4 Intelligent Systems

Intelligent Systems

Full range of industrial computers and integration services for automation applications

With a diverse range of innovative technologies, including cloud computing (industrial and video servers), edge computing (fanless, slim, portable devices), and high performance embedded systems, Advantech's intelligent systems are equipped with smart, secure, and energy-saving features. Our intelligent systems are designed specifically for vertical markets in intelligent transportation, factory automation/machine automation, cloud infrastructure, and intelligent video application sectors.

Compact IPCs

Advantech offers a ultra-compact industrial edge computer series that provides the same high computing power as standard IPCs but at smaller sizes. This benefits the customers that have limited spaces for IPCs especially for equipment makers and intelligent factories. Though the system size is significantly reduced, IPC-200 and IPC-300 still provide high expandability to support industrial applications such as machine vision and automation control, and GPU-related applications.

Modular IPCs

Modular computers are aimed at machine automation applications such as vision inspection, AOI, packaging inspection, process automation and intelligent monitoring. Modular IPCs are suited to service and maintenance applications and this compact system, with POE and the latest Intel core processors. They can used in edge computing applications as they deliver enhanced computing and graphic performance.

Intelligent Inspection Systems

AIIS Vision system series are applied to machine automation applications such as AOI, label inspection, and alignment inspections which rely on machine vision. With PoE vision, USB3 vision, lighting control and multiple I/O interfaces, AIIS control system deliver performance computing and low power consumption. They offer intelligent management and extended product longevity.

Industrial Chassis

Advantech offers a diverse range of industrial computer chassis (2U to 4U rackmount, wall-mount) supporting various motherboard/SBC form factors (ATX, MicroATX, PICMG 1.0/1.3, full-size/half-size SBC).

Chassis features include versatile power supplies (ATX 2.x and ATX 3.x), swappable accessories/storages, and cooling systems. High-end models are with the built-in intelligent self-diagnosis modules for smart fan control and remote management via EdgeSync 360 hardware/software solutions.

Industrial Motherboards

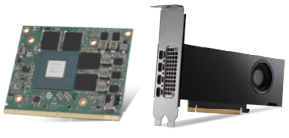
Advantech offers a full lineup of industrial motherboards in various form factors, including performance-rich ATX, best price/performance MicroATX and compact integrated Mini-ITX. These highly integrated motherboards feature advanced capabilities like multi-core processing and PCI Express technology, catering to demanding industrial applications with seamless upgrades, long-term support, proven reliability, and strict revision control.

Slot SBCs and Passive Backplanes

Slot single board computers (SBC) and backplanes follow PICMG 1.0 and PICMG 1.3 standards that offer flexibility and performance. Assembled with backplanes, slot SBCs and embedded PCs with multiple I/O and processing elements. We also provide customizable passive backplanes which include PCI boards, PICMG 1.3, PICMG 1.0 full-sized, and half-sized single board computers.

Industrial Computer Peripherals

Advantech IPC peripherals can integrate with various modules including IPMI, TPM, power supplies and versatile rack mount/wall mount peripherals. They can help system integrators build easy-to-operate computer systems.

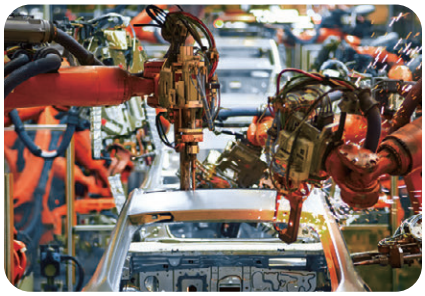


Industrial GPU Cards

Advantech provides a full range of GPU cards with PCIe and mobile PCIe based on NVIDIA® RTX technology, NVIDIA® Quadro®, and Tesla®. These industrial-grade graphics cards feature extended lifecycle and high reliability specifically for intensive use in multiple displays, video surveillance, digital signage, video walls, 3D visualization in industrial, embedded, medical applications.

Applications

Automated Optical Inspection (AOI)



Factory Automation

Predictive Maintenance

Automatic Equipment

Imaging Processing

AI Inference

Start your Business with an IPC Expert

Toolless thumb screws

Lockable door, with-or-without key

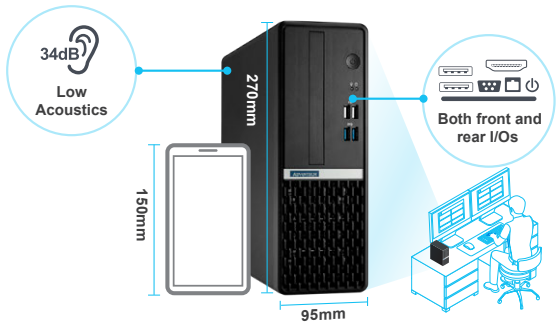
Front-accessible fan without opening top cover

Small footprint chassis design for better work field layout arrangement

Ultra Compact IPCs

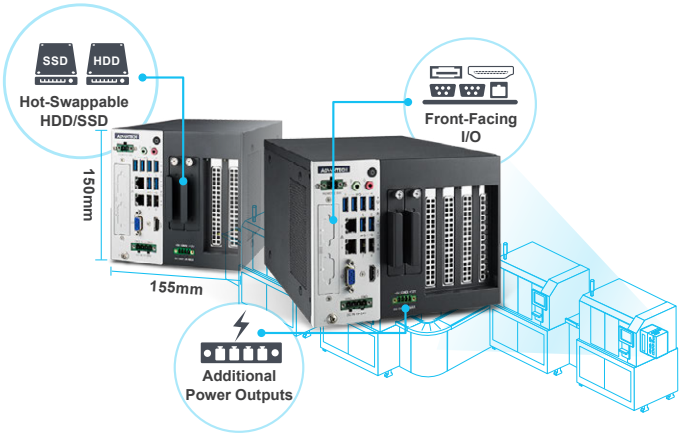
Advantech industrial edge computer for intelligent manufacturing

The current industrial automation market is trending towards increasingly compact form factors and intelligent designs that offer space savings and boost efficiency. Advantech's latest Compact IPC series offers a compact yet powerful solution for industrial automation, featuring high expandability for machine vision and motion control applications. With a wide operating temperature range and wide input power tolerance, it's built to thrive in harsh environments. Front-facing I/O ensures easy deployment and maintenance, while our rapid and localized configuration services accelerate time-to-market, enabling seamless integration into Industry 4.0 initiatives.



IPC-320 : Quiet and Compact Tower IPC

IPC-320 is a 7.7-liter size tower IPC which is perfect for space limited in-cabinet edge applications. Its compact size doesn't compromise on performance, offering low-noise operation at just 34dB acoustics even under 100% workload. This versatility extends its application scope beyond the laboratory and healthcare industries. Backed by Advantech's industrial-grade design, longevity support, strict product certification service, and revision management, as well as worldwide localized support, the IPC-320 stands as the reliable choice for operations control.

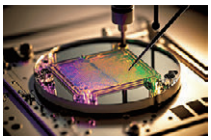


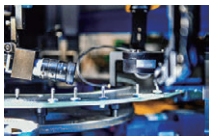
IPC-2 Series: Ultra-Compact System with Card Expansion

Designed to function as an intelligent edge device for manufacturing equipment, the latest IPC-220/240 is an ultra-compact modular system (155 x 231 x 150 mm/6.1" x 9.05" x 5.9"for IPC-220 and 195 x 231 x 150 mm/7.68" x 9.05" x 5.9" for IPC-240) equipped with 2/4 PCIe/PCI slots for integrating diverse add-ons, such as I/O cards, motion cards, vision cards, and GPU cards to support machine control and vision applications, or provide artificial intelligence for automated optical inspection (AOI) operations.

Target Applications


Fiber Optic Sensing


Legacy Semiconductor


Machine Vision System for Inspection


3D Vision-Guided Robots


High-Speed Adhesive Dispenser


Wafer Optical Inspection

Learn More: https://www.advantech.com/en/intelligent-systems/industrial-computers/compact-ipc-2-series

Ultra Compact IPCs

Ultra Compact Chassis




Model		IPC-220	IPC-240	IPC-242	IPC-320
Form Factor		Compact	Compact	Compact	Compact
Drive Bay	2.5"	2 x HDD/SSD (Max 15mm height)	2 x HDD/SSD (Max 15mm height)	2 x HDD/SSD (Max 15 mm height)	1 x 3.5" or 2 x 2.5" HDD/SSD (T:9.6 mm)
Cooling	No. of Fans	1	1	1	NA (Optional as 98R)
	CFM	82	82	46.62	-
	Air Filter	✓	✓	✓	NA (Optional as 98R)
Power Supply	AC	–	–	250 W Flex	250 W Flex
	DC	19 ~ 24 V_{DC}, 8 A ~ 6.5 A		–	-
	DC Ouput	5 V_{DC} and 12 V_{DC}, 2 A max			-
	System Power Consumption	150 W (without add-on card) ~ 230 W (with add-on card)		AC 250 W	AC 250 W
Backplane	PCIe x16	1	1	1	1
	PCIe x4	1	IPC-240-20B1: 3 IPC-240-21B2: 1	IPC-242-00A1: 3 IPC-242-01A1: 1	1
	PCI	–	IPC-240-20B1: 0 IPC-240-21B2: 2	IPC-242-00A1: 0 IPC-242-01A1: 2	0
Mechanical	Dimension (W x H x D)	155 x 150 x 231 mm (6.1" x 5.9" x 9.05")	195 x 150 x 231 mm (7.68" x 5.9" x 9.05")	333 x 269.2 x 88 mm (13.11" x 10.55" x 3.46")	95 x 270 x 300 mm (3.74" x 10.63" x 11.81")
	Weight	3.1 kg	3.3 kg	4.2 kg	3.306 kg
Support MB		PCE-2032/PCE-2132/PCE-2033/PCE-2133			AIMB-308H-00A1

Ultra Compact Motherboards

Model		PCE-2033/PCE-2133	PCE-2132/PCE-2032
Form Factor		Compact	
Processor System	Chipset	Q670E/H610E	Q470E/H420E
	CPU	Intel® 12th/13th/14th Gen Core™ i (LGA1700)	Intel® 10th Gen Core™ i (LGA1200)
	Core	Max. 16	Max. 10
	Cache	Max. 30 MB	Max. 20 MB
	Memory	Dual DDR5 5600 MHz Max. 64 GB	Dual DDR4 2666/2933 MHz Max. 64 GB
Graphic	Graphics Controller	Intel® UHD Graphics	Intel® HD Graphics
	VRAM	Shared system memory is subject to OS	
Expansion	Mini PCIe	1	
Storage	SATA Channel	2 x SATA 3.0	
	M.2	PCE-2033-00A1: 0 PCE-2133-00A1: 1 NVMe M.2 2280 PCIe Gen4 x4, M-Key	PCE-2032-00A1: 0 PCE-2132-00A1: 1 NVMe M.2 2280 PCIe Gen3 x4, M-Key
	mSATA	PCE-2033-00A1: 1 PCE-2133-00A1: 1 x SATA/mPCIe/USB	PCE-2032-00A1: 1 x SATA PCE-2132-00A1: 1 x SATA/mPCIe/USB
	RAID	0/1/5 (Q670E Only)	0/1/5 (Q470E Only)
Ethernet	Ethernet Interface	2 x RJ-45	
	Controller	Q670E: LAN1: Intel® I219LM, LAN2: Intel® I226V H610E: LAN1: Intel® I219V, LAN2: Intel® I226V	Q470E: LAN1: Intel® I219LM, LAN2: Intel® i210AT H420E: LAN1: Intel® I219V, LAN2: Intel® i210AT
Front I/O	Display	VGA + HDMI	
	LAN	2	
	USB	Q670E: 8 x USB 3.2, 2 x Internal USB 2.0 H610E: 4 x USB 3.2, 4 x USB 2.0, 2 x Internal USB 2.0	Q470E: 6 x USB 3.2, 2 x USB 2.0, 2 x Internal USB 2.0 H420E: 6 x USB 3.2, 2 x USB 2.0, 2 x Internal USB 2.0
	COM	2 x RS-232/422/485 support auto flow control	
	Audio	1 x line-out and 1 x mic-in	
	Remote Power Switch	✓	
Watchdog Timer	Output	System reset	
	Interval	Programmable 1 ~ 255 sec/min	
Support Chassis		IPC-220 / IPC-240 / IPC-242	

✓ : supported, – : not supported, △ : optional

Modular IPCs

Fanless Modular System Introduction

Be flexible, be invincible: fanless edge PCs for the industrial IoT era

To enable the realization of Industry 4.0, field-based edge intelligence is important for developing new IoT applications. Advantech's MIC-7 series PCs provide high-performance computing, multiple I/O interfaces, and flexible expandability with the integration of i-Modules and iDoor, and can be widely deployed to support various industrial IoT applications. The MIC-7 series can be equipped with a wide range of processors to provide custom entry-level and high-end solutions. With the provision of multiple I/O for connecting devices, MIC-7 systems can serve as a data gateway and industrial controller. Moreover, when integrated with intelligent i-Modules, a variety of add-on cards can be installed for machine automation applications.

Diverse selection of CPUs for customized performance

intel partner Titanium IoT Solutions

MIC-770
- 8th/9th Gen Intel® Core™
- 6 Cores
- 12 Threads

MIC-770 V2
- Intel® 10th Gen Xeon®/Core™
- 10 Cores
- 20 Threads

MIC-770 V3
- 12th/13th/14th Gen Intel® Core™
- 24 Cores
- 32 Threads

Various expansion I/O for flexible communication

Innovative slot expansion for enhanced control

Learn More: https://page.advantech.com/en/global/intelligent-systems/modular-ipc/mic-7-series

Modular IPCs

Fanless Modular System: MIC-7 Series

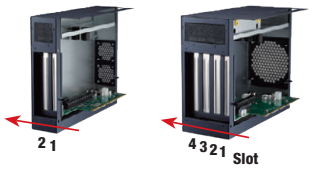


Model		MIC-770 V3	MIC-770 V2	MIC-770
Form Factor		Compact	Compact	Compact
Processor System	Chipset	R680E/H610E	W480E/H420E	Q370/H310
	CPU	Intel® 12th/13th/14th Gen Core™ i LGA1700	Intel® 10th Gen Xeon®/Core™ i LGA1200	Intel® 8th/9th Gen Core™ i LGA1151
	Core	Max. 24	Max. 10	Max. 8
	Cache	Max. 30 MB	Max. 20 MB	Max. 12 MB
	Memory	Dual DDR5 4800 MHz SODIMM Max. 64GB	Dual DDR4 2933 MHz SODIMM Max. 64GB	Dual DDR4 2400/2666 MHz SODIMM Max. 64GB
Graphic	Graphics Controller	Intel® UHD Graphics	Intel® HD Graphics	Intel® HD Graphics
	VRAM	Shared system memory is subject to OS	Shared system memory is subject to OS	Shared system memory is subject to OS
Expansion	PCIe x16	Supported via i-Module	Supported via i-Module	Supported via i-Module
	PCIe x8			
	PCIe x4			
	PCIe x1			
	PCI			
	Mini PCIe	2 (R SKU) 1 (H SKU)	2 (W SKU) 1 (H SKU)	2 (Q SKU) 1 (H SKU)
Storage	Storage Bay	1 x 2.5" internal HDD/SSD bay	1 x 2.5" internal HDD/SSD bay	1 x 2.5" internal HDD/SSD bay
	M.2	1 x NVMe M.2 2280 (PCIe Gen3 x4), M-Key	–	–
	mSATA	1	1	1
	CFast	–	–	–
	RAID	0/1/5/10 (R SKU only)	0/1/5/10 (W SKU only)	0/1/5/10 (Q SKU only)
Ethernet	Ethernet Interface	2 x RJ-45 10/100/1000 Mbps	2 x RJ-45 10/100/1000 Mbps	2 x RJ-45 10/100/1000 Mbps
	Controller	R680E: 2 x USB 3.2 (Gen2), 6 x USB 3.2 (Gen1), 1 x USB 2.0 (Internal) H610E: 4 x USB 3.2 (Gen1), 4 x USB 2.0	W480E: 2 x USB 3.2 (Gen2), 6 x USB 3.2 (Gen1) and 1 x internal USB 2.0 H420E: 4 x USB 3.2 (Gen1), 4 x USB 2.0	Q370: 2 x USB 3.1, 6 x USB 3.0 and 1 x internal USB 2.0 H310: 4 x USB 3.0 and 4 x USB 2.0
Front I/O	Display	VGA + HDMI	VGA + HDMI	VGA + HDMI
	LAN	2	2	2
	USB	R680E: 2 x USB3.2 (Gen2), 6 x USB3.2 (Gen1), 1 x USB 2.0 (Internal) H610E: 4 x USB3.2 (Gen1), 4 x USB2.0	W480E: 2 x USB 3.2 (Gen2), 6 x USB 3.2 (Gen1) and 1 x internal USB 2.0 H420E: 4 x USB3.2 (Gen1), 4 x USB 2.0	Q370: 2 x USB3.1, 6 x USB3.0 and 1 x internal USB 2.0 H310: 4 x USB 3.0 and 4 x USB 2.0
	COM	2 x RS-232/422/485 supports auto flow control; 4 x RS-232 (Optional)	2 x RS-232/422/485 supports auto flow control; 4 x RS-232 (Optional)	2 x RS-232/422/485 supports auto flow control; 4 x RS-232 (Optional)
	Audio	Line-out/mic-in	Line-out/mic-in	Line-out/mic-in
Watchdog Timer	Output	System reset	System reset	System reset
	Interval	Programmable 1~ 255 s/min	Programmable 1~ 255 s/min	Programmable 1~ 255 s/min
Power Supply	Output Wattage	–	–	–
	Input Range	9 ~ 36 V_{DC}	9 ~ 36 V_{DC}	9 ~ 36 V_{DC}
	Remote Power Switch	△	△	△
Cooling	System Fan	–	–	–
	Air Filter	–	–	–
Mechanical	Dimension (W x H x D)	77 x 192 x 230 mm (3.07" x 7.55" x 9.05")	77 x 192 x 230 mm (3.07" x 7.55" x 9.05")	77 x 192 x 230 mm (3.07" x 7.55" x 9.05")
	Weight	2.9 kg	2.9 kg	2.9 kg

