion



EPM-1606

mPCIe to M.2 A/E key Transfer Board

- M.2 Wi-Fi & Bluetooth Module (PCIe and USB Base) to Mini PCIe Converter
- Support Windows, MAC and Linux
- Multiple Plated-holes Support M.2 Type 2230/2242
- Operating Temperature: -40 ~ 80°C



EPM-1607

M.2 2242/2260/2280 to 4-RS-232 Module

- Input Interface PCI-Express. 2.0
- Output Interface 4 x RS-232
- Support M.2 Type 2242/2260/2280 Plated-holes
- Industrial Temperature (W/T Temp. -40 ~ 85°C) Operation
- Support Ring Wake Function (Optional)



EPM-1608

M.2 2242/2260/2280 Dual 2.5 GbE LAN Module

- 3-in-1 form Factor 2280/2260/2242
- Ultrafast Transfer Speeds via 2-Native PCIe Lane
- Quickly Adds Two Independent Gigabit Ethernet Ports (with 2kV Isolation) to Embedded Systems
- Supports Wake-on LAN Ensures Unhindered Remoting



EPM-1609

M.2 2280 B/M Key 2.5GbE module

- M.2 2280 B/M Key Support Max 2.5GbE Module
- Compact M.2 PCIe Ethernet Card with RJ-45 Connector on Board
- Support PCI Express x1-lane Host Interface
- Supports Wake-on LAN Ensures Unhindered Remoting
- Quickly Adds Single Independent Ethernet Ports to Embedded Systems



EPM-1712

Vehicle 100Watt Smart DC/DC Converter

- Wide Range DC Input: Typical 12/24Vdc (+9 ~ +36V)
- Intelligent System on/off Control Via Jumper Setting
- 6 Selectable Power on/off Timing Modes
- Load Down/ Over Voltage/ Short Circuit/ Over Current Protection
- Battery Voltage Monitor



EPM-1715

Supercap Power Module

- 500'000 Charge & Discharge Cycling
- 4 x 400F Supercapacitor up to 6-Cell and 8-Cell
- AP for The Parameter Selecting
- Wide Temperature Range: 0 ~ 60°C
- Wide DC Input: +12 ~ 24Vdc
- Over Temperature Protection



EPM-1721

Railway 60W Power Board

- Input to Output Isolation 1500Vdc
- Output Voltage 12Vdc
- Output Current 5000mA
- Wide Temperature Range: -40 ~ +85°C
- Wide DC Input: +9 ~ 36Vdc
- Over Voltage and Current Protection
- Certified with EN50155 and EN50121-3-2



EPM-1722

DC to DC 60W Marine Power Module

- Typical +24Vdc (+9Vdc ~ +36Vdc) w/1.5kV Isolation
- Output Voltage: 12Vdc
- Output Current: 5000mA
- Input to Output Isolation: 1500Vdc
- Operating temperature range: -40 ~ 85°C
- Support IEC60945
- Over Voltage Protection, Hiccup Mode
- Over Current Protection, Hiccup Mode

A small form factor Computer-on-Module (COM) offers reliable embedded platform for critical or industrial applications, ready to use, ideal for user customizable and reduce project schedule and cost. Include COM Express Type 6, COM Express Type 7, COM Express Type 10, Eval Carrier Board, Qseven, SMARC.

Computer-on-Module

Avalue COM Express® Competence Service for Design-Win

Product & Document Support

- SOM Module
- Evaluation Board
- Fast/ Early Sample for Customer's Investigation
- Free Document Download
 - Design guide
 - Carrier Board Schematic
 - Mechanical Drawing
 - Thermal Drawing

Design Assistance Service

- Schematic Review
- Placement/ Layout Review
- On-Site-Co-Debug
- Design Training
- Design Database

Customized/ Validation Service

- Conformal Coating
- Wide Temperature
- Customized Carrier Board Design
- Thermal Customized & Validation
- Environmental/ Compatibility/ EMC/ Safety Validation

Embedded OS Service

- Customized Software
 - Customized BIOS
 - Customized OS Image
 - Device Driver
- eOS Installation



Qseven



COM Express Type 6



COM Express Type 10



Eval Carrier Board



SMARC



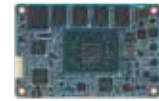
Open Standard Module

Qseven Module



Model Number	EOM-EHL	EOM-APL	EOM-BYT
Processor	Intel® Celeron®/ Pentium®/ Atom™ SoC BGA Processor	Intel® Pentium®/ Celeron® Processor	Intel® Atom™/ Celeron® Processor
System Memory	Onboard Single Channel LPDDR4 3200MT/s 4GB Up to 8GB	Onboard DDR3L 1600 & 1333MHz 4GB Up to 8GB	Onboard DDR3L 2GB Up to 4 GB (Processor E3845 Only Support 1333MHz)
Expansion	4 x PCIe Gen 3 x1	3 x PCIe1	3 x PCIe1
USB	8 x USB 2.0, 1 x USB 3.2 Gen1	6 x USB 2.0, 2 x USB 3.0	5 x USB 2.0, 1 x USB 3.0
SATA	2 x SATA III	2 x SATA III	2 x SATA II
UART	1 x UART	1 x UART	1 x UART
MIO	1 x SMBus, 1 x LPC, 1 x I ² C, 1 x SPI, 1 x SD, 1 x SDIO	1 x SMBus, 1 x LPC, 1 x I ² C, 1 x SPI	1 x LPC, 1 x SMBus, 1 x I ² C
Display Chipset	Integrated Intel® Gen11 UHD Graphics Controller	Intel® HD Graphics 500	Intel® HD Graphics
Display	DP + (eDP or LVDS)	(HDMI or DP) + (eDP or LVDS)	DDI (HDMI or DP) + LVDS
Audio	Intel® High Definition Audio	Intel® High Definition Audio	Intel® High Definition Audio
Ethernet Chipset	1 x Intel® I226LM/IT	1 x Intel® I210AT	1 x Intel® I210AT
Power Requirement	+5V	+5V	+5V
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F); -40°C ~ 85°C (-40°F ~ 185°F) for Wide Temperature CPU SKU	0°C ~ 70°C (32°F ~ 140°F)(Standard) Extend: -20°C ~ 70°C (-4°F ~ 158°F) on Request	0°C ~ 60°C (32°F ~ 140°F)(Standard)
Dimension (L x W)	2.75" x 2.75" (70 x 70 mm)	2.75" x 2.75" (70 x 70 mm)	2.75" x 2.75" (70 x 70 mm)
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B
Software Support	Win 10, Linux	Win 10, Linux, Android	Win 10, Win 7, Win 8, Linux

COM Express Type 10



COM Express Type 6



COM Express Type 6



Model Number	ESM-APLM
Processor	Intel® Celeron®/ Pentium®/ Atom™ SoC Processor
System Memory	1 x 204-pin DDR3L 600/1333MHz SO-DIMM up to 8GB
Expansion	1 x PCIe4
USB	6 x USB 2.0 2 x USB 3.0
SATA	2 x SATA III
COM Port	N/A
MIO	1 x SMBus 1 x LPC
Display Chipset	Intel® HD Graphics 500
Display	LVDS, DDI
Audio	Intel® High Definition Audio
Ethernet	1 x Intel® I210AT
Power Requirement	+4.75V ~ +20V
Operating Temperature	0°C ~ 60°C (32°F ~ 140°F)
Dimension (L x W)	84 x 55 mm (3.31" x 2.17")
Certification	CE, FCC Class B

ESM-RPL	ESM-RPLC	ESM-EHLC
13th Gen. Intel® H-Series Embedded Industrial (45 W), P-Series Embedded Industrial (28 W) BGA Processor	13th Gen. Intel® P-Series Embedded Industrial (28 W), U-Series Embedded Industrial (15 W) BGA Processor	Intel® Atom® x6000E Series and Intel® Pentium® and Celeron® J and N Series Processors
2 x 262-pin DDR5 4800MHz SO-DIMM Supports up to 64GB	1 x 262-pin DDR5 4800MHz SO-DIMM Supports up to 32GB	2 x 260-pin DDR4 3200MHz SO-DIMM Supports up to 32GB (Only Atom® x6000 Series Processors Support IB ECC)
1 x PCIe Gen4 x8 (Selected SKU, H Series) 2 x PCIe Gen4 x4 5 x PCIe Gen3 x1 2 x SATA (2 Lanes Shares with SATA)	2 x PCIe Gen4 x4 5 x PCIe Gen3 x1 2 x SATA (2 Lanes Shares with SATA)	3 x PCIe1
8 x USB 2.0 4 x USB 3.2 Gen2 2 x USB4 (Optional)	8 x USB 2.0 4 x USB 3.2 Gen2 2 x USB4 (Optional)	8 x USB 2.0 4 x USB 3.2 Gen2 x1 (10 Gbps)
2 x SATA III	2 x SATA III	2 x SATA III
2 x UART	2 x UART	2 x UART
1 x SMBus 1 x LPC 1 x I²C 1 x SPI	1 x SMBus 1 x LPC 1 x I²C 1 x SPI	1 x SMBus 1 x LPC/ eSPI (Default) 1 x I²C 1 x SPI
Intel® Iris® Xe Graphics on i7/i5 Processors Intel® UHD Graphics on i3/Celeron® Processors Intel® Gfx up to 96 EU	Intel® Iris® Xe Graphics on i7/i5 Processors Intel® UHD Graphics on i3/Celeron® Processors Intel® Gfx up to 96 EU	Intel® UHD Graphics for 10th Gen Intel® Processors
DDI, VGA, eDP/ LVDS	DDI, VGA, eDP/ LVDS	VGA, LVDS, DDI
Intel® High Definition Audio	Intel® High Definition Audio	Intel® High Definition Audio
1 x Intel® I226LM/IT	1 x Intel® I226LM/IT	1 x Intel® I225LM/IT
+9V ~ +19V	+9V ~ +19V	+9V ~ +19V
0°C ~ 60°C (32°F ~ 140°F) -40°C ~ 70°C (-40°F ~ 158°F) for Wide Temperature CPU SKU	0°C ~ 60°C (32°F ~ 140°F) -40°C ~ 75°C (-40°F ~ 167°F) for Wide Temperature CPU SKU	0°C ~ 60°C (32°F ~ 140°F) (Standard), Extend: -40°C ~ 85°C (-40°F ~ 185°F) with 0.5m/s Air Flow. (Note: Above 70°C Tc, The Recommended Ethernet Speed is 1G.) on Request
125 x 95 mm (4.92" x 3.74")	95 x 95 mm (3.74" x 3.74")	95 x 95 mm (3.74" x 3.74")
CE, FCC Class B	CE, FCC Class B	CE, FCC Class B

ESM-APLC	ESM-TGH	ESM-CFH	ESM-SKLH	ESM-ASLC
Intel® Pentium®/ Celeron®/ Atom™ SoC Processor	11th Gen Intel® Xeon®/ Core™ i7/i5/i3/Celeron® BGA 10nm Processor	9/ 8th Gen Intel® Xeon®/ Core™ i7/i5/i3 Processor	6th Gen Intel® Core™ i7/i5/i3 Processor	Intel® Atom™ x7000RE Series Processor
1 x 204-pin DDR3L 1600MHz 1600/ 1333MHz SO-DIMM up to 8GB	3x 260-pin DDR4-3200MHz SO-DIMM with up to 96 GB with ECC (ECC is Supported with Specific SKU) *3rd Socket on Rear Side by Request	3 x 260-pin DDR4 2400/2133MHz SO-DIMM up to 96GB	2 x 260-pin DDR4 SO-DIMM up to 32GB	1 x 262-pin DDR5 4800MHz SO-DIMM Supports up to 16GB
3 x PCIe1	1 x PEG x16 (Gen4, 16.0 GT/s) Support dGFX and NVMe Storage 8 x PCIe x1 (Gen3, 8.0 GT/s)	1 x PCIe x16 Gen3 8 x PCIe x1	8 x PCIe1	4 x PCIe x1 Gen3 or 1 x PCIe x4 Gen3 or 2 x PCIe x1 Gen3
8 x USB 2.0 4 x USB 3.0	8 x USB 2.0 4 x USB 3.2 Gen2 x1 (10 Gbps)	8 x USB 2.0 4 x USB 3.1	8 x USB 2.0 4 x USB 3.0	8 x USB2.0, 2 x USB3.2 or 8 x USB2.0, 4 x USB3.2
2 x SATA III	4 x SATA III	4 x SATA III	4 x SATA III	2 x SATA III
1 x UART	2 x UART	2 x UART	2 x UART	2 x UART
1 x SMBus 1 x LPC 1 x I²C	1 x SMBus 1 x LPC/ (eSPI Default) 1 x I²C	1 x SMBus 1 x LPC 1 x I²C 1 x SPI	1 x SMBus 1 x LPC 1 x I²C	1 x SMBus 1 x LPC 1 x eSPI 1 x I²C 1 x SPI
Intel® HD Graphics 500	Intel® 11th H Series SoC Processor Integrated	Intel® 8/ 9th SoC Processor Integrated	Intel® 6th SoC Processor Integrated	Intel® UHD Graphics
VGA, LVDS, DDI	VGA LVDS, DDI	VGA, LVDS, DDI	VGA, LVDS, DDI	HDMI/ DP, DP/ TypeC, LVDS/ eDP
Intel® High Definition Audio	Intel® High Definition Audio	Intel® High Definition Audio	Intel® High Definition Audio	Intel® High Definition Audio
1 x Intel® I210AT	1 x Intel® I225LM/IT	1 x Intel® I219LM	1 x Intel® I219LM	1 x Intel® I226IT
+9V ~ +19V	+9V ~ +19V	+9V ~ +19V	+9V ~ +19V	+9V ~ +19V
0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F) (Standard) Extend: -40°C ~ 75°C (-40°F ~ 167°F) on Request	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F)	-40°C ~ 80°C (-40°F ~ 176°F) for Wide Temperature CPU SKU
95 x 95 mm (3.74" x 3.74")	125 x 95 mm (4.92" x 3.74")	125 x 95 mm (4.92" x 3.74")	125 x 95 mm (4.92" x 3.74")	95 x 95 mm (3.74" x 3.74")
CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B

Eval Carrier Board

» Q7 Carrier Board



Model Number	REV-Q703 (A/B)
USB	4 x USB 2.0, 2 x USB 3.0 (2 x USB on Board, 2 x USB 3.0/ 1 x USB External)
SATA	2 x SATA (On Board)
COM Port	1 x RS-232
Video	1 x HDMI, 1 x LVDS, 1 x DP, 1 x eDP (1 x LVDS & 1 x eDP on Board)
Other	External I/O Connector, 1 x Ethernet 1 x SD Socket 3 x Audio Phone Jack, Internal I/O Connector 1 x GPIO, 1 x PCIe x1, 1 x mPCIe, 1 x SPI 1 x SPI, 1 x CAN, 1 x LPC, 1 x JFP 1 x PWM CPU Fan Header 1 x PWR Header
DIO	1 x 16bit GPIO
MIO	1 x SD Socket for Version A 1 x Micro SD Socket for Version B
Expansion	1 x Mini PCIe Supports SIM Card
Audio Chipset	ALC892/ WM8962
Audio Interface	Mic-in, Line-in, Line-out
Power Requirement	DC +12V
Operating Temp.	-40°C ~ 85°C (-40°F ~ 185°F)
Dimension (L x W)	6.69" x 6.69" (170 x 170 mm)
Certification	CE, FCC Class B

» COMe Type 6 Carrier Board



Model Number	EEV-EX26	EEV-EX16-B1	EEV-EX14
USB	1 x USB 2.0 4 x USB 3.2 Gen2 x1 by 1 x IET Connector on Module 2 x USB 4 Type C by 1 x IET Connector on Module (OEM by Request) *Module Board at IO (EEV-EX26 Only)	4 x USB 2.0 4 x USB 3.2 x1	8 x USB 2.0 4 x USB 3.0 (4 USB External)
SATA	4 x SATA III (on Board)	4 x SATA III	4 x SATA II (On Board)
COM Port	N/A	N/A	1 x RS-232/422/485, 1 x RS-232, 1 x LPT (1 x RS232/422/485 External, 1 x RS232 on Board)
Video	4 x Display Port, 1 x VGA, 3 x DP or HDMI by 1 x IET Connector on Module; 1 x LVDS, 1 x eDP (on Board)	3 x Display Port, 1 x VGA, 3 x HDMI, 1 x LVDS, 1 x eDP	1 x Display Port, 1 x VGA, 1 x HDMI 1 x LVDS (1 x LVDS on Board)
Other	1 x SDIO 1 x LAN (Support 2.5G)	1 x SDIO 1 x LAN (Support 2.5G)	1 x PS2/KB & MS 1 x SDIO 2 x LAN
DIO	1 x 8bit GPIO	1 x 8bit GPIO	1 x 8bit GPIO
MIO	N/A	N/A	1 x IrDA
Expansion	1 x PCI-e Gen4 x16 Slot 2 x PCI-e Gen4 x4 Slot	1 x PCI-e Gen4 x16 Slot 2 x PCI-e Gen4 x4 Slot 1 x IET, 1 x SDIO/DIO (Optional, Depend on Module Board)	1 x PCIe x16, 1 x PCIe x4 1 x PCIe x1, 1 x Express Card 1 x Mini PCIe
Audio Chipset	ALC888	ALC888	ALC892
Audio Interface	Mic-in and Line-out	Mic-in and Line-out	Mic-in, Line-in and Line-out
Power Requirement	ATX	ATX	AT/ ATX
Operating Temp.	-40°C ~ 85°C (-40°F ~ 185°F)	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F)
Dimension (L x W)	9.6" x 9.6" (243.84 x 243.84 mm)	9.6" x 9.6" (243.84 x 243.84 mm)	9.6" x 9.6" (243.84 x 243.84 mm)
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B

Eval Carrier Board

» COMe Type 10 Carrier Board



Model Number	EEV-EX15
USB	8 x USB 2.0, 2 x USB 3.0 (2 USB External)
SATA	2 x SATA III (On Board)
COM Port	N/A
Video	1 x Display Port, 1 x HDMI 1 x LVDS (1 x LVDS on Board)
Other	1 x LAN
DIO	1 x 8bit GPIO
MIO	N/A
Expansion	1 x PCIe x4, 1 x IET 1 x SDIO/DIO (Optional, Depend on Module Board)
Audio Chipset	ALC892
Audio Interface	Mic-in and Line-out
Power Requirement	ATX
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F)
Dimension (L x W)	6.7" x 6.7" (170 x 170 mm)
Certification	CE, FCC Class B

» SMARC Carrier Board



Model Number	REV-SA01	REV-SA02	REV-SA03
External I/O Connector	1 x HDMI 1 x VGA 2 x RJ45 1 x DB9 1 x Mini-USB 2 x USB Type A	1 x LAN, 2 x RCA 1 x HDMI, 1 x VGA 1 x Micro SD Socket 1 x Mini USB (OTG) 1 x USB Type A 2.0 Double Deck 1 x Display Port, 2 x RS232 1 x RST Switch, 1 x Power Switch 1 x Power LED, 1 x DIP SW	1 x Power Key 1 x Reset Key 1 x DC Jack 1 x USB 2.0 Type A 1 x USB Type C 1 x Giga Ethernet 1 x Headphone 1 x Micro SD Socket 1 x SIM Socket
Internal I/O Connector	1 x LVDS 1 x Backlight 1 x SD Socket 1 x USB Connector 2 x CAN BUS 1 x Speaker-out/ Mic-in 1 x RS-232 1 x GPIO 1 x SATA 1 x RTC Battery 1 x 2 Cell Li Battery Connector	1 x Camera 2 x Speaker 1 x D-MIC 1 x Mini PCIe (SATA) 1 x Mini PCIe (USB) 1 x Sim Card 1 x GPIO 1 x I ² C 1 x USB2.0 1 x PCIe-1 1 x LVDS 1 x Battery Charger Connect 1 x Inverter 2 x RS485 2 x CAN	1 x USB 2.0 4P Header 1 x Mic Phone 2P Header 1 x Speaker 2P Header 1 x RTC-Battery (CR2032) 1 x M.2 Key E for WIFI/ BT 1 x M.2 key B for LTE 1 x M.2 Key M for SSD (Only for PCIe Switch) 1 x BackLight 4P Header 1 x I ² C Touch Screen Connector 1 x MIPI CSI Screen Connector for MIPI Camera (Option) 1 x MIPI DSI (Option) 1 x LVDS Screen Connector (Default) 1 x GPIO 16 bit 1 x CAN Bus
Power Requirement	+9V ~ 36V DC-in (REV-SA01-02-A1R) +9V ~ 24V DC-in (REV-SA01-03-A1R)	DC +12V	DC +12V
Operating Temperature	0°C ~ 60°C (32°F ~ 140°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Storage Temperature	-20°C ~ 80°C (-40°F ~ 176°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Dimension (L x W)	146 x 101 mm	170 x 170 mm	165 x 120 mm
Weight	0.13 kg	0.024 kg	0.024 kg
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B
Software Support	N/A	N/A	N/A

SMARC



Model Number	SMA-IMX8MP	SMA-3588	SMA-3568	SMA-X8I	SMA-IMX6 E1
Processor	Quad Cortex®-A53 Processors	RockChip RK3588J Quad-core Cortex-A76 and Quad-core Cortex-A55	Rock Chip RK3568 Quad-core Cortex-A55	NXP i.MX 8M Mini	NXP i.MX 6 Dual NXP i.MX 6 Quad Core
System Memory	2GB/ 4GB LPDDR4	2GB/ 4GB/ 8GB LPDDR4	2GB/ 4GB/ 8GB LPDDR4	2GB DDR4 (Default)	1GB/ 2GB DDR3
Storage	16GB/ 32GB eMMC	16GB eMMC	16GB eMMC	eMMC 16GB	eMMC 8GB
Internal I/O Connector	2 x CAN/CAN FD 1 x EDP 1 x HDMI 1 x LVDS 1 x MIPI CSI 1 x MIPI DSI 1 x PCIe 3.0 4 x UART 1 x USB (Type C) 2 x USB 3.0 3 x uSDHC 6 x I ² C 3 x SPI	1 x CAN 14 x GPIO 4 x I ² C 1 x I ² S 1 x SDIO 2 x SPI 6 x UART 1 x Wifi 802.11 a/b/g/n/ac 1 x HDMI 1 x MIPI CSI 1 x MIPI DSI/LVDS 2 x Giga Ethernet 1 x PCIe 2.1 1 x PCIe 3.0 1 x USB 3.0 Type A 1 x USB 3.0 Type A OTG 2 x USB 2.0 Type B	1 x CAN 14 x GPIO 4 x I ² C 1 x I ² S 1 x SDIO 2 x SPI 6 x UART 1 x Wifi 802.11 a/b/g/n/ac 1 x HDMI 1 x MIPI CSI 1 x MIPI DSI/LVDS 2 x Giga Ethernet 1 x PCIe 2.1 1 x PCIe 3.0 1 x USB 3.0 Type A 1 x USB 3.0 Type A OTG 2 x USB 2.0 Type B	1 x Giga LAN Controller 8 x GPIO 3 x I ² C 1 x I ² S 1 x LVDS (Default) 1 x PCIe 1 x MIPI CSI (Option) 1 x MIPI DSI (Option) 1 x SPI 1 x UART 4 x USB 2.0 1 x USB 2.0 OTG	2 x CAN 12 x GPIO 3 x I ² C 1 x JTAG 1 x MLB150 3 x PCIe (Option) 2 x RX/TX (Ser1/3) 1 x SATA eMMC 1 x SDIO 1 x SPDIF 2 x SPI 2 x UART (Ser0/2) 2 x USB 2.0 Port (One OTG) 1 x WDT
Power Requirement	5V	5V	5V	5V	3V ~ 5.25V
Operating Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Dimension (L x W)	50 x 82 mm	82 x 50 mm	82 x 50 mm	82 x 50 mm	82 x 50 mm
Weight	0.06 kg	0.06 kg	0.06 kg	0.06 kg	0.06 kg
Certification	CE, FCC, Class B	CE, FCC, Class B	CE, FCC, Class B	CE, FCC Class B	CE, FCC Class B
Software Support	Android 11	Linux Debian, Andriod	Linux Debian 11, Andriod 11	Yocto 2.5, Android 10.0	Android 4.4, Yocto 2.1

Open Standard Module



Model Number	OSM-3568	OSM-IMX8MM	OSM-IMX93
Chipset	Rockchip RK3568J	NXP iMX8M Mini	NXP i.MX93
Processor	Quad-core Cortex-A55	NXP iMX8M Mini Quad-core Cortex-A53	Dual-Core ARM Cortex-A55 + ARM Cotex-M33
Software Support	Debian11	Yocto (Kirkstone) 4.0	Yocto (Kirkstone) 4.0
System Memory	2GB	4GB	2GB
Storage	16GB eMMC	16GB eMMC	16GB eMMC (Optional 8G/ 32G)
I/O	1 x HDMI Out 2 x SDIO (1 x TF Card, 1 x WIFI&BT) 2 x USB3.0 (1 x USB Host, 1 x USB OTG) 2 x USB Host 1 x MIPI-CSI 1 x MIPI-DSI 1 x PCIe 1 x IR 2 x CAN 1 x SPI 1 x Edp 2 x UART 1 x DC in (USB Type-c) 2 x RJ45 10/100/1000M	2 x SDIO 4 x UART 4 x I ² C 3 x SAI 2 x SPI 3 x PWM 1 x JTAG 29 x GPIO 1 x PCIe 1 x MIPI-CSI 1 x MIPI-DSI 1 x RGMII	1 x MIPI-CSI 1 x MIPI-DSI USB 2.0 2 x Gigabit Ethernet Controller 1 x SD 1 x CAN 2 x SPI 2 x PWM 3 x SAI 24 x GPIO
Power Requirement	5V/ 2A	5V/ 3A	5V/ 3A
Operating Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Dimensions	45 x 45 mm (Size-L)	45 x 45 mm (Size-L)	30 x 30mm (Size-S)
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B



The compact and integrated platform offers fast time-to-market solutions with reliable and rugged designs. Providing certified, robust, industrial-grade computing solutions for mission-critical applications.

Computing System

Compact Computing System



Model Number	EPS-RPR	EPS-RPS	EPS-ADS	ACS10-TGU
Board	EBM-ADS	EBM-ADS	EBM-ADS	ECM-TGUC
Processor	Intel® Core™ i7-14700T, i5-14500T	Intel® Core™ i9-13900TE, i7-13700TE, i5-13500TE, i3-13100TE	Intel® Core™ i9-12900TE, i7-12700TE, i5-12500TE, i3-12100TE Intel® Pentium G7400TE Intel® Celeron G6900TE	Intel® Core™ i5-1135G7 Intel® Core™ i3-1115G4
System Chipset	Intel® H610E Express Chipset	Intel® H610E Express Chipset Intel® Q670E Express Chipset	Intel® H610E Express Chipset Intel® Q670E Express Chipset	N/A
System Memory	2 DIMM Dual Channel DDR5 4800MHz up to 64GB	2 DIMM Dual Channel DDR5 4800MHz up to 64GB	2 DIMM Dual Channel DDR5 4800MHz up to 64GB	1 x 260-Pin SO-DIMM Socket, up to 32GB DDR4 3200MHz
Expansion	1 x mPCIe (Default) 1 x M.2 Key-B 2242/3042/3052 Support SATA3/ PCIeIII x1/ USB 2.0/ USB 3.2 Gen.1 and Internal Nano SIM Slot1 1 x M.2 Key-E 2230 PCIeIII x 1/ USB 2.0 for Wi-Fi & BT Modules	1 x mPCIe (Default) 1 x M.2 Key-B 2242/3042/3052 Support SATA3/ PCIeIII x1/ USB 2.0/ USB 3.2 Gen.1 and Internal Nano SIM Slot1 1 x M.2 Key-E 2230 PCIeIII x 1/ USB 2.0 for Wi-Fi & BT Modules	1 x mPCIe (Default) 1 x M.2 Key-B 2242/3042/3052 Support SATA3/ PCIeIII x1/ USB 2.0/ USB 3.2 Gen.1 and Internal Nano SIM Slot1 1 x M.2 Key-E 2230 PCIeIII x 1/ USB 2.0 for Wi-Fi & BT Modules	1 x M.2 Key-E 2230 (PCIe, USB 2.0) 1 x M.2 Key-B 2242/3052 with 1 x SIM Slot (SATA, USB3.2, USB 2.0)
Storage	1 x 2.5" Drive Bay 1 x M.2 Key-B 2242, Support SATA (Share with Expansion Slot)	1 x 2.5" Drive Bay 1 x M.2 Key-M 2242/2280, Support PCIe Gen IV x 4 (NVMe SSD), RAID 0/1 (0670 Only) 1 x M.2 Key-B 2242, Support SATA (Share with Expansion Slot)	1 x 2.5" Drive Bay 1 x M.2 Key-M 2242/2280, Support PCIe Gen IV x 4 (NVMe SSD), RAID 0/1 (0670 Only) 1 x M.2 Key-B 2242, Support SATA (Share with Expansion Slot)	1 x M.2 Key-B 2242 (SATA3) 1 x M.2 Key-M 2280 NVMe (PCIe Gen4 x 4)
USB	2 x USB 2.0, 6 x USB 3.2	2 x USB 2.0, 6 x USB 3.2	2 x USB 2.0, 6 x USB 3.2	3 x USB 3.2 Gen.2 3 x USB 2.0
COM Port	2 x RS-232 4 x RS-232/422/485	2 x RS-232 4 x RS-232/422/485	2 x RS-232 4 x RS-232/422/485	1 x RS-232/422/485 1 x RS-232
Display Chipset	Intel® 14th Generation CPU Integrated	Intel® 13th Generation CPU Integrated	Intel® 12th Generation CPU Integrated	Intel® Iris® Xe Graphics (i5-1135G7) Intel® UHD Graphics for 11th Gen Intel® Processors (i3-1115G4)
Display Resolution	HDMI 2.0b: 4096 x 2304 @ 60Hz DP++ 1.4: 4096 x 2304 @ 60Hz	HDMI 2.0b: 4096 x 2304 @ 60Hz DP++ 1.4: 4096 x 2304 @ 60Hz	HDMI 2.0b: 4096 x 2304 @ 60Hz DP++ 1.4: 4096 x 2304 @ 60Hz	DP++ 1.4: 4096 x 2304 @ 60Hz
Audio Chipset	Realtek Audio Code	Realtek Audio Code	Realtek Audio Code	Realtek Audio Code
Audio Interface	1 x Mic-in 1 x Line-out	1 x Mic-in 1 x Line-out	1 x Mic-in 1 x Line-out	1 x Mic-in 1 x Line-out
Ethernet Chipset	1 x Intel® I219-LM 1 x Intel® I226-LM	1 x Intel® I219-LM 1 x Intel® I226-LM	1 x Intel® I219-LM 1 x Intel® I226-LM	1 x Intel® I219LM 1 x Intel® I225-V
Ethernet Interface	2 x RJ45	2 x RJ45	2 x RJ45	2 x RJ45
Power Connector	5-Pin Terminal Block	5-Pin Terminal Block	5-Pin Terminal Block	Lockable DC Jack
Power Requirement	DC in Typical 12V/ 24V, Wide Voltage	DC in Typical 12V/ 24V, Wide Voltage	DC in Typical 12V/ 24V, Wide Voltage	+12V
ACPI	Single Power ATX Support S0, S1, S3, S4, S5; ACPI 5.0 Compliant	Single Power ATX Support S0, S1, S3, S4, S5; ACPI 5.0 Compliant	Single Power ATX Support S0, S1, S3, S4, S5; ACPI 5.0 Compliant	Single Power ATX Support S0, S1, S3, S4, S5; ACPI 5.0 Compliant
Power Mode	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)
Dimension (L x W x H)	215.8 x 202.5 x 75 mm	215.8 x 202.5 x 75 mm	215.8 x 202.5 x 75 mm	188 x 120 x 48 mm
Operating Temp.	With Extended Temperature Peripherals w/ Air Flow: -10°C ~ 55°C (14°F ~ 131°F)	With Extended Temperature Peripherals w/ Air Flow: -10°C ~ 55°C (14°F ~ 131°F)	With Extended Temperature Peripherals w/ Air Flow: -10°C ~ 55°C (14°F ~ 131°F)	0°C ~ 50°C (32°F ~ 122°F) with 0.5m/s Air Flow
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class A, UKCA



Compact Computing System

Rugged, fully integrated and ultra-thin platform. With easy to set up, the highly expandable I/O interfaces, and high-speed connectivity designs, it is ideal for IoT applications.



Modular Computing System

Avalue's Intelligent Expansion Technology module makes I/O customization faster and more flexible. Choose the IET module that best fits your application, making for an easy quick-turn prototype



Expandable Computing System

The expandable slot PC allows users to add 3rd party I/O to support PCI or PCIe expansion. Provides high performance computing capability in machine vision, motion control, and industrial automation applications



Barebone System

With a highly integrated industrial chassis and the latest Intel platform mini-ITX boards, the barebone system offers excellent expandability, product longevity, and full customization services



Rackmount System

The Avalue industrial rackmount PC's are available in 1U~4U rackmount sizes and are exceptionally robust and versatile capable to meet the most demanding specifications with maximum performance



ARM-based System

ARM based System series is a strong performance in a low power that specification for industrial applications.



Transportation System

Designed for vehicle, public transportation, and marine. Provide a highly efficient solution with low power consumption and is able to transmit massive data at high speed with low latency. Industrial-grade platform boosts security and stability for real-time transportation management



Edge AI Platform

With high performance and end-to-end connectivity, Avalue Edge AI System makes customers' solutions intelligent and efficiently connect the market.

