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Intelligent Systems

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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 (fan-less, slim, portable devices), and high performance embedded systems, Advantech's intelligent systems are equipped with smart, secure, 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.



Modular IPCs

The modular computers aim at machine automation applications such as vision inspection, AOI, packaging inspection, process automation and intelligent monitoring. Modular IPC is beneficial to service and maintenance and this compact system, with POE and latest Intel Core processor, can be used in the application of edge intelligent, such as edge computing, delivers enhanced computing and graphic performance.



Industrial chassis

Advantech offers a complete selection of industrial computer chassis from 1U to 6U rackmount, to wall-mountable solutions, designed to support a variety of industrial-grade motherboard/single board computer (SBC) form factors, such as ATX, MicroATX, PICMG 1.0/1.3, and full-size/halfsize SBC. Chassis include a range of features such as redundant power supply, hot swappable accessories, storage, and cooling options. High-end models with built in intelligent system modules enable system health self diagnosis, smart fan control, and remote management with WISE-PaaS/ RMM or SNMP sub agent.



Industrial motherboards

Advantech provides a complete range of industrial motherboards in various form factors, from performance-rich ATX to best price/performance MicroATX and ultra compact highly integrated Mini-ITX. These motherboards are highly integrated and deliver advanced features like multi-core processing and PCI Express technology. They are suited for demanding industrial applications that require seamless upgrades, long term support, proven reliability and strict revision control.



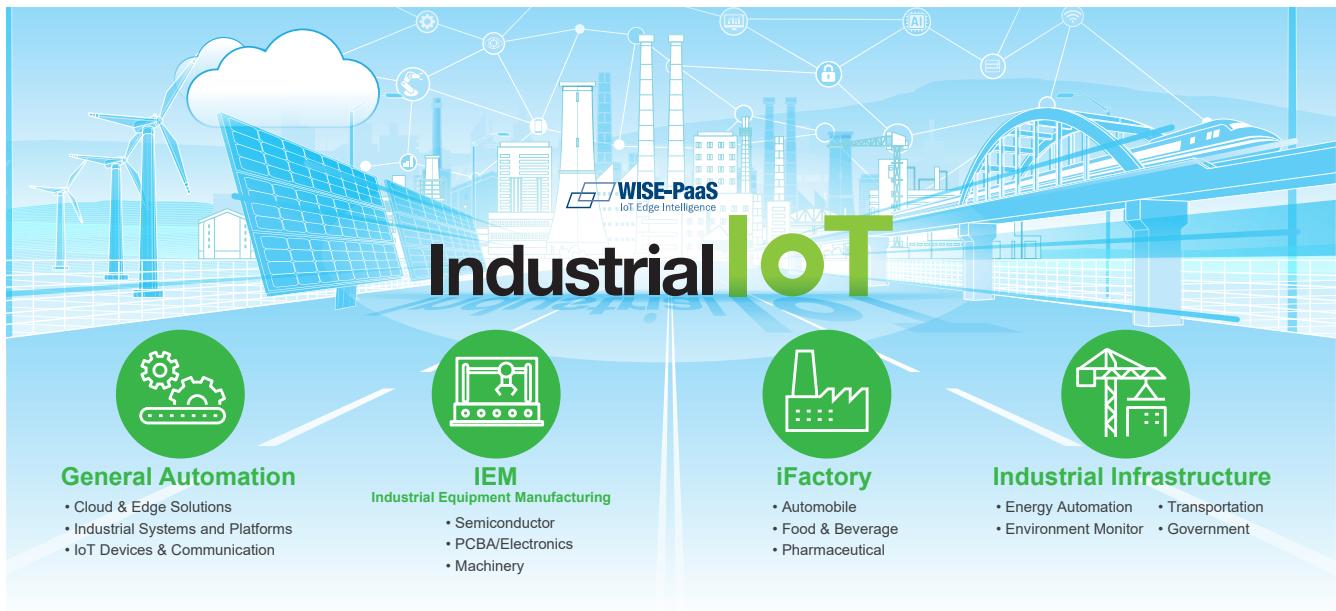
Slot SBCs and passive backplanes

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



Applications



Automated Optical Inspection (AOI)