✓ : supported, – : not supported, △ : optional

Modular IPCs

i-Module Expansion Slot for MIC-7 Series



i-Module	MIC-75M10	MIC-75M11	MIC-75M20	MIC-75M20-01	MIC-75M40-01	MIC-75M40	MIC-75M13
Slot 1	PCIe x16	PCIe x16	PCIe x4	PCIe x8	PCIe x4	PCIe x4	PCIe x16
Slot 2	–	PCI	PCIe x16	PCIe x8	PCIe x8	PCIe x8	PCI
Slot 3	–	–	–	–	PCIe x4	PCIe x4	PCI
Slot 4	–	–	–	–	–	PCIe x4	PCI
Slot 5	–	–	–	–	–	–	–
SATA Port	–	1					
SATA PWR	–	1					
2.5" HDD/SSD Bay	–	1*				2	
N.W. (kg)	0.64	0.87				1.16	
G.W. (kg)	1.71	2.02				2.47	
i-Module (W x H x D)	24 x 192 x 230 mm	50 x 192 x 230 mm				90 x 192 x 230 mm	
MIC-7000 + i-Module (W x H x D)	97 x 192 x 230 mm	123 x 192 x 230 mm				163 x 192 x 230 mm	
MIC-77X + i-Module (W x H x D)	101 x 192 x 230 mm	127 x 192 x 230 mm				167 x 192 x 230 mm	
System Fan	–	98R1752000E (Optional)**				98R1751300E (Optional)**	
12VDC Conn	1						
12VDC Conn. for GPU	–						
PCI/PCIe Card Max. Length (with system fan)	190.2 mm					184.75 mm	
PCI/PCIe Card Max. Length (without system fan)	210.4 mm						

* Need to order 98R1752010E (2.5" HDD/SSD kit for 2-slot i-Module)
** Suggested to add optional system fan if power consumption of add-on card is more than 45W for better thermal management.

Compatible Table

i-Modules / MIC-7 System	1-Slot	2-Slot			3-Slot	4-Slot	
	MIC-75M10	MIC-75M11	MIC-75M20	MIC-75M20-01	MIC-75M40-01	MIC-75M40	MIC-75M13
MIC-7700Q/ MIC-770V1Q MIC-770V2W	✓	✓	✓	✓	–	✓	✓
MIC-7700H/ MIC-770V1H/ MIC-770V2H/ MIC-770V3H	✓	✓	✓	–	–	–	✓
MIC-770V3W	✓	✓	✓	✓	✓	–	✓

✓ : supported, – : not supported, △ : optional

Modular IPCs

i-Module Expansion Slot for MIC-7 Series





i-Module	MIC-75S00	MIC-75S20	MIC-75G20	MIC-75G30	MIC-75GF10
Slot 1	–	PCIe x16	PCIe x16	–	–
Slot 2	–	PCIe x4	–	PCIe x16 (signal PCIe x8) for GPU card	PCIe x4
Slot 3	–	–	PCIe x4	–	PCIe x16 for MXM
Slot 4	–	–	–	PCIe x16 (signal PCIe x8) for GPU card	–
Slot 5	–	–	–	PCIe x4	–
SATA Port	–	1	1	1	1
SATA PWR	–	1	1	1	1
2.5" HDD/SSD Bay	2 x Swappable	2 x Swappable + 2 x Internal	2 x Swappable	2 x Swappable	2 x Swappable
N.W. (kg)	2	1.60	2.99	5	3
G.W. (kg)	3	2.98	4.79	7	5
i-Module (W x H x D)	27 x 192 x 230 mm	90 x 192 x 230 mm	130 x 192 x 385 mm	203 x 192 x 385 mm	113 x 192 x 230 mm
MIC-7000 + i-Module (W x H x D)	100 x 192 x 230 mm	163 x 192 x 230 mm	203 x 192 x 385 mm	276 x 192 x 385 mm	187 x 192 x 230 mm
MIC-77X + i-Module (W x H x D)	104 x 192 x 230 mm	167 x 192 x 230 mm	207 x 192 x 385 mm	280 x 192 x 385 mm	190 x 192 x 230 mm
System Fan	–	98R1751300E (Optional)**	Embedded	Embedded	–
12V$_{DC}$ Conn	–		1		1
12V$_{DC}$ Conn. for GPU	–	–	2	4	–
PCI/PCIe Card Max. Length (with system fan)	–	184.75 mm	310 mm	300 mm	–
PCI/PCIe Card Max. Length (without system fan)	–	210.4 mm	–	–	210.4 mm

* Need to order 98R1752010E (2.5" HDD/SSD kit for 2-slot i-Module)
** Suggested to add optional system fan if power consumption of add-on card is more than 45W for better thermal management.

Compatible Table

i-Modules / MIC-7 System	Featured				
	MIC-75S00	MIC-75S20	MIC-75G20	MIC-75G30	MIC-75GF10
MIC-7700Q/ MIC-770V1Q MIC-770V2W	✓	✓	✓	✓	✓
MIC-7700H/ MIC-770V1H/ MIC-770V2H/ MIC-770V3H	✓	✓	✓	–	✓
MIC-770V3W	✓	✓	✓	✓	✓

✓ : supported, – : not supported, △ : optional

Modular IPCs

Flex I/O Expansion Kit for MIC-7 Series

Flex I/O series modules provide flexible expansion for the MIC-7 series so customers can enjoy display, control, and conduct better communication via Flex I/O. All Flex I/O are attached directly from connectors reserved on the MIC-7 series main board and installed on the front panel, making it easy to fulfill machine, factory automation, and IEM deployments.

Flex I/O Assembly Example

Small Flex I/O

Default MIC-770 | Small Flex I/O Remote Switch | After Assembly

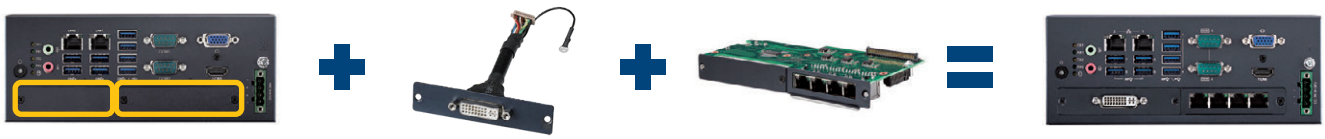
Regular Flex I/O

Default MIC-770 | Regular Flex I/O DVI | After Assembly

Default MIC-770 | Small Flex I/O Remote Switch | Regular Flex I/O DVI | After Assembly

Advanced Flex I/O

Default MIC-770 | Advanced Flex I/O NVMe + 4 x LAN | After Assembly

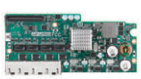


Default MIC-770 | Regular Flex I/O DVI | Advanced Flex I/O NVMe + 4 x LAN | After Assembly

Default MIC-770 | Advanced Flex I/O 4 x PoE | After Assembly

Modular IPCs

Compatible Table

Flex I/O	Function	Part Number	MIC-7700		MIC-770 V1		MIC-770 V2		MIC-770 V3	
			MIC-7700Q	MIC-7700H	MIC-770Q	MIC-770H	MIC-770W	MIC-770H	MIC-770W	MIC-770H
Small FIO										
	Remote Switch	98R17500701	-	-	✓	✓	✓	✓	✓	✓
	GPIO Module (32-bit)	AIIS-DIO32-00A1E	✓	✓	✓	✓	✓	✓	✓	✓
Regular FIO										
	DVI	98R17500001	✓	✓	✓	✓	✓	✓	✓	✓
	HDMI & Remote Switch	98R17500101	✓	✓	✓	✓	✓	✓	✓	✓
	HDMI	98R17500301	✓	✓	✓	✓	✓	✓	✓	✓
	Remote Switch	98R17500401	✓	✓	✓	✓	✓	✓	✓	✓
	4 x COM RS-232	98R17500601	-	-	✓	✓	✓	✓	✓	✓
	Reset & Remote Switch (5VDC)	98R17500801	✓	✓	✓	✓	✓	✓	-	-
	Reset & Remote Switch (5VDC, SATA)	98R17500802	-	-	-	-	-	-	✓	✓
	16-bit GPIO	98R17500901	✓	✓	✓	✓	✓	✓	✓	✓
	DisplayPort	98R17501001	✓	✓	-	-	✓	✓	✓	✓
	Dual LAN	9891790040E	✓	-	-	-	-	-	-	-
	TPM 2.0 Module (LPC)	PCA-TPM-00B1E	✓	✓	✓	✓	✓	✓	-	-
	TPM 2.0 Module (SPI)	PCA-TPMSPI-00A1	-	-	-	-	-	-	✓	✓
	2 x SSD Kit	98R1752020E	✓	-	✓	✓	✓	✓	✓	✓
Advanced FIO*										
	NVMe + 4 x LAN	98910770301	-	-	✓	-	✓	-	✓	-
	NVMe	98910770401	-	-	✓	-	✓	-	✓	-
	4 x PoE	98910770501	-	-	✓	-	✓	-	✓	-

✓ : supported, – : not supported, △ : optional
* H SKU does not support. Please refer to advanced flex I/O datasheet for more detail.
Note: For the additional display port (DVI/HDMI/DP), please refer to the MIC-7 series datasheet.

Intelligent Inspection Systems

Model		☞ AIIS-3411P	☞ AIIS-3411U
Form Factor		Compact	Compact
Processor System	Chipset	H420E	H420E
	CPU	Intel® 10th Gen Core i CPU LGA1200	Intel® 10th Gen Core i CPU LGA1200
	Core	Max. 10	Max. 10
	Cache	Max. 20 MB	Max. 20 MB
	Memory	Dual channel DDR4 2933/2666 MHz (non-ECC) SODIMM Max. 64 GB	Dual channel DDR4 2933/2666 MHz (non-ECC) SODIMM Max. 64 GB
Graphics	Graphics Controller	Integrated Intel® HD Graphics	Integrated Intel® HD Graphics
	VRAM	Shared system memory is subject to OS	Shared system memory is subject to OS
Machine Vision Interface	Interface	4-ch PoE	4-ch USB 3.0
	Controller	i210AT	Renesas μPD720202
Industrial I/O	PWM Lighting Output	4 channels (via optional AIIS-1882)	4 channels (via optional AIIS-1882)
	Lighting Trigger	4 dedicated channels (isolated, via optional AIIS-1882)	4 dedicated channels (isolated, via optional AIIS-1882)
	Digital I/O	28 channels (isolated, via optional AIIS-1882)	28 channels (isolated, via optional AIIS-1882)
Expansion	PCIe x8	1	1
	PCI*	1 x riser card (optional)	1 x riser card (optional)
	mini PCIe	1	1
	Lighting control	Yes, optional AIIS-1882	Yes, optional AIIS-1882
Storage	HDD Bay	1 x internal 2.5" HDD bay	1 x internal 2.5" HDD bay
	mSATA	1	1
	CFast	–	–
	RAID	–	–
Ethernet	Ethernet interface	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: Intel i219LM LAN2: Intel i210AT	LAN1: Intel i219LM LAN2: Intel i210AT
Front I/O	Display	VGA + HDMI 1.4	VGA + HDMI 1.4
	LAN	2	2
	USB	4 x USB 3.0	4 x USB 3.0
	COM	1 x RS-232/422/485 1 x RS-232	1 x RS-232/422/485 1 x RS-232
	PS/2	–	–
	Audio	Line out/mic in	Line out/mic in
Watchdog Timer Output	Output	System reset	System reset
	Interval	Programmable 1 ~ 255 s/min	Programmable 1 ~ 255 s/min
Power Supply	Output Wattage	–	–
	Input Range	19~24 V_{DC}	19~24 V_{DC}
	Remote Power Switch	1	1
Cooling	System Fan	1 (8 cm / 57 CFM)	1 (8 cm / 57 CFM)
	Air Filter	–	–
Mechanical	Dimension (W x H x D)	240 x 97 x 190 mm (9.45" x 3.82" x 7.48")	240 x 97 x 190 mm (9.45" x 3.82" x 7.48")
	Weight	2.56 kg	2.56 kg

✓: supported, – : not supported, △: optional

4-ch PWM Lighting Control Module

Model	☞ AIIS-1882
Signal Interface	PCI Express
Connecting Type	Board to Board
Lighting Trigger	4 Channels
Trigger Input Voltage	Logic 0: 2V max.; Logic 1: 5V min. (24V max.)
Digital Input	12 Channels
Input Voltage	Logic 0: 3 V max.; Logic 1: 10 V min. (40 V max.)
Digital Output	16 Channels
Load Voltage	10~40 V_{DC}
Response Time	≈50μs
Output Type	Selectable Sink (NPN) or Source (PNP)
Isolation	2,500 V_{DC}
Compatible System	AIIS-3411