Compact Computing System



Model Number	EPC-RPU	EPC-EHL	EPC-EHL-8COM
Board	ECM-RPL	ECM-EHL	ECM-EHL
Processor	13th Gen Core™ i7/i5/i3 BGA Processor	Intel® ATOM® Processor x6413E Processor	Intel® ATOM® Processor x6413E Processor
System Memory	1 x 262P SO-DIMM Socket (Capacity Max. up to 32GB DDR5 4800)	1 x 260-Pin SO-DIMM Socket, Max. up to 32GB DDR4 3200MHz	1 x 260-Pin SO-DIMM Socket, Max. up to 32GB DDR4 3200MHz
Expansion	1 x M.2 Key-B 2242/3042/3052 w/SIM Slot 1 x M.2 Key-M 2280 (PCIe Gen 4x4) 1 x M.2 Key-E 2230 (CNVi)	1 x M.2 (Key-B, 2242/3042, w/ SIM Slot) 1 x M.2 (Key-E, 2230)	1 x M.2 (Key-B, 2242/3042, w/ SIM Slot) 1 x M.2 (Key-E, 2230)
Storage	1 x 2.5" Drive Bay (7mm) 1 x M.2 Key-B 2242 SSD (SATA3) 1 x M.2 Key-M 2242/2280 NVMe (PCIe Gen 4x4)	1 x 2.5" Drive Bay (7mm) 1 x M.2 (Key-B, 2242)	1 x 2.5" Drive Bay (7mm) 1 x M.2 (Key-B, 2242)
USB	3 x USB 2.0, 3 x USB 3.2 Gen2 (Type A) 1 x USB 3.2 Gen 2 (Type C)	2 x USB 3.1, 2 x USB2.0 2 x USB 3.1, 6 x USB2.0 (EPC-EHL-8USB)	2 x USB 3.1, 2 x USB2.0 2 x USB 3.1, 6 x USB2.0 (EPC-EHL-8USB)
COM Port	2 x RS232	8 x RS232 (EPC-EHL-8COM) 4 x RS232 (EPC-EHL-8USB) 2 x RS232 (EPC-EHL-4LAN)	8 x RS232 (EPC-EHL-8COM) 4 x RS232 (EPC-EHL-8USB) 2 x RS232 (EPC-EHL-4LAN)
Other	6 x Antenna Mounting with Dust Protection Cover	USB/ LAN 2 x Antenna Mounting with Dust Protection Cover (EPC-EHL) 4 x Antenna Mounting with Dust Protection Cover (EPC-EHL-8COM/ 8USB/ 4LAN)	USB/ LAN 2 x Antenna Mounting with Dust Protection Cover (EPC-EHL) 4 x Antenna Mounting with Dust Protection Cover (EPC-EHL-8COM/ 8USB/ 4LAN)
Display Chipset	Intel® Iris® Xe Graphics Eligible	Intel® UHD Graphics for 10th Gen Intel® Processors	Intel® UHD Graphics for 10th Gen Intel® Processors
Resolution	1 x HDMI 2.0b: 4096 x 2160 @ 60Hz 1 x DP 2.1: 7680 x 4320 @ 60Hz 1 x DP (Type C): 5120 x 3200 @ 60Hz	1 x HDMI 2.0b: 4096 x 2160 @ 60Hz 1 x DP 1.4a: 4096 x 2160 @ 60Hz	1 x HDMI 2.0b: 4096 x 2160 @ 60Hz 1 x DP 1.4a: 4096 x 2160 @ 60Hz
Audio Chipset	Realtek Audio Code	Realtek Audio Code	Realtek Audio Code
Audio Interface	1 x Line-out, 1 x Mic-in	1 x Line-out, 1 x Mic-in	1 x Line-out, 1 x Mic-in
Ethernet Chipset	2 x Intel® I226LM	2 x Intel® I226-IT 4 x Intel® I226-IT (EPC-EHL-4LAN)	2 x Intel® I226-IT 4 x Intel® I226-IT (EPC-EHL-4LAN)
Ethernet Interface	2 x RJ45	2 x RJ45, 4 x RJ45 (EPC-EHL-4LAN)	2 x RJ45, 4 x RJ45 (EPC-EHL-4LAN)
Power Connector	Lockable DC Jack	Lockable DC Jack	Lockable DC Jack
Power Requirement	+12V/ +24V	+12V/ +24V	+12V/ +24V
ACPI	Single Power ATX Support S0, S3, S4, S5; ACPI 5.0 Compliant	Single Power ATX Support S0, S3, S4, S5; ACPI 5.0 Compliant	Single Power ATX Support S0, S3, S4, S5; ACPI 5.0 Compliant
Power Mode	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)
Adapter	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter) AC-DC Adapter	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter) AC-DC Adapter	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter) AC-DC Adapter
Construction	Aluminum + Metal	Aluminum + Metal	Aluminum + Metal
Dimension (L x W x H)	6.97" x 4.84" x 2.17" (177 x 123 x 55 mm)	6.97" x 4.84" x 2.2" (177 x 123 x 65mm)	6.97" x 4.84" x 2.2" (177 x 123 x 65mm)
Operating Temp.	With Extended Temp. Peripherals w/ Air Flow: -10°C ~ 50°C (32°F ~ 122°F) with Air Flow	With Extended Temp. Peripherals w/ Air Flow: -40°C ~ 70°C (-40°F ~ 158°F) (EPC-EHL/ EPC-EHL-8COM) -40°C ~ 60°C (-40°F ~ 140°F) (EPC-EHL-8USB) -10°C ~ 40°C (14°F ~ 104°F) (EPC-EHL-4LAN)	With Extended Temp. Peripherals w/ Air Flow: -40°C ~ 70°C (-40°F ~ 158°F) (EPC-EHL/ EPC-EHL-8COM) -40°C ~ 60°C (-40°F ~ 140°F) (EPC-EHL-8USB) -10°C ~ 40°C (14°F ~ 104°F) (EPC-EHL-4LAN)
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B

Compact Computing System



EPC-EHL-8USB	EPC-EHL-4LAN	EPC-WHL	EPC-TGU
ECM-EHL	ECM-EHL	ECM-WHL	ECM-TGU
Intel® ATOM® Processor x6413E Processor	Intel® ATOM® Processor x6413E Processor	8th Generation Intel® Core™ i7/i5/i3/ Celeron® Processor	11th Generation Intel® Core™ i7/i5/i3/ Celeron® Processor
1 x 260-Pin SO-DIMM Socket, Max. up to 32GB DDR4 3200MHz	1 x 260-Pin SO-DIMM Socket, Max. up to 32GB DDR4 3200MHz	2 x 260-Pin DDR4 2400MHz SO-DIMM Socket up to 64GB	1 x 260-Pin SO-DIMM Socket, Max. up to 32GB DDR4 3200MHz
1 x M.2 (Key-B, 2242/3042, w/ SIM Slot) 1 x M.2 (Key-E, 2230)	1 x M.2 (Key-B, 2242/3042, w/ SIM Slot) 1 x M.2 (Key-E, 2230)	1 x M.2 (Key-B, 2242/3042, w/ SIM Slot) 1 x M.2 (Key-E, 2230, CNVi)	1 x M.2 (Key-M, 2242) 1 x M.2 (Key-B, 2242/3042/3052, w/ SIM Slot) 1 x M.2 (Key-E, 2230)
1 x 2.5" Drive Bay (7mm) 1 x M.2 (Key-B, 2242)	1 x 2.5" Drive Bay (7mm) 1 x M.2 (Key-B, 2242)	1 x 2.5" Drive Bay (7 mm) 1 x M.2 (Key-B, 2242)	1 x 2.5" Drive Bay (7 mm) 1 x M.2 (Key-M, 2242, NVMe) 1 x M.2 (Key-B, 2242)
2 x USB 3.1, 2 x USB2.0 2 x USB 3.1, 6 x USB2.0 (EPC-EHL-8USB)	2 x USB 3.1, 2 x USB2.0 2 x USB 3.1, 6 x USB2.0 (EPC-EHL-8USB)	4 x USB 3.1	4 x USB 3.1 Gen.2 2 x USB 2.0
8 x RS232 (EPC-EHL-8COM) 4 x RS232 (EPC-EHL-8USB) 2 x RS232 (EPC-EHL-4LAN)	8 x RS232 (EPC-EHL-8COM) 4 x RS232 (EPC-EHL-8USB) 2 x RS232 (EPC-EHL-4LAN)	1 x RS232 (Factory Option)	2 x RS232/422/485 (BIOS)
USB/ LAN 2 x Antenna Mounting with Dust Protection Cover (EPC-EHL) 4 x Antenna Mounting with Dust Protection Cover (EPC-EHL-8COM/ 8USB/ 4LAN)	USB/ LAN 2 x Antenna Mounting with Dust Protection Cover (EPC-EHL) 4 x Antenna Mounting with Dust Protection Cover (EPC-EHL-8COM/ 8USB/ 4LAN)	2 x Antenna Mounting with Dust Protection Cover	2 x Antenna Mounting with Dust Protection Cover
Intel® UHD Graphics for 10th Gen Intel® Processors	Intel® UHD Graphics for 10th Gen Intel® Processors	Intel® UHD Graphics 620 (i7/i5/i3) Intel® UHD Graphics 610 (Celeron)	Intel® Iris® Xe Graphics (i7/i5) Intel® Iris® UHD Graphics (i3/ Celeron)
1 x HDMI 2.0b: 4096 x 2160 @ 60Hz 1 x DP 1.4a: 4096 x 2160 @ 60Hz	1 x HDMI 2.0b: 4096 x 2160 @ 60Hz 1 x DP 1.4a: 4096 x 2160 @ 60Hz	2 x HDMI 1.4: 4096 x 2160 @ 24Hz	DP++ 1.4a: 4096 x 2304 @ 60Hz
Realtek Audio Code	Realtek Audio Code	Realtek Audio Code	Realtek Audio Code
1 x Line-out, 1 x Mic-in	1 x Line-out, 1 x Mic-in	1 x Line-out, 1 x Mic-in	1 x Combo Jack (Mic-in + Line-out)
2 x Intel® I226-IT 4 x Intel® I226-IT (EPC-EHL-4LAN)	2 x Intel® I226-IT 4 x Intel® I226-IT (EPC-EHL-4LAN)	1 x Intel® I210AT 1 x Intel® I219LM	2 x Intel® I226-LM
2 x RJ45, 4 x RJ45 (EPC-EHL-4LAN)	2 x RJ45, 4 x RJ45 (EPC-EHL-4LAN)	2 x RJ45	2 x RJ45
Lockable DC Jack	Lockable DC Jack	Lockable DC Jack	Lockable DC Jack
+12V/ +24V	+12V/ +24V	+12V	+12V
Single Power ATX Support S0, S3, S4, S5; ACPI 5.0 Compliant	Single Power ATX Support S0, S3, S4, S5; ACPI 5.0 Compliant	Single Power ATX Support S0, S3, S4, S5 ACPI 5.0 Compliant	Single Power ATX Support S0, S3, S4, S5 ACPI 5.0 Compliant
AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)
Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter) AC-DC Adapter	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter) AC-DC Adapter	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 120W Adapter (12V @ 10A Adapter) AC-DC Adapter	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 120W Adapter (12V @ 10A Adapter) AC-DC Adapter
Aluminum + Metal	Aluminum + Metal	Aluminum + Metal	Aluminum + Metal
6.97" x 4.84" x 2.2" (177 x 123 x 65mm)	6.97" x 4.84" x 2.2" (177 x 123 x 65mm)	6.97" x 4.84" x 2.17" (177 x 123 x 55mm)	6.97" x 4.84" x 2.17" (177 x 123 x 55mm)
With Extended Temp. Peripherals w/ Air Flow: -40°C ~ 70°C (-40°F ~ 158°F) (EPC-EHL/ EPC-EHL-8COM) -40°C ~ 60°C (-40°F ~ 140°F) (EPC-EHL-8USB) -10°C ~ 40°C (14°F ~ 104°F) (EPC-EHL-4LAN)	With Extended Temp. Peripherals w/ Air Flow: -40°C ~ 70°C (-40°F ~ 158°F) (EPC-EHL/ EPC-EHL-8COM) -40°C ~ 60°C (-40°F ~ 140°F) (EPC-EHL-8USB) -10°C ~ 40°C (14°F ~ 104°F) (EPC-EHL-4LAN)	With Extended Temp. Peripherals w/ Air Flow: -10°C ~ 40°C (14°F ~ 104°F)	With Extended Temp. Peripherals w/ Air Flow: -10°C ~ 50°C (32°F ~ 122°F) with air flow
CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B

Compact Computing System



Model Number	NUC-RPU	NUC-TGU	NUC-EHL
Processor	13th Generation Intel® Core™ i7/i5/i3 BGA Processor	11th Generation Intel® Core™ i7/ i5/ i3 BGA Processor	Intel® Celeron® J6412 Processor
System Memory	1 x 262-Pin SO-DIMM Socket Max. up to 32GB DDR5 4800MHz	1 x 260-pin SODIMM socket Max. up to 64GB DDR4 3200 MT/s	1 x 260-pin SODIMM Socket Max. up to 64GB DDR4 3200 MT/s
Expansion	1 x M.2 Key-E 2230 (PCIe, USB 2.0) 1 x M.2 Key-B 2242/3042/3052 with Internal SIM Slot (PCIe, SATA, USB 3.0, USB 2.0) 1 x M.2 Key-M 2280 (PCIe4x4)	1 x M.2 (Key-M, 2280) 1 x M.2 (Key-B, 2242/3024/3052, w/SIM Slot) 1 x M.2 (Key-E 2230)	1 x M.2 (Key-B, 2242/3042, w/ SIM Slot) 1 x M.2 (Key-B, 2242) 1 x M.2 (Key-E, 2230)
Storage	1 x M.2 Key-M 2280 NVMe 1 x M.2 Key-B 2242 SSD	1 x M.2 (Key-M, 2280, NVMe) 1 x M.2 (Key-B, 2242)	1 x M.2 (Key-B, 2242)
USB	4 x USB 3.2 Gen 2 2 x USB 3.2 Gen1 2 x USB 2.0	4 x USB 3.2 Gen.2, 2 x USB 2.0	4 x USB 3.2 Gen.2 , 2 x USB 2.0
COM Port	2 x RS-232/422/485 (BIOS)	2 x RS-232/422/485 (BIOS)	2 x RS-232/422/485 (BIOS)
Other	1 x Power on/off Button w/ LED 1 x LED for Storage, WLAN, WWLAN 1 x Kensington Lock	1 x Power on/off Button w/ LED 1 x LED for Storage/ WLAN/ WWLAN 4 x Antenna Mounting with Dust Cover 1 x Kensington Lock	1 x Power on/off Button w/ LED 1 x Storage LED 4 x Antenna Mounting with Dust Cover 1 x Kensington Lock 1 x Micro SD Slot
Display	4 x HDMI 2.0b: Max. Resolution 4096 x 2304 @ 60Hz	2 x HDMI 2.0b: Max. Resolution 4096 x 2304 @ 60Hz	2 x HDMI 2.0b: 4096 x 2304 @ 60Hz
Audio	Realtek Audio Code 1 x Mic-in, 1 x Line-out	Realtek Audio Code 1 x Mic-in, 1 x Line-out	Realtek Audio Code 1 x Mic-in, 1 x Line-out
Ethernet	1 x Intel I226V, 1 x Intel I219LM	1 x Intel I225LM, 1 x Intel I219LM	2 x Intel I225LM
Power Connector	Lockable DC Jack	Lockable DC Jack	Lockable DC Jack
Power Requirement	+12V	+12V	+12V
Power Mode	ATX	ATX	ATX
Adapter	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 120W Adapter (12V @ 10A)	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 120W Adapter (12V @ 10A)	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 120W Adapter (12V @ 10A)
Operating Temperature	With Extended Temperature Peripherals w/ Air Flow: 0°C ~ 50°C (32°F ~ 122°F)	With Extended Temperature Peripherals w/ Air Flow: 0°C ~ 50°C (32°F ~ 122°F)	With Extended Temperature Peripherals w/ Air Flow: 0°C ~ 60°C (14°F ~ 122°F)
Construction	Aluminum + Metal	Aluminum + Metal	Aluminum + Metal
Mounting Kit	Stand/ Din Rail/ VESA	Stand/ Din Rail/ VESA	Stand/ Din Rail/ VESA
Dimension (L x W x H)	6.85" x 4.92" x 1.52" (174 x 125x 38.7mm)	6.69" x 4.92" x 1.42" (170 x 125 x 36 mm)	6.69" x 4.92" x 1.42" (170 x 125 x 36 mm)
Weight	0.85 kg	1 kg	1 kg
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B

Compact Computing System



Model Number	NUC-ADN	NUC-APL	NUC-APL-Slim
Processor	Intel® Processor N97	Intel® Celeron® J3455/ N3350 Processor	Intel® Celeron® J3455/ N3350 Processor
System Memory	1 x 262-pin SODIMM Socket Max. up to 16GB DDR5 4800 MHz	1 x 204-pin SO-DIMM Socket, Max. up to 8GB DDR3L 1866MHz	1 x 204-pin SO-DIMM Socket, Max. up to 8GB DDR3L 1866MHz
Expansion	1 x M.2 (Key-E, 2230)	1 x M.2 (Key-B, 2242/3042, w/ SIM Slot) 1 x M.2 (Key-E, 2230)	1 x M.2 (Key-B, 2242/3042) 1 x M.2 (Key-E, 2230)
Storage	1 x 2.5" Drive Bay (7 mm)	1 x 2.5" Drive Bay (7 mm) 1 x M.2 (Key-B,2242)	1 x M.2 (Key-B,2242)
USB	4 x USB 3.2 Gen.2 (Type A) 1 x USB3.2 Gen 2 (Type C)	4 x USB 3.0 (5Gbps)	4 x USB 3.0 (5Gbps)
COM Port	1 x RS-232/422/485 (BIOS) 1 x RS-232	1 x RS-232/422/485 (BIOS & Cable) 1 x RS-232	1 x RS-232/422/485 (BIOS & Cable)
Other	1 x Power on/off Button w/ LED 1 x Storage LED 2 x Antenna Mounting with Dust Cover	1 x Power on/off Button w/ LED 1 x Storage LED 2 x Antenna Mounting with Dust Cover	1 x Power on/off Button w/ LED 1 x Storage LED 2 x Antenna Mounting with Dust Cover
Display	2 x HDMI 2.0b: 4096 x 2160 @ 60Hz	2 x HDMI 1.4b: Max. Resolution 3840 x 2160 @ 30Hz 1 x DP (DVI-I/ VGA Factory Option): Max. Resolution 1920 x 1080 @ 60Hz	2 x HDMI 1.4b: Max. Resolution 3840 x 2160 @ 30Hz *1 x DP/ DVI-I/ VGA (Factory Option): Max. Resolution 1920 x 1080 @ 60Hz *DP/ DVI-I/ VGA is an Option which will Replace the Location of COM
Audio	Realtek Audio Code 1 x Audio Jack (Mic-in + Line-out)	Realtek Audio Code 1 x Audio Jack (Mic-in + Line-out Combo)	Realtek Audio Code 1 x Audio Jack (Mic-in + Line-out Combo)
Ethernet	2 x I226V	2 x Realtek RTL8111E Gigabit	2 x Realtek RTL8111E Gigabit
Power Connector	Lockable DC Jack	Lockable DC Jack	Lockable DC Jack
Power Requirement	+12V	+12V	+12V
Power Mode	ATX	ATX	ATX
Adapter	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 120W Adapter (12V @ 10A)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A)
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F) with 0.5m/s air flow	With Extended Temperature Peripherals w/ Air Flow: -10°C ~ 60°C (14°F ~ 140°F)	With Extended Temperature Peripherals w/ Air Flow: -10°C ~ 50°C (14°F ~ 122°F)
Construction	Aluminum + Metal	Aluminum + Metal	Aluminum + Metal
Mounting Kit	VESA/ Din Rail	VESA/ Din Rail	VESA/ Din Rail
Dimension (L x W x H)	4.53" x 4.37" x 2.28" (115 x 111 x 58 mm)	4.53" x 4.37" x 2.28" (115 x 111 x 58 mm)	4.53" x 4.37" x 1.77" (115 x 111 x 45 mm)
Weight	0.85 kg	0.85 kg	0.72 kg
Certification	CE, FCC Class B	CE, FCC Class A	CE, FCC Class A

Modular Computing System



Model Number	EMS-MTU	EMS-MTH	EMS-TGL	EMS-EHL
Processor	Intel® Core™ Ultra 7 Processor 155U Intel® Core™ Ultra 5 Processor 125U	Intel® Core™ Ultra 7 Processor 155H Intel® Core™ Ultra 5 Processor 125H	Intel® Core™ i7-1185GRE/ i5-1145GRE/ i3-1115GRE (WT) Intel® Core™ i7-1185G7E/ i5-1145G7E/ i3-1115G4E (ST)	Intel® Celeron® J6413 Intel® Atom® x6425E
System Memory	2 x 262-Pin SODIMM DDR5 5600MHz up to 64GB	2 x 262-Pin SODIMM DDR5 5600MHz up to 64GB	2 x 260-Pin SODIMM DDR4 3200MHz up to 64GB	1 x 260-Pin SODIMM DDR4 3200MHz up to 32GB
Expansion	1 x Avalue 80-Pin IET Module Interface 1 x M.2 Key-B 2242/3042/3052 (SATA/ PCIe/ USB3.2) w/ SIM Slot 1 x M.2 Key-E 2230 for Wi-Fi & BT Module (USB 2.0/ PCIe)	1 x Avalue 80-Pin IET Module Interface 1 x M.2 Key-B 2242/3042/3052 (SATA/ PCIe/ USB3.2) w/ SIM Slot 1 x M.2 Key-E 2230 for Wi-Fi & BT Module (USB 2.0/ PCIe)	1 x Avalue 80-Pin IET Module Interface 1 x M.2 Key-B 2242/3042/3052 (SATA/ PCIe/ USB3.1) w/ SIM Slot 1 x M.2 Key-E 2230 for Wi-Fi & BT Module (USB2.0/ PCIe)	1 x Avalue 80-Pin IET Module Interface 1 x M.2 Key-B 2242/3042/3052 (SATA/ PCIe/ USB3.2) w/ SIM Slot 1 x M.2 Key-E 2230 for Wi-Fi & BT Module (USB2.0/ PCIe)
Storage	1 x M.2 Key-M 2280 (PCIe), Support NVMe 1 x M.2 Key-B 2242 (SATA), Share with Expansion Slot	1 x M.2 Key-M 2280 (PCIe), Support NVMe 1 x M.2 Key-B 2242 (SATA), Share with Expansion Slot	1 x M.2 Key-M 2280 (PCIe), Support NVMe 1 x M.2 Key-B 2242 (SATA), Share with Expansion Slot	1 x M.2 Key-B 2242/2280 (SATA) 1 x M.2 Key-B 2242 (SATA), share with expansion Slot
USB	2 x USB2.0, 4 x USB 3.2 Gen.1	2 x USB2.0, 4 x USB 3.2 Gen.1	2 x USB 3.1 Gen.2, 2 x USB 3.1 Gen.1	2 x USB 3.2 Gen.2, 2 x USB 3.2 Gen.1
COM Port	2 x COM RS232/422/485 (BIOS & Jumper)	2 x COM RS232/422/485 (BIOS & Jumper)	2 x COM RS232/422/485 (BIOS & Jumper)	2 x COM RS232/422/485 (BIOS & Jumper)
Other	8 x Antenna Mounting w/ Dust Cover	8 x Antenna Mounting w/ Dust Cover	8 x Antenna Mounting w/ Dust Cover	8 x Antenna Mounting w/ Dust Cover
DIO	1 x 8-bit GPIO (DB9)	1 x 8-bit GPIO (DB9)	1 x 8-bit GPIO (DB9)	1 x 8-bit GPIO (DB9)
Display Chipset	Intel® Graphics	Intel® Arc™ Graphics	Intel® Iris® Xe Graphics (Core i7/i5) Intel® UHD Graphics (Core i3)	Intel® UHD Graphics
Display Resolution	1 x DP++ : 4096 x 2304 @ 60Hz 2 x HDMI : 4096 x 2304 @ 60Hz	1 x DP++ : 4096 x 2304 @ 60Hz 2 x HDMI : 4096 x 2304 @ 60Hz	1 x DP++ : 4096 x 2304 @ 60Hz 1 x HDMI : 4096 x 2304 @ 60Hz	1 x DP++ : 4096 x 2304 @ 60Hz 1 x HDMI : 4096 x 2304 @ 60Hz
Audio Chipset	Realtek Audio Code	Realtek Audio Code	Realtek Audio Code	Realtek Audio Code
Audio Interface	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out
Ethernet Chipset	2 x Intel® I226-IT	2 x Intel® I226-IT	1 x Intel® I225-LM, 1 x Intel® I219-LM	2 x Intel® I226-IT
Ethernet Interface	2 x RJ45	2 x RJ45	2 x RJ45	2 x RJ45
Power Connector	3-Pin Terminal Block	3-Pin Terminal Block	3-Pin Terminal Block	3-Pin Terminal Block
Power Requirement	Typical +12/ 24Vdc (+9V ~ +36Vdc)	Typical +12/ 24Vdc (+9V ~ +36Vdc)	Typical +12/ 24Vdc (+9V ~ +36Vdc)	Typical +12/ 24Vdc (+9V ~ +36Vdc)
ACPI	Single Power ATX Support S0, S4, S5 ACPI 5.0 Compliant	Single Power ATX Support S0, S4, S5 ACPI 5.0 Compliant	Single Power ATX Support S0, S3, S4, S5 ACPI 5.0 Compliant	Single Power ATX Support S0, S3, S4, S5 ACPI 5.0 Compliant
Power Mode	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)
Adapter	Optional AC-DC Adapter (120W)	Optional AC-DC Adapter (120W)	Optional AC-DC Adapter (60W)	Optional AC-DC Adapter (60W)
Construction	Aluminum + Metal	Aluminum + Metal	Aluminum + Metal	Aluminum + Metal
Dimension (L x W x H)	240 x 150 x 49 mm (Standard) 240 x 150 x 75 mm (w/ IET Module)	240 x 150 x 59 mm (Standard) 240 x 150 x 85 mm (w/ IET Module)	240 x 150 x 48 mm (Standard) 240 x 150 x 69 mm (w/ IET Module)	240 x 150 x 43 mm (Standard) 240 x 150 x 64 mm (w/ IET Module)
Operating Temp.	-40°C ~ 65°C (w/SSD) Ambient w/ Air Flow	-40°C ~ 50°C (w/SSD) Ambient w/ Air Flow	-40°C ~ 70°C (w/SSD) Ambient air flow, WT sku 0°C ~ 70°C (w/SSD) ambient w/ air flow, ST sku	-40°C ~ 70°C (w/SSD) Ambient w/ Air Flow, WT sku 0°C ~ 65°C (w/SSD) Ambient w/ Air Flow, ST sku
Certification	CE, FCC Class B, UKCA	CE, FCC Class B, UKCA	CE, FCC Class B	CE, FCC Class B, LVD 62368-1

Expandable Computing System



Model Number	SLP-RPR	SLP-WHG
Processor	14th Generation Intel® Raptor Lake-S Refresh i9-14900T/ i7-14700T/ i5-14500T/ i3-14100T/ i9-14900/ i7-14700/ i5-14500/ i3-14100 Processors	Onboard 8th Gen Intel® Core™ SoC i7-8665UE/ i5-8365UE/ i3-8145UE & Celeron® 4305UE BGA Processor
System Chipset	Intel® Q670E Chipset	N/A
System Memory	2-262-pin SO-DIMM Socket Max. up to 64GB DDR5 5600MHz	2 x 260-pin SODIMM Socket Max. up to 32GB DDR4 2133MT/s
Expansion	1 x PCIe16 Slot 1 x PCIe4 Slot 1 x M.2 Key-E 2230 Support PCIe1 and USB2.0 for Wi-Fi & BT Module 1 x M.2 Key-B 2242/3042/3052 Support PCIe1, USB 3.2, SATA3 with Internal SIM Slot for 4G/5G	1 x PCIe x1 Slot 1 x PCIe x4 Slot 1 x M.2 Key-A 2230 for Wi-Fi & BT Module 1 x M.2 Key-B 3042/2242/2260/2280, Support SATA 3/ PCIe III x 1/ USB 2.0 and Internal SIM Slot
Storage	1 x M.2 Key-M 2242/2280 Support NVMe (PCIe Gen4x4) for Storage 1 x M.2 Key-B 2242 Support SATAIII for Storage (Share with Expansion Slot) 2 x 2.5" Drive Bay Support RAID 0/1	1 x M.2 Key-B 2242/2260/2280, Support SATAIII for Storage (Share with Expansion Slot) 1 x 2.5" Drive Bay (Internal)
USB	6 x USB 2.0 (2 x Internal TypeA Connector, 4 x External TypeA Connector) 4 x USB 3.2 Gen 2 (4 x External TypeA Connector)	3 x USB3.1 Gen1 1 x USB Type C w/o ALT Mode
COM Port	4 x RS-232/422/485 4 x RS-232 (2 x RS-232 by Optional)	4 x RS-232
Other	1 x 16-bit Programmable GPIO (by Optional) 1 x Power on/off Switch with LED 1 x Reset Button 1 x HDD LED	1 x Power on/off Switch with LED 1 x Reset Button 1 x HDD LED 1 x Internal USB 2.0 (Type-A) 1 x PS/2 Keyboard/ Mouse
Display	2 x HDMI 2.0b 2 x DVI.1.4 (Support DP++)	3 x HDMI 1.4b: 3840 x 2160 @ 30Hz
Audio	1 x Mic-in 1 x Line-out	N/A
Ethernet	1 x Intel® I219-LM 3 x Intel® I226-V	1 x Intel® I219-LM 2 x Intel® I210-IT
Power Connector	Phoenix Connector	Phoenix Connector
Power Requirement	DC in +12V ~ +24V, Wide Voltage	DC in +12V ~ +24V, Wide Voltage
Power Mode	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)
Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 280W Adapter (24V @ 11.67A)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 180W Adapter (24V @ 7.5A)
Operating Temperature	Passive Cooling -20°C ~ 40°C (14°F ~ 104°F) with 0.7m/s Air Flow (65W) -20°C ~ 50°C (14°F ~ 122°F) with 0.7m/s Air Flow (35W) Active Cooling -20°C ~ 50°C (14°F ~ 122°F) with System Fan (65W) -20°C ~ 60°C (14°F ~ 140°F) with System Fan (35W)	-20~50°C (-4°F ~ 122°F) w/ WT SSD, Ambient w/ 0.5m/s Air Flow
Storage Temperature	-30~70°C (-22°F ~ 158°F)	-40°C ~ 75°C (-40°F ~ 167°F)
Construction	Aluminum + Metal	Aluminum + Metal
Mounting Kit	Wall Mount Kit	N/A
Dimension (L x W x H)	280 x 156 x 230 mm	217 x 115 x 220 mm
Weight	Estimated 6.4 kg	2.6 kg

Transportation System



Model Number	VMS-EHLR	EMS-TGL-Marine	VMS-RPPS
Processor	Intel® Atom® x6425E	Intel® Core™ i7-1185GRE/ i5-1145GRE/ i3-1115GRE	Intel® Core™ 7 processor 150UL Intel® Core™ 5 processor 120UL Intel® Core™ 3 processor 100UL Intel® Core™ processor U300L
System Memory	1 x 260-Pin SODIMM DDR4 3200MHz up to 32GB	2 x 260-Pin SODIMM DDR4 3200MHz up to 64GB	2 x 262-Pin SODIMM DDR5 5200MHz up to 64GB
Expansion	1 x M.2 Key-B 2242/ 3042/3052 (PCIe/ USB 3.1) w/ SIM Slot1 (External) 1 x M.2 Key-E 2230 (PCIe/ USB 2.0) 1 x mPCIe (PCIe/ USB 2.0) w/ SIM Slot2 (External)	1 x M.2 Key-B 2242/3042/3052 (SATA/ PCIe/ USB3.1) w/ SIM Slot 1 x M.2 Key-E 2230 (PCIe/ USB 2.0)	1 x M.2 Key-B 2242/3042/3052 (PCIex1/ USB3.2) w/ SIM Slot1 (External) 1 x M.2 Key-E 2230 (PCIe/ USB 2.0) 1 x Full Size Mini PCIe (PCIe/ USB 2.0) w/ SIM Slot2 (External)
Storage	1 x 2.5" Drive Bay (SATA III) 1 x M.2 Key-B 2242 (SATA III), Share with Expansion Slot	1 x M.2 Key-M 2242/2280 (PCIe) NVMe 1 x M.2 Key-B 2242 (SATA) Share with Expansion Slot	1 x M.2 Key-M 2280 (PCIe) NVMe 2 x 2.5" Drive Bay
USB	2 x USB 3.2 Gen.2 1 x USB 2.0 (M12 A-coded)	2 x USB 3.2 Gen.2 2 x USB 3.2 Gen.1 2 x USB 2.0	2 x USB 2.0 2 x USB 3.2 Gen.2
COM Port	2 x RS-232/422/385 (BIOS & Jumper)	2 x RS-232/422/485 (BIOS & Jumper) 4 x RS-232/422/485 (BIOS) w/ 2.5KV Isolation	2 x RS232/422/485 (Jumper + DIP Switch), Support Auto-flow
Other	2 x SIM Card Slot (External Accessible w/ Dust Cover) 7 x Antenna Mounting w/ Dust Cover 1 x CAN 2.0B (DB9), Optional	8 x Antenna Mounting w/ Dust Cover	2 x SIM Card Slot (External Accessible w/ Dust Cover) 8 x Antenna Mounting w/ Dust Cover 1 x GND
DIO	1 x 8-Bit GPIO (DB9), w/ 2.5KV Isolation	1 x 8-bit GPIO (DB9)	1 x 10-bits GPIO
Display Chipset	Intel® UHD Graphics	Intel® Iris® Xe Graphics (Core i7/i5) Intel® UHD Graphics (Core i3)	Intel® Graphics
Display Resolution	1 x DP++: 4096 x 2304 @ 60Hz 1 x HDMI: 4096 x 2304 @ 60Hz 1 x VGA: 1920 x 1080 @ 60Hz	1 x DP++: 4096 x 2304 @ 60Hz 1 x HDMI: 4096 x 2304 @ 60Hz	2 x DP++: 4096x2304 @ 60Hz HDMI: 4096 x 2304 @ 60Hz
Audio Interface	Mic-in, Line-out, Line-in (DB15)	1 x Mic-in 1 x Line-out	1 x Mic-in 1 x Line-out
Ethernet Chipset	2 x Intel® I210-IT	1 x Intel® I225-LM 1 x Intel® I219-LM	4 x Intel® I226IT
Ethernet Interface	2 x M12 (X-coded)	2 x RJ45	4 x RJ-45 (4 x PoE Available for BOM Option)
Power Requirement	Typical 24Vdc (+9V ~ +36V) w/ Isolation	Typical 12/ 24Vdc (+9V ~ +36V) w/ Isolation	Typical 12/24/48 Vdc (+9 ~ 60Vdc)
Power Mode	AT/ ATX (AT Default), w/ Ignition Control and Power Management	AT/ ATX (ATX Default)	AT/ ATX (AT Default), w/ Ignition Control and Power Management
Dimension (L x W x H)	240 x 150 x 55 mm	240 x 150 x 69 mm	239 x 160 x 56 mm
Operating Temperature	-40°C ~ 70°C (-40°F ~ 158°F) (w/SSD) Ambient w/ Air Flow Follow EN50155, Class OT4	-40°C ~ 60°C (-40°F ~ 140°F) (w/SSD) Ambient w/ Air Flow	Standard System: -40°C ~ 65°C (-40°F ~ 149°F) Ambient w/ Air Flow System with PoE: -40°C ~ 55°C (-40°F ~ 131°F) Ambient w/ Air Flow
Certification Information	CE, FCC Class A, EN50155, EN50121	CE, FCC Class A, IEC 60945, IP50 Rating	CE, FCC Class A, E24 Mark, ISO 7637-2

Transportation System



VMS-CFS	VMS-CFS-PSE	VMS-CFS-SLIM	VMS-APL
Intel® Core™ i7-9700TE/ i7-8700T/ i5-9500TE/ i5-8500T/ i3-9100TE/ i3-8100T & Pentium® G5400T & Celeron® G4900T	Intel® Core™ i7-9700TE/ i7-8700T/ i5-9500TE/ i5-8500T/ i3-9100TE/ i3-8100T & Pentium® G5400T & Celeron® G4900T	Intel® Core™ i7-9700TE/ i7-8700T/ i5-9500TE/ i5-8500T/ i3-9100TE/ i3-8100T & Pentium® G5400T & Celeron® G4900T	Intel® Pentium® N4200 Intel® Celeron® N3350/ J3455 Intel Atom® x7-E3950/ x5-E3940/ x5-E3930
2x 260-Pin SODIMM DDR4 2400/2666MHz up to 64GB	2x 260-Pin SODIMM DDR4 2400/2666MHz up to 64GB	2x 260-Pin SODIMM DDR4 2400/2666MHz up to 64GB	1 x 204-Pin SODIMM DDR3L 1866MHz up to 8GB
1 x Avalue 80-Pin IET Interface 1 x mPCIe (PCIe/ USB 2.0) w/ SIM Slot1 (External) 1 x M.2 Key-E 2230 (PCIe/ USB 2.0) 2 x M.2 Key-B 2242/ 3042/ 2280 (PCIe/ USB 3.1/ SATA) w/ SIM Slot2, 3 (External) 1 x CANBus Module Interface	1 x mPCIe (PCIe/ USB 2.0) w/ SIM Slot1 (External) 1 x M.2 Key-E 2230 (PCIe/ USB 2.0) 2 x M.2 Key-B 2242/ 3042/ 2280 (PCIe/ USB 3.1/ SATA) w/ SIM Slot2, 3 (External) 1 x CANBus Module Interface	1 x mPCIe (PCIe/ USB 2.0) w/ SIM Slot1 (External) 1 x M.2 Key-E 2230 (PCIe/ USB 2.0) 2 x M.2 Key-B 2242/ 3042/ 2280 (PCIe/ USB 3.1/ SATA) w/ SIM Slot2, 3 (External) 1 x CANBus Module Interface	1 x Avalue 80-Pin IET Interface 2 x mPCIe (PCIe/ USB2.0) w/ SIM Slot1, 2 (External) 1 x CANBus Module Interface
2 x 2.5" Drive Bay (SATA III) 2 x M.2 Key-B 2242/2280 (SATA III)	2 x 2.5" Drive Bay (SATA III) 2 x M.2 Key-B 2242/2280 (SATA III)	2 x M.2 Key-B 2242/2280 (SATA III)	1 x 2.5" Drive Bay (SATA III) 1 x M.2 key-B 2242 (SATA III) 1 x SD (3.0)
6 x USB 3.1	6 x USB 3.1 2 x USB 2.0	6 x USB 3.1	4 x USB 3.0
1 x RS232 2 x RS-232/422/485 (BIOS)	1 x RS232 2 x RS-232/422/485 (BIOS)	1 x RS232 2 x RS-232/422/485 (BIOS)	2 x RS-232/422/485 (Jumper)
3 x SIM Card Slot (External Accessible w/ Dust Cover) 5 x Antenna Mounting w/ Dust Cover 1 x 8-Bit GPIO (DB9), w/ 1.5KV Isolation	3 x SIM Card Slot (External Accessible w/ Dust Cover) 5 x Antenna Mounting w/ Dust Cover	3 x SIM Card Slot (External Accessible w/ Dust Cover) 5 x Antenna Mounting w/ Dust Cover	2 x SIM Card Slot (External Accessible w/ Dust Cover) 5 x Antenna Mounting w/ Dust Cover
Intel® UHD Graphics 630/ 610	Intel® UHD Graphics 630/610	Intel® UHD Graphics 630/ 610	Intel® HD Graphics 505/500
1 x DP: 4096 x 2160 @ 60Hz 2 x HDMI: 4096 x 2160 @ 30Hz 1 x LVDS: 1920 x 1200 @ 60Hz	1 x DP: 4096 x 2160 @ 60Hz 2 x HDMI: 4096 x 2160 @ 30Hz 1 x LVDS: 1920 x 1200 @ 60Hz	1 x DP: 4096 x 2160 @ 60Hz 2 x HDMI: 4096 x 2160 @ 30Hz	1 x DP: 4096 x 2160 @ 60Hz 1 x LVDS: 1920 x 1200 @ 60Hz
2 x Mic-in 2 x Line-out	2 x Mic-in 2 x Line-out	2 x Mic-in 2 x Line-out	2 x Mic-in 2 x Line-out
1 x Intel® I211-AT 1 x Intel® I219-LM	1 x Intel® I211-AT 1 x Intel® I219-LM 4 x Intel® W682574L	1 x Intel® I211-AT 1 x Intel® I219-LM	2 x Intel® I211-AT
2 x RJ45	6 x RJ45 (4 x Ports Support 802.3af PoE)	2 x RJ45; 4 x Port RJ45/ M12, Supports 802.3af PoE (Optional)	2 x RJ45
Typical 12/ 24Vdc (+9V ~ +36V)	Typical 12/ 24Vdc (+9V ~ +36V)	Typical 12/ 24Vdc (+9V ~ +36V)	Typical 12/ 24Vdc (+9V ~ +36V)
AT/ ATX (AT Default) w/ Ignition Control and Power Management	AT/ ATX (AT Default) w/ Ignition Control and Power Management	AT/ ATX (AT Default) w/ Ignition Control and Power Management	AT/ ATX (AT Default), w/ Ignition Control and Power Management
240 x 210 x 110 mm	240 x 210 x 110 mm	240 x 210 x 75 mm	239 x 186 x 62 mm
-40°C ~ 70°C (-40°F ~ 158°F) (w/SSD) Ambient w/ Air Flow	-40°C ~ 60°C (-40°F ~ 140°F) (w/SSD) Ambient w/ Air Flow	-40°C ~ 60°C (-40°F ~ 140°F) (w/SSD) Ambient w/ Air Flow	N4200/ N3350/J3455: -20°C ~ 70°C (-4°F ~ 158°F) (w/SSD) Ambient w/ Air Flow E3950/ E3940/ E3930: -40°C ~ 70°C (-40°F ~ 158°F) (w/SSD) Ambient w/ Air Flow
CE, FCC Class A, E13 Mark, ISO7637-2, IP50 Rating	CE, FCC Class A, E13 Mark, ISO7637-2, IP50 Rating	CE, FCC Class A, E13 Mark, ISO7637-2, IP50 Rating	CE, FCC Class B, E13 Mark, ISO7637-2, IP50 Rating

Edge AI Platform

» NVIDIA Jetson Series



Model Number	AIB-NVAO	AIB-NIAO	AIB-NW01
Processor	Jetson AGX Orin 32GB Jetson AGX Orin 64GB	Jetson AGX Orin 32GB Jetson AGX Orin 64GB	Jetson Orin Nano 4GB Jetson Orin Nano 8GB Jetson Orin NX 8GB Jetson Orin NX 16GB
AI Performance	32GB-200 TOPS 64GB-275 TOPS	32GB-200 TOPS 64GB-275 TOPS	Orin Nano 4GB: 20 TOPS Orin Nano 8GB: 40 TOPS Orin NX 8GB: 70 TOPS Orin NX 16GB: 100TOPS
System Memory	32GB 64GB	32GB 64GB	Nano: 4GB/ 8GB NX: 8GB/ 16GB
Storage	64GB eMMC 5.1	64GB eMMC 5.1	128GB M.2 2280 NVMe SSD
Expansion	1 x M.2 M Key 1 x mPCIe 1 x Nano SIM Slot	1 x M.2 B Key 1 x M.2 M Key 1 x MicroSD Card Slot 2 x mPCIe 4 x Nano SIM Slot	1 x M.2 M Key 1 x M.2 E Key 1 x M.2 B Key 1 x Micro SIM Slot
External I/O Connector	4 x 10/100/1000 RJ45 Powered LAN 5 x CAN FD 2 x GMSL2 8 x GPIO (4 x In, 4 x Out) 1 x HDMI 2.0 TypeA 1 x M.2 M Key 1 x mPCIe 1 x Nano SIM Slot 1 x Power Key 1 x Recovery Key 1 x Reset Key 1 x Debug (RS-232) 3 x RS232 2 x RS485/RS422 3 x SYNC I/O (SYNC_IN/SYNC_OUT/SYNC_PPS) 2 x USB3.0 TypeA	5 x 10/100/1000 RJ45 Powered LAN 2 x CAN FD 16 x GPIO (8 x In, 8 x Out) 1 x HDMI 2.0 (TypeA) 1 x M.2 B Key 1 x M.2 M Key 1 x MicroSD Card Slot 2 x mPCIe 4 x Nano SIM Slot 1 x Power Key 1 x Recovery Key 1 x Reset Key 3 x RS232 2 x RS485/422 1 x Debug 4 x SYNC I/O (SYNC_IN/SYNC_OUT/SYNC_PPS) 1 x USB 2.0 Type C 4 x USB 3.0 Type A	2 x 10/100/1000 RJ45 LAN 1 x DC Phoenix 1 x HDMI 2.0 Type A 1 x M.2 B Key 1 x M.2 E Key 1 x Micro SIM 1 x Micro USB OTG 1 x Power LED 1 x Reset 2 x RS-232/485 DB9 (Jumper) 4 x USB 3.0 Type A
Protection	IP5X (Optional)	IP5X (Optional)	N/A
Power Requirement	DC 9V ~ 36V	DC 12V ~ 48V	DC 10V ~ 24V
Operating Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Storage Temperature	-40°C ~ 80°C (-40°F ~ 176°F)	-40°C ~ 80°C (-40°F ~ 176°F)	-40°C ~ 80°C (-40°F ~ 176°F)
Dimension (L x W x H)	276 x 214 x 71 mm	226 x 144.5 x 70 mm	196 x 125 x 66.1 mm
Weight	4.3 kg	2.3 kg	1.41 kg
Certification	CE, FCC Class A	CE, FCC Class A	CE, FCC Class B
Software Support	Ubuntu: 20.04 JetPack 5.1.1 or Higher Linux for Tegra (L4T) R35.3.1 or Higher	Ubuntu: 20.04 JetPack 5.1.1 or Higher Linux for Tegra (L4T) R35.3.1 or Higher	Ubuntu: 20.04 JetPack 5.1.1 or Higher Linux for Tegra (L4T) R35.3.1 or Higher

Edge AI Platform

» NVIDIA Jetson Series



Model Number	AIB-NIAO-S	AIB-NINX-S	AIB-NINX-SC
Processor	Jetson AGX Orin 32GB Jetson AGX Orin 64GB	Jetson NX Orin 8GB Jetson NX Orin 16GB	Jetson NX Orin 8GB Jetson NX Orin 16GB
AI Performance	32GB-200 TOPS 64GB-275 TOPS	8GB-70TOPS 16GB-100TOPS	8GB-70TOPS 16GB-100TOPS
System Memory	32GB 64GB	8GB 16GB	8GB 16GB
Storage	64GB eMMC 5.1	128GB M.2 2280 NVMe SSD	128GB M.2 2280 NVMe SSD
Expansion	1 x M.2 2230 E Key 2 x M.2 2280 M Key 1 x M.2 3042 B Key	1 x M.2 2280/3080 M Key 2 x M.2 2280 M Key	1 x M.2 M key 1 x M.2 E Key
External I/O Connector	1 x Power Key 1 x Recovery Key 2 x USB 3.2 1 x DC Jack 8 x PSE Port 5 x Antenna 2 x Ethernet 2 x HDMI Out 1 x DP Out 2 x USB 2.0 1 x Line in/out	1 x Power Key 1 x RS232/RJ485 2 x USB 3.2 1 x Ethernet 1 x DC Jack 1 x Line in/out 4 x USB 3.2 1 x DC IN	1 x Power Key 2 x Antenna 1 x Micro SD Slot 1 x GPIO/RS232, I²C 1 x USB3.2 Type-C 1 x RJ45 1 x DC IN 1 x Mini DP 1.4
Protection	N/A	N/A	N/A
Power Requirement	DC 12 ~ 28V	DC 12 ~ 28V	DC 9 ~ 36V
Operating Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)	-20°C ~ 80°C (-4°F ~ 176°F)	-20°C ~ 80°C (-4°F ~ 176°F)
Dimension (L x W x H)	265.08 x 186.70 x 105.29 mm	144 x 98 x 80.6 mm	94.4 x 66 x 69.8 mm
Weight	4.2 kg	3.5 kg	0.5 kg
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B
Software Support	AI SDK by Request Ubuntu: 20.04 JetPack 5.1.1 or Higher Linux for Tegra (L4T) R35.3.1 or Higher	AI SDK by Request Ubuntu: 20.04 JetPack 5.1.1 or Higher Linux for Tegra (L4T) R35.3.1 or Higher	AI SDK by Request Ubuntu: 20.04 JetPack 5.1.1 or Higher Linux for Tegra (L4T) R35.3.1 or Higher
Optional Product Features Extension by Daughter Board	SDK/ Software: By Request AGX 5G: 5G Mobility Network (Supports 5G / 4G / 3G SIM Module) PSE Power Supply: 8 x 15W (IEEE802.3af)	SDK/ Software: By Request NX 5G: 5G Mobility Network (Supports 5G / 4G / 3G SIM Module) NX PSE: PSE Power Supply 4 x 15W (IEEE802.3af)	SDK/ Software: By Request 4K60 12G-SDI: 1 x 12G-SDI In & Loop 12G-SDI QL 1 x 4K60/ 2 x 4K30/ 4 x HD60: 1 x 12G-SDI, 2 x 6G-SDI, 4 x 3G-SDI In (Single-Link, Dual-Link, Quad-Link Support) 4K60 HDMI2.1: 1 x HDMI2.1 In & Loop 4K60 HDMI2.0: 1 x HDMI2.0 In & Loop HD60 GMSL2 and CAN Bus: 4 x GMSL2 In, 1 x CAN Bus 4 x TVI: 4 x TVI In HD60 4 x HDMI: 4 x HDMI 4 x USB3.2-A: 1 x USB3.2 Gen2, 4 x USB3.2 Gen1

ARM-based System

» Rockchip Series



Model Number	AIB-3566	AIB-3588
Processor	Rockchip RK3566 Quad-core ARM Cortex-A55	Rockchip RK3588 Quad-core ARM Cortex-A76 and Quad-core ARM Cortex-A55
System Memory	2GB DDR	4GB LPDDR4/ LPDDR4x/ LPDDR5
Storage	32 GB eMMC 5.1	64GB eMMC 5.1
External I/O Connector	1 x 10/100/1000 RJ45 Powered LAN 1 x BT4.1 1 x HDMI 2.0 In 1 x HDMI 2.0 Out 1 x IR or 1 x RS 232 1 x USB 2.0 Type B OTG 1 x USB 3.0 Type A 1 x WIFI 802.11 a/b/g/n/ac 1 x Micro SIM BT 5.0 (Optional) 3G/4G 1 x mPCIe +1 x Micro SIM (Optional)	2 x 10/100/1000 RJ45 Powered LAN 1 x CAN 4 x GPIO 1 x HDMI 2.0 in 2 x HDMI 2.0 out 1 x IR 4 x LED (HDD, WIFI, Power, NET) 1 x Micro SD Slot 1 x Micro SIM Slot 1 x Power Key 1 x USB 3.0 Type A 3 x USB 2.0 Type C 1 x Recovery Key 3 x RS-232/RS485 2 x WIFI Antenna 1 x GTIOT (Optional) 1 x PoE (Optional)
Power Requirement	DC 12V/ 1.5A	DC 12V
Operating Temperature	-20°C ~ 70°C (-4°F ~ 158°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Storage Temperature	-40°C ~ 70°C (-40°F ~ 158°F)	-40°C ~ 85°C (-40°F ~ 185°F)
Dimension (L x W x H)	106 x 100 x 25 mm	160 x 125.5 x 48 mm
Weight	2.58 kg	0.46 kg
Certification	CE, FCC Class A	CE, FCC Class A
Software Support	Android 11.0 Linux Debian 10	Android 13 Linux Debian 11.0

ARM-based System

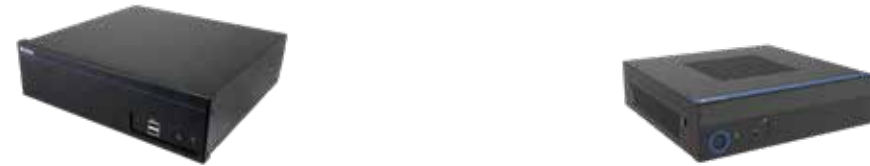
» NXP Series



Model Number	AIB-IMX6	AIB-IMX6A	AIB-IMX8M
Processor	NXP i.MX6 Cortex-A9 Dual Lite/ Quad 1GHz CPU	NXP i.MX6 Cortex-A9 Quad 1GHz CPU	NXP i.MX8M Cortex-A53 Quad Core 1.3GHz; Cortex-M4 Core Processor
System Memory	1GB LPDDR3	1GB LPDDR3	2 GB LPDDR4
Storage	8GB eMMC	8GB eMMC	16GB eMMC
External I/O Connector	1 x 10/100/1000 RJ45 Powered LAN 1 x HDMI 2.0 out 1 x Micro SD Slot 1 x USB 2.0 Type A 1 x Jack for I/R Extender Cable, Co-design (Optional) 1 x with on Board I/R Sensor (Optional)	2 x 10/100/1000 RJ45 Powered LAN 1 x HDMI 2.0 out 1 x Micro SD Slot 1 x Mini USB 3 x RS-232/422/485 DB9 1 x RS-232/422/485 Debug 2 x USB 2.0 Type A 1 x Jack for I/R Extender Cable, Co-design (Optional) 1 x with on Board I/R Sensor (Optional)	2 x 10/100/1000 RJ45 1 x HDMI 2.0 out 1 x Headphone Jack 1 x Micro SD Slot 1 x USB 3.0 Type A 1 x USB 3.0 Type C (Data Only) 2 x DB9 Connector (Default) 4 x DB9 for RS232/485 (Option) 1 x 1x8P GPIO - DB9 Connector 1 x 1x4P CAN - DB9 Connector 1 x Reset 2 x WIFI Antenna (Optional)
Power Requirement	DC 12V ~ 24V, 2.5mm DC Jack, Typical 19V Input With Brownout Detection or Powered LAN (Optional)	DC 12V ~ 24V, 2.5mm DC Jack, Typical 19V Input With Brownout Detection	DC 12V ~ 24V
Operating Temperature	-20°C ~ 70°C (-4°F ~ 158°F)	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Storage Temperature	-40°C ~ 70°C (-40°F ~ 158°F)	-20°C ~ 70°C (-4°F ~ 158°F)	-40°C ~ 60°C (-40°F ~ 140°F)
Dimension (L x W x H)	153 x 107.8 x 30 mm	186 x 121.35 x 37 mm	177 x 112 x 53.5 mm
Weight	1.5 kg	1.0 kg	2.0 kg
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B
Software Support	Android 4.4 or 6.0 Yocto 2.1	Android 4.4 or 6.0 Yocto 2.1	Yocto 2.5 (Default) Android 10.0

Barebone System

» Desktop Chassis



Model Name	BMX-T550-B	BMX-T820
Processor	Intel® 13th Gen Core™ i9/i7/i5/i3 Processor 35W TDP Processor Intel® Core™ i9-13900TE Processor Intel® Core™ i7-13700TE Processor Intel® Core™ i5-13500TE Processor Intel® Core™ i3-13100TE Processor	Intel® 13th Gen Core™ i9/i7/i5/i3 Processor 35W TDP Processor Intel® Core™ i9-13900TE Processor Intel® Core™ i7-13700TE Processor Intel® Core™ i5-13500TE Processor Intel® Core™ i3-13100TE Processor
Platform Controller Hub	Intel® H610E Chipset	Intel® H610E Chipset
System Memory	2 x SODIMM Sockets Support Dual Channel DDR5 4800MHz up to 64GB	2 x SODIMM Sockets Support Dual Channel DDR5 4800MHz up to 64GB
Expansion	M.2 1 x M.2 Key-E 2230 CNVi (PCIe x 1, USB 2.0) 1 x M.2 Key-M 2242/2280 (PCIe x 4) PCIe 1 x PCIe x 16 (Gen 4)	1 x M.2 Key-E 2230 CNVi (PCIe x 1, USB 2.0) 1 x M.2 Key-M 2242/2280 (PCIe x 4)
Storage	M.2 1 x M.2 Key-M 2242/2280 NVMe (PCIe x 4, SATA3) 2.5 Drive Bay 2 x Internal 2.5" Drive Bay (12.5mm)	M.2 1 x M.2 Key-M 2242/2280 NVMe (PCIe x 4, SATA3) 2.5 Drive Bay 1 x Internal 2.5" Drive Bay (12.5mm)
USB	Front I/O 2 x USB 2.0 Rear I/O 2 x USB 2.0 4 x USB 3.2	Front I/O 2 x USB 2.0 Rear I/O 2 x USB 2.0 2 x USB 3.2
COM Port	2 x RS-232/422/485	1 x RS-232 2 x RS-232/422/485
Display Chipset	Intel® UHD Graphics	Intel® UHD Graphics
Display Resolution	HDMI 1.4b: 3840 x 2160 @ 30Hz DP++ 1.4a: 4096 x 2304 @ 60Hz	HDMI 1.4b: 3840 x 2160 @ 30Hz DP++ 1.4a: 4096 x 2304 @ 60Hz
Audio Chipset	Realtek HD Audio	Realtek HD Audio
Ethernet Chipset	Intel® I219-LM Ethernet Controller (1GbE) Intel® I225-V Ethernet Controller (2.5GbE)	Intel® I219-V Ethernet Controller (1GbE) Intel® I225-LM Ethernet Controller (2.5GbE)
Ethernet Interface	2 x RJ45	2 x RJ45
Power Supply	220W Flex ATX Power Supply	AC to DC Adapter
Voltage Input Spec.	100 Vac~240 Vac	+12/24Vdc (+9V ~ +36V)
ACPI	Single Power ATX Support S0, S3, S4, S5	Single Power ATX Support S0, S3, S4, S5
Power Mode	AT/ ATX Mode (Default: ATX Mode)	AT/ ATX Mode (Default: ATX Mode)
Color	Black	Black
Dimension (W x D x H)	280 x 265 x 75 mm	215 x 210 x 55 mm
System Cooling	60 x 60 x 25mm Fan	40 x 40 x 15 mm
Gross Weight	4.7 Kg	2.2 kg
Operating Temp.	0°C~40°C (32°F~104°F) with 0.5m/s Air Flow	0°C~40°C (32°F~104°F) with 0.5m/s Air Flow
Certification	CE, FCC Class B, UKCA	CE, FCC Class A, UKCA

Rackmount System

» 1U Racmount Chassis » 2U Racmount Chassis » 4U Racmount Chassis



Model Name	BCC-CASE-R1U0-01R	BCC-CASE-R2U0-01R	BCC-CASE-R4U0-02R
M/B Form Factor	Up to 12" (W) x 9.6" (D) ATX Compliant MB	Up to 12" (W) x 9.6" (D) ATX Compliant MB	Up to 12" (W) x 9.6" (D) ATX Compliant MB
Industry Standard	Compatible with EIA-RS310D Standard 19" Cabinets	Compatible with EIA-RS310D Standard 19" Cabinets	Compatible with EIA-RS310D Standard 19" Cabinets
Dimension (W x D x H)	381 x 482.6 x 44.4 mm	504 x 482.6 x 88.9 mm	504 x 482.6 x 88.9 mm
Drive Bay	External: Slim ODD x 1 Internal: 3.5" x 2 or 3.5" x 1 & 2.5" x 1	External: 5.25" x 2 Internal: 3.5" x 4	External: 5.25" x 3, 3.5" x 1 Internal: 3.5" x 3, or 3.5" x 2 & 2.5" x 1
Expansion Slot	1 x Full Height Via Riser Card	7 x Low Profile or 3 x Full Profile	7 x Full Profile
System Cooling	2 x 40 x 28 mm Fans	2 x 80 x 25 mm Fans 1 x 97 mm Blower (Rear)	2 x 80 x 25 mm Fans 1 x 97 mm Blower (Rear)
Front I/O	2 x USB Ports	2 x USB Ports	2 x USB Ports
Button	System Power on/off System Reset	System Power on/off System Reset	System Power on/off System Reset
LED	Power LED HDD LED LAN 1 LAN 2	Power Status LAN Activity Drive Activity	Power Status LAN Activity
Limitation of CPU Cooler	Depend on CPU TDP	Depend on CPU TDP	Depend on CPU TDP
Power Supply	315W 1U Flex 100-240Vac (Included)	500W PS2 100-240Vac Power Supply	500W PS2 100-240Vac Power Supply
Material	Material: SGCC Thickness: 1.0mm	Material: SGCC Thickness: 1.2mm	Material: SGCC Thickness: 1.2mm
Rail Kit	Supports 20" Friction Slide Rail	Supports 28" Tool-less & Ball-bearing Slide Rails	Supports 28" Tool-less & Ball-bearing Slide Rails
Operating Temperature	0°C ~ 35°C (32°F ~ 95°F), (w/HDD), Ambient w/ Air Flow	0°C ~ 35°C (32°F ~ 95°F), (w/HDD), Ambient w/ Air Flow	0 ~ 40°C (32°F ~ 104°F) w/ SSD, Ambient w/ 0.5m/s Air Flow
Weight (Chassis Only)	Net Weight: 3.67 kg Gross Weight: 4.79 kg	Net Weight: 7.18 kg Gross Weight: 10.12 kg	Net Weight: 11.5 kg Gross Weight: 14.7 kg

High Performance Computing



Time-to-solutions

Painless upgrades in the existing server rack, cabinet, or inside the system chassis with limited space



IPMI 2.0 Supported

With built-in onboard BMC/IPMI technology with real-time system monitoring and provide preventive maintenance to minimize system downtime and field service cost



Extended Lifecycle

Intel® extends the product availability for IOTG roadmap products to 15 years to respond to the IoT market demand. (Based on Intel® IOTG Roadmap)

All standard models for High Performance Computing



Mainboard

- System level design and testing capability.
- ISO certified manufacturing facility



Barebone System

- High speed I/O adapter and accessories sourcing capability.
- Basic system level integration and testing knowledge.



Fully-integrated System

- Fully tested system.
- No hardware related efforts or experience needed.



Generative AI Solution

- Create an On-Premises GenAI Enterprise in lower TCO.
- Ready-to-use in Enterprise Deployment.
- Implementing Enterprise data security and privacy protection.

Healthcare

- Precision Diagnosis/ Life Science

Medical

- Advanced Medical Imaging Technology

Communication

- Superior Accelerated Workstation

Smart Manufacturing

- Visualization Machine Vision/ Transformative Analytics

Smart City

- Smart Public Safety and Enforcement Technology

Generative AI Solution



Model Number	GAI-ERS-70B	GAI-ERS-70B-Lite	GAI-ERS-33B
Processor (CPU Type)	1 x Intel® Xeon® Silver 4510 or Above	1 x Intel® Xeon® Silver 4510 or Above	1 x Intel® Xeon® Silver 4510 or Above
Chipset	Intel® C741 Chipset	Intel® C741 Chipset	Intel® C741 Chipset
Memory	6 x DDR5 4800 96GB RDIMM 288pin 0 ~ 85°C (Total 576 GB)	6 x DDR5 4800 96GB RDIMM 288pin 0 ~ 85°C (Total 576 GB)	4 x DDR5 5600 64GB RDIMM 288pin 0 ~ 85°C (Total 256 GB)
Storage	2 x M.2 2280 NVMe SSD 2TB Gen4 AI100E With Riser Card 1 x M.2 2280 SATA3 SSD 4TB 3D TLC for OS	2 x M.2 2280 NVMe SSD 2TB Gen4 AI100E With Riser Card 1 x M.2 2280 SATA3 SSD 4TB 3D TLC for OS	2 x M.2 2280 NVMe SSD 2TB Gen4 AI100E With Riser Card 1 x M.2 2280 SATA3 SSD 4TB 3D TLC for OS
IPMI	IPMI 2.0	IPMI 2.0	IPMI 2.0
Expansion Slots	4 x PCIe Gen5 x16 Slots 3 x PCIe Gen5 x4 Slots Slot 1, PCIe 5.0 x16 (GPU: RTX6000 Ada) Slot 2, PCIe 5.0 x4 Slot 3, PCIe 5.0 x16 Slot 4, PCIe 5.0 x4 Slot 5, PCIe 5.0 x16 (GPU: RTX6000 Ada) Slot 6, PCIe 5.0 x4 Slot 7, PCIe 5.0 x16 (Slot 7 is the Slot Closest to CPU)	4 x PCIe Gen5 x16 Slots 3 x PCIe Gen5 x4 Slots Slot 1, PCIe 5.0 x16 (GPU: RTX4000 Ada) Slot 2, PCIe 5.0 x4 Slot 3, PCIe 5.0 x16 (GPU: RTX4000 Ada) Slot 4, PCIe 5.0 x4 Slot 5, PCIe 5.0 x16 (GPU: RTX4000 Ada) Slot 6, PCIe 5.0 x4 Slot 7, PCIe 5.0 x16 (GPU: RTX4000 Ada) (Slot 7 is the Slot Closest to CPU)	4 x PCIe Gen5 x16 Slots 3 x PCIe Gen5 x4 Slots Slot 1, PCIe 5.0 x16 (GPU: RTX4000 Ada) Slot 2, PCIe 5.0 x4 Slot 3, PCIe 5.0 x16 Slot 4, PCIe 5.0 x4 Slot 5, PCIe 5.0 x16 (GPU: RTX4000 Ada) Slot 6, PCIe 5.0 x4 Slot 7, PCIe 5.0 x16 (Slot 7 is the Slot Closest to CPU)
LAN	5 x RJ45 MGMT Port for Dedicated IPMI Access Only LAN1 Port for 1GbE Shares with IPMI Access LAN2 Port for 2.5GbE LAN3 and 4 Ports for 10GbE	5 x RJ45 MGMT Port for Dedicated IPMI Access Only LAN1 Port for 1GbE Shares with IPMI Access LAN2 Port for 2.5GbE LAN3 and 4 Ports for 10GbE	5 x RJ45 MGMT Port for Dedicated IPMI Access Only LAN1 Port for 1GbE Shares with IPMI Access LAN2 Port for 2.5GbE LAN3 and 4 Ports for 10GbE
USB	Rear: 4 x USB 3.2 Gen1 Ports 2 x USB 2.0 Type A Ports	Rear: 4 x USB 3.2 Gen1 Ports 2 x USB 2.0 Type A Ports	Rear: 4 x USB 3.2 Gen1 Ports 2 x USB 2.0 Type A Ports
Display	AST 2600 BMC Controller	AST 2600 BMC Controller	AST 2600 BMC Controller
Display Resolution	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp
Cooling Fan	1 x 120 x 25mm Front Fan 2 x 80 x 25mm Rear Fans	1 x 120 x 25mm Front Fan 2 x 80 x 25mm Rear Fans	1 x 120 x 25mm Front Fan 2 x 80 x 25mm Rear Fans
Power Supply	1 x 1300W PS2 ATX PSU	1 x 1300W PS2 ATX PSU	1 x 1300W PS2 ATX PSU
Operating Temp.	0 ~ 35°C (32 ~ 95°F)	0 ~ 35°C (32 ~ 95°F)	0 ~ 35°C (32 ~ 95°F)
Dimension (W x H x D)	482.6 x 174.8 x 528 mm with Ear Mount	482.6 x 174.8 x 528 mm with Ear Mount	482.6 x 174.8 x 528 mm with Ear Mount
Form Factor	19" 4U Rackmount	19" 4U Rackmount	19" 4U Rackmount
OS	Ubuntu 22.04 LTS	Ubuntu 22.04 LTS	Ubuntu 22.04 LTS

Server Board



Model Number	HPM-ERSUA	HPM-ERSDE	HPM-SIEUA
Processor	Intel LGA4677 Socket Supports 4th and 5th Generation Intel® Xeon® Scalable Processor (Max. TDP at 270W)	Dual Intel LGA4677 Sockets Support 4th and 5th Generation Intel® Xeon® Scalable Processor (Max. TDP at 270W Each)	AMD SP6 Socket Supports 4th Generation AMD EPYC Processor (Max. TDP at 225W)
System Chipset	Intel® C741 Chipset	Intel® C741 Chipset	N/A
System Memory	6 x DDR5 5600MHz RDIMM up to 1.5TB	12 x DDR5 5600MHz RDIMM up to 3TB	6 x DDR5 4800/ 4400MHz RDIMM up to 1.5TB
Expansion	4 x PCIe Gen5 x16 Slots and 3 x PCIe Gen5 x4 Slots Slot 1, PCIe 5.0 x16 Slot 2, PCIe 5.0 x4 Slot 3, PCIe 5.0 x16 Slot 4, PCIe 5.0 x4 Slot 5, PCIe 5.0 x16 Slot 6, PCIe 5.0 x4 Slot 7, PCIe 5.0 x16 (Slot 7 is the Slot Closest to CPU)	7 x PCIe Gen5 x16 Slots Slot 1, PCIe 5.0 x16 from CPU2 Slot 2, PCIe 5.0 x16 from CPU1 Slot 3, PCIe 5.0 x16 from CPU2 Slot 4, PCIe 5.0 x16 from CPU1 Slot 5, PCIe 5.0 x16 from CPU2 Slot 6, PCIe 5.0 x16 from CPU1 Slot 7, PCIe 5.0 x16 from CPU2 (Slot 7 is the Slot Closest to CPU)	3 x PCIe Gen5 x16 Slots and 4 x PCIe Gen5 x8 Slots Slot 1, PCIe 5.0 x8 Slot 2, PCIe 5.0 x16 Slot 3, PCIe 5.0 x8 Slot 4, PCIe 5.0 x16 Slot 5, PCIe 5.0 x16 Slot 6, PCIe 5.0 x8 Slot 7, PCIe 5.0 x16 from CPU2 Slot 7, PCIe 5.0 x8 (Slot 7 is the Slot Closest to CPU)
Display	AST 2600 BMC Controller	AST 2600 BMC Controller	AST 2600 BMC Controller
Resolution	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp
Ethernet	1 x Intel® I210AT Giga-bit Ethernet 1 x Intel® I226-LM 2.5Giga-bit Ethernet 1 x Intel® X550-AT2 10Giga-bit Ethernet	1 x Intel® I210AT Giga-bit Ethernet 1 x Intel® I226-LM 2.5Giga-bit Ethernet 1 x Intel® X550-AT2 10Giga-bit Ethernet	1 x Intel® I210AT Giga-bit Ethernet 1 x Intel® I226-LM 2.5Giga-bit Ethernet 1 x Intel® X550-AT2 10Giga-bit Ethernet
USB/SATA/COM/LAN	10/5/2/5	12/5/2/5	4/4/2/5
Power Requirement	1 x Std. 24 Pin ATX Connector 3 x 8 Pin SSI 12V Connectors	1 x Std. 24 Pin ATX Connector 3 x 8 Pin SSI 12V Connectors	1 x Std. 24 Pin ATX Connector 3 x 8 Pin SSI 12V Connectors
IPMI	IPMI 2.0	IPMI 2.0	IPMI 2.0
Operating Temp.	0 ~ 55°C (32 ~ 131°F) to Support up to 250W TDP CPU 0 ~ 45°C (32 ~ 113°F) to Support up to 270W TDP CPU	0 ~ 50°C (32 ~ 122°F) to Support up to 250W TDP CPU 0 ~ 40°C (32 ~ 104°F) to Support up to 270W TDP CPU	0 ~ 45°C (32 ~ 113°F) to Support up to 225W TDP CPU
Dimension (L x W)	12" x 9.6" (304.8 x 243.84 mm) PCB Thickness is 2.54 mm	12" x 16.452" (304.8 x 417.88 mm) PCB Thickness is 2.86 mm	12" x 9.6" (304.8 x 243.84 mm) PCB Thickness is 2.0 mm
Weight	2.62 lbs (1.19 kg)	4.85 lbs (2.2 kg)	2.14 lbs (0.97 kg)