Intelligent Inspection Systems



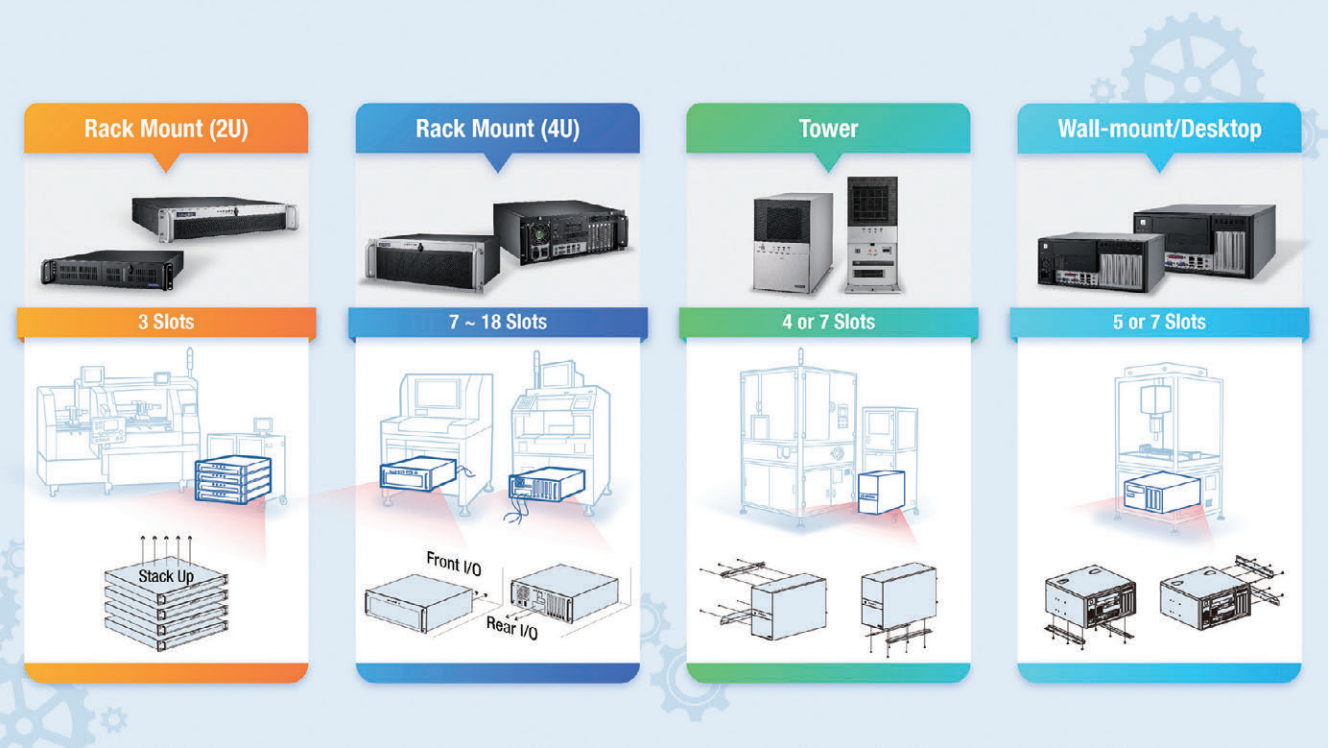

Model		AIIS-3400P	AIIS-3400U	AIIS-3410P	AIIS-3410U
Form Factor		Compact	Compact	Compact	Compact
Processor System	Chipset	H110	H110	H110	H110
	CPU	Intel® 6th/7th Gen Core i CPU LGA1151	Intel® 6th/7th Gen Core i CPU LGA1151	Intel® 6th/7th Gen Core i CPU LGA1151	Intel® 6th/7th Gen Core i CPU LGA1151
	Core	Max. 4	Max. 4	Max. 4	Max. 4
	Cache	Max. 8 MB	Max. 8 MB	Max. 8 MB	Max. 8 MB
	Memory	Dual channel DDR4 1866/2133 MHz (non-ECC) SODIMM Max. 32 GB	Dual channel DDR4 1866/2133 MHz (non-ECC) SODIMM Max. 32 GB	Dual channel DDR4 1866/2133 MHz (non-ECC) SODIMM Max. 32 GB	Dual channel DDR4 1866/2133 MHz (non-ECC) SODIMM Max. 32 GB
Graphics	Graphics Controller	Integrated Intel® HD Graphics	Integrated Intel® HD Graphics	Integrated Intel® HD Graphics	Integrated Intel® HD Graphics
	VRAM	Shared system memory is subject to OS	Shared system memory is subject to OS	Shared system memory is subject to OS	Shared system memory is subject to OS
Machine Vision Interface	Interface	4-ch PoE	4-ch USB	4-ch PoE	4-ch USB
	Controller	Intel i210AT	Renesas µPD720202	Intel i210AT	Renesas µPD720202
Industrial I/O	PWM Lighting Output	–	–	–	–
	Lighting Trigger	–	–	–	–
	Digital I/O	8 Channel (isolated) 32 Channels (isolated, via optional AIIS-1750)	8 Channel (isolated) 32 Channels (isolated, via optional AIIS-1750)	8 Channel (isolated) 32 Channels (isolated, via optional AIIS-1750)	8 Channel (isolated) 32 Channels (isolated, via optional AIIS-1750)
Expansion	PCIe x8	–	–	1	1
	PCI*	–	–	1 x riser card (optional)	1 x riser card (optional)
	Mini PCIe	–	–	1	1
Storage	HDD Bay	1 x internal 2.5" HDD bay	1 x internal 2.5" HDD bay	1 x internal 2.5" HDD bay	1 x internal 2.5" HDD bay
	mSATA	–	–	–	–
	CFast	1	1	1	1
	RAID	–	–	–	–
Ethernet	Ethernet interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: Intel i219LM LAN2: Intel i210AT	LAN1: Intel i219LM LAN2: Intel i210AT	LAN1: Intel i219LM LAN2: Intel i210AT	LAN1: Intel i219LM LAN2: Intel i210AT
Front I/O	Display	VGA + DVI-D	VGA + DVI-D	VGA + DVI-D	VGA + DVI-D
	LAN	2	2	2	2
	USB	4 x USB 3.0	4 x USB 3.0	4 x USB 3.0	4 x USB 3.0
	COM	2 x RS-232/422/485	2 x RS-232/422/485	2 x RS-232/422/485	2 x RS-232/422/485
	PS/2	–	–	–	–
	Audio	Line in/line out/mic in	Line in/line out/mic in	Line in/line out/mic in	Line in/line out/mic in
Rear I/O	Remote Switch	✓	✓	✓	✓
Watchdog Timer Output	Output	System reset	System reset	System reset	System reset
	Interval	Programmable 1 ~ 255 s/min	Programmable 1 ~ 255 s/min	Programmable 1 ~ 255 s/min	Programmable 1 ~ 255 s/min
Power Supply	Output Wattage	–	–	–	–
	Input Range	19 ~ 24 V_{DC}	19 ~ 24 V_{DC}	19 ~ 24 V_{DC}	19 ~ 24 V_{DC}
	Remote Power Switch	1	1	1	1
Cooling	System Fan	1 (6 cm / 27.7 CFM)	1 (6 cm / 27.7 CFM)	1 (8 cm / 57 CFM)	1 (8 cm / 57 CFM)
	Air Filter	–	–	–	–
Mechanical	Dimension (W x H x D)	230 x 70.3 x 175 mm (9.06" x 2.77" x 6.89")	230 x 70.3 x 175 mm (9.06" x 2.77" x 6.89")	240 x 97 x 190 mm (9.45" x 3.82" x 7.48")	240 x 97 x 190 mm (9.45" x 3.82" x 7.48")
	Weight	1.8 kg	1.8 kg	2.4 kg	2.4 kg

✓: supported, – : not supported, △: optional

Industrial Chassis

Comprehensive Portfolio with Diverse Form Factors for Flexible Deployment

Advantech offers a diverse range of industrial computer chassis, ranging from 2U to 4U rackmount and wall-mount options, supporting a variety of motherboard/SBC form factors such as ATX, MicroATX, PICMG 1.0/1.3, and full-size/half-size SBC. Our chassis are equipped with versatile power supplies, swappable accessories/storages, and advanced cooling systems. For top-tier performance, our high-end models feature built-in intelligent self-diagnosis modules for smart fan control and remote management via EdgeSync 360 hardware/software solutions.



Versatile Functionality for Performance Demanding Applications

- Optimized power supply to withstand peak current of GPU card, enabling hybrid GPU/CPU computing.
- IPC-730 additional feature: Built-in industrial-grade ATX 3.0 850W/1200W PSU.

- Exceptional thermal solution to sustain performance & stability.
- IPC-730 additional feature: Dual rear system fans and dual optional auxiliary front system fans for extreme thermal dissipation efficiency

- Solid mechanism to fix GPU card for reliability.
- IPC-730 additional feature: supports powerful 450 W GPU Cards.

Industrial Chassis

Wallmount





Model			IPC-6806S	IPC-6806	IPC-6806W	IPC-6606 / IPC-6608		IPC-7132
Supported Form Factor			PICMG 1.0/1.3 HL SBC	PICMG 1.0 FL SBC	PICMG 1.0/1.3 FL SBC	PICMG 1.0/1.3 FL SBC		ATX/µATX
Drive Bay	Slim ODD		–	–	–	–	–	–
	5.25"		–	–	1	1	2	1
	2.5"		–	–	–	–	–	–
	3.5"	Hot-swap tray	–	–	–	–	–	–
		External	(No support for IPC-DT-3120E	1	1	1	1	1
		Internal	1	1	1	1	–	2
Chassis I/O	USB 2.0		2	2	2	2	2	2
	USB 3.0		–	–	–	–	–	–
	PS/2		–	–	–	–	–	–
Cooling	No. of Fans		1	1	1	1	1	1
	CFM		51.5	51.5	58	51.5	82	82
Power Supply	AC Single		250 W	250 W	350 W	300 W 500 W 700 W		300 W 500 W 700 W
	AC Redundant		(Mechanical limit)	(Mechanical limit)	(Mechanical limit)	(Mechanical limit)		–
	DC		(Mechanical limit)	(Mechanical limit)	(Mechanical limit)	(Mechanical limit)		–
Passive backplane	PICMG 1.0		✓	✓	✓	✓		–
	PICMG 1.3		✓	–	✓	✓		–
Intelligent System Module			–	–	–	–		–
Dimension (W x H x D)	mm		191 x 178 x 290	166 x 178 x 398	198 x 221 x 398	174 x 254 x 396	174 x 315 x 410	200 x 330 x 430
	inch		7.5 x 7.01 x 11.42	6.54 x 7.01 x 15.67	7.8 x 8.7 x 15.67	6.9 x 10 x 15.6	6.9 x 12.4 x 16.1	7.9 x 13 x 16.9
Weight	kg		5.6	6.3	8	9	11	10
	lb		12.3	13.9	17.6	19.8	24.2	21.9

✓: supported, – : not supported, △: optional






Model			IPC-5120 / IPC-7120		IPC-6025	IPC-5122	IPC-7130 / IPC-7130L		IPC-7220	IPC-730
Supported Form Factor			µATX	ATX/µATX	PICMG 1.0/1.3 FL SBC	µATX	ATX/µATX		ATX/µATX	ATX/µATX
Drive Bay	Slim ODD		–		–	1	–	–	–	-
	5.25"		1		–	–	1	1	2	-
	2.5"		–		–	–	–	–	–	2 + 2 Optional
	3.5"	Hot-Swap Tray	–		–	–	2	–	–	-
		External	1		1	1	–	2	1	-
		Internal	1		1	1	1	1	1	2
Chassis I/O	USB 2.0		–		2	2	2	2	2	-
	USB 3.0		–		–	–	–	–	–	-
	PS/2		–		–	–	–	–	–	-
Cooling	No. of Fans		1 + 1		1	1	1 + 1	1	1	2
	CFM		82 + 11		51.5	82	82 + 27.72	82	82	79 x 2 + 23 x 2
Power Supply	AC Single		250W 350W		350 W	300 W 500 W 700 W	300 W 500 W 700 W		300 W 500 W 700 W	ATX 3.0 850 W ATX 3.0 1200 W
	AC Redundant		(Mechanical limit)		(Mechanical limit)	(Mechanical limit)	500 W		500 W	-
	DC		(Mechanical limit)		(Mechanical limit)	(Mechanical limit)	–		–	-
Passive Backplane	PICMG 1.0		–		✓	–	–		–	-
	PICMG 1.3		–		✓	–	–		–	-
Intelligent System Module			–		✓	✓	✓	–	✓	-
Dimension (W x H x D)	mm		320 x 164 x 316.5	380 x 164 x 316.5	111 x 212 x 420	157 x 360 x 340	200 x 320 x 480		200 x 320 x 480	365 x 206 x 450
	in		12.6 x 6.5 x 12.5	15 x 6.5 x 12.5	4.4 x 8.3 x 16.5	6.2 x 14.2 x 13.4	7.9 x 12.6 x 18.9		7.9 x 12.6 x 18.9	14.4 x 8.1 x 17.7
Weight	kg		6.5	7	4.7	6.5	12.8		14	9.2
	lb		14.4	15.5	10.3	14.3	28.2		30.8	20.3

✓: supported, – : not supported, △: optional

Industrial Chassis

Rackmount

Model			1U	2U						4U		
			ACP-1010	IPC-603	ACP-2000	ACP-2010 ACP-2320		ACP-2020	ACP-2020G	IPC-631	IPC-610L IPC-611	
Supported Form Factor			ATX/µATX	ATX/µATX	PICMG 1.0/1.3 FL SBC	ATX/µATX		ATX/µATX	ATX/µATX	ATX/µATX	ATX/µATX	PICMG 1.0/ 1.3 FL SBC
Drive Bay	Slim ODD		1	1	1	–	1	1	1	1	–	
	5.25"		–	–	–	1	–	–	–	–	3	
	2.5"		1 x 3.5" or 2 x 2.5"	–	–	–	–	2 x internal 2 x external (optional hot-swap module)	2 x external	2 x internal 2 x external (optional hot-swap module)	–	
	3.5"	Hot-Swap Tray	–	–	–	–	2 (3.5" or 2.5")	–	–	–	–	
		External	1	–	2	1	–	–	–	–	1	
		Internal	1 x 3.5 or 2 x 2.5	1	–	2		–	–	–	–	
Chassis I/O	USB 2.0		2	–	–	2		2	2	–	2	
	USB 3.0		–	–	–	–	–	–	–	–	–	
	PS/2		–	–	1	1	1	–	–	–	1	
Cooling	No. of Fans		2	2	2	2	2+1	1	2	2	1	
	CFM		24/each	47/each	47/each	47/each	47/each + 28	41	103/each	82/each	82	
Power Supply	AC Single		250 W 350 W	350 W	250 W 300 W 500 W	250 W 350 W		350 W	850 W	500 W 700 W	250 W 300 W 500 W 700 W	
	AC Redundant		(Mechanical limit)	(Mechanical limit)	(Mechanical limit)	(Mechanical limit)		500 W	(Mechanical limit)	–	500 W	
	DC		–	–	–	–		–	–	–	–	
Passive Backplane	PICMG 1.0		✓	–	–	–		–	–	–	–	✓
	PICMG 1.3		✓	–	✓	–		–	–	–	–	✓
Intelligent System Module			–	–	✓	✓		✓	–	–	–	
Dimension (W x H x D)	mm		480 x 44 x 497	482 x 88 x 308	482 x 88 x 451	482 x 88 x 480		482 x 88 x 398	482 x 88 x 450	482 x 177 x 348	482 x 177 x 479	
	in		19 x 1.7 x 19.6	19 x 3.46 x 12.1	19 x 3.5 x 17.8	19 x 3.46 x 18.9		19 x 3.46 x 15.7	18.96 x 3.46 x 17.52	19 x 7 x 13.7	19 x 7 x 18.9	
Weight	kg		8	6.4	11.3	10.7	11.7	8.6	11.78	8	14.5	
	lb		17.6	14.1	24.9	23.5	25.7	18.96	25.97	17.6	31.9	

✓: supported, – : not supported, △: optional

Industrial Chassis

Rackmount

Model			4U																	
			IPC-610H		IPC-610P	ACP-4000		ACP-4010		ACP-4320		ACP-4020		ACP-4340		IPC-623				
Supported Form Factor			ATX/ µATX	PICMG 1.0/1.3 FL SBC	ATX/µATX	ATX/ µATX	PICMG 1.0/1.3 FL SBC	ATX/ µATX	PICMG 1.0/1.3 FL SBC	ATX/ µATX	PICMG 1.0/1.3 FL SBC	ATX/ µATX	PICMG 1.3 HL SBC	ATX/ µATX	PICMG 1.0/1.3 FL SBC	PICMG 1.0/1.3 FL SBC				
Drive Bay	Slim ODD		–		–	–		–		–		1		1		–				
	5.25"		3		3	3		2		2		–		–		2				
	2.5"		–		–	–		–		–		1 x internal		1 x internal		–				
	3.5"	Hot-Swap Tray	–		–	–		–		2		–		4		–				
		External	1		1	1		1		1		2		–		1				
		Internal	–		–	–		–		–		–		–		–				
Chassis I/O	USB 2.0		2		2	2		4		2		–		–		–				
	USB 3.0		–		–	–		–		–		2		2		–				
	PS/2		1		–	1		–		–		–		–		–				
Cooling	No. of Fans		2		2	2		2		1 + 1		2		1 + 1		3				
	CFM		82/each		82/each	82/each		82/each		82 + 28		52 / each		82 + 52		150 / each				
Power Supply	AC Single		300 W 500 W 700 W		ATX 3.0 850 W ATX 3.0 1200 W	300 W 500 W 700 W		300 W 500 W 700 W		300 W 500 W 700 W		300 W 500 W 700 W	500 W	500 W 700 W	500 W	500 W 1200 W				
	AC Redundant		500 W		–	500 W		500 W		500 W		(Mechanical limit)		500 W	500 W	(Mechanical limit)				
	DC		–		–	–		–		–		(Mechanical limit)		–		(Mechanical limit)				
Passive Backplane	PICMG 1.0		–	✓	–	–	✓	–	✓	–	✓	–	–	–	✓	✓				
	PICMG 1.3		–	✓	–	–	✓	–	✓	–	✓	–	✓	–	✓	✓				
Intelligent System Module			–		–	–		✓		✓		✓		✓		✓				
Dimension (W x H x D)	mm		482 x 177 x 479		482 x 177 x 479	482 x 177 x 479		482 x 177 x 479		482 x 177 x 479		482 x 177 x 348		482 x 177 x 479		482 x 177 x 657				
	in		19 x 7 x 18.9		19 x 7 x 18.9	19 x 7 x 18.9		19 x 7 x 18.9		19 x 7 x 18.9		19 x 7 x 13.7		19 x 7 x 18.8		19 x 7 x 26				
Weight	kg		15		14.6	15.2		16.6		17.6		8.5		12.5		27.4				
	lb		33		32.2	33.5		36.5		38.7		18.7		27.5		60.41				