Server Board



Model Number	HPM-621DE	HPM-621UA	HPM-246UA
Processor	Dual Intel FCLGA3647 Sockets Support 1st and 2nd Generation Intel® Xeon® Scalable Processors (Max. TDP at 150W Each)	Intel FCLGA3647 Socket Supports 1st and 2nd Generation Intel® Xeon® Scalable Processors (Max. TDP at 150W)	Intel® LGA1151 Socket Supports 8th/ 9th Gen. Core i7/i5/i3/ Pentium/ Celeron/ Xeon E Processors (Max. TDP at 95W)
System Chipset	Intel® C621 Chipset	Intel® C621 Chipset	Intel® C246 Chipset
System Memory	12 x DDR4 2933/ 2666/ 2400/ 2133MHz RDIMM/ LRDIMM up to 1.5TB	6 x DDR4 2933/ 2666/ 2400/ 2133MHz RDIMM/ LRDIMM up to 768GB	4 x DDR4 2666MHz ECC and Non-ECC DIMM Support up to 128GB (ECC Memory Supported by Specific CPU SKUs)
Expansion	4 x PCIe Gen3 x16 Slots 2 x PCIe Gen3 x8 Slots 1 x PCI 3.0 Slot Slot 1, PCIe 3.0 x16 from CPU1 Slot 2, PCI 3.0 Slot 3, PCIe 3.0 x16 from CPU1 Slot 4, PCIe 3.0 x16 from CPU1 Slot 5, PCIe 3.0 x16 from CPU2 Slot 6, PCIe 3.0 x16 from CPU1 Slot 7, PCIe 3.0 x8 from CPU1 (Slot 7 is the Slot Closest to CPU)	1 x PCI 3.0 Slot, 3 x PCIe Gen3 x16 Slots or 6 x PCIe Gen3 x8 Slots Slot 1, PCI 3.0 Slot 2, PCIe 3.0 x8 Slot 3, PCIe 3.0 x16 (x16 will Switch to x8 Automatically when Slot 2 is Used) Slot 4, PCIe 3.0 x8 Slot 5, PCIe 3.0 x16 (x16 will Switch to x8 Automatically when Slot 4 is Used) Slot 6, PCIe 3.0 x8 Slot 7, PCIe 3.0 x16 (Slot 7 is the Slot Closest to CPU, x16 will Switch to x8 Automatically when Slot 6 is Used)	1 x PCIe Gen3 x16 Slot, 1 x PCIe Gen2 x8 Slot, 1 x PCIe Gen3 x4 Slot, 1 x PCIe Gen3 x1 Slot 1 x PCI 3.0 Slot Slot 1, PCI 3.0 Slot 2, PCIe Gen 3.0 x 16 Slot 3, PCIe Gen 2.0 x 8 Slot 4, PCIe Gen 3.0 x 4 Slot 5, PCIe Gen 3.0 x 1 (Slot 5 is the Slot Closest to CPU)
Display	AST 2500 BMC Controller	AST 2500 BMC Controller	Intel® 8/ 9th Generation CPU Integrated AST 2500 BMC Controller
Resolution	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	3 x DP++ Ports DP: 4096 x 2304 @ 60Hz HDMI : 4096 x 2160 @ 30Hz 1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp
Ethernet	4 x Intel® I210AT Giga-bit Ethernet	4 x Intel® I210AT Giga-bit Ethernet	7 x Intel® I210AT Giga-bit Ethernet
USB/SATA/COM/LAN	8/10/2/4	8/9/2/4	8/4/2/7
Power Requirement	1 x Std. 24 Pin ATX Connector 2 x 8 Pin SSI 12V Connectors	1 x Std. 24 Pin ATX Connector 1 x 8 Pin SSI 12V Connector	1 x Std. 24 pin ATX Connector 1 x 8 Pin SSI 12V Connector
IPMI	IPMI 2.0	IPMI 2.0	IPMI 2.0
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F)	0°C ~ 60°C (32°F ~ 140°F)
Dimension (L x W)	12" x 13" (304.8 x 330.2 mm) PCB Thickness is 2.0 mm	12" x 9.6" (304.8 x 243.84 mm) PCB Thickness is 2.0 mm	12" x 9.6" (304.8 x 243.84 mm) PCB Thickness is 2.0 mm
Weight	3.96 lbs (1.8 kg)	2.14 lbs (0.97 kg)	1.54 lbs (0.7 kg)

Rackmount & Tower Workstation



Model Number	HPS-ERSD4A	HPS-ERSUTA	HPS-ERSU4A	HPS-SIEU4A	HPS-SIEUTA	
Processor (CPU Type)	Dual Intel FCLGA4677 Sockets Support 4th and 5th Gen. Intel Xeon Scalable Processors (Max. TDP at 270W Each)	Intel LGA4677 Socket Supports 4th and 5th Generation Intel® Xeon® Scalable Processor (Max. TDP at 270W)	Intel LGA4677 Socket Supports 4th and 5th Generation Intel® Xeon® Scalable Processor (Max. TDP at 270W)	AMD LGA4844 Socket Support 4th Generation AMD EPYC 8004 Processors (Max. TDP at 225W)	AMD LGA4844 Socket Support 4th Generation AMD EPYC 8004 Processors (Max. TDP at 225W)	
Chipset	Intel® C741 Chipset	Intel® C741 Chipset	Intel® C741 Chipset	N/A	N/A	
Memory	12 x DDR5 5600MHz RDIMM up to 3TB	6 x DDR5 5600MHz RDIMM up to 1.5TB	6 x DDR5 5600MHz RDIMM up to 1.5TB	6 x DDR5 4800/4400MHz RDIMM up to 1.5TB	6 x DDR5 4800/4400MHz RDIMM up to 1.5TB	
Storage	3 x Front Accessible 2.5" Storage Bays	3 x Front Accessible 2.5" Storage Bays	3 x Front Accessible 2.5" Storage Bays	3 x Front Accessible 2.5" Storage Bays	3 x Front Accessible 2.5" Storage Bays	
IPMI	IPMI 2.0	IPMI 2.0	IPMI 2.0	IPMI 2.0	IPMI 2.0	
Expansion Slots	7 x PCIe Gen5 x16 Slots Slot 1, PCIe 5.0 x16 from 2nd CPU Slot 2, PCIe 5.0 x16 from 1st CPU Slot 3, PCIe 5.0 x16 from 2nd CPU Slot 4, PCIe 5.0 x16 from 1st CPU Slot 5, PCIe 5.0 x16 from 2nd CPU Slot 6, PCIe 5.0 x16 from 1st CPU Slot 7, PCIe 5.0 x16 from 2nd CPU (Slot 7 is the Slot Closest to CPU)	4 x PCIe Gen5 x16 Slots and 3 x PCIe Gen5 x4 Slots Slot 1, PCIe 5.0 x16 Slot 2, PCIe 5.0 x4 Slot 3, PCIe 5.0 x16 Slot 4, PCIe 5.0 x4 Slot 5, PCIe 5.0 x16 Slot 6, PCIe 5.0 x4 Slot 7, PCIe 5.0 x16 (Slot 7 is the Slot Closest to CPU)	3 x PCIe Gen5 x16 Slots and 4 x PCIe Gen5 x8 Slots Slot 1, PCIe 5.0 x8 Slot 2, PCIe 5.0 x16 Slot 3, PCIe 5.0 x8 Slot 4, PCIe 5.0 x16 Slot 5, PCIe 5.0 x8 Slot 6, PCIe 5.0 x16 Slot 7, PCIe 5.0 x8 (Slot 7 is the Slot Closest to CPU)	3 x PCIe Gen5 x16 Slots or 6 x PCIe Gen3 x8 Slots Slot 1, PCI 3.0 Slot 2, PCIe 3.0 x8 Slot 3, PCIe 3.0 x16 (x16 will Switch to x8 Automatically when Slot 2 is Used) Slot 4, PCIe 3.0 x8 Slot 5, PCIe 3.0 x16 (x16 will Switch to x8 Automatically when Slot 4 is Used) Slot 6, PCIe 3.0 x8 Slot 7, PCIe 3.0 x16 (Slot 7 is the Slot Closest to CPU, x16 will Switch to x8 Automatically when Slot 6 is Used)	4 x PCIe Gen3 x16 Slots, 2 x PCIe Gen3 x8 Slots Slot 1, PCIe 3.0 x16 from CPU1 Slot 2, PCIe 3.0 Slot 3, PCIe 3.0 x16 from CPU1 Slot 4, PCIe 3.0 x16 from CPU2 Slot 5, PCIe 3.0 x16 from CPU2 Slot 6, PCIe 3.0 x8 from CPU1 Slot 7, PCIe 3.0 x8 from CPU1 (Slot 7 is the Slot Closest to CPU)	1 x PCIe Gen3 x16 Slot, 1 x PCIe Gen2 x8 Slot 1 x PCIe Gen3 x4 Slot, 1 x PCIe Gen3 x1 Slot 1 x PCI 3.0 slot Slot 1, PCI 3.0 Slot 2, PCIe Gen 3.0 x 16 Slot 3, PCIe Gen 2.0 x 8 Slot 4, PCIe Gen 3.0 x 4 Slot 5, PCIe Gen 3.0 x 1 (Slot 5 is the Slot Closest to CPU)
LAN	5 x RJ45 MGMT Port for Dedicated IPMI Access Only LAN1 Port for 1GbE Shares with IPMI Access LAN2 Port for 2.5GbE LAN3 and 4 Ports for 10GbE	5 x RJ45 MGMT Port for Dedicated IPMI Access Only LAN1 Port for 1GbE Shares with IPMI Access LAN2 Port for 2.5GbE LAN3 and 4 Ports for 10GbE	5 x RJ45 MGMT Port for Dedicated IPMI Access Only LAN1 Port for 1GbE Shares with IPMI Access LAN2 Port for 2.5GbE LAN3 and 4 Ports for 10GbE	5 x RJ45 MGMT Port for Dedicated IPMI Access Only LAN1 Port for 1GbE Shares with IPMI Access LAN2 Port for 2.5GbE LAN3 and 4 Ports for 10GbE	5 x RJ45 MGMT Port for Dedicated IPMI Access Only LAN1 Port for 1GbE Shares with IPMI Access LAN2 Port for 2.5GbE LAN3 and 4 Ports for 10GbE	5 x RJ45 MGMT Port for Dedicated IPMI Access Only LAN1 Port for 1GbE Shares with IPMI Access LAN2 Port for 2.5GbE LAN3 and 4 Ports for 10GbE
USB	Front: 2 x USB 3.2 Gen1 Ports Rear: 6 x USB 3.2 Gen1 Ports	Front: 2 x USB 3.2 Gen1 Ports Rear: 4 x USB 3.2 Gen1 Ports + 2 x USB 2.0 Type A Ports	Front: 2 x USB 3.2 Gen1 Ports Rear: 4 x USB 3.2 Gen1 Ports	Front: 2 x USB 3.2 Gen1 Ports Rear: 4 x USB 3.2 Gen1 Ports	Front: 2 x USB 3.2 Gen1 Ports Rear: 4 x USB 3.2 Gen1 Ports	
Display	AST 2600 BMC Controller	AST 2600 BMC Controller	AST 2600 BMC Controller	AST 2600 BMC Controller	AST 2600 BMC Controller	
Display Resolution	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	
Cooling Fan	1 x 120 x 25mm Front Fan 2 x 80 x 25mm Rear Fans	1 x 120 x 25mm Front Fan 2 x 80 x 25mm Rear Fans	1 x 120 x 25mm Front Fan 2 x 80 x 25mm Rear Fans	1 x 120 x 25mm Front Fan 2 x 80 x 25mm Rear Fans	1 x 120 x 25mm Front Fan 2 x 80 x 25mm Rear Fans	
Power Supply	1 x 1300W PS2 ATX PSU	1 x 1300W PS2 ATX PSU	1 x 1300W PS2 ATX PSU	1 x 1300W PS2 ATX PSU	1 x 1300W PS2 ATX PSU	
Operating Temp.	0 ~ 35°C (32 ~ 95°F)	0°C ~ 35°C (32°C ~ 95°F)	0°C ~ 35°C (32°C ~ 95°F)	0°C ~ 35°C (32°C ~ 95°F)	0°C ~ 35°C (32°C ~ 95°F)	
Dimension (W x H x D)	482.6 x 174.8 x 650 mm with Ear Mount	340 x 488 x 650 mm with External Handles & Pedestal Stand	482.6 x 174.8 x 528 mm with Ear Mount	340 x 488 x 528 mm with External Handles & Pedestal Stand	482.6 x 174.8 x 528 mm with Ear Mount	
Form Factor	19" 4U Rackmount	Tower Chassis	19" 4U Rackmount	Tower Chassis	19" 4U Rackmount	
OS	Windows 10 IoT Enterprise LTSC 2021, Windows 11 Windows Server 2019, Windows Server 2022 Ubuntu 21.10, 22.04 LTS or Later Red Hat Enterprise Linux (RHEL) 8.2 and Later	Windows Server 2019 bare-metal support (KB5017379) & Hyper-V support (KB5018419) Windows Server 2022 Ubuntu 20.04/22.04 LTS or later Red Hat Enterprise Linux (RHEL) 8.2 and later	Windows Server 2019 bare-metal support (KB5017379) & Hyper-V support (KB5018419) Windows Server 2022 Ubuntu 20.04/22.04 LTS or later Red Hat Enterprise Linux (RHEL) 8.2 and later	Windows Server 2019 bare-metal support (KB5017379) & Hyper-V support (KB5018419) Windows Server 2022 Ubuntu 20.04/22.04 LTS or later Red Hat Enterprise Linux (RHEL) 8.2 and later	Windows Server 2019 bare-metal support (KB5017379) & Hyper-V support (KB5018419) Windows Server 2022 Ubuntu 20.04/22.04 LTS or later Red Hat Enterprise Linux (RHEL) 8.2 and later	

Rackmount & Tower Workstation



Model Number	HPS-621U4A	HPS-621UTA	HPS-621D4A	HPS-621DTA	HPS-246U4A	HPS-246UTA	HPS-621U2A	
Processor (CPU Type)	Intel FCLGA3647 Socket Supports 1st and 2nd Generation Intel® Xeon® Scalable Processors (Max. TDP at 150W)	Dual Intel FCLGA3647 Sockets Support 1st and 2nd Generation Intel® Xeon® Scalable Processors (Max. TDP at 150W Each)	Dual Intel FCLGA3647 Sockets Support 1st and 2nd Generation Intel® Xeon® Scalable Processors (Max. TDP at 150W Each)	Intel® LGA1151 Socket Supports 8th/ 9th Generation Core i7/i5/i3/ Pentium/ Celeron/ Xeon E Processors (Max. TDP at 95W)	Intel® FCLGA3647 Socket Supports 1st and 2nd Generation Intel® Xeon Scalable Processors (Max. TDP at 150W)	Intel® FCLGA3647 Socket Supports 1st and 2nd Generation Intel® Xeon Scalable Processors (Max. TDP at 150W)	Intel® FCLGA3647 Socket Supports 1st and 2nd Generation Intel® Xeon Scalable Processors (Max. TDP at 150W)	
Chipset	Intel® C621 Chipset	Intel® C621 Chipset	Intel® C621 Chipset	Intel® C246 Chipset	Intel® C621 Chipset	Intel® C621 Chipset	Intel® C621 Chipset	
Memory	6 x DDR4 2933/ 2666/ 2400/ 2133MHz RDIMM/ LRDIMM up to 768GB	12 x DDR4 2933/ 2666/ 2400/ 2133 MHz RDIMM/ LRDIMM up to 1.5TB	12 x DDR4 2933/ 2666/ 2400/ 2133 MHz RDIMM/ LRDIMM up to 1.5TB	4 x DDR4 2666MHz ECC and Non-ECC DIMM Support up to 128GB (ECC Memory Supported by Specific CPU SKUs)	6 x DDR4 2933/ 2666/ 2400/ 2133MHz RDIMM/ LRDIMM up to 768GB	6 x DDR4 2933/ 2666/ 2400/ 2133MHz RDIMM/ LRDIMM up to 768GB	6 x DDR4 2933/ 2666/ 2400/ 2133MHz RDIMM/ LRDIMM up to 768GB	
Storage	3 x Front Accessible 2.5" Storage Bays	3 x Front Accessible 2.5" Storage Bays	3 x Front Accessible 2.5" Storage Bays	3 x Front Accessible 2.5" Storage Bays	3 x Front Accessible 2.5" Storage Bays	3 x Front Accessible 2.5" Storage Bays	4 x External 5.25" Storage Bays 2 x Internal 3.5" Storage Bays	
IPMI	IPMI 2.0	IPMI 2.0	IPMI 2.0	IPMI 2.0	IPMI 2.0	IPMI 2.0	IPMI 2.0	
Expansion Slots	1 x PCI 3.0 Slot, 3 x PCIe Gen3 x16 Slots or 6 x PCIe Gen3 x8 Slots Slot 1, PCI 3.0 Slot 2, PCIe 3.0 x8 Slot 3, PCIe 3.0 x16 (x16 will Switch to x8 Automatically when Slot 2 is Used) Slot 4, PCIe 3.0 x8 Slot 5, PCIe 3.0 x16 (x16 will Switch to x8 Automatically when Slot 4 is Used) Slot 6, PCIe 3.0 x8 Slot 7, PCIe 3.0 x16 (Slot 7 is the Slot Closest to CPU, x16 will Switch to x8 Automatically when Slot 6 is Used)	4 x PCIe Gen3 x16 Slots, 2 x PCIe Gen3 x8 Slots Slot 1, PCIe 3.0 x16 from CPU1 Slot 2, PCI 3.0 Slot 3, PCIe 3.0 x16 from CPU1 Slot 4, PCIe 3.0 x16 from CPU2 Slot 5, PCIe 3.0 x16 from CPU2 Slot 6, PCIe 3.0 x8 from CPU1 Slot 7, PCIe 3.0 x8 from CPU1 (Slot 7 is the Slot Closest to CPU)	1 x PCIe Gen3 x16 Slot, 1 x PCIe Gen2 x8 Slot 1 x PCIe Gen3 x4 Slot, 1 x PCIe Gen3 x1 Slot 1 x PCI 3.0 slot Slot 1, PCI 3.0 Slot 2, PCIe Gen 3.0 x 16 Slot 3, PCIe Gen 2.0 x 8 Slot 4, PCIe Gen 3.0 x 4 Slot 5, PCIe Gen 3.0 x 1 (Slot 5 is the Slot Closest to CPU)	1 x PCI 3.0 Slot, 3 x PCIe Gen3 x16 Slots or 6 x PCIe Gen3 x8 Slots Slot 1, PCI 3.0 Slot 2, PCIe 3.0 x8 Slot 3, PCIe 3.0 x16 (x16 will Switch to x8 Automatically when Slot 2 is Used) Slot 4, PCIe 3.0 x8 Slot 5, PCIe 3.0 x16 (x16 will Switch to x8 Automatically when Slot 4 is Used) Slot 6, PCIe 3.0 x8 Slot 7, PCIe 3.0 x16 (Slot 7 is the Slot Closest to CPU, x16 will Switch to x8 Automatically when Slot 6 is Used)	4 x PCIe Gen3 x16 Slots, 2 x PCIe Gen3 x8 Slots Slot 1, PCIe 3.0 x16 from CPU1 Slot 2, PCIe 3.0 Slot 3, PCIe 3.0 x16 from CPU1 Slot 4, PCIe 3.0 x16 from CPU2 Slot 5, PCIe 3.0 x16 from CPU2 Slot 6, PCIe 3.0 x8 from CPU1 Slot 7, PCIe 3.0 x8 from CPU1 (Slot 7 is the Slot Closest to CPU)	1 x PCIe Gen3 x16 Slot, 1 x PCIe Gen2 x8 Slot 1 x PCIe Gen3 x4 Slot, 1 x PCIe Gen3 x1 Slot 1 x PCI 3.0 slot Slot 1, PCI 3.0 Slot 2, PCIe Gen 3.0 x 16 Slot 3, PCIe Gen 2.0 x 8 Slot 4, PCIe Gen 3.0 x 4 Slot 5, PCIe Gen 3.0 x 1 (Slot 5 is the Slot Closest to CPU)	1 x PCIe Gen3 x16 Slot, 1 x PCIe Gen2 x8 Slot 1 x PCIe Gen3 x4 Slot, 1 x PCIe Gen3 x1 Slot 1 x PCI 3.0 slot Slot 1, PCI 3.0 Slot 2, PCIe Gen 3.0 x 16 Slot 3, PCIe Gen 2.0 x 8 Slot 4, PCIe Gen 3.0 x 4 Slot 5, PCIe Gen 3.0 x 1 (Slot 5 is the Slot Closest to CPU)	1 x PCIe Gen3 x16 Slot, 1 x PCIe Gen2 x8 Slot 1 x PCIe Gen3 x4 Slot, 1 x PCIe Gen3 x1 Slot 1 x PCI 3.0 slot Slot 1, PCI 3.0 Slot 2, PCIe Gen 3.0 x 16 Slot 3, PCIe Gen 2.0 x 8 Slot 4, PCIe Gen 3.0 x 4 Slot 5, PCIe Gen 3.0 x 1 (Slot 5 is the Slot Closest to CPU)
LAN	4 x RJ45 (LAN1 Shares IPMI Port)	4 x RJ45 (LAN1 Shares IPMI Port)	4 x RJ45 (LAN1 Shares IPMI Port)	7 x RJ45 (LAN1 Shares IPMI Port)	4 x RJ45 (LAN1 Shares IPMI Port)	4 x RJ45 (LAN1 Shares IPMI Port)	4 x RJ45 (LAN1 Shares IPMI Port)	
USB	Front: 2 x USB 3.2 Gen1 Ports Rear: 4 x USB 3.2 Gen1 Ports	Front: 2 x USB 3.2 Gen1 Ports Rear: 4 x USB 3.2 Gen1 Ports	Front: 2 x USB 3.2 Gen1 Ports Rear: 4 x USB 3.2 Gen1 Ports	Front: 2 x USB 3.2 Gen1 Ports Rear: 2 x USB 3.2 Gen2 Ports	Front: 2 x USB 3.2 Gen1 Ports Rear: 2 x USB 3.2 Gen2 Ports	Front: 2 x USB 3.2 Gen1 Ports Rear: 2 x USB 3.2 Gen2 Ports	Front: 2 x USB 2.0 Type A Ports Rear: 4 x USB 3.2 Gen1 Ports	
Display	AST 2500 BMC Controller	AST 2500 BMC Controller	AST 2500 BMC Controller	Intel® 8/ 9th Generation CPU Integrated AST 2500 BMC Controller	AST 2500 BMC Controller	AST 2500 BMC Controller	AST 2500 BMC Controller	
Display Resolution	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	3 x DP++ Ports, DP: 4096 x 2304 @ 60Hz HDMI : 4096 x 2160 @ 30Hz 1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	1 x VGA Port VGA: 1920 x 1200 @ 60Hz 32bpp	
Cooling Fan	1 x 120 x 25mm Front Fan 2 x 80 x 25mm Rear Fans	1 x 120 x 25mm Front Fan 2 x 80 x 25mm Rear Fans	1 x 120 x 25mm Front Fan 2 x 80 x 25mm Rear Fans	2 x 80 x 25 mm Rear Fans	1 x 120 x 25mm Front Fan 2 x 80 x 25mm Rear Fans	2 x 80 x 25 mm Rear Fans	4 x 80 x 25 mm Middle Fans	
Power Supply	1 x 1300W PS2 ATX PSU	1 x 1300W PS2 ATX PSU	1 x 1300W PS2 ATX PSU	1 x 500W PS2 ATX PSU	1 x 1300W PS2 ATX PSU	1 x 1300W PS2 ATX PSU	1 x 1U 80plus Gold 500W PSU	
Operating Temp.	0 ~ 40°C (32 ~ 104°F)	0°C ~ 40°C (32°C ~ 104°F)	0°C ~ 40°C (32°C ~ 104°F)	0 ~ 45°C (32 ~ 113°F)	0°C ~ 40°C (32°C ~ 104°F)	0°C ~ 40°C (32°C ~ 104°F)	0 ~ 40°C (32 ~ 104°F)	
Dimension (W x H x D)	482.6 x 174.8 x 528 mm with Ear Mount	340 x 488 x 528 mm with External Handles & Pedestal Stand	482.6 x 174.8 x 528 mm with Ear Mount	340 x 488 x 528 mm with External Handles & Pedestal Stand	482.6 x 174.8 x 528 mm with Ear Mount	340 x 488 x 528 mm with External Handles & Pedestal Stand	483 x 88 x 650 mm	
Form Factor	19" 4U Rackmount	Tower Chassis	19" 4U Rackmount	Tower Chassis	19" 4U Rackmount	Tower Chassis	19" 2U Rackmount	
OS	Windows 10 IoT Enterprise Windows Server 2016 Windows Server 2019	Windows 10 IoT Enterprise Windows Server 2016 Windows Server 2019	Windows 10 IoT Enterprise Windows Server 2016 Windows Server 2019	Windows 10 IoT Enterprise Windows Server 2016 Windows Server 2019	Windows 10 IoT Enterprise Windows Server 2016 Windows Server 2019	Windows 10 IoT Enterprise Windows Server 2016 Windows Server 2019	Windows 10 IoT Enterprise Windows Server 2016 Windows Server 2019	

CPU List

Server Intel Xeon® Scalable Processor Series List

Supported Sockets	Process	Brand	Processor Number	Cores	Threads	Processor Base Frequency	Max Turbo Frequency	TDP	Chipset		
FCLGA3647	Skylake	Bronze	3106	8	8	1.70 GHz		85 W	C621		
			4109T	8	16	2.00 GHz	3.00 GHz	70 W			
		Silver	4110	8	16	2.10 GHz	3.00 GHz	85 W			
			4114T	10	20	2.20 GHz	3.00 GHz	85 W			
			4116	12	24	2.10 GHz	3.00 GHz	85 W			
			4116T	12	24	2.10 GHz	3.00 GHz	85 W			
		Gold	5118	12	24	2.30 GHz	3.20 GHz	105 W			
			5119T	14	28	1.90 GHz	3.20 GHz	85 W			
			5120T	14	28	2.20 GHz	3.20 GHz	105 W			
			6126T	12	24	2.60 GHz	3.70 GHz	125 W			
			6126	12	24	2.60 GHz	3.70 GHz	125 W			
			6130T	16	32	2.10 GHz	3.70 GHz	125 W			
			6130	16	32	2.10 GHz	3.70 GHz	125 W			
			6138	20	40	2.00 GHz	3.70 GHz	125 W			
	Cascade Lake	Silver	4209T	8	16	2.20 GHz	3.20 GHz	70 W			
			4210	10	20	2.20 GHz	3.20 GHz	85 W			
			4215	8	16	2.50 GHz	3.50 GHz	85 W			
			4214	12	24	2.20 GHz	3.20 GHz	85 W			
		Gold	4216	16	32	2.10 GHz	3.20 GHz	100 W			
			5215	10	20	2.50 GHz	3.40 GHz	85 W			
			5218T	16	32	2.10 GHz	3.80 GHz	105 W			
			6226	12	24	2.70 GHz	3.70 GHz	125 W			
			6230	20	40	2.10 GHz	3.90 GHz	125 W			
			6238T	22	44	1.90 GHz	3.70 GHz	125 W			
			Sapphire Rapids	Bronze	3408U	8	8	1.8 GHz		1.9 GHz	125 W
					4416+	20	40	2.0 GHz		3.9 GHz	165 W
				Silver	4410Y	12	24	2.0 GHz		3.9 GHz	150 W
					4410T	10	20	2.7 GHz		4.0 GHz	150 W
6448Y	32	64			2.1 GHz	4.1 GHz	225 W				
Gold	6426Y	16		32	2.5 GHz	4.1 GHz	185 W				
	6418H	24		48	2.1 GHz	4.0 GHz	185 W				
	5415+	8		16	2.9 GHz	4.1 GHz	150 W				
	5420+	28		56	2.0 GHz	4.1 GHz	205 W				
	5418Y	24		48	2.0 GHz	3.8 GHz	185 W				
	6430	32	64	2.10 GHz	3.40 GHz	270 W					
	Emerald Rapids	Bronze	3508U (Only HPM-ERSUA)	8	8	2.1 GHz	2.2 GHz	125 W			
4516Y+			24	48	2.2 GHz	3.7 GHz	185 W				
Silver		4514Y	16	32	2.0 GHz	3.4 GHz	150 W				
		4510	12	24	2.4 GHz	4.1 GHz	150 W				
		4509Y	8	16	2.6 GHz	4.1 GHz	125 W				
		4510T	12	24	2.0 GHz	3.7 GHz	115 W				
		6548Y+	32	64	2.5 GHz	4.1 GHz	250 W				
Gold		6526Y	16	32	2.8 GHz	3.9 GHz	195 W				
		5515+	8	16	3.2 GHz	4.1 GHz	165 W				
		5520+	28	56	2.2 GHz	4.0 GHz	205 W				
		6530	32	64	2.1 GHz	4.0 GHz	270 W				
		FCLGA4677								C741	

CPU List

Server Board HPM-246UA CPU List 8/9th Generation Intel® Core™ i7/i5/i3/Pentium®/Celeron®/Xeon® E

Supported Sockets	Process	Brand	Processor Number	Cores	Threads	Processor Base Frequency	Max Turbo Frequency	TDP	Chipset
FCLGA1151	Coffee Lake	Xeon® E	E-2176G	6	12	3.70 GHz	4.70 GHz	80 W	C246
			E-2124G	4	4	3.40 GHz	4.50 GHz	71 W	
			E-2278GEL	8	16	2.00 GHz	3.90 GHz	35 W	
			E-2278GE	8	16	3.30 GHz	4.70 GHz	80 W	
			E-2226GE	6	6	3.40 GHz	4.60 GHz	80 W	
		Core™ i7	i7-8700	6	12	3.20 GHz	4.60 GHz	65 W	
			i7-8700T	6	12	2.40 GHz	4.00 GHz	35 W	
			i7-9700E	8	8	2.60 GHz	4.40 GHz	65 W	
			i7-9700TE	8	8	1.80 GHz	3.80 GHz	35 W	
		Core™ i5	i5-8500	6	6	3.00 GHz	4.10 GHz	65 W	
			i5-8500T	6	6	2.10 GHz	3.50 GHz	35 W	
			i5-9500E	6	6	3.00 GHz	4.20 GHz	65 W	
			i5-9500TE	6	6	2.20 GHz	3.60 GHz	35 W	
			Core™ i3	i3-8100	4	4	3.60 GHz		
		i3-8100T		4	4	3.10 GHz		35 W	
		i3-9100E		4	4	3.10 GHz	3.70 GHz	65 W	
		i3-9100TE		4	4	2.20 GHz	3.20 GHz	35 W	
		Pentium	G5400	2	4	3.70 GHz		58 W	
			G5400T	2	4	3.10 GHz		35 W	
		Celeron	G4900	2	2	3.10 GHz		54 W	
			G4900T	2	2	2.90 GHz		35 W	

Server AMD EPYC Processor Series List

Supported Sockets	Process	Brand	Processor Number	Cores	Threads	Processor Base Frequency	Max Turbo Frequency	TDP	Chipset
LGA4844	EPYC 8004	Embedded	8534P	64	128	2.3 GHz	3.15 GHz	200 W	NA
			8434P	48	96	2.5 GHz	3.15 GHz	200 W	
			8324P	32	64	2.65 GHz	3.0 GHz	180 W	
			8224P	24	48	2.55 GHz	3.0 GHz	160 W	
			8124P	16	32	2.45 GHz	3.0 GHz	125 W	
			8C24P	12	24	2.45 GHz	3.0 GHz	100 W	

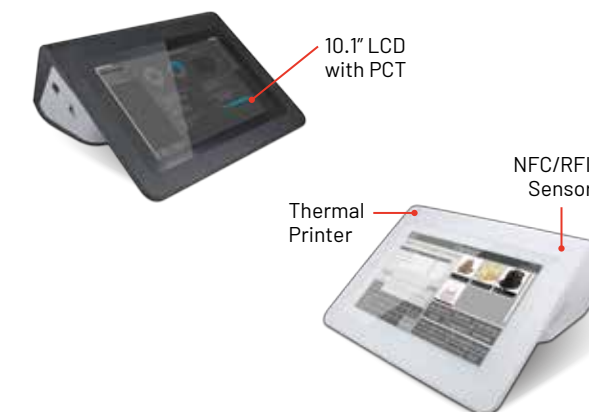


Avalue's Panel PC lineup spans sizes from 7" to 21", featuring versatile designs including fanless, expansion, rugged, and light industrial options. Our offerings include Industrial Panel PCs, Industrial Displays, Medical Panel PCs, Medical Displays, Open Frame Panel PCs, Android Multi-Touch Panel PCs, and Audio & Video Extenders.

Panel PC / Monitor / Mobile

POS Terminal

» Compact POS



Model Number	RiPac-10P3
Processor	Intel® Celeron® N3350 1.1GHz Processor
System Memory	4GB LPDDR4 Onboard
Storage	64G eMMC/ Option for 128GB
Operating System	Windows 10, Android 8.1
LCD Panel	10.1" LCD 5" LCD (Customer Facing)
Resolution	1280 x 800 (10.1") 1280 x 720 (5")
Touch Screen	Projected Capacitive Touch
Wireless LAN	Built-in IEEE 802.11 a/b/g/n/ac
Bluetooth	Bluetooth 4.2
Serial Port	2 x RS-232 in DB9, Powered with 5V/ 12V
USB Port	4 x USB 3.0
SD Card	1 x SD Card Slot Support up to 128GB
LAN Port	2 x RJ45 (Realtek 8111H)
Cash Drawer	1 x RJ11 (12V/ 24V)
NFC	ISO/ IEC 14443 A/B, 15693, 18092 (Optional)
Thermal Printer	Printing Method: Thermal Dot Line Printing Resolution: (W) 8 Dots/mm, (H) 8 Dots/mm Maximum Print Speed: 200 mm/s Maximum Print Width: 72 mm Maximum Paper Width: 80 mm Type of Paper Cutting: Full Cut & Partial Cut
Power Type	+24V/ 6A 120W
Dimensions	299(L) x 316.2 (W) x 148.9 (H) mm
Weight	3 kg ±10%
Operating Temperature	5°C ~ 40°C (41°F ~ 104°F)
Storage Temperature	-10°C ~ 60°C (14°F ~ 140°F)
Operating Humidity	0% ~ 95% Non-condensing
Certifications	CE, FCC, VCCI, CCC

Customer Display

- 5" 2nd Display for Customer Use
- Adjustable for Best View Angle



Integrated Printer

- Support 58/80mm with Auto Cut Thermal Printer
- Pain-free Paper Roll Change
- Accessible Printer Module for Easy Replacement



Industrial Panel PC

Explore Avalue's cutting-edge Industrial Panel PCs tailored for diverse industrial settings. Our series features Expansion, Rugged HMI, Light Industrial, Self-Diagnostic, Stainless Steel, Outdoor, and ARM-based Panel PCs, ensuring robust performance in challenging environments.

Open Frame Tablet

Unleash the power of our open-frame ultra-thin tablet designed for seamless integration and a fully flat design, ideal for diverse applications such as fitness kiosks, retail, and industrial automation. Experience cutting-edge technology tailored for fitness environments, with features like durability, interactive touchscreens, and versatile installation options.

Industrial Display

Discover our Industrial Displays offering a vast selection of robust screens with IP65/66, touch panels, and outdoor capabilities. Explore options like Rugged Industrial Displays and Bar Type Displays with dedicated customer service support.



POS Terminal

Elevate your retail experience with our state-of-the-art POS Terminals. Our advanced systems boast cutting-edge technology, ensuring fast and secure transactions. Explore a range of options, including touchscreen functionality, versatile connectivity, and robust security features, to meet the demands of modern retail environments.

Panel Kits

Optimize your industrial panel PC process with our Panel Kits featuring bonding options like PCAP and 5-wire resistive touch. These kits, equipped with full-size panels, cater to diverse applications, ensuring efficiency and precision in implementation.

ARM-based Panel PC

POS Terminal

» Desktop POS



Model Number	ISS-15K4	ISS-15K5	ISS-32K4
LCD Size	15.6", 16:9	15.6", 16:9	32" 16:9
Display Type	Full HD	Full HD	Full HD
Resolution	1920 x 1080	1920 x 1080	1920 x 1080
Pixel Pitch	0.179 x 0.179 mm	0.179 x 0.179 mm	0.179 x 0.179 mm
Luminance	220 cd/m ²	220 cd/m ²	400 cd/m ²
Viewing Angle	85 (U), 85 (D), 85 (L), 85 (R)	85 (U), 85 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Touch Type	Projective Capacitive	Projective Capacitive	Projective Capacitive
Touch Light Transmission	85%	85%	85%
Touch Controller	Build-in Touch Controller	Build-in Touch Controller	Build-in Touch Controller
Processor	Intel® Celeron® Processor J6412	CPU Rockchip RK3568 Quad-core Cortex-A55 up to 2.0GHz	Intel® Celeron® Processor J6412
System Chipset	Intel® Elkhart Lake SoC	Rockchip	Intel® Elkhart Lake SoC
System Memory	Onboard 2GB Memory	Onboard 4GB Memory	Single DRAM Socket, Max. Up to 32GB DDR4 3200MHz
Expansion	N/A	N/A	1 x M.2 Key-B 2242/3042 with Internal SIM Slot (PCIe, USB 2.0); 1 x M.2 Key-E 2230 (PCIe, USB 2.0)
Storage	Onboard 32GB eMMC	Onboard 128GB eMMC	1 x M.2 Key-B, 2242 (SATA3) 1 x Micro SD Card Slot
I/O	2 x USB 2.0 2 x USB 3.0 1 x RJ45 10/100M 1 x RJ12 for Cashdrawer 1 x RJ11 (RS-232)	4 x USB 2.0 (Front) 1 x RJ45 10/100M 1 x RJ12 for Cashdrawer 1 x RJ11 (RS-232)	2 x USB 2.0 (Front) 4 x USB 3.2 Gen.2 (10Gbp/s) 1 x RS232/422/485 (BIOS) 2 x RJ45 2 x HDMI 2.0b
Display Chipset	Intel® UHD Graphics	Rockchip	Intel® UHD Graphics
Audio	Build in	Build in	Realtek ALC888S
Audio Interface	1 x 3W Speaker	1 x 3W Speaker	2 x 10W Speaker
Ethernet	1 x 10/100M LAN	1 x 10/100M LAN	2 x Intel® I225-LM
2nd LCD Panel	N/A	N/A	N/A
Optional	N/A	N/A	N/A
Power Connector	Mini-din 4P for DC in w/ Lock Type +24V DC in	Mini-din 4P for DC in w/ Lock Type +24V DC in	AC Power Input
Power Type	ATX	ATX	ATX
Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 90W Adapter (24V @ 4A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 90W Adapter (24V @ 4A Adapter)	N/A
Construction	Plastic	Plastic	Plastic
IP Rating	N/A	N/A	N/A
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-10°C ~ 60°C (14°F ~ 140°F)	-10°C ~ 60°C (14°F ~ 140°F)	-10°C ~ 60°C (14°F ~ 140°F)
Dimension (L x W x H)	300 x 250 x 599.9 mm	300 x 250 x 599.9 mm	TBC
Weight	6 kg	6 kg	TBC
Certifications	CE/ FCC/ VCCI	CE/ FCC/ VCCI	CE/ FCC
OS Information	Win10 IoT	Android 11	Win10 IoT

POS Terminal

» Desktop POS



PT58	RiVar-1502	Rity153	Rity103
15.6", 16:9	15.6", 16:9	15", 4:3	10.1", 16:9
Full HD	Full HD	XGA	WSVGA
1920 x 1080	1920 x 1080	1024 x 768	1024 x 600
0.179 x 0.179 mm	0.179 x 0.179 mm	0.297 x 0.297 mm	0.2175 x 0.2088 mm
250 cd/m ²	300 cd/m ²	500 cd/m ²	350 cd/m ²
85 (U), 85 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)	88 (U), 88 (D), 88 (L), 88 (R)	70 (U), 70 (D), 70 (L), 70 (R)
Projective Capacitive	Projective Capacitive	5-Wire Resistive/ Projective Capacitive Touch	5-Wire Resistive/ Projective Capacitive Touch
85%	85%	RES 75%/ PCT90%	RES 75%/ PCT90%
Build-in Touch Controller	Build-in Touch Controller	Onboard USB Touch (PenMount)/ USB Touch (EETI)	Onboard USB Touch (PenMount)/ USB Touch (EETI)
Intel® Celeron® Processor J6412 12th Gen. Intel® Core™ i3-1215U/ i5-1235U	Intel® Celeron® Processor J3455	Intel® Celeron® Processor N3350 1.1GHz	Intel® Celeron® Processor N3350 1.1GHz
Intel® Elkhart Lake SoC Intel® Alder Lake SoC	Intel® Apollo Lake SoC	Intel® Apollo Lake SoC	Intel® Apollo Lake SoC
1 x 8GB DDR4 SO-DIMM Memory (Max. Support up to 16GB)	Default Onboard 4GB DDR4 SDRAM (Option up to 8GB)	1 x 204-Pin DDR3L 1066MHz SO-DIMM up to 8 GB	1 x 204-Pin DDR3L 1066MHz SO-DIMM up to 8 GB
1 x M.2 Slot for Storage	1 x M.2 E Key Slot for .2.4/ 5G WiFi Module	1 x M.2 B Key Slot Support	1 x M.2 B Key Slot Support
M.2 2242 SATA 128GB	Default 128GB eMMC	1 x 2.5" Drive Bay, 1 x M.2 B Key Slot	1 x M.2 B Key Slot
3 x USB 2.0, 3 x USB 3.1 2 x COM Supported 5V/ 12V Output 1 x RJ-11 for Cash Drawer 12/ 24V 1 x Type C (DP+PD)	4 x USB 3.0 2 x COM Supported 5V/ 12V Output 1 x RJ-11 for Cash Drawer 12/ 24V 1 x HDMI	2 x USB 2.0, 4 x USB 3.0 2 x RS-232/422/485 (BIOS) 2 x RS-232, 1 x HDMI 1.4b, 1 x VGA 1 x RJ11 for Cash Drawer 1 x Battery in Connector	4 x USB 3.0 2 x RS-232/422/485 (BIOS) 1 x RS-232 1 x HDMI 1.4b 1 x RJ11 for Cash Drawer
Intel® UHD Graphics	Intel® HD Graphics 500	Intel® HD Graphics 500	Intel® HD Graphics 500
Realtek ALC887	ES8316C	Realtek 888S	Realtek 888S
2 x 2W Speaker	2 x 2W Speaker	2 x 2W Speaker	2 x 2W Speaker
1 x RJ45 with Realtek RTL8111H	2 x RJ45 with Realtek 8111H	2 x Realtek RTL8111E-VB-GR	2 x Realtek RTL8111E-VB-GR
10.1" Resolution 1280 x 800	N/A	N/A	N/A
iButton Reader/ RFID Reader/ Fingerprint Reader/ 2D Scanner/ 2 x 20 Character LCM/ 3-Track MSR USB Interface	Camera/ NFC/ MSR	MSR	N/A
Mini-din 4P for DC in w/ Lock Type +19V DC in	DC Jack w/ Lock Type +24V DC in	Mini-din 4P for DC in w/ Lock Type +19V ~ 24V DC in	Mini-din 4P for DC in w/ Lock Type +19V ~ 24V DC in
ATX	ATX	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)
Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 65W Adapter (19V @ 3.42A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 60W Adapter (24V @ 2.5A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 90W Adapter (24V @ 3.75A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 90W Adapter (24V @ 3.75A Adapter)
Aluminum + Plastic	Plastic	Black Coverlens, ABS Plastic	Black Coverlens, ABS Plastic
IP65 for Front Panel	IP65 for Front Panel, IP41 for Rear	IP65 for Front Panel	IP65 for Front Panel
0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
-10°C ~ 60°C (14°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-10°C ~ 60°C (14°F ~ 140°F)	-10°C ~ 60°C (14°F ~ 140°F)
361.6 x 300.5 x 191.9 mm	391 x 251 x 44.5 mm	362.1 x 290.08 x 51 mm	260 x 178 x 42 mm
3 kg	2.7 kg	4 kg	1.8 kg
CE/ FCC/ VCCI	CE/ FCC/ VCCI: Class B	CE, FCC Class B, VCCI	CE, FCC Class B, VCCI
Windows 10 IoT (64 bit) Windows 11 (64 bit)	Windows 10, Android 8.1	Win10 IoT, Linux	Win10 IoT, Linux

Rugged Panel PC



Model Number	ARC-1235	ARC-1535	ARC-21W35
LCD Size	12.1", 4:3	15", 4:3	21.5"
Display Type	XGA	XGA	Full HD
Resolution	1024 x 768	1024 x 768	1920 x 1080
Pixel Pitch	0.240 x 0.240 mm	0.297 x 0.297 mm	0.248 x 0.248
Luminance	600 cd/m ²	300 cd/m ²	250 cd/m ²
Contrast Ratio	1000	2000	3000
Viewing Angle	89(U), 89(D), 89(L), 89(R)	88(U), 88(D), 88(L), 88(R)	89(U), 89(D), 89(L), 89(R)
Response Time	13 ms	16 ms	20 ms
Backlight	LED	LED	LED
Touch Type	A Model: 5-Wire Resistive Touch B Model: PCAP Multi-touch up to 10 Points (Full Flat Design)	PCAP Multi-touch up to 10 Points	
Touch Light Transmission	A Model: 80%, B Model: 89%	88%	
Touch Controller	A Model: Onboard USB Touch (PenMount) B Model: External USB Controller	USB touch (EETI)	
SBC	ARC-EHL		
Processor	Onboard Intel® Pentium®/ Celeron®/ Atom™ SoC BGA Processor		
I/O Chipset	EC ITE IT5571		
System Memory	Single 260-pin DDR4 SODIMM Socket Supports up to 32GB DDR4 3200MTs SDRAM		
Expansion	1 x M.2 Key-E 2230 for Wi-Fi & BT Module 1 x M.2 Key-B 2242/3042/3052 for SATA 3/ PCIe x1/ USB 3.1		
Storage	1 x M.2 Key-B 2242/3042/3052 for SATA 3/ PCIe x1/ USB 3.1 or 1 x 2.5" Drive Bay (7mm HDD Restricted)		
USB	4 x USB 3.1 Gen.2		
COM Port	1 x RS-232/422/485, Selectable by BIOS, RS-485 Supports Auto Flow, Pin-9 Selected by Ring/ +5V/ +12V); 1 x RS-232		
Display Chipset	Intel® Elkhart Lake SoC Processor Integrated Gen11 LP Graphics		
Display Resolution	HDMI: Max. Resolution 4096 x 2160 @ 60Hz (Optional by IET Module)		
Audio	Realtek ALC888S/ 897		
Audio Interface	2 x 2W Speakers		
Ethernet	2 x Intel® I225-IT 2.5 Gigabit Ethernet (Wide Temperature)		
Power Connector	Lockable DC Jack, +12V ~ 24V		
Power Type	AT/ ATX (ATX is Default Setting)		
Adapter	Input: 100 ~ 240 Vac/ 50 ~ 60 Hz Output: 72W Adapter (19V @ 3.78A)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 120W Adapter (24V @ 5A)	
Construction (Front, Rear)	A Model: Front Metal, Rear Aluminum Die Casting; B Model: Aluminum Die Casting		
Operating Temperature	A Model: -20°C ~ 60°C (-4°F ~ 140°F), B Model: -10°C ~ 50°C (14°F ~ 122°F)		
Storage Temperature	-30°C ~ 70°C (-22°F ~ 158°F)		
Certification	CE, FCC Class B		
OS Information	Windows 10 IoT, Windows 11 IoT, Linux		
Dimension	A Model: 283 x 221.1 x 51.2 mm B Model: 192.86 x 225.4 x 51.5 mm	A Model: 350 x 274 x 54.5 mm B Model: 350.51 x 274.51 x 56.5 mm	538.05 x 341.05 x 64 mm
Weight	2.4 kg	3.7 kg	7.3 kg

Rugged Panel PC



ARC-1037	ARC-10W37	ARC-1239	ARC-1539
10.4", 4:3	10.1", 16:10	12.1", 4:3	15", 4:3
XGA	WXGA	XGA	XGA
1024 x 768	1280 x 800	1024 x 768	1024 x 768
0.0685 mm (H) x 0.2055 mm (V)	0.1695 mm x 0.1695 mm	0.240 mm (H) x 0.240 mm (V)	0.297mm (H) x 0.297mm (V)
500 cd/m ²	350 cd/m ²	600 cd/m ²	500 cd/m ²
1200	800	1000	2500
88 (U), 88 (D), 88 (L), 88 (R)	85 (U), 85 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)	88 (U), 88 (D), 88 (L), 88 (R)
25 ms	25 ms	13 ms	16 ms
LED	LED	LED	LED
5-Wire Resistive Touch	PCAP Multi-touch up to 10 Points	A Model: 5 Wires Resistive Touch B Model: PCAP Multi-touch up to 10 Points	
80%	88%	80% (Resistive)/ 89% (PCAP)	
Onboard USB Touch (PenMount)	USB Touch (EETI)	Onboard USB Touch (PenMount) for Resistive; USB Touch (EETI) for PCAP	
ARC-ADLN	ARC-ASL		
Onboard Intel® Pentium®/ Celeron®/ Atom™ Alder Lake-N Processor	Onboard Intel® Atom™ x7000RE Series Amston Lake Processor		
EC ITE IT5782VG	EC ITE IT5782VG		
Single 262-pin DDR5 4800MHz SO-DIMM Socket Supports up to 32GB Max (Non ECC Only)	1 x 262-pin DDR5 4800MHz SO-DIMM Socket, Supports up to 16GB		
1 x M.2 Key-E 2230 for Wi-Fi & BT Module 1 x M.2 Key-B 2242/3042/3052 for SATA3/ PCIe x1/ USB3.1	1 x M.2 Key-B 2242/3042/3052 for SATA3/ PCIe x1/ USB3.1 1 x M.2 Key-E 2230 for Wi-Fi & BT Module 1 x 80-pin IET Interface		
1 x M.2 Key-B 2242/3042/3052 for SATA3/ PCIe x1/ USB 3.1 or 1 x 2.5" Drive Bay (7mm HDD Restricted)	1 x M.2 Key-B 2242/3042/3052 for SATA3/ PCIe x1/ USB 3.1 or 1 x 2.5" Drive Bay (7mm HDD Restricted)		
2 x USB 3.1 Gen.2 (1 x Dual Deck, Type A) 1 x USB Type C (w/ PD, USB, Display Function)	2 x USB 3.1 Gen.2 (1 x Dual Deck, Type A) 1 x USB Type C (w/ PD, USB, Display Function)		
1 x RS-232/422/485, Selectable by BIOS, RS-485 Supports Auto Flow, Pin-9 Selected by Ring/ +5V/ +12V); 1 x RS-232	1 x RS-232/422/485, Selectable by BIOS, RS-485 Supports Auto Flow, Pin-9 Selected by Ring/ +5V/ +12V); 1 x RS-232		
Intel® Alder Lake-N Processor Integrated Gen 12 UHD Graphics	Intel® UHD Graphics		
HDMI: Max. Resolution 4096 x 2160 @ 60Hz (Optional by IET Module)	HDMI: Max. Resolution 4096 x 2160 @ 60Hz (Optional by IET Module)		
Realtek ALC888S/ 897	Realtek ALC 888S/897		
2 x 2W Speakers	2 x 2W Speaker Output Line-in, Line-out, Mic-in by Expandable IET (Option)		
2 x Intel® I226-LM 2.5 Gigabit Ethernet	2 x Intel® I226LM 2.5 GbE		
Lockable DC Jack, +12V ~ 24V	Lockable DC Jack (Phoenix Connector by Option), +12V ~ 24V		
AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)		
Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 72W Adapter (19V @ 3.78A)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 72W Adapter (19V @ 3.78A Adapter)		
Front Metal, Rear Aluminum Die Casting	Aluminum Die Casting	Silver Aluminum (Resistive), Die Casting with Cover Lens (P-cap); Black Die Casting	
-10°C ~ 50°C (14°F ~ 122°F)	A Model: -20°C ~ 60°C (-4°F ~ 140°F) B Model: -10°C ~ 50°C (14°F ~ 122°F)		
-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)		
CE, FCC Class B	CE, FCC Class B		
Windows 10 IoT, Windows 11 IoT, Linux	Windows 10 IoT, Windows 11 IoT, Linux		
259.6 x 195.8 x 46 mm	282.29 x 200.93 x 50.9 mm	A Model: 283 x 221 x 51.2 mm B Model: 284 x 223 x 46 mm	A Model: 350 x 274 x 54.5 mm B Model: 350.51 x 274.51 x 56.5 mm
2.3 kg	2.17 kg	2.4 kg	3.7 kg

Rugged Panel PC



Model Number	ARC-1242	ARC-1542	ARC-21W42
LCD Size/ Display Type	12.1", 4:3/ XGA	15", 4:3/ XGA	21.5", 16:9/ Full HD
Resolution	1024 x 768	1024 x 768	1920 x 1080
Pixel Pitch	0.240 mm (H) x 0.240 mm (V)	0.297mm (H) x 0.297mm (V)	247.95 um (H) x 247.95 um (V)
Luminance	600 cd/m ²	500 cd/m ²	500 cd/m ²
Contrast Ratio	1000	2500	1000
Viewing Angle	89 (U), 89 (D), 89 (L), 89 (R)	88 (U), 88 (D), 88 (L), 88 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	13 ms	16 ms	14 ms
Backlight	LED	LED	LED
Touch Type	A Model: 5 Wires Resistive Touch B Model: PCAP Multi-touch up to 10 Points	A Model: 5 Wires Resistive Touch B Model: PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points
Touch Light Transmission	80% (Resistive)/ 89% (PCAP)	80% (Resistive)/ 89% (PCAP)	89 %
Touch Controller	Onboard USB Touch (PenMount) for Resistive; USB Touch (EETI) for PCAP	Onboard USB Touch (PenMount) for Resistive; USB Touch (EETI) for PCAP	USB Touch (EETI)
SBC	ARC-RPLPS	ARC-RPLPS	ARC-RPLPS
Processor	13th Generation Intel® Core™ i3/i5/i7 Processors (LGA1700 Socket)	13th Generation Intel® Core™ i3/i5/i7 Processors (LGA1700 Socket)	13th Generation Intel® Core™ i3/i5/i7 Processors (LGA1700 Socket)
I/O Chipset	EC ITE IT5782VG	EC ITE IT5782VG	EC ITE IT5782VG
System Memory	1 x 262-pin DDR5 4800MHz SO-DIMM up to 32GB	1 x 262-pin DDR5 4800MHz SO-DIMM up to 32GB	1 x 262-pin DDR5 4800MHz SO-DIMM up to 32GB
Expansion	1 x M.2 Key-B 2242/3042/3052/2280 with SIM Card Slot Support SATA3/ PCIe & USB for LTE (4/5G) NVMe 1 x M.2 (Key-E, 2230, PCIe1, USB2.0) 1 x 80-pin IET Interface	1 x M.2 Key-B 2242/3042/3052/2280 with SIM Card Slot Support SATA3/ PCIe & USB for LTE (4/5G) NVMe 1 x M.2 (Key-E, 2230, PCIe1, USB2.0) 1 x 80-pin IET Interface	1 x M.2 Key-B 2242/3042/3052/2280 with SIM Card Slot Support SATA3/ PCIe & USB for LTE (4/5G) NVMe 1 x M.2 (Key-E, 2230, PCIe1, USB2.0) 1 x 80-pin IET Interface
Storage	1 x M.2 Support SATA, or 1 x 2.5" SATA3 Drive Bay	1 x M.2 Support SATA, or 1 x 2.5" SATA3 Drive Bay	1 x M.2 Support SATA, or 1 x 2.5" SATA3 Drive Bay
USB	4 x USB 3.2, 1 x USB Type C (with PD, Display, USB Function)	4 x USB 3.2, 1 x USB Type C (with PD, Display, USB Function)	4 x USB 3.2, 1 x USB Type C (with PD, Display, USB Function)
COM Port	1 x RS-232/422/485, 1 x RS-232	1 x RS-232/422/485, 1 x RS-232	1 x RS-232/422/485, 1 x RS-232
Other	7 x Knockouts for Antenna Mounting (5 from Rear Cover + 2 from IET Bracket)	7 x Knockouts for Antenna Mounting (5 from Rear Cover + 2 from IET Bracket)	7 x Knockouts for Antenna Mounting (5 from Rear Cover + 2 from IET Bracket)
Display Chipset	Intel® Iris® Xe Graphics (for Core i5 & i7) Intel® UHD Graphics for 12th Gen Intel® Processors (for Core i3 & Celeron)	Intel® Iris® Xe Graphics (for Core i5 & i7) Intel® UHD Graphics for 12th Gen Intel® Processors (for Core i3 & Celeron)	Intel® Iris® Xe Graphics (for Core i5 & i7) Intel® UHD Graphics for 12th Gen Intel® Processors (for Core i3 & Celeron)
Audio	Realtek ALC 888S/897	Realtek ALC 888S/897	Realtek ALC 888S/897
Audio Interface	2 x 2W Speaker Output Line-in, Line-out, Mic-in by Expandable IET (Option)	2 x 2W Speaker Output Line-in, Line-out, Mic-in by Expandable IET (Option)	2 x 2W Speaker Output Line-in, Line-out, Mic-in by Expandable IET (Option)
Ethernet	2 x Intel® I226LM 2.5 GbE	2 x Intel® I226LM 2.5 GbE	2 x Intel® I226LM 2.5 GbE
Power Connector	Lockable DC Jack (Phoenix Connector by Option), +12V ~ 24V	Lockable DC Jack (Phoenix Connector by Option), +12V ~ 24V	Lockable DC Jack (Phoenix Connector by Option), +12V ~ 24V
Power Type	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)
Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 72W Adapter (19V @ 3.78A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 72W Adapter (19V @ 3.78A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 120W Adapter (24V @ 5A Adapter)
Construction (Front, Rear)	Silver Aluminum (Resistive), Die Casting with Cover Lens (P-cap); Black Die Casting	Silver Aluminum (Resistive), Die Casting with Cover Lens (P-cap); Black Die Casting	Die Casting with Cover Lens (P-cap) Black Die Casting
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B
OS Information	Windows 10 IoT, Windows 11 IoT, Linux	Windows 10 IoT, Windows 11 IoT, Linux	Windows 10 IoT, Windows 11 IoT, Linux
Dimension	A Model: 283 x 221 x 51.2 mm B Model: 284 x 223 x 46 mm	A Model: 350 x 274 x 54.5 mm B Model: 350.51 x 274.51 x 56.5 mm	538.05 x 341.05 x 60.05mm
Weight	2.4 kg	3.7 kg	7.3 kg

Rugged Panel PC



Model Number	ARC-1238	ARC-1538	ARC-21W38	ARC-1738-C1
LCD Size	12.1"	15"	21.5"	17"
Display Type	XGA	XGA	Full HD	SWGA
Resolution	1024 x 768	1024 x 768	1920 x 1080	1280 x 1024
Pixel Pitch	0.240 x 0.240 mm	0.297 x 0.297 mm	0.248 x 0.248	0.264 x 0.264
Luminance	600 cd/m ²	300 cd/m ² , 500 cd/m ²	250 cd/m ²	250 cd/m ²
Contrast Ratio	1000	2000	3000	1000
Viewing Angle	89 (U), 89 (D), 89 (L), 89 (R)	88 (U), 88 (D), 88 (L), 88 (R)	89 (U), 89 (D), 89 (L), 89 (R)	80 (U), 80 (D), 85 (L), 85 (R)
Response Time	13 ms	16 ms	20 ms	5 ms
Backlight	LED	LED	LED	LED
Touch Type	A Model: 5-Wire Resistive Touch B Model: PCAP Multi-touch up to 10 Points (Full Flat Design)		PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points (Full Flat Design)
Touch Light Transmission	5-Wire Resistive Touch: 80%, Projective Capacitive Multi-Touch: 89%		88%	89%
Touch Controller	A Model: Onboard USB Touch (PenMount) B Model: External USB Controller		USB touch (EETI)	Onboard USB Touch (ILITEK)
SBC	ARC-TGL			EMX-TGLC
Processor	On board 11th Gen. Intel® Core™ i7/i5/i3/ Celeron BGA Processor			On board 11th Gen. Intel® Core™ i5/i3/Celeron BGA Processor
I/O Chipset	EC (IT8528VG-I/FX)			EC (ITE IT8528E)
System Memory	Single 260-pin DDR4 SODIMM Socket, Supports up to 32GB DDR4 3200MTs SDRAM			2 x 260-pin DDR4 3200 MHz SO-DIMM Socket, up to 64GB Max
Expansion	1 x M.2 Key-E 2230 for Wi-Fi & BT Module 1 x M.2 Key-B 2242/3042/3052 for SATA3/PCIe x1/ USB3.1			1 x M.2 Key B 3042/3052/2242/2260/2280 for SATA/ USB 3.0/ USB 2.0, 1 x M.2 Key E 2230 Support WiFi Module
Storage	1 x M.2 Key-B 2242/3042/3052 for SATA3/PCIe x1/ USB3.1 or 1 x 2.5" Drive Bay (7mm HDD Restricted)			1 x M.2 Key B 3042/3052/2242/2260/2280 Support 1 x PCIe x1/SATA/ USB 3.0/ USB 2.0 or 1 x 2.5" Drive Bay
USB	4 x USB 3.1 Gen.2			3 x USB 3.1 Gen.2, 1 x USB 3.1 Gen.1, 3 x USB 2.0 (Optional) *1 x USB 2.0 for Option Shared The Same Port with COM
COM Port	1 x RS-232/422/485, Selectable by BIOS, RS-485 Supports Auto Flow, Pin-9 Selected by Ring/ +5V/ +12V; 1 x RS-232			COM1: 1 x RS-232/422/485 (Default); COM2: 1 x RS-232/422/485 (Optional); COM3: 1 x RS-232 (Optional) COM4 ~ 6: 3 x RS-232/ GPIO/ USB 2.0 (Optional)
Display Chipset	Intel® 11th Generation CPU Integrated			Intel® 11th Generation CPU Integrated
Display Resolution	HDMI: Max. Resolution 4096 x 2160 @ 60Hz (Optional by IET Module)			2 x DP++: 1920 x 1080 @ 60Hz
Audio	Realtek ALC897			Realtek ALC897 Co-lay ALC888S & Tempo 92HD73
Audio Interface	2 x 2W Speakers			2 x 5W Speakers
Ethernet	1 x Intel® I219LM PCI-e Gigabit Ethernet, 1 x Intel® I225LM 2.5 Gigabit Ethernet			1 x Intel® I219LM Gigabit Ethernet PHY (LAN1) 1 x Intel® I226LM 2.5 Gigabit Ethernet (LAN2)
Power Connector	Lockable DC Jack, +12 ~ 24V			Mini-DIN 4pin DC-in, +12V ~ 24V DC-in
Power Type	AT/ ATX (ATX is Default Setting)			AT/ ATX (ATX is Default Setting)
Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 72W Adapter (19V @ 3.78A)		Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 120W Adapter (24V @ 5A)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 120W Adapter (24V @ 5A)
Construction (Front, Rear)	A Model: Front Metal, Rear Aluminum Die Casting; B Model: Aluminum Die Casting			
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F)			0°C ~ 50°C (32°F ~ 122°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)			-20°C ~ 60°C (-4°F ~ 140°F)
Certification	CE, FCC Class B			CE, FCC Class A, CCC
OS Information	Windows 10 IoT, Windows 11 IoT, Linux			Windows 10 IoT, Windows 11 IoT, Linux
Dimension	A Model: 283 x 221 x 51.2 mm B Model: 284 x 223 x 46 mm	A Model: 350 x 274 x 54.5 mm B Model: 350.51 x 274.51 x 56.5 mm	538.05 x 341.05 x 64 mm	393 x 325 x 72 mm
Weight	2.4 kg	3.7 kg	7.3 kg	4.4 kg

Rugged Panel PC



Model Number	FPC-08W29	FPC-10W09
LCD Size	8"	10.1"
Display Type	WSVGA	WSVGA
Resolution	1024 x 600	1024 x 600
Pixel Pitch	0.1725 mm (H) x 0.1656 mm (V)	0.2175 mm (H) x 0.2088 mm (V)
Luminance	500 cd/m ²	350 cd/m ²
Contrast Ratio	700	500
Viewing Angle	70 (U), 75 (D), 75 (L), 75 (R)	70 (U), 70 (D), 70 (L), 70 (R)
Response Time	20 ms	16 ms
Backlight	LED	LED
Touch Type	5-Wire Resistive	5-Wire Resistive
Touch Light Transmission	80 %	80 %
Touch Controller	Onboard USB Touch (PenMount)	Onboard USB Touch (PenMount)
SBC	ECM-BYT	ECM-BYT
Processor	Intel® Atom™ E3845 4-Core 1.91GHz Processor	Intel® Atom™ E3845 4-Core 1.91GHz Processor
System Chipset	Intel® Valleyview SoC	Intel® Valleyview SoC
I/O Chipset	Nuvoton W83627DHG-P	Nuvoton W83627DHG-P
System Memory	1 x 204-Pin DDR3L 1333MHz SO-DIMM up to 8GB	1 x 204-Pin DDR3L 1333MHz SO-DIMM up to 8 GB
Expansion	1 x Mini PCIe Supports mSATA	1 x Mini PCIe Supports mSATA
Storage	1 x CompactFlash Type I/II Socket (CF-SATA Optional)	2.5" SSD/ HDD or Type I/II CF Card
I/O	3 x USB 2.0, 1 x USB 3.0 1 x RS-232/422/485, 1 x RS-232	4 x USB 2.0, 1 x USB 3.0 1 x RS-232/422/485
Display Chipset	Intel® Valleyview SoC Integrated Graphics Supports Dual Display	Intel® Valleyview SoC Integrated Graphics Supports Dual Display
Display Resolution	VGA: Max. Resolution 2560 x 1080 @ 60Hz HDMI: Max. Resolution 1920 x 1200 @ 60Hz	VGA: Max. Resolution 2560 x 1080 @ 60Hz HDMI: Max. Resolution 1920 x 1200 @ 60Hz
Audio	Realtek ALC888S Support 5.1-CH	Realtek ALC888S Support 5.1-CH
Ethernet	2 x Intel® I210AT	2 x Intel® I210AT
Power Type	AT/ ATX (ATX is Default Setting), Lockable DC Jack, +12V ~ +26V (12V @ 5A Adapter)	AT/ ATX (ATX is Default Setting), Lockable DC Jack, +12V ~ +26V (12V @ 5A Adapter)
Construction (Front, Rear)	Metal, Aluminum + Metal	Metal, Aluminum + Metal
Dimension	225 x 129 x 43.4 mm	300 x 195 x 56 mm
Weight	1.27 kg	1.50 kg
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)
Certification	CE, FCC Class B	CE, FCC Class B
OS Information	Windows 7, Windows 8.1, Linux, Windows 10 IoT	Windows 7, Windows 8.1, Linux, Windows 10 IoT