✓: supported, – : not supported, △: optional

Industrial Motherboards

ATX Motherboards

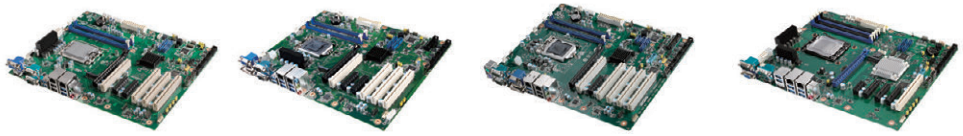



Model		AIMB-788E	AIMB-788	AIMB-787	AIMB-786
Processor System	CPU	Intel® 12th/13th/14th Gen Core™ i9/i7/i5/i3, Pentium®/ Celeron®	12th Generation Intel® Core™ i9/i7/i5/i3, Pentium®/Celeron®	10th Generation Core™ i9/i7/ i5/i3 & Pentium®/Celeron®	8th/9th Generation Core™ i7/ i5/i3 & Pentium®/Celeron®
	Socket	LGA1700	LGA1700	LGA1200	LGA1151
	Max. Speed	3.9 GHz	3.6 GHz	3.8 GHz	3.7 GHz
	Cache	L3: up to 36 MB (depends on CPU)	L3: up to 30 MB (depends on CPU)	L3: up to 20 MB (depends on CPU)	L3: up to 12 MB (depends on CPU)
	Chipset	Intel Q670E	Intel Q670E	Intel Q470E	Intel Q370
	BIOS	AMI 256 Mbit SPI	AMI 256 Mbit SPI	AMI 256 Mbit SPI	AMI 256 Mbit SPI
Expansion Slot	PCIe x16	2 (x8 link, Gen5, Gen4)	1 (Gen4)	1 (Gen3)	1 (Gen3)
	PCIe x8	2 (x4 link, Gen4, Gen3)	1 (x 4 link, Gen3)	–	–
	PCIe x4	2 (Gen4, Gen3)	3 (Gen3)	4 (Gen3)	4 (Gen3)
	PCIe x1	1 (Gen4)	–	–	–
	PCI	–	2	2	2
Memory	Technology	Dual Channel DDR5 4400 MHz	Dual Channel DDR4 3200 MHz	Dual Channel DDR4 2400/2666/2933 MHz	Dual Channel DDR4 2400/2666 MHz
	Max. Capacity	192 GB	128 GB	128 GB	128 GB
	Socket	4 x 288-pin DIMM	4 x 288-pin DIMM	4 x 288-pin DIMM	4 x 288-pin DIMM
Graphics	Controller	Intel® UHD Graphics	Intel® UHD Graphics	Intel® HD Graphics	Intel® HD Graphics
	VRAM	Shared system memory subject to OS	Shared system memory up to 1 GB	Shared system memory up to 1 GB	Shared system memory up to 1 GB
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	GbE LAN1: Intel I219-LM GbE LAN2: Intel I210-AT	GbE LAN1: Intel I219-LM GbE LAN2: Intel I210-AT	GbE LAN1: Intel I219-LM GbE LAN2: Intel I210-AT	GbE LAN1: Intel I219-LM GbE LAN2: Intel I211-AT
M.2	Slot	PCIe x4 M-Key 2280 type	PCIe x4 M-Key 2280 type	PCIe x4 M-Key 2280 type	–
SATA	Max. Date Transfer Rate	600 MB/s	600 MB/s	600 MB/s	600 MB/s
	Channel	4 (SW RAID)	4 (SW RAID)	4 (SW RAID)	5 (SW RAID)
I/O Interface	VGA	1	1	1	1
	DVI	–	–	1	1
	DP	1	1	1	1
	HDMI	1	1	–	–
	USB	13 (6 USB 3.2 and 7 USB 2.0)	14 (6 USB 3.2 and 8 USB 2.0)	14 (6 USB 3.2 and 8 USB 2.0)	13 (6 USB 3.2 and 7 USB 2.0)
	Serial	6	6	6	6
	PS/2	-	-	Optional	Optional
	Ethernet (GbE)	2	2	2	2
	Audio	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out
Watchdog Timer	Output	System reset	System reset	System reset	System reset
	Interval	Programmable, 1-255 Sec	Programmable, 1-255 Sec	Programmable, 1-255 Sec	Programmable, 1 ~ 255 sec

✓: supported, – : not supported, △: optional

Industrial Motherboards

ATX Motherboards



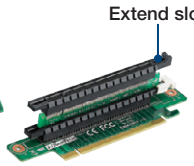
Model		AIMB-708	AIMB-707	AIMB-706	AIMB-723
Processor System	CPU	12th Generation Intel® Core™ i9/i7/i5/i3, Pentium®/Celeron®	10th Generation Core™ i9/i7/ i5/i3 & Pentium®/Celeron®	8th/9th Generation Core™ i7/ i5/i3 & Pentium®/Celeron®	AMD Ryzen™ Embedded 7000
	Socket	LGA1700	LGA1200	LGA1151	LGA1718
	Max. Speed	3.6 GHz	3.8 GHz	3.7 GHz	4.7 GHz
	Cache	L3: up to 30 MB (depends on CPU)	L3: up to 20 MB (depends on CPU)	L3: up to 12 MB (depends on CPU)	L3: up to 64 MB (depends on CPU)
	Chipset	Intel H610E	Intel H420E	Intel H310	AMD B650
	BIOS	AMI 256 Mbit SPI	AMI 128 Mbit SPI	AMI 128 Mbit SPI	AMI 256 Mbit SPI
Expansion Slot	PCIe x16	1 (Gen4)	1 (Gen3)	1 (Gen3)	1 (Gen4)
	PCIe x8	–	–	–	-
	PCIe x4	2 (Gen3)	2 (x 1 link, Gen3)	1 (Gen2)	1 (x2 link, Gen4) 2 (Gen4)
	PCIe x1	–	–	–	1 (Gen3)
	PCI	4	4	5	1
Memory	Technology	Dual Channel DDR4 3200 MHz	Dual Channel DDR4 2400/2666/2933 MHz	Dual Channel DDR4 2400/2666 MHz	Dual Channel DDR5 5200 MHz
	Max. Capacity	64 GB	64 GB	64 GB	128 GB
	Socket	2 x 288-pin DIMM	2 x 288-pin DIMM	2 x 288-pin DIMM	4 x 288-pin DIMM
Graphics	Controller	Intel® UHD Graphics	Intel® HD Graphics	Intel® HD Graphics	AMD Radeon™ Graphics
	VRAM	Shared system memory subject to OS	Shared system memory subject to OS	Shared system memory subject to OS	Shared system memory subject to OS
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000/2500 Mbps
	Controller	GbE LAN1: Intel I219-V GbE LAN2: Intel I225-V (G2 Only)	GbE LAN1: Intel I219-V GbE LAN2: Intel I211-AT (G2 Only)	GbE LAN1: Intel I219-V GbE LAN2: Intel I211-AT (G2 Only)	GbE LAN1: Intel I226-V; GbE LAN2: Intel I226-V
M.2	Slot	PCIe x2 M-Key 2280 type (G2 only)	PCIe x2 M-Key 2280 type (G2 only)	–	PCIe x2 M-Key 2280 type
SATA	Max. Date Transfer Rate	600 MB/s	600 MB/s	600 MB/s	600 MB/s
	Channel	4	4	4	4
I/O Interface	VGA	1	1	1	1
	DVI	–	1 (G2 only)	1 (G2 only)	–
	DP	–	–	–	1
	HDMI	1 (G2 only)	–	–	1
	USB	G2: 10 (4 USB 3.2 and 6 USB 2.0) VG: 7 (2 USB 3.2 and 5 USB 2.0)	G2: 10 (6 USB 3.2 and 4 USB 2.0) VG: 7 (4 USB 3.2 and 3 USB 2.0)	9 (4 USB 3.2 and 5 USB 2.0)	11 (8 USB 3.2 and 73USB 2.0)
	Serial	G2: 6 VG: 2	G2: 6 VG: 2	G2: 6 VG: 2	2
	PS/2	–	Optional	2 (1 x keyboard and 1 x mouse)	–
	Ethernet (GbE)	G2: 2 VG: 1	G2: 2 VG: 1	G2: 2 VG: 1	2
	Audio	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out
Watchdog Timer	Output	System reset	System reset	System reset	System reset
	Interval	Programmable, 1-255 Sec	Programmable, 1-255 Sec	Programmable, 1 ~ 255 sec	Programmable, 1-255 Sec

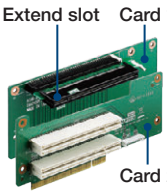
✓: supported, – : not supported, △: optional

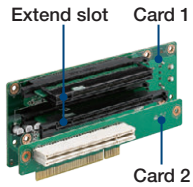
Industrial Motherboards

Riser Cards

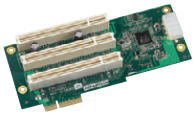


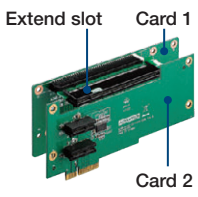


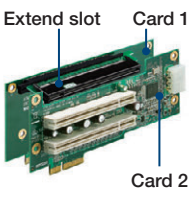





Model		☞ AIMB-RP10P-01A1E	☞ AIMB-R4104-01A1E	☞ AIMB-RF10F-01A1E	☞ AIMB-RP30P-03A1E	☞ AIMB-RP3PF-21A1E	☞ AIMB-RP3P8-12A1E
Interface		PCI	PCIe x4	PCIe x16	PCI	PCIe x16/PCI	PCIe x16/PCI
Expansion Slots		1 x PCI	1 x PCIe x4	1 x PCIe x16	3 x PCI	1 x PCIe x16 + 2 x PCI	2 x PCIe x8 + 1 x PCI
Chassis	1U	✓	✓	✓	–	–	–
	2U	–	–	–	✓	✓	✓
ATX	AIMB-788	–	–	–	–	–	–
	AIMB-787	–	–	–	–	–	–
	AIMB-786	–	–	–	–	–	–
	AIMB-785	–	✓	✓	–	–	–
	AIMB-708	✓	–	✓	✓	✓	–
	AIMB-707	✓	–	✓	✓	✓	–
	AIMB-706	✓	–	✓	✓	✓	–
	AIMB-705	✓	–	✓	✓	✓	–







Model		☞ AIMB-R430P-03A3E	☞ AIMB-R4301-03A2E	☞ AIMB-R431F-21A1E	☞ AIMB-R43PF-21A1E	☞ ASMB-RM2F4-11A1
Interface		PCIe x4	PCIe x4	PCIe x16/PCIe x4	PCIe x16/PCIe x4	PCIe x16 / PCIe x4
Expansion Slots		3 x PCI	3 x PCIe x1	1 x PCIe x16 + 2 x PCIe x1	1 x PCIe x16 + 2 x PCI	PCIe x16 / PCIe x4
Chassis	1U	–	–	–	–	–
	2U	✓	✓	✓	✓	✓ (ACP-2020G only)
ATX	AIMB-788	✓	△	□	✓	✓
	AIMB-787	✓	△	□	✓	✓
	AIMB-786	✓	△	□	✓	✓
	AIMB-785	✓	△	□	✓	✓

✓: Fully compatible
□: Only the PCIe x16 and PCIe x1 (bottom slot) connectors work.
△: Only one PCIe x1 connector works (top slot).

Slot SBCs & Passive Backplanes

PICMG 1.3 Full-Size Single Board Computers

Model		LGA1700 PICMG 1.3 SHB ☞ PCE-5033	LGA1700 PICMG 1.3 SHB ☞ PCE-5133
Processor System	CPU	14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3/Pentium®/ Celeron® LGA1700 socket processor	14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3/Pentium®/ Celeron® LGA1700 socket processor
	Max. Speed	3.6 GHz	3.6 GHz
	Cache	Up to 36 MB (depends on CPU)	Up to 36 MB (depends on CPU)
	Chipset	Intel H610E	Intel R680E
	BIOS	AMI 256 Mbit SPI	AMI 256 Mbit SPI
Backplane	PCIe	1 x16, 1 x4	1 x16 or 2 x8, 1 x4
Bus	PCI (32-bit/33/66 MHz)	4	4
Memory	Technology	Dual-channel (non-ECC) U-DIMM DDR5 5600 MHz	Dual-channel (non-ECC/ ECC) U-DIMM DDR5 5600 MHz
	Max. Capacity	64 GB (depends on CPU)	64 GB (depends on CPU)
	Socket	2 x DDR5 288-pin DIMM	2 x DDR5 288-pin DIMM
Graphics	Controller	Chipset integrated with Intel® UHD Graphics	Chipset integrated with Intel® UHD Graphics
	VRAM	Shared system memory is subject to OS	Shared system memory is subject to OS
	Video Out	1st: VGA 2nd: DVI-D/DP/HDMI 3rd: DVI-D/DP/HDMI	1st: VGA 2nd: DVI-D/DP/HDMI 3rd: DVI-D/DP/HDMI
Ethernet	Interface	10M/100M/1000M/2500Mbps	10M/100M/1000M/2500Mbps
	LAN1/LAN2 Controller	LAN 1: Intel® I226-V LAN 2: Intel® I226-V	LAN 1: Intel® I226-LM LAN 2: Intel® I226-LM
	Connector	2 x RJ-45	2 x RJ-45
	Disable in BIOS	✓	✓
SATA	Max. Data Transfer Rate	600 MB/s SATA3.0	600 MB/s SATA3.0
	Channel	4	6
	S/W Raid	–	0, 1, 5, 10
Rear I/O	VGA	1	1
	Ethernet	2	2
	USB 2.0	1	1
	USB 3.2	2	2
	PS/2	0	0
	Serial	0	0
Internal I/O	USB 2.0	5 (USB Type-A * 1 + 4 on backplane)	5 (USB Type-A * 1 + 4 on backplane)
	USB 3.2	2	6
	SATA	4	6
	M.2 (2280 Type M)	0	1
	Serial	2	2
	Parallel	0	0
	PS/2	0	0
	OBS(Onboard Security Hardware Monitor)	✓	✓
Watchdog Timer	Output	System reset	System reset
	Interval	Programable, 1~255 sec/min	Programable, 1~255 sec/min
Miscellaneous	Advantech Audio Module	PCA-AUDIO-HDB1E	PCA-AUDIO-HDB1E
	Advantech SAB-2000	–	✓
	AMT	–	✓

✓: supported, – : not supported, △: optional

Slot SBCs & Passive Backplanes

PICMG 1.3 Full-Size Single Board Computers



Model		LGA1200 PICMG 1.3 SHB	LGA1200 PICMG 1.3 SHB	LGA1200 PICMG 1.3 SHB
		☞ PCE-5032	☞ PCE-5132	☞ PCE-7132
Processor System	CPU	LGA1200 10th Gen Intel® Core™ i9/i7/ i5/i3/Pentium®/Celeron® Processors	LGA1200 10th Gen Intel® Core™ i9/i7/ i5/i3/Pentium®/Celeron® Processors	LGA1200 10th Gen Intel® Xeon® and Core™ i9/i7/i5/i3/Pentium® Processors
	Max. Speed	3.8 GHz	3.8 GHz	3.7 GHz
	Cache	Up to 20 MB (depends on CPU)	Up to 20 MB (depends on CPU)	Up to 20 MB (depends on CPU)
	Chipset	Intel H420E	Intel Q470E	Intel W480E
	BIOS	AMI 128 Mbit SPI	AMI 256 Mbit SPI	AMI 256 Mbit SPI
Backplane Bus	PCIe	1 x16, 1 x4	1 x16, 1 x4	1 x16 or 2 x8, 1 x4
	PCI (32-bit/33 MHz)	4	4	4
Memory	Technology	Dual-channel (non-ECC) U-DIMM DDR4 2666/2933 MHz	Dual-channel (non-ECC) U-DIMM DDR4 2666/2933 MHz	Dual-channel (non-ECC/ECC) U-DIMM DDR4 2666/2933 MHz
	Max. Capacity	64 GB (Depends on CPU)	64 GB (Depends on CPU)	64 GB (Depends on CPU)
	Socket	2 x DDR4 288-pin DIMM	2 x DDR4 288-pin DIMM	2 x DDR4 288-pin DIMM
Graphics	Controller	Chipset integrated with Intel® HD Graphics	Chipset integrated with Intel® HD Graphics	Chipset integrated with Intel® HD Graphics
	VRAM	Shared system memory is subject to OS	Shared system memory is subject to OS	Shared system memory is subject to OS
	Video Out	VGA + DP/DVI-D	VGA + DP/DVI-D + DP/DVI-D	VGA + DP/DVI-D + DP/DVI-D
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	LAN1/LAN2 Controller	LAN 1: Intel® I219-V LAN 2: Intel® I210-AT	LAN 1: Intel® I219-LM LAN 2: Intel® I210-AT	LAN 1: Intel® I219-LM LAN 2: Intel® I210-AT
	Connector	2 x RJ-45	2 x RJ-45	2 x RJ-45
	Disable in BIOS	✓	✓	✓
SATA	Max. Data Transfer Rate	600 MB/s SATA3.0	600 MB/s SATA3.0	600 MB/s SATA3.0
	Channel	4	6	6
	S/W Raid	-	0, 1, 5, 10	0, 1, 5, 10
Rear I/O	VGA	1	1	1
	Ethernet	2	2	2
	USB 2.0	1	1	1
	USB 3.2	2	2	2
	PS/2	0	0	0
	Serial	0	0	0
Internal I/O	USB 2.0	5 (USB Type-A * 1 + 4 on backplane)	5 (USB Type-A * 1 + 4 on backplane)	5 (USB Type-A * 1 + 4 on backplane)
	USB 3.2	2	6	6
	SATA	4	6	6
	M.2 (2280 Type M)	0	1	1
	Serial	2	2	2
	Parallel	0	0	0
	PS/2	0	0	0
	OBS (Onboard Security Hardware Monitor)	✓	✓	✓
Watchdog Timer	Output	System reset	System reset	System reset
	Interval	Programable, 1~255 sec/min	Programable, 1~255 sec/min	Programable, 1~255 sec/min
Miscellaneous	Advantech Audio Module	PCA-AUDIO-HDB1E	PCA-AUDIO-HDB1E	PCA-AUDIO-HDB1E
	Advantech SAB-2000	–	✓	✓
	AMT	–	✓	✓