Rugged Panel PC



	FPC-10W39	FPC-1736	FPC-21W42
LCD Size	10.1"	17"	21.5"
Display Type	WSVGA	SWGA	FHD
Resolution	1024 x 600	1280 x 1024	1920 x 1080
Pixel Pitch	0.2175 mm (H) x 0.2088 mm (V)	0.264 mm (H) x 0.264 mm (V)	0.248 mm (H) x 0.248 mm (V)
Luminance	350 cd/m ²	250 cd/m ²	250 cd/m ²
Contrast Ratio	500	1000	1000
Viewing Angle	70 (U), 70 (D), 70 (L), 70 (R)	80 (U), 80 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	16 ms	5 ms	20 ms
Backlight	LED	LED	LED
Touch Type	5-Wire Resistive	Projective Capacitive	Projective Capacitive
Touch Light Transmission	80 %	89 %	85 %
Touch Controller	Onboard USB Touch (EETI)	Onboard USB Touch (ILITEK)	Onboard USB Touch (EETI)
SBC	ECM-ASL	EMX-H3102C	MX610H
Processor	Intel® Processor N97 3.60GH Processor	Intel® Core™ i3/i5/i7 Processors (LGA1151 Socket, Max. TDP at 65W)	13th Generation Intel® Core™ i3/i5/i7 Processors (LGA1700 Socket)
System Chipset	N/A	Intel® H310 Express Chip	Intel® H610E
I/O Chipset	ITE IT5782VG	ITE IT8786E-I	Fintek® F81966AB-I
System Memory	1 x 262-Pin DDR5 4800MHz SO-DIMM up to 16GB Max	2 x 260-Pin DDR4 2666MHz SO-DIMM up to 64GB Max	2 x 262-pin DDR5 4800MHz SO-DIMM up to 64GB Max
Expansion	1 x M.2 E-key Slot, Type-2230 with PCIe	1 x PCIe x4 Slot (Option for 2 x PCI Slot) 1 x M.2 E-key Slot, Type-2230 with PCIe	1 x PCIe x16 Slot (Option for 2 x PCI Slot) 1 x M.2 E-key Slot, Type-2230 with PCIe
Storage	1 x M.2 B-Key 2242 with PCIe x1	1 x M.2 M-key 2242 with SATA	1 x M.2 M-key 2280/2242 with SATA
I/O	3 x USB 3.2, 1 x USB 2.0 1 x RS-422/485	4 x USB 3.0 4 x RS-232	4 x USB 3.2, 2 x USB 2.0 2 x RS-232/422/485
Display Chipset	Intel® UHD Graphics Integrated Graphics Supports Triple Display	Intel® 8/ 9th Generation CPU Integrated	Intel® UHD Graphics Integrated Graphics Supports Triple Display
Display Resolution	HDMI: Max. Resolution 4096 x 2160 @ 60Hz	VGA: Max. Resolution 2560 x 1080 @ 60Hz HDMI: Max. Resolution 1920 x 1200 @ 60Hz	DP: Max. Resolution 4096 x 2304 @ 60Hz HDMI: Max. Resolution 3840 x 2160 @ 30Hz
Audio	Realtek ALC888S	Realtek ALC888S Support 5.1-CH	Realtek ALC897
Ethernet	2 x Intel® I226V/I226IT 2.5 Gigabit Ethernet	1 x Intel® I219-V Gigabit Ethernet 1 x Intel® I225-V 2.5 Gigabit Ethernet	1 x Intel® I219-LM Gigabit Ethernet 1 x Intel® I225-V 2.5 Gigabit Ethernet
Power Type	AT/ ATX (ATX is Default Setting), Lockable DC Jack, +12V ~ +26V (19V @ 3.78A Adapter)	AT/ ATX (ATX is Default Setting), Lockable DC Jack, +12V ~ +24V (19V @ 6.32A Adapter)	AT/ ATX (ATX is Default Setting), PSU Flex ATX 300W
Construction (Front, Rear)	Metal, Aluminum + Metal	Metal	Metal
Dimension	300 x 195 x 73 mm	392.7 x 325.32 x 121.55 mm	538 x 341 x 122 mm
Weight	1.50 kg	7.5 kg	12.6 kg
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 45°C (32°F ~ 113°F)	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-10°C ~ 50°C (14°F ~ 122°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Certification	CE, FCC Class B, UKCA, LVD, VCCI	CE, FCC Class A, CCC	CE, FCC Class B, UKCA, LVD, VCCI
OS Information	Windows 10, Windows 11, Linux	Windows 10 IoT, Linux	Windows 10, Windows 11, Linux

Stainless Steel Panel PC



Model Number	SPC-1542	SPC-2142	SPC-10W35
LCD Size	15", 4:3	21.5", 16:9	10.1", 16:10
Display Type	XGA	Full HD	WXGA
Resolution	1024 x 768	1920 x 1080	1280 x 800
Pixel Pitch	0.297 x 0.297 mm	0.248 x 0.248 mm	0.1695mm (H) x 0.1695mm (V)
Luminance	300 cd/m ²	250 cd/m ²	350 cd/m ²
Contrast Ratio	2000	3000	800
Viewing Angle	88 (U), 88 (D), 88 (L), 88 (R)	89 (U), 89 (D), 89 (L), 89 (R)	85 (U), 85 (D), 85 (L), 85 (R)
Response Time	16 ms	18 ms	25 ms
Backlight	LED	LED	LED
Touch Type	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points
Touch Light Transmission	89%	89%	88 %
Touch Controller	USB (EETI)	USB (EETI)	EETI
SBC	HID-2340	HID-2340	ECM-EHL3
Processor	Socketed FCLGA1700 Intel® 12th/13th Gen Core™ i7/i5/i3 Processor	Socketed FCLGA1700 Intel® 12th/13th Gen Core™ i7/i5/i3 Processor	Onboard Intel® Elkhart Lake Processor
I/O Chipset	ITE IT8883FN-I	ITE IT8883FN-I	IT557IE
System Memory	1 x 262-pin DDR5 4800MHz SO-DIMM, up to 32GB Max.	1 x 262-pin DDR5 4800MHz SO-DIMM, up to 32GB Max.	1 x 204-Pin DDR4 3200MHz SO-DIMM, up to 32GB Max.
Expansion	1 x M.2 Key-B 2280/3042/3052 with SIM Card Slot Support SATA3/ PCIe & USB for LTE (4/5G) 1 x M.2 Key-E, 2230 Supports WiFi Module	1 x M.2 Key-B 2280/3042/3052 with SIM Card Slot Support SATA3/ PCIe & USB for LTE (4/5G) 1 x M.2 Key-E, 2230 Supports WiFi Module	1 x M.2 key-E 2230 Supports WiFi Module 1 x M.2 key-B 3042/2242 1 x M.2 key-M Supports 2260 Slot
Storage	1 x M.2 Support SATA, 1 x 2.5" SATA3 Drive Bay	1 x M.2 Support SATA, 1 x 2.5" SATA3 Drive Bay	1 x M.2 Support SATA, 1 x 2.5" SATA3 Drive Bay
USB	2 x M12 Connector (USB2.0)	2 x M12 Connector (USB2.0)	2 x M12 Connector (USB2.0)
COM Port	1 x M12 Connector (RS232/422/485 by Jumper & BIOS Selection)	1 x M12 Connector (RS232/422/485 by Jumper & BIOS Selection)	1 x M12 Connector (RS232/422/485 by Jumper & BIOS Selection)
Display Chipset	Intel® UHD Graphics	Intel® UHD Graphics	Intel® SoC Integrated Graphics
Audio	Realtek ALC 888S	Realtek ALC 888S	Realtek ALC 888S
Ethernet	1 x M12 Connector (1 x Intel® I225LM, 1 x Intel® I226LM 2.5 Gigabit Ethernet)	1 x M12 Connector (1 x Intel® I225LM, 1 x Intel® I226LM 2.5 Gigabit Ethernet)	1 x M2 Connector (2 x Intel® I210AT PCIe Gigabit Ethernet)
Power Connector	1 x M12 DC Jack, +12V ~ 24V	1 x M12 DC Jack, +12V ~ 24V	1 x M12 DC Jack, +12V ~ 24V
Power Type	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)
Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 90W Adapter (24V @ 3.75A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 90W Adapter (24V @ 3.75A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 60W Adapter (24V @ 2.5A Adapter)
Construction (Front, Rear)	Stainless Steel	Stainless Steel	Stainless Steel
Operating Temperature	-10°C ~ 50°C (-14°F ~ 122°F)	-10°C ~ 50°C (-14°F ~ 122°F)	-10°C ~ 50°C (-14°F ~ 122°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Certification	CE, FCC Class A	CE, FCC Class A	CE, FCC Class A
OS Information	Windows 10 IoT, Windows 11 IoT, Linux	Windows 10 IoT, Windows 11 IoT, Linux	Windows 10 IoT, Windows 11 IoT, Linux
IP Rating	Full IP66, IP69K	Full IP66, IP69K	Full IP66, IP69K
Dimension	TBD	562 x 365.8 x 49 mm	296 x 214 x 49 mm
Weight	5.7 kg	11.3 kg	3 kg

Stainless Steel Panel PC



Model Number	SPC-1533-B1	SPC-2133-B1	SPC-15W37
LCD Size	15", 4:3	21.5", 16:9	15.6", 16:9
Display Type	XGA	Full HD, 1920 x 1080	Full HD
Resolution	1024 x 768		1920 x 1080
Pixel Pitch	0.297 x 0.297 mm	0.248 x 0.248 mm	179.25 um (H) x 179.25 um (V)
Luminance	300 cd/m ²	250 cd/m ²	450 cd/m ²
Contrast Ratio	2000	3000	800
Viewing Angle	88 (U), 88 (D), 88 (L), 88 (R)	89 (U), 89 (D), 89 (L), 89 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	16 ms	18 ms	30 ms
Backlight	LED	LED	LED
Touch Type	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points
Touch Light Transmission	89%	89%	89%
Touch Controller	USB (EETI)	USB (EETI)	USB (EETI)
SBC	EMX-APLP	EMX-APLP	EMX-ASLP
Processor	Onboard Intel® Apollo Lake Processor	Onboard Intel® Apollo Lake Processor	Onboard Intel® Alder Lake-N Processor
I/O Chipset	ITE IT8528	ITE IT8528	IT5782VG
System Memory	2 x 204-pin DDR3L 1600MTs, up to 16GB Max.	2 x 204-pin DDR3L 1600MTs, up to 16GB Max.	1 x 262-pin DDR5 4800MHz SO-DIMM, up to 16GB Max.
Expansion	1 x Full Size Mini PCI-e Support mSATA (SATA III and mSATA by Auto Switch IC) 1 x SIM Card Slot 1 x M.2 (2230) A-Key, Support WiFi Module	1 x Full Size Mini PCI-e Support mSATA (SATA III and mSATA by Auto Switch IC) 1 x SIM Card Slot 1 x M.2 (2230) A-Key, Support WiFi Module	1 x M.2 Key-B, 2242/3042/3052, with SIM Card Slot Support SATA3/ PCIe & USB for LTE (4/5G) 1 x M.2 Key-E, 2230 supports WiFi module
Storage	1 x Full Size Mini PCI-e mSATA, 1 x 2.5" SATA3 Drive Bay	1 x Full Size Mini PCI-e mSATA, 1 x 2.5" SATA3 Drive Bay	1 x M.2 Support SATA, 1 x 2.5" SATA3 Drive Bay
USB	2 x M12 Connector (USB2.0)	2 x M12 Connector (USB2.0)	2 x M12 Connector (USB 2.0)
COM Port	1 x M12 Connector (RS232/422/485 by Jumper & BIOS Selection)	1 x M12 Connector (RS232/422/485 by Jumper & BIOS Selection)	1 x M12 Connector (RS-232/422/485 by Jumper & BIOS Selection)
Display Chipset	Intel® SoC integrated Graphics	Intel® SoC integrated Graphics	Intel® UHD Graphics
Audio	Realtek ALC 888S/897	Realtek ALC 888S/897	Realtek ALC 888S/ 897
Ethernet	1 x M2 Connector (1 x Intel® I210AT PCIe Gigabit Ethernet)	1 x M2 Connector (1 x Intel® I210AT PCIe Gigabit Ethernet)	1 x M2 Connector (2 x Intel® I226LM 2.5 Gigabit Ethernet)
Power Connector	1 x M12 DC Jack, +12V ~ 26V (Option for Phoenix Connector)	1 x M12 DC Jack, +12V ~ 26V (Option for Phoenix Connector)	1 x M12 DC Jack, +12 ~ 24V
Power Type	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)	AT/ ATX (ATX is Default Setting)
Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 72W Adapter (19V @ 3.78A Adapter)
Construction (Front, Rear)	Stainless Steel	Stainless Steel	Stainless Steel
Operating Temperature	-10°C ~ 50°C (-14°F ~ 122°F)	-10°C ~ 50°C (-14°F ~ 122°F)	-10°C ~ 50°C (-14°F ~ 122°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Certification	CE, FCC Class A	CE, FCC Class A	CE, FCC Class A
OS Information	Windows 10 IoT, Linux, Android x86 8.1	Windows 10 IoT, Linux, Android x86 8.1	Windows 10 IoT, Windows 11 IoT, Linux
IP Rating	Full IP66, IP69K	Full IP66, IP69K	Full IP66, IP69K
Dimension	393 x 315.8 x 49 mm	562 x 365.8 x 49 mm	TBD
Weight	5.7 kg	9.4 kg	5.7 kg

General Purpose Panel PC



Model Number	SID-10WR2	SID-15WR2	SID-21WR2	SID-10W04
LCD Size	10.1"	15.6"	21.5"	10.1"
Resolution	1280 x 800	1920 x 1080	1920 x 1080	1280 x 800
Pixel Pitch	0.1695 x 0.1695 mm	0.153 (H) x 0.153 (V) mm	0.24795 x 0.24795 mm	0.1692 x 0.1692 mm
Luminance	350 cd/m ²	300 cd/m ²	250 cd/m ²	350 cd/m ²
Contrast Ratio	800	700	3000	800
Viewing Angle	85 (U), 85 (D), 85 (L), 85 (R)	85 (U), 85 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)	85 (U), 85 (D), 85 (L), 85 (R)
Response Time	30 ms	30 ms	30 ms	30 ms
Backlight	LED	ELED	LED	LED
Touch Type	PCAP	PCAP	PCAP	PCAP
Touch Light Transmission	86%	86%	86%	86%
SBC	ACP-RK3568	ACP-RK3568B	ACP-RK3568	ACP-APL
Processor	Rockchip RK3568	Rockchip RK3568	Rockchip RK3568	Intel Celeron J3455 1.5GHz
I/O Chipset	Rockchip SoC Integrated	Rockchip SoC Integrated	Rockchip SoC Integrated	Intel Celeron Integrated
Memory	2GB DDR4 on board	4GB DDR4 on board	2GB DDR4 on board	1 x 4GB 204 pin SO-DIMM DDR3L
Storage	32GB eMMC on board	32GB eMMC on board	32GB eMMC on board	32GB eMMC/ M.2 3042 SSD
Graphics	Mali-G52 GPU	Mali-G52 GPU	Mali-G52 GPU	Intel® HD Graphics 500
HDMI Resolution	HDMI up to 1080p @ 120Hz	1 x HDMI-in	HDMI up to 1080p @ 120Hz	HDMI up to 1080p @ 60Hz
USB Port	2 x USB 3.0 Type A	1 x USB type-A 3.0 1 x USB type-A 2.0 1 x USB type-C	2 x USB 3.0 Type A	2 x USB 3.0 Type A
Serial Port	1 x RS-232 DB9	N/A	1 x RS-232 DB9	1 x RS-232/485 DB9
Audio Interface	1 x Headphone Jack	N/A	1 x Headphone Jack	1 x Headphone Jack
Ethernet	10/100/1000 RJ45 LAN	10/100/1000 RJ45 LAN	10/100/1000 RJ45 LAN	10/100/1000 RJ45 LAN
Wi-Fi	Wi-Fi 802.11 a/b/g/n/ac	Wi-Fi 802.11 a/b/g/n/ac	Wi-Fi 802.11 a/b/g/n/ac	Wi-Fi 802.11 a/b/g/n/ac
Bluetooth	BT 5.0	BT 5.4	BT 5.0	BT 5.0
Power Connector	DC Jack +12 ~ +24VDC	DC Jack +12 VDC/ Powered LAN	DC Jack +12 ~ +24VDC	DC Jack +12 ~ +24VDC
Power Type	AT/ ATX (AT is Default Setting)	AT/ ATX (AT is Default Setting)	AT/ ATX (AT is Default Setting)	AT/ ATX (AT is Default Setting)
Adapter	Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 24W Adapter (12V @ 2A Adapter)	Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)
Construction/Color	Metal, Black	Plastic, Black	Metal, Black	Metal, Black
Mounting	VESA 75 x 75	VESA 75 x 75	VESA 100 x 100	VESA 75 x 75
Dimension	255.2 x 169.4 x 40.7 mm	370 x 228 x 23.5mm	533.3 x 329.3 x 56.6 mm	258.8 x 182.8 x 49.6 mm
Weight	1.36 kg	2.1 kg	7.2 kg	1.36 kg
IP Rating	Front IP65	N/A	Front IP65	Front IP65
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Operating Humidity	5% ~ 90% Relative Humidity, Non-condensing	20% ~ 80% Relative Humidity, Non-condensing	5% ~ 90% Relative Humidity, Non-condensing	5% ~ 90% Relative Humidity, Non-condensing
Certification	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B
OS Information	Android 11, Debian 11	Android 14	Android 11, Debian 11	Windows 10 IoT Ubuntu 20.04

General Purpose Panel PC



SID-15W04	SID-21W04	SID-10WAD	SID-15WAD	SID-21WAD
15.6"	21.5"	10.1"	15.6"	21.5"
1920 x 1080	1920 x 1080	800 x 1280	1920 x 1080	1920 x 1080
0.17925 x 0.17925 mm	0.24795 x 0.24795 mm	0.1692X0.1692 mm	0.17925 x 0.17925 mm	0.24795 x 0.24795 mm
220 cd/m ²	250 cd/m ²	350 cd/m ²	220 cd/m ²	500 cd/m ²
800	3000	1000	800	1000
85 (U), 85 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)	85 (U), 85 (D), 85 (L), 85 (R)	85 (U), 85 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)
30 ms	30 ms	25 ms	30 ms	14 ms
LED	LED	LED	LED	LED
PCAP	PCAP	PCAP	PCAP	PCAP
85%	86%	85%	85%	85%
ACP-APL	ACP-APL	ACP-ADL	ACP-ADL	ACP-ADL
Intel Celeron J3455 1.5GHz	Intel Celeron J3455 1.5GHz	Intel® N50 1.0 GHz	Intel® N50 1.0 GHz	Intel® N50 1.0 GHz
Intel Celeron Integrated	Intel Celeron Integrated	Intel® N50 Integrated	Intel® N50 Integrated	Intel® N50 Integrated
1 x 4GB 204 pin SO-DIMM DDR3L	1 x 4GB 204 pin SO-DIMM DDR3L	8GB LPDDR5 on board	8GB LPDDR5 on board	8GB LPDDR5 on board
32GB (eMMC)/ M.2 3042 SSD	32GB (eMMC)/ M.2 3042 SSD	64GB eMMC 32/ 128GB (Optional)	64GB eMMC 32/ 128GB (Optional)	64GB eMMC 32/ 128GB (Optional)
Intel® HD Graphics 500	Intel® HD Graphics 500	Intel® UHD Graphics	Intel® UHD Graphics	Intel® UHD Graphics
HDMI up to 1080p @ 60Hz	HDMI up to 1080p @ 60Hz	HDMI up to 4096x2304@60fps	N/A	N/A
2 x USB 3.0 Type A	2 x USB 3.0 Type A	2 x USB 3.0 Type A	2 x USB 3.0 Type A	2 x USB 3.0 Type A
1 x RS-232/485 DB9	1 x RS-232/485 DB9	1 x RS-485/232	1 x RS-232/422/485 (RJ45 Type)	1 x RS-232/422/485 (RJ45 Type)
1 x Headphone Jack	1 x Headphone Jack	1 x Headphone Jack	1 x Headphone Jack	1 x Headphone Jack
10/100/1000 RJ45 LAN	10/100/1000 RJ45 LAN	10/100/1000 RJ45 LAN	10/100/1000 RJ45 LAN	10/100/1000 RJ45 LAN
Wi-Fi 802.11 a/b/g/n/ac	Wi-Fi 802.11 a/b/g/n/ac	Wi-Fi 802.11 a/b/g/n/ac/ax	Wi-Fi 802.11 a/b/g/n/ac/ax	Wi-Fi 802.11 a/b/g/n/ac/ax
BT 5.0	BT 5.0	BT 5.2	BT 5.2	BT 5.2
DC Jack +12 ~ +24VDC	DC Jack +12 ~ +24VDC	DC Jack +12 ~ +24VDC	DC Jack +12 ~ +24VDC	DC Jack +12 ~ +24VDC
AT/ ATX (AT is Default Setting)	AT/ ATX (AT is Default Setting)	AT/ ATX (AT is Default Setting)	AT/ ATX (AT is Default Setting)	AT/ ATX (AT is Default Setting)
Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)
Metal, Black	Metal, Black	Metal, Black	Metal, Black	Metal, Black
VESA 100 x 100	VESA 100 x 100	VESA 75 x 75	VESA 100 x 100	VESA 100 x 100
388.8 x 258.8 x 49.6 mm	533.3 x 329.3 x 56.6 mm	255 x 169 x 45 mm	388.8 x 258.8 x 39mm	535.3 x 329.3 x 46mm
3.59 kg	7.2 kg	1.27 kg	2.85 kg	7.2 kg
Front IP65	Front IP65	Front IP65	Front IP65	Front IP65
0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
5% ~ 90% Relative Humidity, Non-condensing	5% ~ 90% Relative Humidity, Non-condensing	5% ~ 90% Relative Humidity, Non-condensing	5% ~ 90% Relative Humidity, Non-condensing	5% ~ 90% Relative Humidity, Non-condensing
CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B
Windows 10 IoT Ubuntu 20.04	Windows 10 IoT Ubuntu 20.04	Windows 10 IoT Windows 11 IoT (w/ TPM) Ubuntu 24.04	Windows 10 IoT Windows 11 IoT (w/ TPM) Ubuntu 24.04	Windows 10 IoT Windows 11 IoT (w/ TPM) Ubuntu 24.04

General Purpose Panel PC



Model Number	APC-15WR2
LCD Size, Display Type	15.6", Full HD
Resolution	1920 x 1080
Pixel Pitch	0.17925 mm (H) x 0.17925 mm (V)
Luminance	400 cd/m ²
Contrast Ratio	800
Viewing Angle	85 (U), 85 (D), 85 (L), 85 (R)
Response Time	8 ms
Backlight	LED
Touch Type	Projective Capacitive
Touch Light Transmission	≥ 87%
Touch Controller	USB Touch (ILITEK)
SBC	ACP-RK3568A
Processor	Rockchip RK3568
System Chipset	Rockchip
I/O Chipset	N/A
System Memory	4GB LPDDR4 on board
Expansion	1 x M.2 3042 B-Key for LTE or SSD
Storage	64GB eMMC on board
USB	2 x USB 3.0
COM Port	1 x RS-232/485 (RJ45 Type)
Display Chipset	Rockchip
Audio	Everest ES8388
Audio Interface	1 x Line-out, 2 x Speaker
Ethernet	1 x Realtek RTL8211F Gigabit
Power Connector	DC Jack +12 ~ 24V DC in/ Powered LAN
Power Type	AT
Adapter	Optional Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)
Construction	Plastic PC + ABS w/ Antibacterial
Dimension	388.5 x 263 x 31.5 mm
Weight	2.2 kg
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-10°C ~ 60°C (-14°F ~ 140°F)
Certification	CE, FCC Class B
OS Information	Android 11

Model Number	CCD-07WR2	CCD-10WR2
LCD Size	7"	10.1"
Display Type	WXGA	WXGA
Resolution	1024 x 600	1280 x 800
Pixel Pitch	0.1178 x 0.1178 mm	0.1695 x 0.1695 mm
Luminance	300 cd/m ²	350 cd/m ²
Contrast Ratio	500	800
Viewing Angle	85 (U), 85 (D), 85 (L), 85 (R)	85 (U), 85 (D), 85 (L), 85 (R)
Response Time	20ms	30 ms
Backlight	LED	LED
Touch Type	PCAP	PCAP
Touch Light Transmission	75%	86%
Processor	Rockchip RK3568 Quad-Core ARM Cortex-A55, up to 2.0GHz	
I/O Chipset	Rockchip SoC Integrated	
Memory	2GB DDR4 on board	
Storage	32GB eMMC on Board	
HDMI Resolution	HDMI Up to 1080p @ 30Hz	
USB Port	2 x USB 3.0 (Type A)	
Audio	1 x Headphone Jack, 2 x Speaker	
Other	1 x 2MP Camera with Digital Microphone	
Ethernet	1 x 10/100/1000 RJ45 LAN	
Wi-Fi	Wi-Fi 802.11 a/b/g/n/ac	
Bluetooth	BT 5.0	
Power Connector	DC Jack +12 ~ +24V	
Power Type	AT	
Adapter	Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 50W Adapter (19V @ 2.1A Adapter)	
Construction, Color	Plastic, White	
Mounting	VESA 75 x 75	
Dimension	191 x 124 x 33 mm	261 x 181 x 34 mm
Weight	580 g	800 g
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	
Operating Humidity	5% ~ 90% Relative Humidity, Non-condensing	
Certification	CE, FCC Class B	
OS Information	Android 11, Debian 11	

General Purpose Panel PC



Model Number	VNS-10WR2	VNS-10WAD
LCD Size	10.1"	10.1"
Display Type	WXGA	WXGA
Resolution	1280 x 800	1280 x 800
Pixel Pitch	0.1695 (H) x 0.1695 (V) mm	0.1695 (H) x 0.1695 (V) mm
Luminance	350 cd/m ²	350 cd/m ²
Contrast Ratio	800	800
Viewing Angle	85 (U), 85 (D), 85 (L), 85 (R)	85 (U), 85 (D), 85 (L), 85 (R)
Response Time	30 ms	30 ms
Backlight	LED	LED
Touch Type	PCAP	PCAP
Touch Light Transmission	86%	86%
Touch Controller	USB Interface	SIS9255
SBC	ACP-RK3568A	ACP-ADL
Processor	Rockchip RK3568	Intel® Alder Lake-N50 Processor
System Memory	4GB LPDDR4 on board	8GB LPDDR5 on board
Storage	64GB eMMC on board 1 x M.2 3042 B-Key	64GB eMMC on board
USB	2 x USB 3.0 Type A	2 x USB Type A 3.0
COM Port	1 x RS-232/485 (RJ45 Type)	1 x RS-232/422/485 (RJ45 Type)
Other	Touch Button for Power/ Brightness/ Volume 1 x 3.5mm Audio Jack, NFC, Cam 2.0 MP LED Indicating Bar	2.0MP Camera Wi-Fi 802.11a/b/g/n/ac/ax, BT 5.2, NFC LED Indicating Bar
Display Chipset	Rockchip	Intel® UHD Graphics
Display Resolution	1280 x 800	1280 x 800
Audio	Everest ES8388	ALC233/256
Audio Interface	1 x Line-out, 1 x Mic-in, 2 x Speaker	1 x Line-out, 2 x Speaker
Ethernet	1 x Realtek RTL8211F Gigabit	1x RTL8111-CG
Power Connector	DC Jack +12 ~ 24V DC in/ Powered LAN	DC Jack +12 ~ 24V DC in/ Powered LAN
Power Type	AT	AT
Adapter	Optional Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)	Optional Input: 100 ~ 240 Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)
Construction	White Plastic w/ Antibacterial	White Plastic w/ Antibacterial
Dimension	270 x 193 x 28 mm	270 x 193 x 28 mm
Weight	1.1 kg	1.1kg
Certification	CE, FCC Class B	CE, FCC Class B
OS Information	Android 11, Debian 11	Windows 10/11, Ubuntu 22.04

Light Industrial Panel PC



Model Number	APC-2132	APC-2138
LCD Size	21.5"	21.5"
Display Type	Full HD	Full HD
Resolution	1920 x 1080	1920 x 1080
Pixel Pitch	0.248mm(H) x 0.248mm(V)	0.248mm(H) x 0.248mm(V)
Luminance	250 cd/m ²	250 cd/m ²
Contrast Ratio	1000	1000
Viewing Angle	89(U), 89(D), 89(L), 89(R)	89(U), 89(D), 89(L), 89(R)
Response Time	22 ms	14 ms
Backlight	LED	LED
Touch Type	Projective Capacitive	Projective Capacitive
Touch Light Transmission	≥ 85%	≥ 85%
Touch Controller	USB Touch (EETI)	USB Touch (ILITEK)
SBC	ARC-SKLU	EMX-TGLC
Processor	Intel® Core™ i7/i5/i3/ Celeron Processor	Intel® Core™ i5/i3/ Celeron Processor
System Chipset	Intel® Skylake U SoC Integrated	Intel® Tigerlake U SoC Integrated
I/O Chipset	EC ITE IT8528E	EC ITE IT8528E
System Memory	1 x 260-Pin DDR4 2133MHz SO-DIMM up to 16GB	2 x 260-pin DDR4 3200MHz SO-DIMM up to 64GB
Expansion	1 x Full Size (Support Half Size, Auto Switch for mSATA, USB, PCIe Signal)	1 x M.2 Type B 3042/3052/2242/2260/ 2280 1 x M.2 Key E 2230 Support WiFi Module
Storage	1 x 2.5" SATA3 SSD	1 x 2.5" Drive Bay
USB	4 x USB 3.0, 2 x USB 2.0 (by IET Module)	3 x USB 3.1 Gen 2; 1 x USB 3.1 Gen 1
COM Port	1 x RS-232/422/485, 1 x RS-232	2 x RS-232/422/485
Display Chipset	Intel® Skylake SoC Integrated Graphics Supports Dual Display	Intel® Tigerlake SoC Integrated Graphics Supports Dual Display
Audio	Realtek ALC888S Support 5.1-CH	RealTek ALC897
Audio Interface	1 x Line-out, 1 x Mic-in (by IET Module)	N/A
Ethernet	1 x Intel® I210AT 1 x Intel® I219LM	1 x Intel® I219LM 1 x Intel® I225IT
Power Connector	Lockable DC Jack, +12V ~ +26V	Lockable Mini Din 4-pin, +12V ~ +24V
Power Type	AT/ ATX	AT/ ATX
Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 72W Adapter (19V @ 3.78A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 90W Adapter (24V @ 3.75A Adapter)
Construction (Front, Rear)	Plastic-black	Plastic-black
Dimension	539.6 x 342.6 x 45.5 mm	539.6 x 342.6 x 45.2 mm
Weight	6.3 kg	6.3 kg
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-10°C ~ 60°C (14°F ~ 140°F)	-10°C ~ 60°C (14°F ~ 140°F)
Certification	CE, FCC Class B	CE, FCC Class B
OS Information	Windows 7, Windows 8.1, Windows 10 IoT, Linux	Windows 10 IoT, Linux

Light Industrial Panel PC



Model Number	APC-2334	APC-2340
LCD Size	23.8"	23.8"
Display Type	Full HD	Full HD
Resolution	1920 x 1080	1920 x 1080
Pixel Pitch	274.5 um(H) x 274.5 um(V)	274.5 um(H) x 274.5 um(V)
Luminance	250 cd/m ²	250 cd/m ²
Contrast Ratio	3000	3000
Viewing Angle	89(U), 89(D), 89(L), 89(R)	89(U), 89(D), 89(L), 89(R)
Response Time	16 ms	16 ms
Backlight	LED	LED
Touch Type	Projective Capacitive	Projective Capacitive
Touch Light Transmission	89%	89%
Touch Controller	USB Touch (EETI)	USB Touch (EETI)
SBC	EMX-KBLUP	EMX-ADLP
Processor	Intel® Core™ i7/i5/i3/ Celeron Processor	12th/13th Gen Intel® Core™ i7/5/3/Celeron Processor
System Chipset	Intel® Kabylake U SoC Integrated	Intel® Alder Lake SoC
I/O Chipset	EC ITE IT8528E	EC ITE IT5782VG
System Memory	2 x 260-pin DDR4 2400MHz SO-DIMM Supports up to 32GB	2 x 262-pin DDR5 4800 MHz SO-DIMM Supports up to 64GB
Expansion	1 x M.2 2230 1 x mPCIe with SATA or PCIe x1 mSATA	1 x M.2 Key B 3042/3052 for 4G/5G 1 x M.2 Key E 2230 Support WiFi Module
Storage	1 x 2.5" Drive Bay	1 x 2.5" Drive Bay 1 x M.2 Key M 2280 (PCI-e x4) slot for storage
USB	4 x USB 3.0	2 x USB 3.2 Gen2, 2 x USB 3.0 Gen.2
COM Port	N/A	N/A
Display Chipset	Intel® Kabylake SoC Integrated Graphics Supports Dual Display	Intel® UHD Graphics for 12th Gen Intel® Processors
Audio	Realtek ALC888S Support 5.1-CH	Realtek ALC888S HD
Audio Interface	1 x Line-out, 1 x Mic-in	N/A
Ethernet	1 x Intel® I210AT 1 x Intel® I219LM	1 x Intel® i226LM 1 x Intel® i219LM
Power Connector	Lockable DC Jack, +12V ~ +24V	Lockable DC Jack, +12V ~ +24V
Power Type	AT/ ATX	AT/ ATX
Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 72W Adapter (19V @ 3.78A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 90W Adapter (24V @ 3.75A Adapter)
Construction (Front, Rear)	Plastic-black	Plastic-black
Dimension	592 x 382 x 49.5 mm	592 x 382 x 49.5 mm
Weight	7.2 kg	6.2 kg
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-10°C ~ 60°C (14°F ~ 140°F)	-10°C ~ 60°C (14°F ~ 140°F)
Certification	CE, FCC Class B	CE, FCC Class B, VCCI
OS Information	Windows 10 IoT, Linux	Windows 10 IoT, Linux

Open Frame Panel PC



Model Number	OFP-07W33	OFP-15W33	OFP-21W33
LCD Size	7", 16:10	15.6", 16:9	21.5", 16:9
Resolution	1280 x 800	1920 x 1080	1920 x 1080
Luminance	300 cd/m ²	220 cd/m ²	250 cd/m ²
Viewing Angle	89 (U), 89 (D), 89 (L), 89 (R)	85 (U), 85 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Touch Type	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points
Processor	Onboard Intel® Celeron® N3350/J3455 SoC BGA Processor	Onboard Intel® Celeron® N3350/J3455 SoC BGA Processor	Onboard Intel® Celeron® N3350/J3455 SoC BGA Processor
System Memory	4GB DDR3L Memory (Option up to 8GB by One SO-DIMM Socket)	4GB DDR3L Memory (Option up to 16GB by Two SO-DIMM Socket)	4GB DDR3L Memory (Option up to 16GB by Two SO-DIMM Socket)
Wireless	Option by Mini PCIe : 802.11 a/b/g/n/ac Wireless LAN and Bluetooth 4.0+	Option by Mini PCIe : 802.11 a/b/g/n/ac Wireless LAN and Bluetooth 4.0+	Option by Mini PCIe : 802.11 a/b/g/n/ac Wireless LAN and Bluetooth 4.0+
Storage	64GB mSATA by mPCIe Slot	64GB mSATA by mPCIe Slot (Option for SATA interface 2.5" HDD/ SSD)	64GB mSATA by mPCIe Slot (Option for SATA Interface 2.5" HDD/ SSD)
External I/O Connector	2 x Intel® I210AT 4 x USB 3.0 1 x HDMI 1 x RS-232 1 x DC Jack	2 x Intel® I210AT, 4 x USB 3.0 1 x RS-232/422/485 1 x DP++, 1 x DP, 1 x HDMI 1 x Line-out, 1 x Mic-in 1 x DC Jack, 1 x Phoenix Connector for DC in 1 x Phoenix Connector for Reset	2 x Intel® I210AT, 4 x USB 3.0 1 x RS-232/422/485 1 x DP++, 1 x DP, 1 x HDMI 1 x Line-out, 1 x Mic-in 1 x DC Jack, 1 x Phoenix Connector for DC in 1 x Phoenix Connector for Reset
Internal I/O Connector	1 x RS-232/422/485 2 x USB 2.0 1 x GPIO 1 x Full Size Mini-PCIe Support mSATA 1 x Half Size Mini-PCIe for Option WIFI/ BT	4 x RS-232 (Optional) 4 x USB 2.0 (Optional) 1 x GPIO 1 x Full Size Mini PCI-e Support mSATA 1 x SIM Card Slot 1 x M.2 (2230) A-Key, Support WiFi Module	4 x RS-232 (Optional) 4 x USB 2.0 (Optional) 1 x GPIO 1 x Full Size Mini PCI-e Support mSATA 1 x SIM Card Slot 1 x M.2 (2230) A-Key, Support WiFi Module
Power Requirement	+12V ~ 26V DC in	+12V ~ 24V DC in	+12V ~ 24V DC in
Power Type	AT/ ATX (Default is AT Mode)	AT/ ATX (Default is AT Mode)	AT/ ATX (Default is AT Mode)
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)	0°C ~ 45°C (32°F ~ 113°F)	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	0% ~ 90% Relative Humidity, Non-condensing	0% ~ 90% Relative Humidity, Non-condensing	0% ~ 90% Relative Humidity, Non-condensing
OS Information	Windows 10 IoT, Linux, x86 Android 8.1	Windows 10 IoT, Linux, x86 Android 8.1	Windows 10 IoT, Linux, x86 Android 8.1
Dimension	183.1 x 115.8 x 48.6 mm	387 x 235 x 46 mm	501.9 x 296.2 x 52.4 mm
Weight	700 g	2.5 kg	4.1 kg
Certification	CE, FCC Class A	CE, FCC Class A	CE, FCC Class A

Open Frame Panel PC



OFP-15W38	OFP-21W38	OFP-15W42	OFP-21W42
15.6", 16:9	21.5", 16:9	15.6", 16:9	21.5", 16:9
1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
220 cd/m ²	250 cd/m ²	220 cd/m ²	250 cd/m ²
85 (U), 85 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)	85 (U), 85 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)
PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points
Onboard Tiger Lake U 11th Intel® Core™ SoC i7/i5/i3 BGA Processor or Celeron® BGA Processor	Onboard Tiger Lake U 11th Intel® Core™ SoC i7/i5/i3 BGA Processor or Celeron® BGA Processor	Socketed FCLGA1700 Intel® 12th/13th Gen Core™ i7/i5/i3 Processor	Socketed FCLGA1700 Intel® 12th/13th Gen Core™ i7/i5/i3 Processor
4GB DDR4 Memory (Option up to 64GB)	4GB DDR4 Memory (Option up to 64GB)	1 x 262-pin DDR5 4800MHz SO-DIMM up to 32GB	1 x 262-pin DDR5 4800MHz SO-DIMM up to 32GB
Option by M.2 WIFI/ BT Module	Option by M.2 WIFI/ BT Module	Option by M.2 WIFI/ BT Module	Option by M.2 WIFI/ BT Module
Default with 64GB M.2 (Option for SATA Interface 2.5" HDD/ SSD)	Default with 64GB M.2 (Option for SATA Interface 2.5" HDD/ SSD)	Default with 64GB M.2 (Option for SATA Interface 2.5" HDD/ SSD)	Default with 64GB M.2 (Option for SATA Interface 2.5" HDD/ SSD)
3 x USB 3.1 Gen2, 1 x USB 3.1 Gen1 1 x RS-232 (Default)/422/485 1 x Intel® I225IT 2.5 GbE 1 x Intel® I219LM GbE PHY 2 x DP++ 1 x Line-out, 1 x Mic-in 1 x Mini Din 4-pin DC Jack 1 x Phoenix Connector for DC in 1 x Phoenix Connector for Reset	3 x USB 3.1 Gen2, 1 x USB 3.1 Gen1 1 x RS-232 (Default)/422/485 1 x Intel® I225IT 2.5 GbE 1 x Intel® I219LM GbE PHY 2 x DP++ 1 x Line-out, 1 x Mic-in 1 x Mini Din 4-pin DC Jack 1 x Phoenix Connector for DC in 1 x Phoenix Connector for Reset	4 x USB 3.2 Gen2 1 x RS-232 (Default)/422/485 2 x Intel® I226LM 2.5 GbE 4 x DP++ 1 x Line-out, 1 x Mic-in 1 x Mini Din 4-pin DC Jack 1 x Phoenix Connector for DC in 1 x Phoenix Connector for Reset	4 x USB 3.2 Gen2 1 x RS-232 (Default)/422/485 2 x Intel® I226LM 2.5 GbE 4 x DP++ 1 x Line-out, 1 x Mic-in 1 x Mini Din 4-pin DC Jack 1 x Phoenix Connector for DC in 1 x Phoenix Connector for Reset
1 x RS-232/422/485 (Optional) 3 x RS-232 (Optional) 4 x USB 2.0 (Optional) 1 x GPIO 1 x SIM Card Slot 1 x M.2 (2230) E-Key, Support WiFi Module/ BT 1 x M.2 (2242) B-Key, Support Storage/ 5G Module	1 x RS-232/422/485 (Optional) 3 x RS-232 (Optional) 4 x USB 2.0 (Optional) 1 x GPIO 1 x SIM Card Slot 1 x M.2 (2230) E-Key, Support WiFi Module/ BT 1 x M.2 (2242) B-Key, Support Storage/ 5G Module	1 x RS-232/422/485 (Optional) 3 x RS-232 (Optional) 4 x USB 2.0 (Optional) 1 x GPIO 1 x SIM Card Slot 1 x M.2 (2230) E-Key, Support WiFi Module/ BT 1 x M.2 (2242) B-Key, Support Storage/ 5G Module 1 x M.2 Key-M 2280 (PCI-ex4) Slot for Storage NVMe SSD	1 x RS-232/422/485 (Optional) 3 x RS-232 (Optional) 4 x USB 2.0 (Optional) 1 x GPIO 1 x SIM Card Slot 1 x M.2 (2230) E-Key, Support WiFi Module/ BT 1 x M.2 (2242) B-Key, Support Storage/ 5G Module 1 x M.2 Key-M 2280 (PCI-ex4) Slot for Storage NVMe SSD
DC in +12~24V	DC in +12~24V	DC in +12~24V	DC in +12 ~ 24V
AT/ ATX (Default is AT Mode)	AT/ ATX (Default is AT Mode)	AT/ ATX (Default is AT Mode)	AT/ ATX (Default is AT Mode)
0°C ~ 45°C (32°F ~ 113°F)	0°C ~ 45°C (32°F ~ 113°F)	0°C ~ 45°C (32°F ~ 113°F)	0°C ~ 45°C (32°F ~ 113°F)
-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing
Windows 10 IoT, Windows 11 IoT, Linux	Windows 10 IoT, Windows 11 IoT, Linux	Windows 10 IoT, Windows 11 IoT, Linux	Windows 10 IoT, Windows 11 IoT, Linux
387 x 235 x 48 mm	501.9 x 296.2 x 55 mm	387 x 235 x 48 mm	501.9 x 296.2 x 55 mm
2.9 kg	5.2 kg	2.9 kg	5.2 kg
CE, FCC Class A	CE, FCC Class A	CE, FCC Class A	CE, FCC Class A

Open Frame Tablet



Model Number	OFT-07WR2	OFT-10WR2	OFT-21WR2
LCD Size	7"	10.1"	21.5"
Resolution	600 x 1024	800 x 1280	1920 x 1080
Luminance	350 cd/m ²	350 cd/m ²	250 cd/m ²
Viewing Angle	85 (U), 85 (D), 85 (L), 85 (R)	80 (U), 80 (D), 80 (L), 80 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Touch Type	PCAP	PCAP	PCAP
Processor	Rockchip RK3568	Rockchip RK3568	Rockchip RK3568
System Memory	2GB DDR4 on board	2GB DDR4 on board	2GB DDR4 on board
Wireless	Wi-Fi 802.11 a/b/g/n/ac	Wi-Fi 802.11 a/b/g/n/ac	Wi-Fi 802.11 a/b/g/n/ac
Storage	32GB eMMC on board	32GB eMMC on board	32GB eMMC on board
External I/O Connector	1 x 10/100/1000 RJ45 Powered LAN 1 x DC Jack 1 x Headphone Jack 1 x HDMI 1.4 Out 1 x Reset 2 x USB 3.0 Type A	1 x 10/100/1000 RJ45 Powered LAN 1 x DC Jack 1 x Headphone Jack 1 x HDMI 1.4 Out 1 x Reset 2 x USB 3.0 Type A	1 x 10/100/1000 RJ45 Powered LAN 1 x DC Jack 1 x Headphone Jack 1 x HDMI 1.4 Out 1 x Reset 2 x USB 3.0 Type A
Internal I/O Connector	1 x A-MIC 1 x DC Input 1 x 16-bit GPIO 1 x I ² C Sensor Interface 1 x M.2 3042 B-Key 2 x RS-232 1 x RS-485 1 x RTC Battery 1 x Speaker 1 x Touch Button 1 x USB CAM_DMIC Interface 1 x USB Touch Interface	1 x A-MIC 1 x DC Input 1 x 16-bit GPIO 1 x I ² C Sensor Interface 1 x M.2 3042 B-Key 2 x RS-232 1 x RS-485 1 x RTC Battery 1 x Speaker 1 x Touch Button 1 x USB CAM_DMIC Interface 1 x USB Touch Interface	1 x A-MIC 1 x DC Input 1 x 16-bit GPIO 1 x I ² C Sensor Interface 1 x M.2 3042 B-Key 2 x RS-232 1 x RS-485 1 x RTC Battery 1 x Speaker 1 x Touch Button 1 x USB CAM_DMIC Interface 1 x USB Touch Interface
Power Requirement	DC 12V ~ 24V	DC 12V ~ 24V	DC 12V ~ 24V
Power Type	AT	AT	AT
Operating Temp.	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temp.	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing
OS Information	Android 11, Debian 11	Android 11, Debian 11	Android 11, Debian 11
Dimension	190 x 130 x 31.8 mm	254 x 178 x 33.8 mm	515 x 322 x 44.9 mm
Weight	0.5 kg	0.7 kg	3.6 kg
Certification	CE, FCC Class A	CE, FCC Class A	CE, FCC Class A

Open Frame Tablet



Model Number	OFT-10W04	OFT-15W04	OFT-21W04
LCD Size	10.1"	15.6"	21.5"
Resolution	800 x 1280	1920 x 1080	1920 x 1080
Luminance	350 cd/m ²	220 cd/m ²	250 cd/m ²
Viewing Angle	85 (U), 85 (D), 85 (L), 85 (R)	85 (U), 85 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Touch Type	PCAP	PCAP	PCAP
Processor	Intel® Celeron® J3455 2M Cache 1.50 GHz	Intel® Celeron® J3455 2M Cache 1.50 GHz	Intel® Celeron® J3455 2M Cache 1.50 GHz
System Memory	1 x 4GB 204 pin SO-DIMM DDR3L	1 x 4GB 204 pin SO-DIMM DDR3L	1 x 4GB 204 pin SO-DIMM DDR3L
Wireless	Wi-Fi 802.11 a/b/g/n/ac	Wi-Fi 802.11 a/b/g/n/ac	Wi-Fi 802.11 a/b/g/n/ac
Storage	32GB eMMC/ M.2 3042 SSD	32GB eMMC/ M.2 3042 SSD	32GB eMMC/ M.2 3042 SSD
External I/O Connector	1 x 10/100/1000 RJ45 Powered LAN 1 x DC Jack 1 x Headphone Jack 1 x HDMI 1.4 Out 1 x Reset 2 x USB 3.0 Type A	1 x 10/100/1000 RJ45 Powered LAN 1 x DC Jack 1 x Headphone Jack 1 x HDMI 1.4 Out 1 x Reset 2 x USB 3.0 Type A	1 x 10/100/1000 RJ45 Powered LAN 1 x DC Jack 1 x Headphone Jack 1 x HDMI 1.4 Out 1 x Reset 2 x USB 3.0 Type A
Internal I/O Connector	1 x A-MIC 1 x DC Input 1 x DIO 1 x M.2 3042 B-Key 1 x Micro USB 1 x MIPI DSI 1 x RS-232/422/485 Debug 1 x SD Card Slot 1 x Speaker 1 x Touch Button	1 x A-MIC 1 x DC Input 1 x DIO 1 x M.2 3042 B-Key 1 x Micro USB 1 x MIPI DSI 1 x RS-232/422/485 Debug 1 x SD Card Slot 1 x Speaker 1 x Touch Button	1 x A-MIC 1 x DC Input 1 x DIO 1 x M.2 3042 B-Key 1 x Micro USB 1 x MIPI DSI 1 x RS-232/422/485 Debug 1 x SD Card Slot 1 x Speaker 1 x Touch Button
Power Requirement	DC 12V~24V	DC 12V~24V	DC 12V~24V
Power Type	AT	AT	AT
Operating Temp.	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temp.	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing
OS Information	Windows 10 IoT, Ubuntu 20.04	Windows 10 IoT, Ubuntu 20.04	Windows 10 IoT, Ubuntu 20.04
Dimension	254 x 178 x 41.6 mm	384 x 254 x 47.5 mm	515 x 322 x 53.7 mm
Weight	1.28 kg	2.2 kg	4.3 kg
Certification	CE, FCC Class A	CE, FCC Class A	CE, FCC Class A

Open Frame Tablet

» General Purpose



Model Number	OFT-07WR3	OFT-10WR3	OFT-15WR3
LCD Size	7"	10.1"	15"
Resolution	800 x 400	800 x 1280	1024 x 768
Luminance	500 cd/m ²	350 cd/m ²	500 cd/m ²
Viewing Angle	89 (U), 89 (D), 89 (L), 89 (R)	85 (U), 85 (D), 85 (L), 85 (R)	88 (U), 88 (D), 88 (L), 88 (R)
Touch Type	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points
Processor	Rockchip RK3568J Quad-core Cortex-A55 1.4/ 1.8GHz	Rockchip RK3568J Quad-core Cortex-A55 1.4/ 1.8GHz	Rockchip RK3568J Quad-core Cortex-A55 1.4/ 1.8GHz
System Memory	4GB LPDDR4 on board	4GB LPDDR4 on board	4GB LPDDR4 on board
Wireless	Wi-Fi 802.11 a/b/g/n/ac	Wi-Fi 802.11 a/b/g/n/ac	Wi-Fi 802.11 a/b/g/n/ac
Storage	64GB eMMC on board	64GB eMMC on board	64GB eMMC on board
External I/O Connector	2 x 10/100/1000 RJ45 LAN 1 x DC Jack 1 x HDMI 2.0 Out 1 x Reset 1 x RS-232/422/485 DB9 2 x USB 3.0 Type A	2 x 10/100/1000 RJ45 LAN 1 x DC Jack 1 x HDMI 2.0 Out 1 x Reset 1 x RS-232/422/485 DB9 2 x USB 3.0 Type A	2 x 10/100/1000 RJ45 LAN 1 x DC Jack 1 x HDMI 2.0 Out 1 x Reset 1 x RS-232/422/485 DB9 2 x USB 3.0 Type A
Internal I/O Connector	1 x Backlight 2 x CAN 1 x DC Input 1 x 16-bit GPIO 1 x I ² C 1 x M.2 3042 B-Key 2 x RS-232 1 x RS-485 1 x RTC Battery 1 x SIM Card Slot 1 x Speaker 1 x Touch Button 2 x USB 2.0	1 x Backlight 2 x CAN 1 x DC Input 1 x 16-bit GPIO 1 x I ² C 1 x M.2 3042 B-Key 2 x RS-232 1 x RS-485 1 x RTC Battery 1 x SIM Card Slot 1 x Speaker 1 x Touch Button 2 x USB 2.0	1 x Backlight 2 x CAN 1 x DC Input 1 x 16-bit GPIO 1 x I ² C 1 x M.2 3042 B-Key 2 x RS-232 1 x RS-485 1 x RTC Battery 1 x SIM Card Slot 1 x Speaker 1 x Touch Button 2 x USB 2.0
Power Requirement	DC 12V ~ 24V	DC 12V ~ 24V	DC 12V ~ 24V
Power Type	AT	AT	AT
Operating Temperature	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)
Storage Temperature	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing
OS Information	Android 13, Debain 11	Android 13, Debain 11	Android 13, Debain 11
Dimension	170 x 110 x 6 mm	143 x 228.6 x 2.5 mm	326.5 x 253.5 x 9.1 mm
Weight	0.69 kg	1.05 kg	2.3 kg
Certification	CE, FCC Class A	CE, FCC Class A	CE, FCC Class A

Open Frame Tablet

» General Purpose



	OFT-07WAD	OFT-10WAD
LCD Size	7"	10.1"
Resolution	800 x 1280	800 x 1280
Luminance	350 cd/m ²	350 cd/m ²
Viewing Angle	1750 (H), 1750 (V)	1750 (H), 1750 (V)
Touch Type	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points
Processor	Intel® IOTG Alder Lake-N Processor 6W N50	Intel® IOTG Alder Lake-N Processor 6W N50
System Memory	8GB LPDDR5 on board 16GB (Optional)	8GB LPDDR5 on board 16GB (Optional)
Wireless	Wi-Fi 802.11 a/b/g/n/ac/ax	Wi-Fi 802.11 a/b/g/n/ac/ax
Storage	64GB eMMC 32/ 128GB (Optional)	64GB eMMC 32/ 128GB (Optional)
External I/O Connector	2 x 10/100/1000 RJ45 LAN 1 x Audio Jack TRS 1 x DC Jack 1 x HDMI 2.0 Out 1 x Reset 2 x USB 3.0 Type A	2 x 10/100/1000 RJ45 LAN 1 x Audio Jack TRS 1 x DC Jack 1 x HDMI 2.0 Out 1 x Reset 2 x USB 3.0 Type A
Internal I/O Connector	1 x A-MIC 2 x GPIO 1 x I ² C 1 x M.2 2230 E-Key 1 x Micro SD slot 1 x MIPI DSI 1 x RS-232 1 x RS-485 1 x RTC Battery 1 x Speaker 2 x Touch Button 1 x USB 2.0 2 x USB 2.0 + DMIC	1 x A-MIC 2 x GPIO 1 x I ² C 1 x M.2 2230 E-Key 1 x Micro SD Slot 1 x MIPI DSI 1 x RS-232 1 x RS-485 1 x RTC Battery 1 x Speaker 2 x Touch Button 1 x USB 2.0 2 x USB 2.0 + DMIC
Power Requirement	DC 12V ~ 24V	DC 12V ~ 24V
Power Type	AT	AT
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing
OS Information	Windows 10 IoT, Windows 11 IoT (w/ TPM) Linux Ubuntu 24.04	Windows 10 IoT, Windows 11 IoT (w/ TPM) Linux Ubuntu 24.04
Dimension	183.1 x 115.9 x 24.3 mm	252 x 166 x 38 mm
Weight	0.4 kg	0.64 kg
Certification	CE, FCC Class A	CE, FCC Class A

» Open Frame Tablet for Fitness



	OFR-15WMX	OFR-21WMX
LCD Size	15.6"	21.5"
Resolution	1920 x 1080	1920 x 1080
Luminance	350 cd/m ²	500 cd/m ²
Viewing Angle	85 (U), 85 (D), 85 (L), 85 (R)	85 (U), 85 (D), 85 (L), 85 (R)
Touch Type	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points
Processor	Onboard MT8365 CPU, Quad-core ARM 2.0GHz Cortex-A53 MP Core, ARM Mali G52 GPU	Onboard MT8365 CPU, Quad-core ARM 2.0GHz Cortex-A53 MP Core, ARM Mali G52 GPU
System Memory	4GB DDR3L RAM on board	4GB DDR3L RAM on board
Wireless	Option by M.2 Wi-Fi/BT Module	Option by M.2 Wi-Fi/BT Module
Storage	32G eMMC on board	32G eMMC on board
External I/O Connector	1 x Audio Amplifier 1 x DC Jack/ 12V/ 60W 1 x LAN (10M/100M) RJ45 1 x HDMI (AUX-088 HDMI 2.0 Connector 3 in/ 1 out) 1 x Line-out	1 x Audio Amplifier 1 x DC Jack/ 12V/ 60W 1 x LAN (10M/100M) RJ45 1 x HDMI (AUX-088 HDMI 2.0 Connector 3 in/ 1 out) 1 x Line-out
Internal I/O Connector	1 x RS232 1 x RS232/RS485 4 x USB 2.0 1 x Support 5W/ 8ohm Stereo Speaker Support AUX-088 board for Peripheral Connection for Open Frame Fitness (ACP-I350 & AUX-088 Connected to JMCU1 (UART Signal)) 1 x Support TV Tuner/ 1 x HR Board/ 1 x NFC/ 1 x Sensor Modules/ 1 x Fan 1 x Support Motor & Resistance Controller 1 x M.2 Wi-Fi/ BlueTooth Module (By Optional)	1 x RS232 1 x RS232/RS485 4 x USB 2.0 1 x Support 5W/ 8ohm Stereo Speaker Support AUX-088 board for Peripheral Connection for Open Frame Fitness (ACP-I350 & AUX-088 Connected to JMCU1 (UART Signal)) 1 x Support TV Tuner/ 1 x HR Board/ 1 x NFC/ 1 x Sensor Modules/ 1 x Fan 1 x Support Motor & Resistance Controller 1 x M.2 Wi-Fi/ BlueTooth Module (By Optional)
Power Requirement	DC 12V	DC 12V
Power Type	AT	AT
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing
OS Information	Android 10 (Develop) Yocto Supports	Android 10 (Develop) Yocto Supports
Dimension	408.2 x 241.5 x 18 mm	515 x 322.2 x 26 mm
Weight	2.3 kg	5.1 kg
Certification	CE, FCC Class A	CE, FCC Class A

Industrial Display

» Open Frame Display



Model Number	OFM-15W00	OFM-21W00
LCD Size	15.6", 16:9	21.5", 16:9
Display Type	Full HD	Full HD
Resolution	1920 x 1080	1920 x 1080
Pixel Pitch	0.17925 (H) x 0.17925 (V)	0.24795 (H) x 0.24795 (V)
Luminance	220 cd/m ²	250 cd/m ²
Contrast Ratio	800	2000
Viewing Angle	85 (U), 85 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	30 ms	35 ms
Backlight	LED	LED
Touch Type	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points
Touch Light Transmission	89 %	89 %
Touch Controller	USB Type (EETI)	USB Type (EETI)
Input Connector	HDMI, Display Port, VGA, USB Type B for Touch Function, OSD Keys	HDMI, Display Port, VGA, USB Type B for Touch Function, OSD Keys
Power Connector	DC Jack (Option for Phoenix Connector)	DC Jack (Option for Phoenix Connector)
Power Type	+12V DC in (Option for 9V ~ 36V DC in)	+12V DC in (Option for 9V ~ 36V DC in)
Adapter	By Option	By Option
Construction (Front, Rear)	Metal	Metal
Option Features	Support WiFi6 Media Server Function Bi-direction Image Transfer and USB Signal Available Panel Mount Kits, Wall Mount Kits by Option	Support WiFi6 Media Server Function Bi-direction Image Transfer and USB Signal Available Panel Mount Kits, Wall Mount Kits by Option
Dimension	387 x 235 x 46 mm	501.9 x 294.2 x 53.4 mm
Weight	2.5 kg	4.1 kg
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)

» Rugged Industrial Display



Model Number	ARC-10W00	ARC-1200
LCD Size	10.1"	12.1"
Display Type	WXGA	XGA
Resolution	1280 x 800	1024 x 768
Pixel Pitch	0.1695 x 0.1695 mm	0.240 x 0.240 mm
Luminance	350 cd/m ²	600 cd/m ²
Contrast Ratio	800	1000
Viewing Angle	85 (U), 85 (D), 85 (L), 85 (R)	88 (U), 88 (D), 88 (L), 88 (R)
Response Time	25 ms	11 ms
Backlight	LED	LED
Touch Type	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points
Touch Light Transmission	88%	88%
Touch Controller	USB Type	USB Type
Input Connector	HDMI, Display Port, VGA, USB Type B for Touch Function, OSD Keys, Line in	HDMI, Display Port, VGA, USB Type B for Touch Function, OSD Keys, Line in
Power Connector	DC Jack (Option for Phoenix Connector)	DC Jack (Option for Phoenix Connector)
Power Type	+12V DC in (Option for 9V ~ 36V DC in)	+12V DC in (Option for 9V ~ 36V DC in)
Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)
Construction (Front, Rear)	Full Flat Die Casting with Cover Lens/ Metal Default with Panel Mount Kits	Full Flat Die Casting with Cover Lens/ Metal Default with Panel Mount Kits
Option Features	Support WiFi6 Media Server Function Bi-direction Image Transfer and USB Signal	Support WiFi6 Media Server Function Bi-direction Image Transfer and USB Signal
Dimension	282.36 x 201 x 61.4 mm	293.77 x 226.31 x 61.5 mm
Weight	2 kg	2.5 kg
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F) Option -20°C ~ 70°C
Storage Temperature	-20°C ~ 60°C (-4°F~140°F)	-20°C ~ 60°C (-4°F~140°F) Option -30°C ~ 70°C

Industrial Display

» Rugged Industrial Display



Model Number	ARC-1500	ARC-15W00	ARC-1700	ARC-18W00	ARC-21W00
LCD Size	15"	15.6"	17"	18.5"	21.5"
Display Type	XGA	WXGA	SXGA	WXGA	FHD
Resolution	1024 x 768	1366 x 768 (Optional for 1920 x 1080)	1280 x 1024	1366 x 768 (Optional for 1920 x 1080)	1920 x 1080
Pixel Pitch	0.297 x 0.297 mm	0.252 x 0.252 mm	0.264 x 0.264 mm	0.1 x 0.3 mm	0.24795 x 0.24795
Luminance	300 cd/m ²	300 cd/m ²	350 cd/m ²	500 cd/m ²	250 cd/m ²
Contrast Ratio	2000	500	800	1000	3000
Viewing Angle	88 (U), 88 (D), 88 (L), 88 (R)	80 (U), 80 (D), 80 (L), 80 (R)	60 (U), 88 (D), 88 (L), 88 (R)	89 (U), 89 (D), 89 (L), 89 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	16 ms	8 ms	30 ms	25 ms	25 ms
Backlight	LED	LED	LED	LED	LED
Touch Type	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points	PCAP Multi-touch up to 10 Points
Touch Light Transmission	88%	88%	88%	88%	88%
Touch Controller	USB Type	USB Type	USB Type	USB Type	USB Type
Input Connector	HDMI, Display Port, VGA, USB Type B for Touch Function, OSD Keys, Line in	HDMI, Display Port, VGA, USB Type B for Touch Function, OSD Keys, Line in	HDMI, Display Port, VGA, USB Type B for Touch Function, OSD Keys, Line in	HDMI, Display Port, VGA, USB Type B for Touch Function, OSD Keys, Line in	HDMI, Display Port, VGA, USB Type B for Touch Function, OSD Keys, Line in
Power Connector	DC Jack (Option for Phoenix Connector)	DC Jack (Option for Phoenix Connector)	DC Jack (Option for Phoenix Connector)	DC Jack (Option for Phoenix Connector)	DC Jack (Option for Phoenix Connector)
Power Type	+12V DC in (Option for 9V ~ 36V DC in)	+12V DC in (Option for 9V ~ 36V DC in)	+12V DC in (Option for 9V ~ 36V DC in)	+12V DC in (Option for 9V ~ 36V DC in)	+12V DC in (Option for 9V ~ 36V DC in)
Adapter	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz/ Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz/ Output: 60W Adapter (12V @ 5A Adapter)	Input: 100 ~ 240Vac/ 50 ~ 60Hz/ Output: 60W Adapter (12V @ 5A Adapter)
Construction (Front, Rear)	Full Flat Die Casting with Cover Lens/ Metal Default with Panel mount kits	Full Flat Die Casting with Cover Lens/ Metal Default with Panel Mount Kits	Full Flat Die Casting with Cover Lens/ Metal Default with Panel Mount Kits	Full Flat Die Casting with Cover Lens/ Metal Default with Panel Mount Kits	Full Flat Die Casting with Cover Lens/ Metal Default with Panel Mount Kits
Option Features	Support WiFi6 Media Server Function Bi-direction Image Transfer and USB Signal	Support WiFi6 Media Server Function Bi-direction Image Transfer and USB Signal	Support WiFi6 Media Server Function Bi-direction Image Transfer and USB Signal	Support WiFi6 Media Server Function Bi-direction Image Transfer and USB Signal	Support WiFi6 Media Server Function Bi-direction Image Transfer and USB Signal
Dimension	350.5 x 274.5 x 63.5 mm	391.21 x 239.21 x 68 mm	392.72 x 325.32 x 70.25 mm	460.40 x 285.60 x 66 mm	538.05 x 341.05 x 71 mm
Weight	3.7 kg	3.2 kg	4.6 kg	5.1 kg	5.9 kg
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F) Option -20°C ~ 70°C	-10°C ~ 50°C (14°F ~ 122°F) Option -10°C ~ 60°C	-10°C ~ 50°C (14°F ~ 122°F) Option -20°C ~ 70°C	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)
Storage Temperature	-20°C ~ 60°C (-4°F~140°F) Option -30°C ~ 70°C	-20°C ~ 60°C (-4°F~140°F) Option -30°C ~ 70°C	-20°C ~ 60°C (-4°F~140°F), Option -30°C ~ 70°C	-20°C ~ 60°C (-4°F~140°F)	-20°C ~ 60°C (-4°F~140°F)

Panel Kits



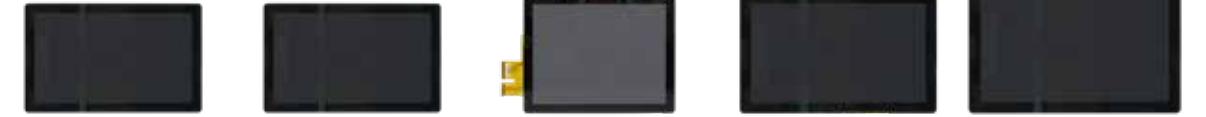
Model Number	PCC-LPC-AB08-R	PCC-FPC-AB08-R	PCC-FPC-AB10-R	PCC-ARC-AB12-R
LCD Size	8", 4:3	8", 16:9	10.1", 16:9	12.1", 4:3
Display Type	SVGA	WVGA	WSVGA	XGA
LED Driving Board	Panel Built-in	External Board	Panel Built-in	Panel Built-in
Resolution	800 x 600	1024 x 600	1024 x 600	1024 x 768
Pixel Pitch	0.0675 mm (H) x 0.2025 mm (V)	0.1725 mm (W) x 0.1656 mm (H)	0.2175 mm (W) x 0.2088 mm (H)	0.240 mm (H) x 0.240 mm (V)
Luminance	500	500	350	600
Contract Ratio	500	700	500	1000
Viewing Angle	50 (U), 70 (D), 70 (L), 70 (R)	70 (U), 75 (D), 75 (L), 75 (R)	70 (U), 70 (D), 70 (L), 70 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	25 ms	20 ms	16 ms	11 ms
Touch light Transmission	80%	80%	80%	80%
Touch Controller	EETI	EETI	EETI	EETI
Touch Type	5W	5W	5W	5W
Interface	LVDS	LVDS	LVDS	LVDS
Operating Temperature	-10°C ~ 70°C	-10°C ~ 70°C	0°C ~ 50°C	-10°C ~ 70°C



Model Number	PCC-PPC-AB15-R	PCC-SPC-AB17-R	PCC-PPC-AB21-R
LCD Size	15", 4:3	17", 4:3	21.5", 16:9
Display Type	XGA	SXGA	FHD
LED Driving Board	Panel Built-in	Panel Built-in	External Board
Resolution	1024 x 768	1280 x 1024	1920 x 1080
Pixel Pitch	0.297 mm (H) x 0.297 mm (V)	0.264 mm (H) x 0.264 mm (V)	0.248 mm (H) x 0.248 mm (V)
Luminance	300	350	250
Contract Ratio	2000	800	3000
Viewing Angle	88 (U), 88 (D), 88 (L), 88 (R)	80 (U), 80 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	16 ms	30 ms	18 ms
Touch light Transmission	80%	80%	80%
Touch Controller	EETI	EETI	EETI
Touch Type	5W	5W	5W
Interface	LVDS	LVDS	LVDS
Operating Temperature	-10°C ~ 70°C	-10°C ~ 70°C	0°C ~ 50°C



Model Number	PCC-OFP-AB07-C	PCC-ARC-AB10-C	PCC-ARC-AB12-C	PCC-ARC-AB15-C
LCD Size	7", 16:10	10.1" 16:10	12.1", 4:3	15", 4:3
Display Type	WXGA	WXGA	XGA	XGA
LED Driving Board	Panel Built-in	Panel Built-in	Panel Built-in	Panel Built-in
Resolution	1280 x 800	1280 x 800	1024 x 768	1024 x 768
Pixel Pitch	0.03925 (H) x 0.11775 (V)	0.1695 mm (H) x 0.1695 mm (V)	0.240 mm (H) x 0.240 mm (V)	0.297 mm (H) x 0.297 mm (V)
Luminance	300	350	600	300
Contract Ratio	900	800	1000	2000
Viewing Angle	89 (U), 89 (D), 89 (L), 89 (R)	85 (U), 85 (D), 85 (L), 85 (R)	89 (U), 89 (D), 89 (L), 89 (R)	88 (U), 88 (D), 88 (L), 88 (R)
Response Time	30 ms	25 ms	11 ms	16 ms
Touch light Transmission	89%	88%	89%	89%
Touch Controller	EETI	EETI	EETI	ILITEK
Touch Type	PCAP	PCAP	PCAP	PCAP
Interface	LVDS	LVDS	LVDS	LVDS
Operating Temperature	-20°C ~ 70°C	-10°C ~ 50°C	-20°C ~ 70°C	-10°C ~ 70°C



Model Number	PCC-ARC-AB15-C	PCC-ARC-AB15-C	PCC-ARC-AB17-C	PCC-ARC-AB21-C	PCC-APC-AB23-C
LCD Size	15.6", 16:9	15.6", 16:9	17", 4:3	21.5", 16:9	23.8", 16:9
Display Type	WXGA	FHD	SXGA	FHD	FHD
LED Driving Board	Panel Built-in	Panel Built-in	Panel Built-in	External Board	External Board
Resolution	1366 x 768	1920 x 1080	1280 x 1024	1920 x 1080	1920 x 1080
Pixel Pitch	0.252 mm (H) x 0.252 mm (V)	0.17925 (H) x 0.17925 (V)	0.264 mm (H) x 0.264 mm (V)	0.24795 mm (H) x 0.24795 mm (V)	0.2745 mm (H) x 0.2745 mm (V)
Luminance	300	450	350	250	250
Contract Ratio	500	800	800	3000	1000
Viewing Angle	80 (U), 80 (D), 80 (L), 80 (R)	85 (U), 85 (D), 85 (L), 85 (R)	60 (U), 80 (D), 80 (L), 80 (R)	89 (U), 89 (D), 89 (L), 89 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	8 ms	13 ms	30 ms	20 ms	16 ms
Touch light Transmission	89%	85%	89%	89%	85%
Touch Controller	WEIDA	WEIDA	EETI	EETI	EETI
Touch Type	PCAP	PCAP	PCAP	PCAP	PCAP
Interface	LVDS	LVDS	LVDS	LVDS	LVDS
Operating Temperature	0°C ~ 60°C	-20°C ~ 70°C	-20°C ~ 70°C	0°C ~ 50°C	0°C ~ 50°C

Intelligent Healthcare



Medical Tablet



CAXAO-DC CAXAO Desktop Cradle

- Desktop Cradle for CAXAO
- +19V DC input
- Support 3 x USB2.0/ 1 x 10/100 LAN
- 180 x 198.2 x 129.2 mm
- 1.05 Kg



CAXAO-WM CAXAO Wall Mount kit

- Wall Mount kit for CAXAO
- +19V DC input
- Support 3 x USB2.0/ 1 x 10/100 LAN
- VESA mount compliant (75 x 75 mm)
- 143.6 x 218.8 x 48.6 mm
- 0.58 kg



CAXAO-CS CAXAO Battery Charging Station

- Battery Charging Station for CAXAO
- +19V DC input
- Support 3 Batteries charging
- 159 x 105 x 57.9 mm
- 0.62 Kg



CAXAO-SS CAXAO Shoulder Strap

- Shoulder Strap for CAXAO
- Adjustable shoulder strap with 130cm drop



CAXAO-HS CAXAO Hand Strap

- Hand Strap for CAXAO

Model Number	CAXAO
Processor	Intel® Celeron® N3350 1.1GHz Processor
System Memory	Onboard 4GB LPDDR4
Storage	64GB M.2 Solid State Drive (Option up to 128GB)
Operating System	Windows 10/ Android 8.1
LCD Size	10.1", WXGA
Resolution	1280 x 800
Luminance	300 cd/m ²
Touch Screen	10 Points Projective Capacitive
Wireless LAN	802.11 a/b/g/n/ac
Bluetooth	Bluetooth 5.0
Camera	2MP Front Camera 8MP Rear Camera With Auto Focus
NFC	ISO/ IEC 14443 A/B, 15693/ 18092, NFCIP-1, NFCIP-2 Support MIFARE and Felica
Barcode Scanner	1D/2D Barcode Scanner (Optional)
Downside I/O Connectors	1 x Audio Jack 2 x USB 2.0 Type A 1 x Micro SD 1 x DC Jack 1 x HDMI Output
Control Button	1 x Power Button 1 x Barcode Scanner Trigger
LED Indicator	1 x Power
Power Requirement	DC Jack +19V
Battery	28.44W Li-Polymer Battery
Battery Operating Time	6 Hours
Construction	Rubber + Plastic
Dimensions	281 x 193.3 x 19.95 mm
Weight	1 kg
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)
IP Rating	IP65
Certifications	CE, FCC, VCCI, CCC, BSMI, EN60601-1, EN60601-1-2



Medical Tablet

The Medical Tablets are designed to enable mobility and flexibility for point-of-care data acquisition and management. Digitization helps to improve efficiency and mobility in healthcare, it delivers a secured and eco-friendly experience with stylish design.