✓: supported, – : not supported, △: optional

Slot SBCs & Passive Backplanes

PICMG 1.3 Full-Size Single Board Computers



Model		LGA1151 PICMG 1.3 SHB	LGA1151 PICMG 1.3 SHB	LGA1151 PICMG 1.3 SHB
		☞ PCE-5031	☞ PCE-5131	☞ PCE-7131
Processor System	CPU	LGA1151 9th/8th Gen Intel® Core™ i7/i5/i3/Pentium®/Celeron® Processors	LGA1151 9th/8th Gen Intel® Core™ i7/i5/i3/Pentium®/Celeron® Processors	LGA1151 9th/8th Gen Intel® Xeon® and Core™ i7/i5/i3/Pentium® Processors
	Max. Speed	3.7 GHz	3.7 GHz	3.7 GHz
	Cache	Up to 12 MB (depends on CPU)	Up to 12 MB (depends on CPU)	Up to 16 MB (depends on CPU)
	Chipset	Intel H310	Intel Q370	Intel C246
	BIOS	AMI 256 Mbit SPI	AMI 256 Mbit SPI	AMI 256 Mbit SPI
Backplane Bus	PCIe	1 x16, 1 x4	1 x16, 1 x4	1 x16 or 2 x8, 1 x4
	PCI (32-bit/33 MHz)	4	4	4
Memory	Technology	Dual-channel (non-ECC) DDR4 2400/2666	Dual-channel (non-ECC) DDR4 2400/2666	Dual-channel (non-ECC) DDR4 2400/2666
	Max. Capacity	64 GB (depends on CPU)	64 GB (depends on CPU)	64 GB (depends on CPU)
	Socket	2 x DDR4 288-pin DIMM	2 x DDR4 288-pin DIMM	2 x DDR4 288-pin DIMM
Graphics	Controller	Chipset integrated with Intel® HD Graphics	Chipset integrated with Intel® HD Graphics	Chipset integrated with Intel® HD Graphics
	VRAM	Shared system memory is subject to OS	Shared system memory is subject to OS	Shared system memory is subject to OS
	Video Out	VGA + DP/DVI-D	VGA + DP/DVI-D + DP/DVI-D	VGA + DP/DVI-D + DP/DVI-D
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	LAN1/LAN2 Controller	LAN 1: Intel® I219-V LAN 2: Intel® I211-AT	LAN 1: Intel® I219-LM LAN 2: Intel® I210-AT	LAN 1: Intel® I219-LM LAN 2: Intel® I210-AT
	Connector	2 x RJ-45	2 x RJ-45	2 x RJ-45
	Disable in BIOS	✓	✓	✓
SATA	Max. Data Transfer Rate	600 MB/s SATA3.0	600 MB/s SATA3.0	600 MB/s SATA3.0
	Channel	4 x SATA3.0	5 x SATA3.0	5 x SATA3.0
	S/W Raid	–	0, 1, 5, 10	0, 1, 5, 10
Rear I/O	VGA	1	1	1
	Ethernet	2	2	2
	USB 2.0	0	0	0
	USB 3.2	1	1	1
	PS/2	1	1	1
	Serial	0	0	0
Internal I/O	USB 2.0	7 x USB 2.0 (2 x pin header, 1 x USB Type-A, 4 x on backplane)	7 x USB 2.0 (2 x pin header, 1 x USB Type-A, 4 x on backplane)	7 x USB 2.0 (2 x pin header, 1 x USB Type-A, 4 x on backplane)
	USB 3.2	2	6	6
	SATA	4	5	5
	M.2 (2280 Type M)	0	1	1
	Serial	2	2	2
	Parallel	1	1	1
	PS/2	1	1	1
	OBS(Onboard Security Hardware Monitor)	✓	✓	✓
Watchdog Timer	Output	System reset	System reset	System reset
	Interval	Programable, 1~255 sec/min	Programable, 1~255 sec/min	Programable, 1~255 sec/min
Miscellaneous	Advantech Audio Module	PCA-AUDIO-HDB1E	PCA-AUDIO-HDB1E	PCA-AUDIO-HDB1E
	Advantech SAB-2000	–	✓	✓
	AMT	–	✓	✓

✓: supported, – : not supported, △: optional

Slot SBCs & Passive Backplanes

PICMG 1.3 Half-Size Single Board Computers

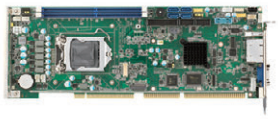



Model		PCIe Half-Size SBC			
		☞ PCE-3032	☞ PCE-4132	☞ PCE-3029	☞ PCE-4129
Processor System	CPU	LGA1200 10th Gen Intel® Core™ i9/i7/i5/i3/Pentium®/ Celeron® Processors	LGA1200 10th Gen Intel® Xeon® and Core™ i9/i7/i5/i3 Processors	LGA1151 7th/6th Gen Intel® Core™ i7/i5/i3/Pentium® Processors	LGA1151 7th/6th Gen Intel® Xeon® and Core™ i7/i5/ i3 Processors
	Speed	Up to 3.8 GHz	Up to 3.5 GHz	Up to 3.7 GHz	Up to 3.8 GHz
	Cache	Up to 20 MB	Up to 20 MB	Up to 8 MB	Up to 8 MB
	Chipset	Intel H420E	Intel W480E	Intel H110	Intel C236
Bus	BIOS	AMI 128 Mbit SPI Flash	AMI 256 Mbit SPI Flash	AMI 128 Mbit SPI Flash	AMI 128 Mbit SPI Flash
	PCIe	1 x16, 4 x1	1 x16 or 2 x8, 4 x1	1 x16, 4 x1	1 x16 or 2 x8, 4 x1
Graphics	Controller	Chipset integrated with Intel® HD Graphics	Chipset integrated with Intel® HD Graphics	Chipset integrated with Intel® HD Graphics	Chipset integrated with Intel® HD Graphics
	VRAM	Shared with system memory is subject to OS	Shared with system memory is subject to OS	Shared with system memory is subject to OS	Shared with system memory is subject to OS
	Video Output	VGA + DVI-D/DP	VGA + DVI-D + DP	VGA + DVI-D/DP	VGA + DVI-D + DP
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN 1: Intel® I210-AT LAN 2: Intel® I210-AT	LAN 1: Intel® I210-AT LAN 2: Intel® I210-AT	LAN1: Intel® I219-V LAN2: Intel® I210-AT	LAN1: Intel® I219-LM LAN2: Intel® I210-AT
	Connector	2 x RJ-45	2 x RJ-45	2 x RJ-45	2 x RJ-45
	Disabled in BIOS	✓	✓	✓	✓
Memory	Technology	Dual channel (non-ECC) DDR4 2666/2933 MHz	Dual channel DDR4 ECC 2666/2933 MHz (ECC function depends on processor)	Dual-channel DDR4 1866/2133 MHz	Dual channel DDR4 ECC 1866/2133 MHz (ECC function depends on processor)
	Max. Capacity	64 GB	64 GB	32 GB	32 GB
	Socket	260-pin SO-DIMM x2	260-pin SO-DIMM x2	260-pin SODIMM x2	260-pin SO-DIMM X2
SATA	Max. Data Transfer Rate	600MB/s	600MB/s	600MB/s	600MB/s
	Channel	3	4	4	4
	RAID	–	0,1,5,10	–	0,1,5,10
I/O Interface	USB	4 x USB 3.2, 6 x USB 2.0	6 x USB 3.2, 7 x USB 2.0	3 x USB 3.2, 7 x USB 2.0	3 x USB 3.2, 7 x USB 2.0
	mSATA	0	0	1	1
	Serial	2 x RS-232 Optional: 4 x RS-422/485 w/ auto-flow or 4 x RS-232 by COM module	2 x RS-232 Optional: 4 x RS-422/485 w/ auto-flow or 4 x RS-232 by COM module	2 x RS-232 Optional: 4 x RS-422/485 w/ auto-flow or 4 x RS-232 by COM module	2 x RS-232 Optional: 4 x RS-422/485 w/ auto-flow or 4 x RS-232 by COM module
	Parallel	0	0	1	1
	PS/2	0	0	1	1
	LAN	2	2	2	2
	OBS (Onboard Security Hardware Monitor)	✓	✓	✓	✓
Watchdog Timer	Output	System reset	System reset	System reset	System reset
	Interval	Programmable 1-255 sec	Programmable 1-255 sec	Programmable 1-255 sec	Programmable 1-255 sec
Miscellaneous	Advantech Audio Module	PCA-AUDIO-HDB1E	PCA-AUDIO-HDB1E	PCA-AUDIO-HDB1E	PCA-AUDIO-HDB1E

✓: supported, – : not supported, △: optional

Slot SBCs & Passive Backplanes

PICMG 1.0 Single Board Computers



Model		PICMG 1.0 Full-Size SBC	PICMG 1.0 Half-Size SBC
		☞ PCA-6029	☞ PCI-7032
Processor System	CPU	LGA1151 7th/6th Gen Intel® Core™ i7/i5/i3/Pentium®/ Celeron® Processors	Intel® Celeron® J1900/N2930 Processors
	Max. Speed	3.9 GHz	2.0 GHz
	Cache	Up to 8MB	Up to 2MB
	Chipset	Intel H110	–
	BIOS	AMI 128Mbit SPI Flash	AMI 64Mb SPI Flash
Bus	PCI	32-bit/33MHz PCI	32-bit/33MHz PCI
	ISA	HISA (ISA High Driver)	–
Graphics	Controller	Chipset integrated Intel® HD Graphics	Chipset integrated Intel® HD Graphics
	VRAM	Shared system memory is subject to OS	Shared system memory is subject to OS
	Video Output	VGA + DVI-D/DP	Dual independent display: choosing two interfaces from VGA, LVDS, and DVI
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN 1: Intel® I219-V LAN 2: Intel® I211-AT	LAN1: Intel® I210-AT LAN2: Intel® I210-AT (G2)
	Connector	2 x RJ-45	2 x RJ-45
	Disabled in BIOS	✓	✓
Memory	Technology	Dual-channel (non-ECC) U-DIMM DDR4 2133/2400	G2: Dual channel DDR3L-1333 VG: DDR3L-1333
	Max. Capacity	64 GB	8 GB (4GB per DIMM)
	Socket	2 x DDR4 288-pin DIMM	1 x DDR3 204-pin SO-DIMM VG, 2 x G2
SATA	Max. Data Transfer Rate	600 MB/s	300 MB/s (SATA2.0)
	Channel	4	2
	RAID	–	–
I/O Interface	USB	1 x USB 3.2, 7 x USB 2.0	G2: 1 x USB 3.0, 6 x USB 2.0 VG: 1 x USB 3.0, 5 x USB 2.0
	Serial	2 RS-232	G2: 4 x RS-232/422/485 VG: 2 x RS-232/422/485
	Parallel	1	–
	M.2	1	–
	PS/2	1	1
	LAN	2	G2: 2 VG: 1
	OBS (Hardware Monitor)	✓	G2: ✓ VG: –
Watchdog Timer	Output	System reset	System reset
	Interval	Programmable, 1~255 sec	Programmable, 1~255 sec
Miscellaneous	Advantech Audio Module	PCA-AUDIO-HDB1E	PCA-AUDIO-HDB1E
	Advantech SAB-2000	–	–

✓: supported, – : not supported, △: optional

Slot SBCs & Passive Backplanes

PICMG1.3 Full-Size SBC Backplanes

Category	Part Number	Wallmount/Desktop Chassis					Rackmount Chassis								
		IPC-6025	IPC-6606	IPC-6806	IPC-6806W	IPC-6608	ACP-2000	IPC-510	IPC-610	IPC-611	ACP-4000	ACP-4010	ACP-4320	ACP-4340	IPC-623
		5-slot	6-slot	6-slot	6-slot	8-slot	3 slot/ 2U	14 slot / 4U							20 slot/ 4U
5 Slot BP	PCE-5B05-02A1E	✓	–	–	–	–	–	–	–	–	–	–	–	–	–
6 Slot BP	PCE-5B06-00A1E	–	✓	–	✓	–	–	–	–	–	–	–	–	–	–
	PCE-5B06-03A1E	–	✓	–	✓	–	–	–	–	–	–	–	–	–	–
	PCE-5B06-04A1E	–	✓	–	✓	–	–	–	–	–	–	–	–	–	–
	PCE-5B06V-00A1E	–	–	–	–	–	✓	–	–	–	–	–	–	–	–
	PCE-5B06V-04A1E	–	–	–	–	–	✓	–	–	–	–	–	–	–	–
8 Slot BP	PCE-5B07-04A1E	–	–	–	–	✓	–	–	–	–	–	–	–	–	–
	PCE-5B08-02A1E	–	–	–	–	✓	–	–	–	–	–	–	–	–	–
	PCE-7B08-04A1E	–	–	–	–	✓	–	–	–	–	–	–	–	–	–
14 Slot BP	PCE-5B12-07A1E	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	–
	PCE-5B12-07A2E	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	–
	PCE-7B13-07A1E	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	–
	PCE-7B13-07A2E	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	–
	PCE-5B10-04A1E	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	–
	PCE-5B12-0AA1	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	–
	PCE-7B13-0AA1	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	–
	PCE-5B13-03A1E	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	–
	PCE-5B13-08A2E	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	–
19 Slot BP	PCE-5B18-88B1E	–	–	–	–	–	–	–	–	–	–	–	–	–	✓
	PCE-7B19-88B1E	–	–	–	–	–	–	–	–	–	–	–	–	–	✓
	PCE-5B18-0EA1	–	–	–	–	–	–	–	–	–	–	–	–	–	✓
	PCE-7B19-0EA1	–	–	–	–	–	–	–	–	–	–	–	–	–	✓

Category	Part Number	PCIe				PCI-X			PCI
		x16	x8	x4	x1	64/66	64/100	64/133	32/33
5 Slot BP	PCE-5B05-02A1E	1	–	1	–	–	–	–	2
6 Slot BP	PCE-5B06-00A1E	1	–	–	4	–	–	–	–
	PCE-5B06-03A1E	1	–	1	–	–	–	–	3
	PCE-5B06-04A1E	1	–	–	–	–	–	–	4
	PCE-5B06V-00A1E	1	–	–	4	–	–	–	–
	PCE-5B06V-04A1E	1	–	–	–	–	–	–	4
8 Slot BP	PCE-5B07-04A1E	1	–	1		–	–	–	4
	PCE-5B08-02A1E	1	–	–	4	–	–	–	2
	PCE-7B08-04A1E	–	2	1	–	–	–	–	4
14 Slot BP	PCE-5B12-07A1E	1	–	3	–	–	–	–	7
	PCE-5B12-07A2E	1	–	3	–	–	–	–	7
	PCE-7B13-07A1E	–	2	3	–	–	–	–	7
	PCE-7B13-07A2E	–	2	3	–	–	–	–	7
	PCE-5B10-04A1E	1	–	–	4	–	–	–	4
	PCE-5B12-0AA1	1	–	–	–	–	–	–	10
	PCE-7B13-0AA1	–	2	–	–	–	–	–	10
	PCE-5B13-03A1E	1	–	8	–	–	–	–	3
	PCE-5B13-08A2E	1	–	–	3	–	–	–	8
19 Slot BP	PCE-5B18-88B1E	1	–	–	–	8	–	–	8
	PCE-7B19-88B1E	–	2	2	–	–	8	–	8
	PCE-5B18-0EA1	1	–	2	–	–	–	–	14
	PCE-7B19-0EA1	–	2	2	–	–	–	–	14

✓: supported, – : not supported, △: optional

Slot SBCs & Passive Backplanes

PICMG1.0 Full-Size SBC Backplanes

Category	Part Number	Slot Per Segment			2U Chassis	4U Chassis			
		PCI	ISA	ISA/PCI	ACP-2000	ACP-4000	ACP-4010	ACP-4320	ACP-4340
					3 slot	14 slot	14 slot	14 slot	14 slot
6/8 Slot BP	PCA-6106P4-0A2E	4	1	–	–	–	✓	–	–
	PCA-6106P3-0D2E	2	2	1	–	–	–	–	–
	PCA-6108P6-0C1E	5	1	1	–	–	–	–	–
	PCA-6108P4-0C2E	3	3	1	–	–	–	–	–
14/15 Slot BP	PCA-6114P12-0B3E	11	1	1	–	✓	✓	✓	✓
	PCA-6114P10-0B2E	10	2	–	–	✓	✓	✓	✓
	PCA-6114P7-0E1E	7	6	–	–	✓	✓	✓	✓
	PCA-6114P4-0C2E	4	8	–	–	✓	✓	✓	✓
	PCA-6113P4R-0C2E	4	7	–	–	✓	✓	✓	✓
20 Slot BP	PCA-6120P18-0A2E	17	1	1	–	–	–	–	–
	PCA-6120P12-0A3E	11	7	1	–	–	–	–	–

Category	Part Number	4U Chassis				Wallmount/Desktop Chassis				Cage
		IPC-510	IPC-610	IPC-611	IPC-623	IPC-6608	IPC-6606	IPC-6806/ IPC-6806W	IPC-6025	IPC-6006
		14 slot	14 slot	14 slot	20 slot	8 slot	6 slot	6 slot	5 slot	6 slot
6/8 Slot BP	PCA-6106P4-0A2E	–	–	–	–	–	–	–	–	–
	PCA-6106P3-0D2E	–	–	–	–	–	✓	✓	–	✓
	PCA-6108P6-0C1E	–	–	–	–	✓	–	–	–	–
	PCA-6108P4-0C2E	–	–	–	–	✓	–	–	–	–
14/15 Slot BP	PCA-6114P12-0B3E	✓	✓	✓	–	–	–	–	–	–
	PCA-6114P10-0B2E	✓	✓	✓	–	–	–	–	–	–
	PCA-6114P7-0E1E	✓	✓	✓	–	–	–	–	–	–
	PCA-6114P4-0C2E	✓	✓	✓	–	–	–	–	–	–
	PCA-6113P4R-0C2E	✓	✓	✓	–	–	–	–	–	–
20 Slot BP	PCA-6120P18-0A2E	–	–	–	✓	–	–	–	–	–
	PCA-6120P12-0A3E	–	–	–	✓	–	–	–	–	–

✓: supported, – : not supported, △: optional

Slot SBCs & Passive Backplanes

Backplanes Compatible with Half-Size SBCs

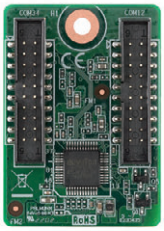
Interface	Category	Part Number	PCIe				PCI
			x16	x8	x4	x1	32/33
PICMG1.3 Half-Size BP	6 Slot	PCE-3B06-00A1E	1	–	–	4	–
	6 Slot	PCE-3B06-02A1E	1	–	–	2	2
	6 Slot	PCE-3B06-03A1E	1	–	–	1	3
	14 Slot	PCE-3B12-08A1E	1	–	–	2	8
	14 Slot	PCE-4B13-00A1E	–	1	11	–	–
PICMG1.0 Half-Size BP	4 Slot	PCA-6104P4-0B2E	–	–	–	–	4
	6 Slot	PCA-6105P5-0B2E	–	–	–	–	5

Interface	Category	Part Number	Rackmount Chassis	Wallmount/Desktop Chassis		
			ACP-4020	IPC-3012	IPC-6806S	IPC-6606S
			14 slot / 4U	3 slot	6 slot	6 slot
PICMG1.3 Half-Size BP	6 Slot	PCE-3B06-00A1E	–	–	✓	–
	6 Slot	PCE-3B06-02A1E	–	–	✓	–
	6 Slot	PCE-3B06-03A1E	–	–	✓	–
	14 Slot	PCE-3B12-08A1E	✓	–	–	–
	14 Slot	PCE-4B13-00A1E	✓	–	–	–
PICMG1.0 Half-Size BP	4 Slot	PCA-6104P4-0B2E	–	–	–	–
	6 Slot	PCA-6105P5-0B2E	–	–	✓	✓

✓: supported, – : not supported, △: optional

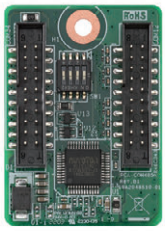
Slot SBCs & Passive Backplanes

Extension Modules for Slot SBCs



PCA-COM232-ESPA1

- 4 RS-232 series ports extension module by eSPI connector on CPU card
- Dimensions (L x H): 30 x 42 mm (1.18 x 1.65 in)
- Support Model: PCE-5033/5133



PCA-COM485-ESPA1

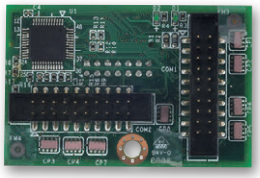
- 4 RS-422/485 series ports extension module by eSPI connector on CPU card
- Dimensions (L x H): 30 x 42 mm (1.18 x 1.65 in)
- Support Model: PCE-5033/5133

PCA-TPMSPI-00A1

- Trusted platform module compliant with TCG 2.0 specification and TCG software stack 2.0 via SPI connector on CPU card
- Hardware based data protection solution for storage device encryption and decryption
- Dimensions (L x H) : 20 x 22 mm (0.79 x 0.87 in)
- Support Model: PCE-5033/5133, AIMB-788/723/708

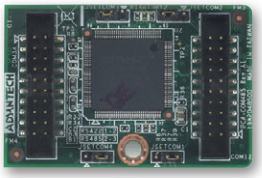
PCA-AUDIO-HDB1E

- HD Audio Extension Module
- Line-out, Mic-in, Line-in, Surround-out, Speak-out, S/PDIF
- Dimensions (L x H): 68 x 125 mm (2.67 x 4.92 in)
- Support Model: PCE-5029/5031/5032/ 5033/5129/5131/5132/ 5133/7129/ 7131/7132/7133; PCE-3029/3032/ 4129/4132



PCA-COM232-00A2

- 4 RS-232 series ports extension module by LPC connector on CPU card.
- Dimensions (L x H): 31.5 x 48 mm (1.24 x 1.88 in)
- Support Model: PCE-5029/5031/5032/ 5129/5131/5132/7129/7131/7132; PCE-3029/3032/4129/4132; AIMB-705/706/707, 785/786/787 (BIOS customization is required)



PCA-COM485-00A1E

- 4 RS-422/485 series ports extension module by LPC connector on CPU card.
- With auto-flow control function
- Dimensions (L x H): 31.5 x 48 mm (1.24 x 1.88 in)
- Support Model: PCE-5029/5031/5032/ 5129/ 5131/5132/7129/7131/7132; PCE-3029/3032/4129/4132; AIMB-707, 706/785/786/787(BIOS customization is required)

PCE-SA01-00A1E

- I/O extension stack board
- 1 DP, 2 USB 3.0, MIC-in, LINE-out
- Dimensions (L x H) : 68 x 125 mm (2.67 x 4.92 in)
- Support Model: PCE-5029/5031/5032/ 5033/5129/5131/5132/5133/7129/ 7131/7132; PCE-3029/3032/4129/4132; PCA-6029

PCA-TPM-00B1E

- Trusted platform module compliant with TCG 2.0 specification and TCG software stack 2.0 via LPC connector on CPU card
- Hardware based data protection solution for storage device encryption and decryption
- Dimensions (L x H) : 31.5 x 30.5 mm (1.24 x 1.2 in)
- Support Model: PCE-5029/5031/5032/ 5033/ 5129/5131/5132/5133/7129/7131/ 7132; PCE-3029/3032/4129/4132; AIMB-705/706/707/785/786/787

Industrial Computer Peripherals

☞ CPU Coolers

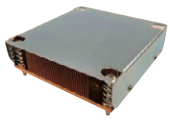





	1970005436T001	1970005349T000	1970005354T001	1970005380T001	1970005786N001	1960052651N021
Thermal Dispatch Performance	LGA1700 125W	LGA1700 65W	LGA1700 65W	LGA1700 65W	LGA1718 105W	Intel LGA1151/1200 95W
Fan	6 cm/38.8 CFM 6800±10% RPM	9.5 cm/57.7 CFM 4500±10% RPM	9.5 cm/57.7 CFM 4500±10% RPM	10 cm/33.5 CFM 4600±10% RPM	9.2 cm/109.3 CFM 5300±10% RPM	6 cm/28.78 CFM 5800±10% RPM
Heatsink Material	Aluminum & Copper	Aluminum & Copper	Aluminum	Aluminum	Aluminum	Aluminum
Heatsink Dimension	90 x 90 x 67.2 mm (3.5" x 3.5" x 2.6")	90 x 90 x 25 mm (3.5" x 3.5" x 1")	90 x 90 x 15 mm (3.5" x 3.5" x 0.6")	90 x 90 x 26 mm (3.5" x 3.5" x 1.0")	125 x 95 x 65.5 mm (4.9" x 3.7 " x 2.6")	90 x 88 x 65 mm (3.5" x 3.5" x 2.6")
Dimension	90 x 90 x 69 mm (3.5" x 3.5" x 2.7")	90 x 90 x 55.4 mm (3.5" x 3.5" x 2.2")	90 x 90 x 45.4 mm (3.5" x 3.5" x 1.8")	101.6 x 99.2 x 61 mm (4" x 3.9" x 2.4")	125 x 95 x 118.5 mm (4.9" x 3.7" x 4.7")	90 x 90 x 68 mm (3.5" x 3.5" x 2.7")
Weight	445 g	368 g	235 g	391 g	634 g	417 g
Minimum Chassis Height	2U	2U	1.5U	2U	4U	2U
Recommended Chassis	Motherboard/ backplane version of chassis	Motherboard/ backplane version of chassis	IPC-220/240	IPC-320	Motherboard version of chassis	Motherboard/ backplane version of chassis
Supported Boards	AIMB-708/788; PCE-5033/5133 AIMB-308 ASMB-588/788	AIMB-708/788; PCE-5033/5133 ASMB-588/788	PCE-2033/2133	AIMB-308	AIMB-723	AIMB-705/706/707 AIMB-785/786/787 PCE-5029/5129/7129 PCE-5031/5131/7131 PCE-5032/5132/7132 ASMB-585/586/587 ASMB-785/786/787



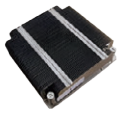




	1960047669N001	1960050255N001	1960053207N001	1970004537N001	1960049408N001
Thermal Dispatch Performance	Intel LGA1151/1200 95W	Intel LGA1151/1200 95W	Intel® LGA1151/1200 65 W	Intel® LGA1151/1200 55W	Intel LGA1151/1200
Fan	9.5cm /57.7 CFM 4500±10% RPM	7 cm/39.45 CFM 5400±10% RPM	9 cm/45.09 CFM 4400±10% RPM	7.5 cm/11.83 CFM 5500±10% RPM	–
Heatsink Material	Aluminum & Copper	Copper	Aluminum & Copper	Copper	Copper
Heatsink Dimension	90 x 90 x 35 mm (3.5" x 3.5" x 1.4")	83 x 83 x 40 mm (3.3" x 3.3" x 1.6")	90 x 90 x 19.1 mm (3.5" x 3.5" x 0.8")	84 x 84 x 13 mm (3.3" x 3.3" x 0.5")	85 x 85 x 26 mm (3.3" x 3.3" x 1.0")
Dimension	120 x 120 x 69.4 mm (4.7" x 4.7" x 2.7")	83 x 83 x 56.5 mm (3.3" x 3.3" x 2.2")	120 x 120 x 46 mm (4.7" x 4.7" x 1.8")	84 x 84 x 28 mm (3.3" x 3.3" x 1.1")	87 x 90 x 27.8 mm (3.4" x 3.5" x 1.1")
Weight	500 g	619 g	250 g	375 g	611 g
Minimum Chassis Height	4U	2U	1.5U	1U	1U
Recommended Chassis	Motherboard version of chassis	Backplane version of chassis	IPC-220/240	–	ACP-1010 HPC-7140/7180
Supported Boards	AIMB-705/706/707 AIMB-785/786/787	PCE-5029/5129/7129 PCE-5031/5131/7131 PCE-5032/5132/7132 PCE-3029/4129 PCE-3032/4132	PCE-3029/3032 PCE-4129/4132 AIMB-786/706	PCE-3029/4129 PCE-3032/4132	AIMB-705/706/707 AIMB-785/786/787 ASMB-585/586/587 ASMB-785/786/787 ASMB-610/610V3

✓: supported, – : not supported, △: optional

Industrial Computer Peripherals



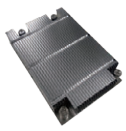

PN	1970005531T001	1960067860N001	1970005933N001	1970005860N000
Thermal Dispatch Performance	LGA1700 65W	LGA1151/1200 125W	LGA4677/4710 385W	LGA4677/4710 270W
Fan	–	6 cm/50.4 CFM 9000 ± 10% RPM	8 cm/56.1 CFM 5500 ± 10% RPM	6 cm/50.6 CFM 10000 ± 10% RPM
Heatsink Material	Copper stack fin & VC base	Aluminum stack fin & copper block with heatpipe	Aluminum stack fin & copper block with heatpipe	Aluminum stack fin & copper block with heatpipe
Dimensions	90 x 90 x 28 mm (3.54" x 3.54" x 1.1")	88.9 x 89.7 x 64.2 mm (3.5" x 3.49" x 2.53")	118 x 83.2 x 109 mm (4.65" x 3.28" x 4.29")	118 x78 x 64 mm (4.65" x 3.07" x 2.52")
Weight	386g	393g	625g	452g
Minimum Chassis Height	1U	2U	3U	2U
Supported Boards	ASMB-588/610V3	ASMB-587/787	ASMB-817/927/977/ 807/622V3	ASMB-817/927/977/ 807/622V3





PN	1970005575T001	1970004902T000	1970004565N001	1960081603N101	1960088272T001
Thermal Dispatch Performance	LGA4677/4710 185W	LGA4189 205W	LGA4189 105W	LGA3647 205W	LGA3647 150W
Fan	–	6 cm/43.08 CFM 8400 ± 10% RPM	–	6 cm/63.3 CFM 12000 ± 10% RPM	6 cm/50.4 CFM 9000 ± 10% RPM
Heatsink Material	Aluminum stack fin & copper block with heatpipe	Aluminum stack fin & copper block with heatpipe	Aluminum stack fin & copper block with heatpipe	Aluminum stack fin & copper block with heatpipe	Aluminum stack fin
Dimensions	118 x 78 x 24.7 mm (4.65" x 3.07" x 0.97")	183 x 132 x 86 mm (7.36" x 5.35" x 3.54")	130 x 100 x 47 mm (5.12" x 3.07" x 1.85")	138 x 115 x 85 mm (5.43" x 4.52" x 3.34")	108 x 79.8 x 63.8 mm (4.26" x 3.15" x 2.52")
Weight	250g	470g	255g	464g	250g
Minimum Chassis Height	1U	2U	1U	2U	2U
Supported Boards	ASMB-817/927	ASMB-816/976/622	ASMB-816	ASMB-815/925/935/975	ASMB-815/825/925/935/ 975





PN	1970005676N001	1970004817N001	1970004815N001
Thermal Dispatch Performance	LGA6096 210W	LGA4094 225W	LGA4094 180W
Fan	6 cm/58.31 CFM 11000 ± 10% RPM	6 cm/50.4 CFM 9000 ± 10% RPM	–
Heatsink Material	Aluminum stack fin & copper block with heatpipe	Aluminum stack fin & copper block with heatpipe	Aluminum stack fin & CU block with heatpipe
Dimensions	118 x 92.4 x 65 mm (4.65" x 3.64" x 2.56")	120 x 80 x 64 mm (4.72" x 3.15" x 2.52")	120 80 24.5 mm (4.72" x 3.15" x 0.96")
Weight	510g	480g	254g
Minimum Chassis Height	2U	2U	1U
Supported Boards	ASMB-831 (AMD)	ASMB-830 (AMD)	ASMB-830 (AMD)

✓: supported, – : not supported, △: optional

Industrial Computer Peripherals

☞ Accessories

☞ Slide Rails

For 2U and higher rackmount chassis

- 26" P/N: 9680006905
- Maximum acceptable load: 45 kg
- 1 pair included

☞ Industrial Disk Trays/Bays

IPC-DT-5121

Shockproof industrial hard disk drive tray with cooling fan and optional front USB and PS/2 interfaces

- Accepted Device: 1 x 3.5" HDD (only for 9.5mm thickness)
- Cooling Fan: 1 x 4 cm
- Color (Codes): Gray (414U), Black (4C2X)
- Dimensions (W x H x D): 148.5 x 42.6 x 171 mm (5.84" x 1.67" x 6.73")

IPC-DT-3120E

Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD/SSD trays

- Accepted Device: 2 x 2.5" SATA HDD/SSD (only for HDD/SSD thickness less than 9.6 mm)
- Dimensions (W x H x D): 101.6 x 25.4 x 139 mm (4" x 1" x 5.47")

9892200013E

Module to convert a 5.25" drive bay to a slim ODD and a 3.5" drive bay

- Accepted Device: 3.5" device x 1, slim ODD x 1

IPC-DT-5230E

Mobile rack for converting dual 5.25" drive bays to three 3.5" SATA HDD trays

- Accepted Device: 1 x 3.5" device, 1 x slim ODD
- Cooling Fan: 1 x 8 cm
- Dimensions (W x H x D): 146.5 x 86 x 225 mm (5.76" x 3.38" x 8.85")

989K008733

A frame to securely fix a 3.5" HDD in a 5.25" drive bay

- Accepted Device: 3.5" HDD x 1

989K008734

A frame to securely fix two 2.5" HDDs/SSDs in a 3.5" drive bay

- Accepted Device: 2 x 2.5" SATA HDD/SSD (only for HDD thickness less than 9.6 mm)

98R1BTOS000

A frame to securely fix four 2.5" HDD in a 5.25" drive bay

- Accepted Device : 24 x .5" SATA HDD/SSD (device thickness less than 9.6mm); or 2 x 2.5" SATA HDD/SSD (device thickness less than 15 mm)

96RACK-5SS-CAGE-CR

Mobile rack for converting one 5.25" drive bay to four 2.5" SAS/SATA HDD/SSD trays