Medical Panel PC

Experience the pinnacle of medical computing with our Intel Processor Medical Panel PCs. Engineered for healthcare, our Medical Panel PCs boast advanced features, including front IP65 medical displays, ensuring optimal performance and reliability.

Medical Display

With brightness stabilization, exceptional image quality, high resolution, and advanced remote control technology, the Medical Monitor Display ensures precise and reliable medical imaging.



Medical Box PC

Avalue GPU Expansion System are available for high-speed computing applications such as smart medical, manufacturing, and transportation.



Video Manager

The device is designed to integrate with various medical equipment for real-time video recording during operations or diagnoses. It provides high-quality video display and complies with medical standards.



Medical Battery

Medical Panel PC



Model Number	HID-2340	HID-2334	HID-2138
LCD Size	23.8"	23.8"	21.5"
Display Type	Full HD	Full HD	Full HD
Resolution	1920 x 1080	1920 x 1080	1920 x 1080
Pixel Pitch	0.274 x 0.274	0.274 x 0.274	0.248 x 0.248
Luminance	250 cd/m ²	250 cd/m ²	250 cd/m ²
Contrast Ratio	3000	3000	1000
Viewing Angle	89 (U), 89 (D), 89 (L), 89 (R)	89 (U), 89 (D), 89 (L), 89 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	16 ms	16 ms	22 ms
Backlight	LED	LED	LED
Touch Type	Projective Capacitive	Projective Capacitive	Projective Capacitive
Touch Light Transmission	86%	86%	89%
Touch Controller	USB Interface, EETI	USB Interface, EETI	USB Interface, EETI
SBC	HID ADLPS Motherboard	HID-2334 M/B + Charger Board	HID TGLP Motherboard
Processor	Socketed FCLGA1700 Intel® 12th/13th Gen Core™ i7/i5/i3 Processor	7th Generation Intel® Kaby Lake Core™ i7/i5/i3/ Celeron® Processor	11th Gen Intel® Core™ i7/i5/i3/Celeron Processor
I/O Chipset	EC ITE IT5782VG	EC ITE IT8518E	EC ITE IT8528E
System Memory	1 x 262-pin DDR5 4800MHz SO-DIMM Socket up to 32GB Max (Min 8GB)	2 x 260pin SODIMM Socket up to 32GB DDR4 2400 SDRAM	2 x 260-pin DDR4 3200 MHz SO-DIMM socket up to 64GB Max
Expansion	Optional M.2 Key B 3042/3052/2280 x 1 Optional M.2 Key E for WIFI x 1 Optional IET Expansion x 1	1 x M.2 (Key E, 2230) with PCIe x1 CNVI and USB2.0 for Wireless 1 x mini PCIe with SATA or PCIe x1, mSATA	Optional PCIe Low Profile Card x 1 Optional M.2 Storage x 1 Optional M.2 5G Module x 1
Storage	1 x M.2 Key M Storage (Optional) 1 x 2.5" SSD (Optional)	1 x 2.5" SATA3 SSD (Optional)	1 x M.2 Key-B 2242/3042/2260 for Storage
USB	1 x USB 2.0, 3 x USB 3.0 1 x USB Type C, 1 x USB 1.1 (Isolated 5KV)	4 x USB 3.0	2 x USB 2.0 2 x USB Type C
COM Port	1 x RS-232/422/485 1 x RS-232 (Isolated 5KV)	N/A	Optional
Other	Optional 5.0M AF Camera Optional Barcode Scanner Optional NFC Optional Capture Card, Optional WIFI/ BT Optional IET Board	Optional Hot Swappable Batteries and 4 Slot Charging Bay Optional 5.0M Auto Focus Camera with Cover Optional WIFI/ BT	Optional 5.0M AF Camera Optional Barcode Scanner Optional NFC Optional WIFI/ BT Optional Handset
Display Chipset	Intel® 12th Generation CPU Integrated	Intel® HD Graphics 620	Intel® 11th Generation CPU Integrated
Audio	Realtek ALC888S	Realtek ALC888S	Realtek ALC888S
Audio Interface	Line-out, Mic-in, 2 x 2W Speaker	Line-out, Mic-in, 2 x 2W Speaker	Line-out, Mic-in, 2 x 2W Speaker
Ethernet	1 x Intel® I225LM Gigabit Ethernet 1 x Intel® I226LM Gigabit Ethernet	1 x Intel® I210AT, 1 x Intel® I219LM	1 x Intel® I219LM Gigabit Ethernet PHY 1 x Intel® I226LM Gigabit Ethernet PHY
Adapter	AC/ DC Medical Power Adapter Output: 120W Adapter (24V/ 5A Adapter)	AC/ DC Medical Power Adapter Output: 120W Adapter (24V/ 5A Adapter)	AC/ DC Medical Power Adapter Output: 90W Adapter (19V/ 4.73A Adapter)
Construction (Front, Rear)	Plastic, Plastic	Plastic, Plastic	Plastic, Plastic
Dimension	592 x 382 x 49.5mm	380 x 587 x 45.5mm	539.6 x 342.6 x 45.4 mm
Weight	6.0 kg	6.9 kg (without Batteries)	4.8 kg
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-10°C ~ 60°C (14°F ~ 140°F)	-30°C ~ 70°C (-22°F ~ 158°F)	-10°C ~ 60°C (14°F ~ 140°F)
Certification	CE, FCC Class B, UL60601-1	CE, FCC Class B, UL60601-1 4th Edition	CE, FCC Class B, UL60601-1
OS Information	Windows 10 IoT, Linux	Win 10, Linux	Win 10, Linux

Medical Panel PC



	HID-2132	HID-1540	HID-1337
LCD Size	21.5"	15.6"	13.3"
Display Type	Full HD	Full HD	Full HD
Resolution	1920 x 1080	1920 x 1080	1920 x 1080
Pixel Pitch	0.248 x 0.248	0.179 x 0.179	0.153 x 0.153
Luminance	250 cd/m ²	500 cd/m ²	300 cd/m ²
Contrast Ratio	1000	1000	600
Viewing Angle	89 (U), 89 (D), 89 (L), 89 (R)	89 (U), 89 (D), 89 (L), 89 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	22 ms	25 ms	27 ms
Backlight	LED	LED	LED
Touch Type	Projective Capacitive	Projective Capacitive	Projective Capacitive
Touch Light Transmission	89%	89%	85%
Touch Controller	USB Interface, EETI	USB Interface, EETI	USB Interface, EETI
SBC	ARC-SKLU	HID ADLPS Motherboard	HID-1337 Motherboard
Processor	6th Gen Intel® Core™ i7/i5/3/ Celeron Processor	Socketed FCLGA1700 Intel® 12th/13th Gen Core™ i7/i5/i3 Processor	Intel® Alder Lake-N Processor
I/O Chipset	EC ITE IT8528E	EC ITE IT5782VG	EC ITE IT5782VG
System Memory	1 x 260pin SODIMM Socket up to 16GB DDR4 2133 SDRAM	1 x 262-pin DDR5 4800MHz SO-DIMM Socket up to 32GB Max (Min 8GB)	1 x 262-pin DDR5 4800MHz SO-DIMM Socket up to 16GB
Expansion	1 x Full Size (Support Half Size, Auto Switch for mSATA, USB, PCIe Signal) Optional IET Expansion x 1	Optional M.2 Key B 3042/3052/2280 x 1 Optional M.2 Key E for WIFI x 1	Optional M.2 (Key-B, 2242/3042/3052, SATA only) x 1 Optional M.2 (Key-E, 2230, PCIe x1, USB2.0) x 1
Storage	1 x 2.5" SATA3 SSD (Optional)	1 x M.2 Key M Storage (Optional)	1 x M.2 Key-B 2242/3042/3052 for M.2 SATAIII SSD (Optional)
USB	4 x USB 3.0, 2 x USB 2.0 by Pin Header 1 x USB 2.0 (Isolated 5KV)	1 x USB 2.0 3 x USB 3.0 1 x USB Type C	4 x USB 3.2 at Bottom 2 x USB 3.2 at Side 1 x USB Type C (PD Output 5V/3A 15W, USB, Display Function)
COM Port	1 x RS-232/422/485, 1 x RS-232 1 x RS-232 (Isolated 5KV)	1 x RS-232/422/485	1 x RS-232/422/485
Other	Optional 5.0M AF Camera Optional Barcode Scanner Optional WIFI/ BT Optional NFC Optional Handset	Default with Programable LED Light Bar Optional 5.0M AF Camera Optional NFC Optional WIFI/ BT	Default with Programable LED Light Bar Optional RFID Optional WIFI/ BT
Display Chipset	Intel® HD Graphics 520	Intel® 12th Generation CPU Integrated	Intel® 12th Generation CPU Integrated
Audio	Realtek ALC888S	Realtek ALC888S	Realtek ALC888S
Audio Interface	Line-out, Mic-in, 2 x 2W Speaker	Line-out, Mic-in, 2 x 5W Speaker	2 x 5W Speaker
Ethernet	1 x Intel® I219LM, 1 x Intel® I210AT 1 x Intel® I210AT (Isolated 5KV) on IET Module	1 x Intel® I225LM Gigabit Ethernet 1 x Intel® I226LM Gigabit Ethernet	2 x Intel® I226LM 2.5 Gigabit Ethernet
Adapter	AC/ DC Medical Power Adapter Output: 90W Adapter (19V/ 4.74A Adapter)	AC/ DC Medical Power Adapter Output: 120W Adapter (24V/5A Adapter)	AC/ DC Medical Power Adapter Output: 72W Adapter (24V/3A Adapter)
Construction (Front, Rear)	Plastic, Plastic	Plastic, Plastic	Plastic, Plastic
Dimension	539.6 x 342.6 x 45.2 mm	400 x 263 x 42.5 mm	198 x 325 x 38 mm
Weight	5.6 kg	2.3 kg	1.8 kg
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-10°C ~ 60°C (14°F ~ 140°F)	-10°C ~ 60°C (14°F ~ 140°F)
Certification	CE, FCC Class B, UL60601-1 4th Edition	CE, FCC Class B, UL60601-1	CE, FCC Class B, UL60601-1
OS Information	Win 7/ 10/ Linux	Win10 64bit, Linux	Win 10/11 Linux

Medical Display



Model Number	HID-2100	RCC-MM-GMD23G-01R	RCC-MM-GMD24G-01R
LCD Size	21.5"	23.8"	24"
Display Type	Full HD	Full HD	Full HD
Resolution	1920 x 1080	1920 x 1080	1920 x 1200
Pixel Pitch	0.248 x 0.248	0.2745 x 0.2745	0.270 x 0.270
Luminance	250 cd/m ²	AG Glass 230 nits AG PCAP 220 nits (Optional)	AR Glass 820 nits AG PCAP 800 nits (Optional)
Contrast Ratio	1000	3000	1000
Viewing Angle	89 (U), 89 (D), 89 (L), 89 (R)	89 (U), 89 (D), 89 (L), 89 (R)	89 (U), 89 (D), 89 (L), 89 (R)
Response Time	22 ms	16 ms	14 ms
Backlight	LED	LED	LED
Touch Type	Projective Capacitive	Projective Capacitive	Projective Capacitive
Touch Light Transmission	89%	89%	89%
USB	2 x USB 2.0 1 x USB Type B	N/A	N/A
Calibration Mode/ DICOM	N/A	Optional	Optional
Optional	N/A	AG PCAP Touch 0.5W Speaker x2 DICOM Calibration Mode	AG PCAP Touch 0.5W Speaker x2 DICOM Calibration Mode
Connector	HDMI Input DP Input VGA Input DC Output	VGA Input DVI Input HDMI Input Display Port Input	VGA Input DVI Input HDMI Input Display Port Input
Audio Interface	Line-out, Mic-in, 2 x 2W Speaker	0.5W Speaker x2 (Optional)	0.5W Speaker x2 (Optional)
Adapter	AC/ DC Power Adapter Output: 120W Adapter (24V/ 5A Adapter)	Adapter ATM065T-P240 Class 1 Adapter (65W, 24V)	AC/DC Adapter Input: 100-250Vac, 1A, 60/50Hz Output: 24V, 3.75A
Construction (Front, Rear)	Plastic, Plastic	Plastic, Plastic	Plastic, Plastic
IP Rating	IP65 at Front	IP65 at Front	IP65 at Front
Dimension	539.6 x 342.6 x 45.5 mm	587.0 x 367.5 x 59.5 mm	573.8 x 387.8 x 63.5 mm
Weight	5.3 kg	6.8 kg	7 kg
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Certification	CE, FCC Class B	CE (IEC/EN/BS EN60601-1, IEC/EN/BS EN60601-2) FCC Class B, VCCI, CCC cTUVus Certified (ANSI/AAMI ES60601-1, CSA C22.2 NO.60601-1) DIN6868-157 Compliant	CE (IEC/EN/BS EN60601-1, IEC/EN/BS EN60601-2) FCC Class B, VCCI cTUVus Certified (ANSI/AAMI ES60601-1, CSA C22.2 NO.60601-1) DIN6868-157 Compliant

Medical Display



RCC-MM-GMD27G-01R	RCC-MM-GMD27G-02R	RCC-MM-GMD32G-02R	RCC-MM-GMD55G-01R
27"	27"	32"	55"
Full HD	4K	4K	4K
1920 x 1080	3840 x 2160	3840 x 2160	3840 x 2160
0.3114 x 0.3114	0.15525 x 0.15525	0.1845 x 0.1845	0.315 x 0.315
AR Glass 930 nits AG PCAP 850 nits (Optional)	AR Glass 740 nits AG PCAP 710 nits (Optional)	AR Glass 780 nits AG PCAP 750 nits (Optional)	AG Glass 460 nits AG PCAP 440 nits (Optional)
1000	1000	1500	4000
89 (U), 89 (D), 89 (L), 89 (R)	89 (U), 89 (D), 89 (L), 89 (R)	89 (U), 89 (D), 89 (L), 89 (R)	89 (U), 89 (D), 89 (L), 89 (R)
14 ms	16 ms	20 ms	8.5 ms
LED	LED	LED	LED
Projective Capacitive	Projective Capacitive	Projective Capacitive	Projective Capacitive
89%	89%	89%	89%
N/A	N/A	N/A	1 x USB HUB
Optional	Default	Default	Optional
AG PCAP Touch 2W Speaker x2 DICOM Calibration Mode Backlight Stabilizer (ALS)	AG PCAP Touch 2W Speaker x2 SDI in/out or DVI in GPIO Remote Control	AG PCAP Touch 2W Speaker x2 GPIO Remote Control SDI in/out or DVI in	AG PCAP Touch Speaker ODM Evaluation Calibration Mode GPIO Remote Control Backlight Stabilizer (ALS)
VGA Input DVI Input HDMI Input Display Port Input	VGA Input DVI Input HDMI Input Display Port Input	VGA Input DVI Input HDMI Input Display Port Input	VGA Input DVI Input Display Port Input
2W Speaker x2 (Optional)	2W Speaker x2 (Optional)	2W Speaker x2 (Optional)	ODM Evaluation
AC/DC Adapter Input: 100-250Vac, 1A, 60/50Hz Output: 24V, 3.75A	Delta MDS-150AAS24 F class1 PSU (150W,24V)	AC/DC Adapter Input: 100-250 Vac, 60/50Hz Output: 24V, 6.25A	Delta MDS-400AUS24B PSU (400W,24V,NO FAN)
GM Metal, Plastic	GM Metal, GM Metal	GM Metal, GM Metal	GM Metal, GM Metal
IP65 at Front	IP65 at Front	IP65 at Front	IP65 at Front
660.2 x 408.8 x 65.8 mm	660.2 x 408.76 x 52.9 mm	761.2 x 465.6 x 61.5 mm	1314 x 785 x 85 mm
8 kg	7.5 kg	11 kg	39 kg
0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
CE (IEC/EN/BS EN60601-1, IEC/EN/BS EN60601-2) FCC Class B, VCCI cTUVus certified (ANSI/AAMI ES60601-1, CSA C22.2 NO.60601-1) DIN6868-157 Compliant	CE, FCC Class B, VCCI UL/cUL (ANSI/AAMI ES60601-1, CAN/CSA C22.2 NO.60601-1) DIN6868-157 Compliant	CE, FCC Class B UL/cUL (ANSI/AAMI ES60601-1, CAN/CSA C22.2 NO.60601-1) DIN6868-157 Compliant	CE, FCC Class B, VCCI cTUVus certified (ANSI/AAMI ES60601-1, CSA C22.2 NO.60601-1) DIN6868-157 Compliant

Medical Box PC



Model Name	MAB-T660	MAB-T600	MAB-T600-B1
Processor	12/13th Generation Intel® Core™ i9/i7/i5/i3 LGA1700 Processor	12/13th Generation Intel® Core™ i9/i7/i5/i3 LGA1700 Processor	12/13th Generation Intel® Core™ i9/i7/i5/i3 LGA1700 Processor
Motherboard	EMX-R680P	RX610H	RX680R
System Memory	2 x SODIMM Up to 64GB Dual Channel DDR5 4800MHz Non-ECC DRAM Support	2 x DIMM Slots Support Dual Channel DDR5 Memory Speed up to 4800/5600MHz (CPU Dependent) with UDIMM, up to 64GB	4 x DIMM Slots Support Dual Channel DDR5 Memory Speed up to 4400MHz with UDIMM, up to 128GB, with ECC Support
Expansion	1 x M.2 (2230) E-Key, Support Wi-Fi Module 1 x M.2 (2242/2280) M-Key 1 x PCI-e x 16 Gen 5 or 2 x PCI-e x 8 by Switch (from CPU)	1 x M.2 M-Key 2242/2280/22110 NVMe 1 x M.2 E-Key 2230 with CNVi Support 1 x Gen 5 PCIe x16 (x16 Physical Black) 1 x Gen 3 PCIe x1 (x4 Physical Open Ended) 2 x Gen 3 PCIe x1 (x16 Physical Yellow)	1 x M.2 M-Key 2242/2280/22110 NVMe 1 x M.2 M-Key 2242/2280/22110 NVMe 1 x M.2 E-Key 2230 with CNVi Support 1 x Gen 5 PCIe x16 2 x Gen 4 PCIe x4 (x16 Physical Yellow) 1 x Gen 3 PCIe x4 Open Ended
Storage	1 x 2.5" SATAIII HDD/SSD Drive	2 x 2.5" SATAIII HDD/SSD Drive (2 x 3.5" SATAIII HDD/SSD Drive as Option)	2 x 2.5" SATAIII HDD/SSD Drive (2 x 3.5" SATAIII HDD/SSD Drive as Option)
USB	2 x USB 2.0 (Front I/O) 4 x USB 3.2 Gen 2 4 x USB 3.2 Gen 1	2 x USB 2.0 (Front I/O) 2 x USB 2.0 Type A 4 x USB 3.2 Type A	2 x USB 2.0 (Front I/O) 6 x USB 3.2 Gen 2 x 1 Ports 1 x USB 3.2 Gen 2 x 2 Type-C
Other I/O	1 x HDMI 2 x DP 4 x RJ45	1 x HDMI 2 x DP 2 x RJ45	4 x DP 2 x RJ45
Audio	Realtek Audio Code 1 x Mic-in, 1 x Line-out	Realtek Audio Code 1 x Mic-in, 1 x Line-out	Realtek Audio Code 1 x Mic-in, 1 x Line-out
Operating Temperature	0 ~ 35°C (32°F ~ 95°F) w/ SSD, Ambient w/ 0.5m/s Air Flow	0 ~ 40°C (32°F ~ 104°F) w/ SSD, Ambient w/ 0.5m/s Air Flow	0 ~ 40°C (32°F ~ 104°F) w/ SSD, Ambient w/ 0.5m/s Air Flow
Power Supply	400W ATX Power Supply (Medical Grade)	500W ATX Power Supply (Medical Grade)	500W ATX Power Supply (Medical Grade)
Color	White	White	White
Dimension (W x D x H)	315 x 273 x 92 mm	330 x 344 x 160 mm	330 x 344 x 160 mm
Weight	4.8 kg	7 kg	7 kg
Certification	IT Grade CE, FCC Class A	Medical Grade CE, FCC Class B	Medical Grade CE, FCC Class B
Compatible Add-on Card List	NVIDIA RTX4000 SFF Ada NVIDIA RTX2000 Ada NVIDIA T1000 YUAN SC400N2-L HDMI 2CH 1080p YUAN SC400N4 HDMI 4CH 1080p YUAN SC710N2-L HDMI 2CH 4K YUAN SC410N4 HDMI 4CH 4K Intel 82574 1CH LAN Card Intel I350AM2 2CH LAN Card Intel I210 PoE Card PCIe WIFI 6/6E Module Kit/Set	NVIDIA RTX4000 Ada NVIDIA RTX4000 SFF Ada NVIDIA RTX2000 Ada NVIDIA T1000 YUAN SC400N2-L HDMI 2CH 1080p YUAN SC400N4 HDMI 4CH 1080p YUAN SC710N2-L HDMI 2CH 4K YUAN SC410N4 HDMI 4CH 4K Intel 82574 1CH LAN Card Intel I350AM2 2CH LAN Card Intel I210 PoE Card PCIe WIFI 6/6E Module Kit/Set PCIe 5G Module Set	NVIDIA RTX4000 Ada NVIDIA RTX4000 SFF Ada NVIDIA RTX2000 Ada NVIDIA T1000 YUAN SC400N2-L HDMI 2CH 1080p YUAN SC400N4 HDMI 4CH 1080p YUAN SC710N2-L HDMI 2CH 4K YUAN SC410N4 HDMI 4CH 4K Intel 82574 1CH LAN Card Intel I350AM2 2CH LAN Card Intel I210 PoE Card PCIe WIFI 6/6E Module Kit/Set PCIe 5G Module Set

Video Manager



Model Name	MED-VPR-8430
CPU Memory	Intel Elkhart Lake x6425E 2.0Ghz (Boost 3.0Ghz) DDR4-16GB Soldered on Board
Storage	2.5 Inch SATA SSD 1TB M.2 SATA SSD (Expandable)
Color	White
Dimension (W x D x H)	296 x 296 x 67 mm (Case Only) 318 x 316 x 67 mm (All Inclusive)
I/O	4 x 4K HDMI-IN, 2 x 4K HDMI-OUT 2 x RJ45, 1 x HDBaseT (100m Extension) 2 x RS-232 8 x GPIO 6 x USB Ports
System Cooling	Fanless
Platform	Intel x86 & NXP
System Cooling	Fanless
Software	Built-in Time Cabinet Software
Screen Layout	Multi-view layout
Button	System Power on/off
LED	Power LED
Power Supply	24V/4.17A DC
Operating Temp.	0°C ~ 40°C (32°F ~ 104°F)
Gross Weight	4.3 kg

Medical Battery System



Model Number	EPB-1001
SBC	EPB-1001 Battery Board
MCU	IT8911
Charger IC	LTC1760
Power IC	LTC3789 for Vout1
DC Input	24Vdc/ 5A
Charge Current	4A Max. for 2 Batteries
Charge Voltage	16.8 V
Output Current Per Battery	6.8 A
Output Voltage Per Battery	14.4 V
Output Power	12V/ 19V DC-out 80W
USB Port	Type A
Indicator Light	Power/ Battery1/ Battery 2
Power Connector	DC Jack with Lock
Power Type	DC in
Color	Black/ White
Dimension	235 x 182 x 43 mm
Weight	1.2 kg
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-40°C ~ 75°C (-40 ~ 167°F) (Without Battery Pack)
Certification	CE/ FCC ANSI/ AAMI ES 60601 CAN/ CSA C22.2 No. 60601-1



Digital Paper

- Communication Board**
- Built-in Touch Screen
 - Low Power Consumption
 - High Performance i.MX 7 Dual Processor
 - No Power Needed to Maintain Display Image

- Digital Signage**
- True Flat Front Panel
 - Outdoor/ Indoor Application
 - Front Cover Class
 - Optional Open Frame

- Optional PCAP Touch
- Optional Front Light Module
- LAN/ Wi-Fi/ LTE Support
- Windows/ Android Support

- E Note**
- Extremely Thin and Light
 - High-contrast Display
 - Up to Three Weeks Use on a Single Charge
 - Convenient Tool for Writing, Highlighting, Erasing
 - Familiar A4 Size



E Note

Avalue's eNote, equipped with a stylus for document digitization, boasts long battery life and portability. It offers a paper-like screen and a smooth writing experience.



Public Display Solution

Avalue's E-ink Public Display Solution for hospitals ensures low-power, remote updates, streamlining communication with eco-friendly efficiency.



Outdoor Display Solution

Empower communication with dynamic, energy-saving messaging. Enhance content delivery, target specific information, and foster awareness for community engagement.

E Note



Model Number	ENT-13T1	ENT-10T1
LCD Size	13.3"	10.3"
Resolution	H: 1650 x V: 2200	H: 1404 x V: 1872
Viewing Angle	180 (U), 180 (D), 180 (L), 180 (R)	180 (U), 180 (D), 180 (L), 180 (R)
Touch Type	Projective Capacitive	Projective Capacitive
Processor	881AP140A0-BTY2C012TT404 (Cortex-A53 1.2GHz x 4 Core)	Rockchip RK3566 Quad-core Cortex-A55 @ 1.8GHz
System Memory	2GB DDR3L	2GB LPDDR4
Wireless	Wi-Fi/ Bluetooth Module	2.4G/ 5G Wi-Fi Bluetooth4.2
Storage	16GB eMMC NAND Flash Memory Approx. 10.86GB Free Storage	64GB EMMC
External I/O Connector	1 x USB	1 x USB-C Port
Power Requirement	Lithium-Ion Polymer Battery (2000mAh)	3000mAh Li-ion Battery
Power Type	ATX	ATX
Operating Temperature	5°C ~ 35°C (41°F ~ 95°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	0°C ~ 40°C (32°F ~ 104°F)	-20°C ~ 50°C
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing
Software Support	Android 5.1	Android 11
Dimension	302.6 x 224 x 5.7 mm	230.6 x 183 x 5.3mm,
Weight	0.352 kg	390g
Certification	FCC, VCCI	CE, FCC Class B, VCCI, TELEC

Public Display Solution



Model Number	EPD-42T	EPD-4200	EPD-3133
LCD Size	42"	42"	31.2"
Resolution	H: 2160 x V: 2880	H: 2160 x V: 2880	H: 2560 x V: 1440
Viewing Angle	180 (U), 180 (D), 180 (L), 180 (R)	180 (U), 180 (D), 180 (L), 180 (R)	180 (U), 180 (D), 180 (L), 180 (R)
Touch Type	Projective Capacitive	Cover Lens Only	Projective Capacitive
Processor	NXP i.MX 7 Dual Processor/ Dual Arm® Cortex®-A7 Cores and Cortex-M4	N/A	Onboard Intel® Celeron® SoC BGA Processor N3350 (Apollo Lake Platform)
System Memory	On-Board 2GB DDR3L	N/A	1 x 204-Pin DDR3L 1866MTs SO-DIMM Up to 8GB
Wireless	M.2 Wi-Fi/ Bluetooth Module (Optional)	N/A	mPCIe Wi-Fi/ Bluetooth Module (Optional)
Storage	On-Board 8GB eMMC	N/A	2.5" SATA3 SSD 64GB
External I/O Connector	2 x USB 2.0 (Edge I/O) 1 x Micro USB for USB OTG 1 x RJ-45 Connector for Gigabit Ethernet	1 x USB 1.1	4 x USB 3.1 (Gen1 5Gbps) 1 x DB-9 Male Connector for COM1 2 x RJ45 LAN Port 2 x HDMI (1.4b): Max. Resolution 3840 x 2160 @ 30Hz
Power Requirement	DC +12V	DC +12V	DC +19V
Power Type	AT	N/A	AT/ ATX
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)
Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 95% Relative Humidity, Non-condensing
Software Support	Android 5.1 (Default) Linux 4.15 (Yocto 2.1)	N/A	Android 8.1 (Default) Windows 10 IoT
Dimension	918.8 x 704.6 x 37.6 mm	934.2 x 704.6 x 39 mm	750 x 445 x 36.7 mm
Weight	7.5 kg	11.4 kg	7.2 kg
Certification	CE, FCC Class B	FCC Class B & CE (EN 55032 & 55035) ESD Level 3	CE, FCC Class A

Public Display Solution



Model Number	EPD-3150	EPD-2501
LCD Size	31.5"	25.3"
Resolution	H: 2560 x V: 1440	H: 3200 x V: 1800
Viewing Angle	180 (U), 180 (D), 180 (L), 180 (R)	180 (U), 180 (D), 180 (L), 180 (R)
Touch Type	Cover Lens Only	Cover Lens Only
Processor	All winner B810	Onboard Intel® Celeron® SoC BGA Processor N3350 (Apollo Lake Platform)
System Memory	On-Board LPDDR4 4GB	1 x 204-Pin DDR3L 1866MTs SO-DIMM up to 8GB
Wireless	Wi-Fi	mPCIe Wi-Fi/ Bluetooth Module (Optional)
Storage	32GB eMMC micro SD card	2.5" SATA3 SSD 64GB
External I/O Connector	USB-C port SD card	2 x HDMI 1 x COM 2 x LAN 4 x USB 3.1 (Gen1)
Power Requirement	DC +12V	DC +12V
Power Type	ATX	AT/ ATX
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4 ~ 140°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing	40°C @ 90% Relative Humidity, Non-condensing
Software Support	Android 12	Android 8.1 (Default) Windows 10 IoT
Dimension	707.9 * 413.2 * 23.5 mm	607 x 350 x 38.8 mm
Weight	5 kg	4.4 kg
Certification	CE, FCC Class A	CE, FCC Class B

Outdoor Display Solution



Model Number	EPD-4200-B1
LCD Size	42"
Resolution	H: 2160 x V: 2880
Viewing Angle	180 (U), 180 (D), 180 (L), 180 (R)
Touch Type	Cover Lens Only
Processor	N/A
System Memory	N/A
Wireless	N/A
Storage	N/A
External I/O Connector	1 x USB 1.1
Power Requirement	DC +12V
Power Type	N/A
Operating Temperature	-15°C ~ 65°C
Storage Temperature	-20°C ~ 70°C (-4 ~ 158°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Software Support	N/A
Dimension	676 x 910 x 58 mm
Weight	12 kg
Certification	CE, FCC Class A

Tailored to
Your Needs



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