- Accepted Device: 4 x 2.5" SAS/SATA HDD/SSD
- Dimension (W x H x D): 146 x 41 x 170 mm (5.74" x 1.61" x 6.69")

Add-on Card Hold Down Kits

98RKBTOS09E

Add-on card hold down kit (short)

- Bracket quantity of each kit: 5 pcs
- For PCI add-on card with height 72.3mm ~ 87.3mm and PCIe add-on card with height 81.7 ~ 91.8 mm

98RKBTOS10E

Add-on card hold down kit (long)

- Bracket quantity of each kit: 5 pcs
- For PCI add-on card with height 54.8 ~ 75.7 mm and PCIe add-on card with height 59.3mm ~ 80.2mm

Industrial Computer Peripherals

USB Cables




Part Number	1700008461	1700002204	1700014398	1700028292-01
Description	USB 2.0 cable with 4 ports	USB 2.0 cable with 2 ports	USB 2.0 cable with 4 ports	USB 3.0 cable with 2 ports
Cable Length	30.5 cm (12.01")	27 cm (11.92")	30.5 cm (12.01")	30 cm (11.81")
Remark	For ATX/Micro-ATX MB, full-sized SBC		For half-sized SBC	For ATX/Micro-ATX MB, full/half-sized SBC

SATA Cables





Part Number	96CB-SATAPOWER-6P2	1700022749-11	1700019381	1700007351	1700003194
Description	SATA power cable for slim ODD	SATA power cable for HDD/SSD	SATA data cable (right angle)	SATA data cable (right angle)	SATA data cable
Cable Length	10 cm (3.94")	10 cm (3.94")	55 cm (21.65")	40 cm (15.75")	60 cm (23.62")
Remark	Big 4 P to SATA power cable for Slim ODD	Big 4 P to SATA power cable for HDD/SSD	SATA data cable with 1 right angle and 1 vertical connectors	SATA data cable with 1 right angle and 1 vertical connectors	SATA data cable with vertical connectors with locks

COM and Printer Ports Cables



Part Number	1701092300	1701090401	1700008762
Description	COM cable with 2 ports	COM cable with 1 port	COM cable with 2 ports
Cable Length	28.5 cm (11.22")	40 cm (15.75")	22.5 cm (8.86")
Remark	For ATX/Micro-ATX MB, full-sized SBC		For half-sized SBC

Industrial Computer Peripherals

Accessories

Video Cables




Part Number	PCE-DP20-00A1	PCE-DP10-00A1E	1700021831-01	1700034454-01
Description	DisplayPort cable with two ports	DisplayPort cable with one port	DP to DVI port cable	HDMI cable
Cable Length	25cm (9.84")	25 cm (9.84")	30 cm (11.81")	30 cm (11.81")
Remark	Video cable for converting on board DP connector to external DP port supporting DP 1.1a/1.2 signaling For full-sized SBC	Video cable for converting on board DP connector to external DP port supporting DP 1.1a/1.2 signaling For full-sized SBC	Video cable for converting on board DP connector to external DVI-D port For full/half-sized SBC	Video cable for converting on board DP connector to external HDMI port For full/half-sized SBC

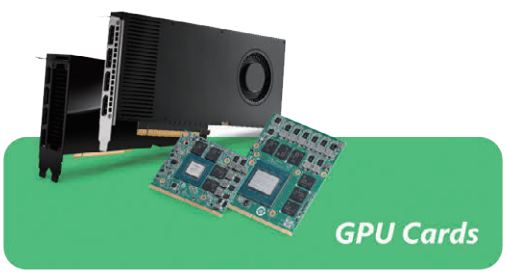
Remote On/Off Control Cables


Part Number	98R1RTSWF00	98R1RTSWH00
Description	Remote switch connector with full-height bracket. (A 2-pin phenix connector for remote switch reveiver)	Remote switch connector with helf-height bracket. (A 2-pin phenix connector for remote switch reveiver)
Cable Length	60 cm (23.62")	60 cm (23.62")

Other Cables


Part Number	1700029268-01	1700024754-01
Description	Power cable for GPU card (Primary) (Two 4-pin 12V connectors to one 6+2 pins PCIe power connector)	Power cable for GPU card (Secondary) (Two B4P Molex connectors to one 6+2-pin PCIe power connector)
Cable Length	10 cm (3.93")	10 cm (3.93")
Remark	For GPU card with 2 power connectors, use 1700029268-01 x1 + 1700024754-01 x1. For GPU card with 1 power connector, use 1700029268-01. Suggest to use Advantech 500W or higher wattage power supply for GPU built-in system.	

Industrial GPU Solutions



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NVIDIA Elite Partner

Delivers a wide range of Industrial GPU Solutions with early authorized access and exclusive technical support.

RTX GPU Cards in Industrial

Comprehensive offerings for image processing and Edge AI acceleration in manufacturing, transportation, and medical industries.

Qualified and Certified Systems

NVIDIA-qualified and certified systems ensure hardware stability and software compatibility.

Edge AI Computing IPC

IPC-730

ACP-4340

MIC-770 V3+MIC-75G20

MIC-770 V3+MIC-75GF10

ITA-3650G

NVIDIA MXM GPU Cards

SKY-MXM-5000A
SKY-MXM-5000A-6SDA

SKY-MXM-3500A
SKY-MXM-3500A-2SDA

SKY-MXM-2000A
SKY-MXM-2000A-8SDA

SKY-MXM-A4500
SKY-MXM-A4500-6SDA

SKY-MXM-A2000
SKY-MXM-A2000-8SDA

SKY-MXM-A500
KY-MXM-A500-4SHA

SKY-MXM-A1000
SKY-MXM-A1000-4HDA

SKY-MXM-RTX3000
SKY-MXM-R3000-6HDA

SKY-MXM-T1000
SKY-MXM-T1000-4HDB

NVIDIA Quadro GPU Cards

NVIDIA RTX A800 40GB
SKY-QUAD-A800-40

NVIDIA RTX 6000 Ada
SKY-QUAD-6000A-48

NVIDIA RTX 5000 Ada
SKY-QUAD-5000A-32

NVIDIA RTX 4500 Ada
SKY-QUAD-4500A-24

NVIDIA RTX 4000 Ada
SKY-QUAD-4000A-20

NVIDIA RTX 4000 SFF Ada
SKY-QUAD-4000SA-20

NVIDIA RTX 2000A
SKY-QUAD-2000A-16

NVIDIA RTX A1000
SKY-QUAD-A1000-8

NVIDIA RTX A400
SKY-QUAD-A400-4

NVIDIA Tesla GPU Cards

NVIDIA H200 NVL
SKY-TESL-H200N-141

NVIDIA H100 NVL
SKY-TESL-H100N-94P

NVIDIA L40S
SKY-TESL-L40S-48P

NVIDIA L4
SKY-TESL-L4-24P

NVIDIA A100 80GB
SKY-TESL-A100-80P

NVIDIA A40
SKY-TESL-A40-48P

NVIDIA A30
SKY-TESL-A30-24P

NVIDIA A10
SKY-TESL-A10-24P

NVIDIA A2
SKY-TESL-A2-16P

NVIDIA T4
SKY-TESL-T4-16P

NVIDIA GPU Cards

NVIDIA MXM GPUs

Advantech MXM series are compact in size and rugged in design with a small form factor and low power consumption. They fit perfectly in the limited spaces of applications such. as surgery, gaming, and autonomous driving.

Model	SKY-MXM-5000A	SKY-MXM-3500A	SKY-MXM-2000A	SKY-MXM-A4500	SKY-MXM-A2000	SKY-MXM-A1000	SKY-MXM-A500	SKY-MXM-RTX3000	SKY-MXM-T1000
Part Number	SKY-MXM-5000A-6SDA	SKY-MXM-3500A-2SDA	SKY-MXM-2000A-8SDA	SKY-MXM-A4500-6SDA	SKY-MXM-A2000-8SDA	SKY-MXM-A1000-4SDA	SKY-MXM-A500-4SHA	SKY-MXM-R3000-6SDA	SKY-MXM-T1000-4HDB
GPU Architecture	Ada Lovelace	Ada Lovelace	Ada Lovelace	Ampere	Ampere	Ampere	Ampere	Turing	Turing
GPU Memory	16GB GDDR6 with ECC	12GB GDDR6 with ECC	8GB GDDR6 with ECC	16GB GDDR6 with ECC	8GB GDDR6 with ECC	4GB GDDR6	4GB GDDR6	6GB GDDR6	4GB GDDR6
Memory Interface	256-bit	192-bit	128-bit	256-bit	128-bit	128-bit	64-bit	192-bit	128-bit
Max Clock	9000 MHz	9000 MHz	8000 MHz	8000 MHz	7000 MHz	7000 MHz	7000 MHz	7000 MHz	6000 MHz
Memory BW	576 GB/s	432 GB/s	256 GB/s	512 GB/s	224 GB/s	224 GB/s	112 GB/s	336 GB/s	192 GB/s
CUDA Cores	9728	5120	3072	5888	2560	2048	2048	1920	896
RT Cores	76	40	24	46	20	16	16	30	-
Tensor Cores	304	160	96	184	80	64	64	240	-
Tensor Tflops (FP16 Dense/ Sparse)	165/329	92/184	52/104	70/140	34/66	26/52	25/50	44/NA	N / A
Max FP 32 Per f	41.15	23.04	12.8	17.66	8.64	6.66	6.54	5.3 TF	2.7 TF
GPU Clock	1425 MHz	1725 MHz	1635 MHz	930 MHz	1117 MHz	1192 MHz	652 MHz	945 MHz	1395 MHz
Boost Clock	2115 MHz	2250 MHz	2115 MHz	1500 MHz	1612 MHz	1624 MHz	1597 MHz	1380 MHz	1455 MHz
Form Factor	MXM Type B+	MXM Type B+	MXM Type A	MXM Type B+	MXM Type A	MXM Type A	MXM Type A	MXM Type B	MXM Type A
Dimension (L x H)	82 x 105 mm (3.23" x 4.13")	82 x 105 mm (3.23" x 4.13")	82 x 70 mm (3.23" x 2.76")	82 x 105 mm (3.23" x 4.13")	82 x 70 mm (3.23" x 2.76")	82 x 70 mm (3.23" x 2.76")	82 x 70 mm (3.23" x 2.76")	82 x 105 mm (3.23" x 4.13")	82 x 70 mm (3.23" x 2.76")
Interface	MXM 3.1, PCIe 4.0 x16	MXM 3.1, PCIe 4.0 x16	MXM 3.1, PCIe 4.0 x8	MXM 3.1, PCIe 3.0 x16	MXM 3.1, PCIe 3.0 x8	MXM 3.1, PCIe 3.0 x8	MXM 3.1, PCIe 3.0 x4	MXM 3.1, PCIe 3.0 x16	MXM 3.1, PCIe 3.0 x16x
TGP Power	115 W	115 W	60 W	115 W	60 W	60 W	35 W	80 W	50 W
Display Output	4 x DP 1.4a, HDMI 2.1 4K at 120Hz or 8K at 60Hz		3 x DP 1.4a, HDMI 2.1 4K at 120Hz or 8K at 60Hz	4 x DP 1.4a, HDMI 2.1 4K at 120Hz or 8K at 60Hz			Headless Design No Display Output	4 x DP 1.4a, HDMI 2.1 4K at 120Hz or 8K at 60Hz	
NVENC	2(8th Gen)	2(8th Gen)	1(8th Gen)	1(7th Gen)	1(7th Gen)	1(7th Gen)	1(7th Gen)	1(7th Gen)	1(6th Gen)
NVDEC	5(5th Gen)	1(5th Gen)	1(5th Gen)	2(5th Gen)	2(5th Gen)	2(5th Gen)	1(5th Gen)	3(4th Gen)	3(4th Gen)
Operating temperature	0 ~ 55°C (32 ~ 131°F) (dependent on CPU and cooler solution)								
Storage temperature	-40 ~ 85°C (-40 ~ 185°F)								
Vibration (Non-operating)	2G								
OS support	Windows 10/11, 64-bit Linux Drivers, 64-bit								

✓: supported, – : not supported, △: optional

NVIDIA GPU Cards

NVIDIA Quadro RTX™ GPUs

Designed and built to accelerate any professional workflow, NVIDIA RTX™ professional GPU cards feature large memory, advanced enterprise features, optimized drivers, and certification for industrial applications.

Model	NVIDIA RTX A800 40GB	NVIDIA RTX 6000 Ada	NVIDIA RTX 5000 Ada	NVIDIA RTX 4500 Ada	NVIDIA RTX 4000 Ada	NVIDIA RTX 4000 SFF Ada	NVIDIA RTX A6000	NVIDIA RTX A5500	NVIDIA RTX A5000	NVIDIA RTX A4500	NVIDIA RTX A4000
Part Number	SKY-QUAD-A800-40	SKY-QUAD-6000A-48	SKY-QUAD-5000A-32	SKY-QUAD-4500A-24	SKY-QUAD-4000A-20	SKY-QUAD-4000SA-20	SKY-QUAD-RTXA 6000B	SKY-QUAD-A5500-24B	SKY-QUAD-RTXA 5000B	SKY-QUAD-RTXA 4500B	SKY-QUAD-RTXA 4000B
GPU Architecture	Ampere	Ada Lovelace	Ada Lovelace	Ada Lovelace	Ada Lovelace	Ada Lovelace	Ampere	Ampere	Ampere	Ampere	Ampere
Memory Size	40 GB HBM2 with ECC	48 GB GDDR6 with ECC	32 GB GDDR6 with ECC	24 GB GDDR6 with ECC	20 GB GDDR6 with ECC	20 GB GDDR6 with ECC	48 GB GDDR6 with ECC	24 GB GDDR6 with ECC	24 GB GDDR6 with ECC	20 GB GDDR6 with ECC	16 GB GDDR6 with ECC
Memory Interface	5,120-bit	384-bit	384-bit	320-bit	160-bit	160-bit	384-bit	384-bit	384-bit	320-bit	256-bit
Memory Bandwidth	1555 GB/s	960 GB/s	576 GB/s	432 GB/s	360 GB/s	280 GB/s	768 GB/s	768 GB/s	768 GB/s	640 GB/s	512 GB/s
Form Factor	Dual slot, full height	Dual slot, full height	Dual slot, full height	Dual slot, full height	Single slot, full height	Dual slot, low profile	Dual slot, full height	Dual slot, full height	Dual slot, full height	Dual slot, full height	Single slot, full height
Dimension (L x H)	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	241.3 x 111.8 mm (9.5" x 4.4")	167.6 x 68.6 mm (6.6" x 2.7")	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	241.3 x 111.8 mm (9.5" x 4.4")
CUDA Cores	6912	18176	12800	7,680	6144	6144	10752	10249	8192	7168	6144
Tensor Cores	432	568	400	240	192	192	336	320	256	224	192
RT Cores	–	142	100	60	48	48	84	80	64	56	48
FP32	19.5	91.1	65.3	39.6	26.7	19.2	38.7	34.1	27.8	23.7	19.2
Media Acceleration	1 JPEG Decoder, 5 Video Decoder	3 NVENC 3 NVDEC (+AV1 enc&dec)	2 NVENC 2 NVDEC (+AV1 enc&dec)	2 NVENC 2 NVDEC (+AV1 enc&dec)	2 NVENC 2 NVDEC (+AV1 enc&dec)	2 NVENC 2 NVDEC (+AV1 enc&dec)	1 NVENC, 2 NVDEC, (+AV1 dec)	1 NVENC, 2 NVDEC, (+AV1 dec)	1 NVENC, 2 NVDEC, (+AV1 dec)	1 NVENC, 2 NVDEC, (+AV1 dec)	1 NVENC, 2 NVDEC, (+AV1 dec)
NVLink	✓	–	–	–	–	–	✓	✓	✓	✓	–
Virtualization Ready	✓	✓	✓	–	–	–	✓	✓	✓	–	–
Display Connectors	Headless Design	4 x DP 1.4	4 x DP 1.4	4 x DP 1.4	4 x DP 1.4	4 x mDP 1.4	4 x DP 1.4	4 x DP 1.4	4 x DP 1.4	4 x DP 1.4	4 x DP 1.4
Operating Temperature	0 ~ 45°C (32 ~ 113°F)	0 ~ 45°C (32 ~ 113°F)	0 ~ 45°C (32 ~ 113°F)	0 ~ 45°C (32 ~ 113°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 45°C (32 ~ 113°F)	0 ~ 45°C (32 ~ 113°F)	0 ~ 45°C (32 ~ 113°F)	0 ~ 45°C (32 ~ 113°F)	0 ~ 45°C (32 ~ 113°F)	0 ~ 50°C (32 ~ 122°F)
Max Power	240 W	300 W	250 W	210 W	130 W	70 W	300 W	230 W	230 W	200 W	140 W
Power Connector	16-Pin PCIe	16-Pin PCIe	16-Pin PCIe	16-Pin PCIe	16-Pin PCIe	–	8-Pin CPU	8-Pin PCIe	8-Pin PCIe	8-Pin PCIe	6-Pin PCIe
Graphics Bus	PCIe 4.0 x16	PCIe 4.0 x16	PCIe 4.0 x16	PCIe 4.0 x16	PCIe 4.0 x16	PCIe 4.0 x16	PCIe 4.0 x16	PCIe 4.0 x16	PCIe 4.0 x16	PCIe 4.0 x16	PCIe 4.0 x16

✓: supported, – : not supported, △: optional

NVIDIA GPU Cards

NVIDIA Quadro® GPUs: Entry to Mid-range

Model	NVIDIA RTX 2000 Ada	NVIDIA RTX A2000 12GB	NVIDIA RTX A1000	NVIDIA RTX A400	NVIDIA T1000 8GB	NVIDIA T1000	NVIDIA T400 4GB
Part Number	SKY-QUAD-2000A-16	SKY-QUAD-A2000-12B	SKY-QUAD-A1000-8	SKY-QUAD-A400-4	SKY-QUAD-T1000-8-B	SKY-QUAD-T1000-AB	SKY-QUAD-T400-4-B
GPU Architecture	Ada Lovelace	Ampere	Ampere	Ampere	Turing	Turing	Turing
Memory Size	16 GB GDDR6 with ECC	12 GB GDDR6 with ECC	8 GB GDDR6	4 GB GDDR6	8 GB GDDR6	4 GB GDDR6	4 GB GDDR 6
Memory Interface	128-bit	192-bit	128-bit	64-bit	128-bit	128-bit	64-bit
Memory Bandwidth	224 GB/s	288 GB/s	192 GB/s	96 GB/s	160 GB/s	160 GB/s	80 GB/s
Form Factor	Dual slot, low profile	Dual slot, low profile	Single slot, low profile	Single slot, low profile	Single slot, low profile	Single slot, low profile	Single slot, low profile
Dimension (L x H)	167.6 x 68.6 mm (6.6" x 2.7")	167.6 x 68.6 mm (6.6" x 2.7")	162.5 x 68.6 mm (6.4" x 2.7")	162.5 x 68.6 mm (6.4" x 2.7")	154.9 x 68.6 mm (6.1" x 2.7")	154.9 x 68.6 mm (6.1" x 2.7")	154.9 x 68.6 mm (6.1" x 2.7")
CUDA Cores	2816	3328	2304	768	896	896	384
Tensor Cores	88	104	72	24	–	–	–
RT Cores	22	26	18	6	–	–	–
FP32	12	8	6.74 TFLOPS	2.7 TFLOPS	2.5	2.5	1
Media Acceleration	1 NVENC, (+AV1 enc) 1 NVDEC, (+AV1 dec)	1 NVENC, 2 NVDEC, (+AV1 dec)	1 NVENC, 1 NVDEC, (+AV1 dec)	1 NVENC, 1 NVDEC, (+AV1 dec)	1 NVENC, 2 NVDEC,	1 NVENC, 2 NVDEC,	1 NVENC, 2 NVDEC,
NVLink	–	–	–	–	–	–	–
Virtualization Ready	–	–	–	–	–	–	–
Display Connectors	4 x mDP 1.4	4 x mDP 1.4	4 x mDP 1.4	4 x mDP 1.4	4 x mDP 1.4	4 x mDP 1.4	3 x mDP 1.4
Operating Temperature	0 ~ 45°C (32 ~ 113°F)	0 ~ 50°C (32 ~ 122°F)	0°C to 50 °C	0°C to 50 °C	0 ~ 55°C (32 ~ 131°F)	0 ~ 55°C (32 ~ 131°F)	0 ~ 55°C (32 ~ 131°F)
Max Power	70 W	70 W	50 W	50 W	50 W	50 W	30 W
Power Connector	–	–	–	–	–	–	–
Graphics Bus	PCIe 4.0 x8	PCIe 4.0 x16	PCIe 4.0 x8	PCIe 4.0 x8	PCIe 3.0 x16	PCIe 3.0 x16	PCIe 3.0 x16

NVIDIA Quadro® Long-Life SKU Model

Model	NVIDIA RTX A4000E	NVIDIA RTX 6000E Ada	NVIDIA RTX 5000E Ada	NVIDIA RTX 4000E Ada	NVIDIA RTX 2000E Ada	NVIDIA T1000E	NVIDIA T600E	NVIDIA T400E
Part Number	SKY-QUAD-A4000E16B	SKY-QUAD-6000EA-48	SKY-QUAD-5000EA-32	SKY-QUAD-4000EA-20	SKY-QUAD-2000EA-16	SKY-QUAD-T1000E8B	SKY-QUAD-T600E-4	SKY-QUAD-T400E-4
GPU Architecture	Ampere	Ada Lovelace	Ada Lovelace	Ada Lovelace	Ada Lovelace	Turing	Turing	Turing
Memory Size	16 GB GDDR6 with ECC	48 GB GDDR6 with ECC	32 GB GDDR6 with ECC	20 GB GDDR6 with ECC	16 GB GDDR6 with ECC	8 GB GDDR6	4 GB GDDR6	4 GB GDDR6
Memory Interface	256-bit	384-bit	384-bit	160-bit	128-bit	128-bit	128-bit	64-bit
Memory Bandwidth	512 GB/s	960 GB/s	576 GB/s	320 GB/s	224 GB/s	160 GB/s	160 GB/s	80 GB/s
Form Factor	Single slot, full height	Dual slot, full height	Dual slot, full height	Dual slot, full height	Single slot, low profile	Single slot, low profile	Single slot, low profile	Single slot, low profile
Dimension (L x H)	241.3 x 111.8 mm (9.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	241.3 x 111.8 mm (9.5" x 4.4")	169.6 x 68.9 mm (6.6" x 2.7")	154.9 x 68.6 mm (6.1" x 2.7")	154.9 x 68.6 mm (6.1" x 2.7")	154.9 x 68.6 mm (6.1" x 2.7")
CUDA Cores	6144	18176	12800	6144	2816	896	640	384
Tensor Cores	192	568	400	192	88	–	-	-
RT Cores	48	142	100	48	22	–	-	-
Max FP 32 Per f	19.2	91.1	65.3	26.7	12	2.5	1.7	1.09
Media Acceleration	1 NVENC, 2 NVDEC, (+AV1 dec)	3 NVENC 3 NVDEC (+AV1 enc&dec)	2 NVENC 2 NVDEC (+AV1 enc&dec)	2 NVENC 2 NVDEC (+AV1 enc&dec)	1 NVENC 1 NVDEC (+AV1 enc&dec)	1 NVENC, 2 NVDEC,	1 NVENC 2 NVDEC	1 NVENC 2 NVDEC
NVLink	–	–	–	–	–	–	–	–
Virtualization Ready	–	✓	✓	–	–	–	–	–
Display Connectors	4 x DP 1.4	4 x DP 1.4	4 x DP 1.4	4 x DP 1.4	4 x mDP 1.4	4 x mDP 1.4	4 x mDP 1.4	4 x mDP 1.4
Operating Temperature	0 ~ 50 °C (32 ~ 122°F)	0 ~ 45 °C (32 ~ 113°F)	0 ~ 45 °C (32 ~ 113°F)	0 ~ 50 °C (32 ~ 122°F)	0 ~ 45 °C (32 ~ 113°F)	0 ~ 55°C (32 ~ 131°F)	0 ~ 55°C (32 ~ 131°F)	0 ~ 55°C (32 ~ 131°F)
Max Power	140 W	300 W	250 W	130 W	50 W	50 W	40W	30 W
Power Connector	6-Pin PCIe	16-Pin PCIe	16-Pin PCIe	16-Pin PCIe	–	–	–	–
Graphics Bus	PCIe 4.0 x16	PCIe 4.0 x16	PCIe 4.0 x16	PCIe 4.0 x16	PCIe 4.0 x8	PCIe 4.0 x16	PCIe 3.0 x16	PCIe 3.0 x16

✓: supported, – : not supported, △: optional

NVIDIA GPU Cards

NVIDIA Tesla® GPUs

Accelerating the most demanding HPC and hyperscale data center workloads, delivering the horsepower needed to run bigger simulations faster than ever before, and for supporting the highest performance and user density applications.

Model	Tesla H100 NVL	NVIDIA H100	NVIDIA A100 80G	NVIDIA A30	NVIDIA L40S	NVIDIA L40
Part Number	SKY-TESL-H100N-94P	SKY-TESL-H100-80P	SKY-TESL-A100-80P	SKY-TESL-A30-24P	SKY-TESL-L40S-48P	SKY-TESL-L40-48P
GPU Architecture	Hopper	Hopper	Ampere	Ampere	Ada Lovelace	Ada Lovelace
Form Factor	Dual slot, full height 3 NVLINK bridges	Dual slot, full height 3 NVLINK bridges	Dual slot, full height 3 NVLINK bridges	Dual slot, full height 1 NVLINK bridge	Dual slot, full height	Dual slot, full height
Dimension (L x H)	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")
GPU Memory	94GB HBM3	80GB HBM2e	80GB HBM2e	24GB HBM2	48GB DDR6 with ECC	48GB DDR6 with ECC
Memory Bandwidth	3.9TB/s	2TB/s	1,935 GB/s	933GB/s	864GB/s	864GB/s
CUDA Cores	14592	14592	6912	3584	18176	18176
Tensor Cores	456	456	432	224	568	568
RT Cores	–	–	–	–	142	142
FP32/FP64 TFLOPS	67 / 34	48 / 24	19.5 / 9.7	10.3 / 5.2	91.6 / –	88 / –
Multi-Instance GPU	Up to 7	Up to 7	Up to 7	Up to 4	–	–
Media Acceleration	7 JPEG Decoder, 7 Video Decoder	7 JPEG Decoder, 7 Video Decoder	1 JPEG Decoder, 5 Video Decoder	1 JPEG Decoder, 4 Video Decoder	3 NVENC, 3 NVDEC, (+AV1 enc/dec)	3 NVENC, 3 NVDEC, (+AV1 enc/dec)
Ray Tracing	–	–	–	–	✓	✓
Fast FP64	✓	✓	✓	✓	–	–
Design	Compute Optimise	Compute Optimise	Compute Optimise	Compute Optimise	Compute + Graphics	Compute + Graphics
DL & Compute	Ultimate	Ultimate	Ultimate	Fastest	Fastest	Fastest
Graphics	For in-situ visualization (no vPC/vQuadro)		For in-situ visualization (no vPC/vQuadro)	For in-situ visualization (no vPC/vQuadro)	Best	Best
Operating Temperature	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)
Max Power	400 W	350 W	300 W	165 W	350 W	300 W

Model	NVIDIA L4	NVIDIA A40	NVIDIA A10	NVIDIA A2
Part Number	SKY-TESL-L4-24P	SKY-TESL-A40-48P	SKY-TESL-A10-24P	SKY-TESL-A2-16P
GPU Architecture	Ada Lovelace	Ampere	Ampere	Ampere
Form Factor	Single slot, low profile	Dual slot, full height 1 NVLINK bridge	Single slot, full height	Single slot, low profile
Dimension (L x H)	167.6 x 68.6 mm (6.6" x 2.7")	266.7 x 111.8 mm (10.5" x 4.4")	266.7 x 111.8 mm (10.5" x 4.4")	167.6 x 68.6 mm (6.6" x 2.7")
GPU Memory	24GB DDR6 with ECC	48GB DDR6 with ECC	24GB GDDR6	16GB GDDR6
Memory Bandwidth	300GB/s	696GB/s	600GB/s	200GB/s
CUDA Cores	7680	10752	9216	1280
Tensor Cores	240	336	288	40
RT Cores	60	84	72	10
FP32/FP64 TFLOPS	31.3 / –	37.4 / –	31.2 / –	4.5 / –
Multi-Instance GPU	–	–	–	–
Media Acceleration	2 NVENC, 4 NVDEC, (+AV1 enc/dec)	1 Video Encoder, 2 Video Decoder (+AV1 decode)	1 Video Encoder, 2 Video Decoder (+AV1 decode)	1 Video Encoder, 2 Video Decoder (+AV1 decode)
Ray Tracing	✓	✓	✓	✓
Fast FP64	–	–	–	–
Design	Compute + Graphics	Compute + Graphics	Compute + Graphics	Compute + Graphics
DL & Compute	Fastest	Fastest	Fast	Fast
Graphics	Good	Best	Good	Good
Operating Temperature	0 ~ 50°C (32 ~ 122°F)	0 ~ 55°C (32 ~ 131°F)	0 ~ 55°C (32 ~ 131°F)	0 ~ 50°C (32 ~ 122°F)
Max Power	72 W	300 W	150 W	40-60 W

✓: supported, – : not supported, △: optional

Industrial GPU Solutions

NVIDIA GPU Card Support List for Modular IPC




Model	MIC-770 series + MIC-75M20	MIC-770 series + MIC-75G20	MIC-770 series + MIC-75G30	MIC-770 series + MIC-75GF10
Supported GPU Model	Tesla A2 / T4 / L4 Quadro T400 4GB/T1000 8GB RTX A2000 12GB/4000 SFF ADA	Quadro A4000/4500/5000/5500/6000/ 4000 Ada/5000 Ada/6000 Ada	Quadro A4000/4500/5000/5500/6000/ 4000 Ada/5000 Ada/6000 Ada	MXM RTX-3000/A2000/T1000/A500
CUDA Cores	Up to 7,680	Up to 18,176	Up to 18,176 x2	Up to 2560
FP32	Up to 30.3 TFLOPS	Up to 91.1 TFLOPS	Up to 91.1 TFLOPS x2	Up to 8.25 TFLOPS
GPU Power Budget	Up to 80W	Up to 350W	Up to 700W (dual 350W)	Up to 80W
Operating Temperature	0~40°C with air flow	0~35°C with air flow	0~35°C with air flow	-10~50°C (T1000) -10~40°C (RTX-3000/A2000)
Function	1 x PCIe by 4 slot for I/O, Frame grabber Card	1 x PCIe by 4 slot for I/O, Frame grabber Card 2 x SSD/HDD Swappable	1 x PCIe by 4 slot for I/O, Frame grabber Card 2 x SSD/HDD Swappable	1 x PCIe by 4 slot for I/O , Frame grabber Card 2 x SSD/HDD Swappable
System Power	Up to 230W including GPU	Up to 448W including GPU	Up to 755W including GPU	Up to 230W including GPU
Recommended Power Supply	(230W) 96PSA-A230W24P4-3	(480W) 96PSD-A480W24-MS (Peak power 720W, 3 Sec.) (PSU Cable) 1700029474-01 PSU 1.5M (Power cord) 1700029720-01 USA AC Conn.	(1000W) XMIC-HRPG-1000-24 (PSU Cable) 1700031413-01 PSU 1M (Power cord) 1700029720-01 USA AC Conn.	(230W) 96PSA-A230W24P4-3
Compatible GPU Card Dimension	Max card length: 170 mm Max card height: 125 mm Max card thickness: 41 mm (2-slot)	Max card length: 310 mm Max card height: 130 mm Max card thickness: 59 mm (2.75-slot)	Max card length: 310 mm Max card height: 130 mm Max card thickness: 62 mm (3-slot)	MXM Type A/B
System Fan	Add 98R1752000E Add 98R1752002E for A2 & T4 (23,000RPM, 31.6 CFM, 62 dB)	Embedded (2200 RPM, 82 CFM, 36.5 dB)	Embedded (2200 RPM, 82 CFM, 36.5 dB)	Fanelss
Dimension (W x H x D)	127 x 192 x 230 mm	207 x 192 x 385 mm	280 x 192 x 385 mm	190 x 192 x 230 mm

NVIDIA GPU Card Support List for Compact IPC and Industrial Chassis







Model	IPC-220	IPC-240	IPC-320	IPC-610 series ACP-4000 series ACP-4340 series	ACP-2020G-85Z	IPC-7130 series	IPC-730
Supported GPU model	Quadro T400 4GB/T1000 8GB RTX A2000 12GB/4000 SFF ADA		Quadro T400 4GB/ T1000 8GB RTX A2000 12GB/4000 SFF ADA	All Quadro	All Quadro	All Quadro	All Quadro
Recommended Power Supply	19~24 DC		(default with a 250W power supply)	(850W) 96PS-A850WPS2G (700W) PS8-700ATX-BB For RTX 4080 and 4090, please select 850W↑	(default with an 850W power supply)	(850W) 96PS-A850WPS2G (700W) PS8-700ATX-BB For RTX 4080 and 4090, please select 850W↑	ATX 3.0 850W ATX 3.0 1200W
Compatible GPU Card Dimension	Max. card length: 179 mm Max. card height: 111 mm		Max. card length: 170 mm Max. card height: 69 mm	Max. card length: FL (340 mm) Max. card height: 135 mm	Max. card length: FL (340 mm) Max. card height: FH (111.15 mm)	Max. card length: FL (340 mm) Max. card height: 135 mm	Max. card length: 357 mm Max. card height: 180 mm
Dimension (W x H x D)	155 x 150 x 230 mm	195 x 150 x 230 mm	95 x 270 x 300 mm	82 x 177 x 479 mm	482 x 88 x 445 mm	200 x 320 x 480 mm	365 x 206 x 450 mm