Factory Automation



Predictive Maintenance



Automatic Equipment



Imaging Processing



AI Inference

Start your Business with an IPC Expert



Tool-less thumb screws



Lockable door, flexible with-or-without key



Front-accessible fan without opening top cover



Small footprint chassis design for better work field layout arrangement

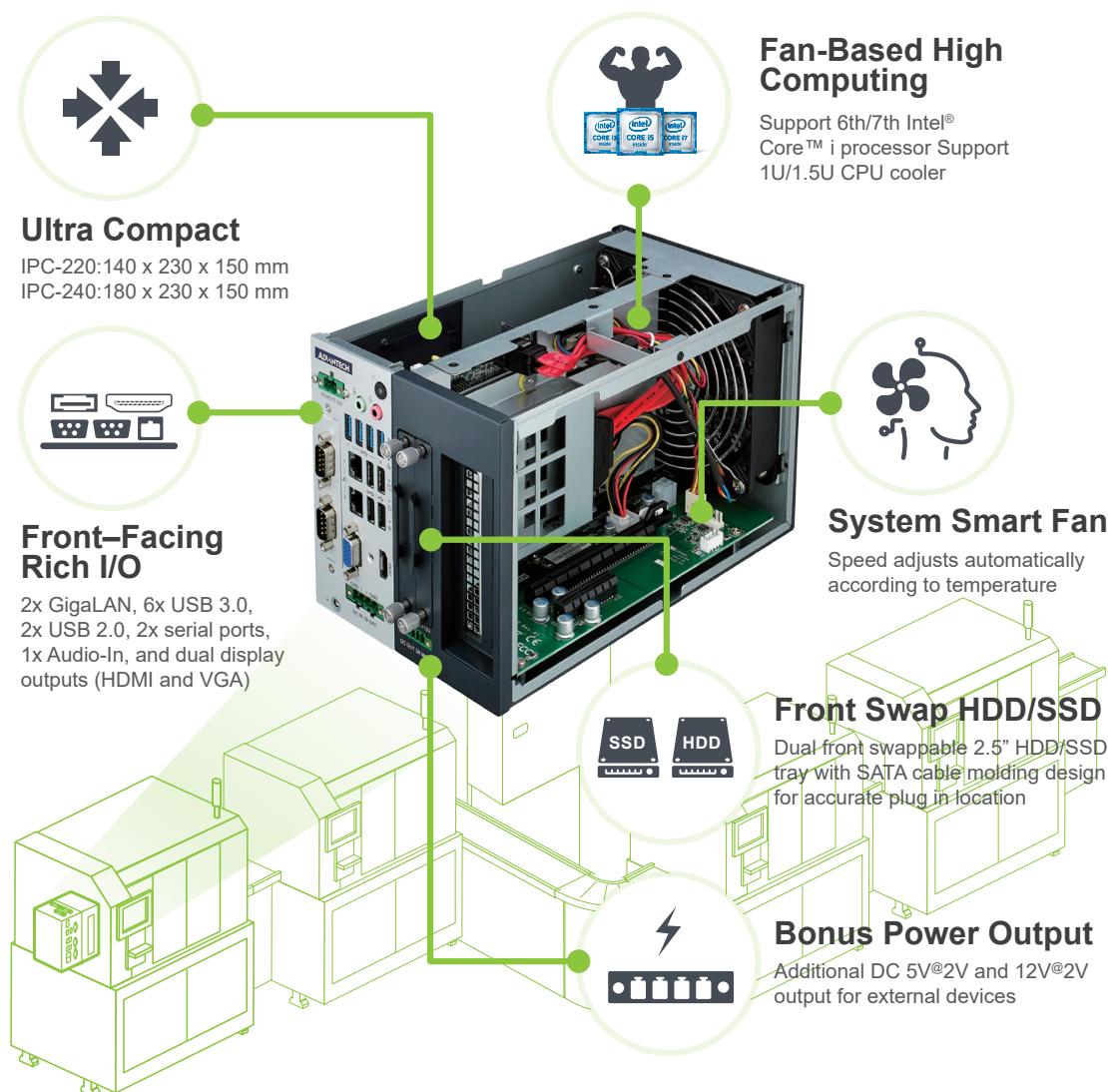
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Modular IPCs

Ultra Compact IPC Introduction

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 IPC-220/240 is an ultra-compact industrial edge computer that features a wide operating temperature range, wide input power tolerance, and front-facing I/O for convenient access and easy deployment. Despite its compact size, the IPC-220/240 offers high expandability to support machine vision and motion control, making it ideal for industrial automation and equipment manufacturing applications. Moreover, with Advantech's rapid and localized configuration services, the IPC-220/240 reduces the time-to-market for machine builders and accelerates the realization of Industry 4.0.



Ultra Compact and Powerful

Industrial Edge Computer for Intelligent Manufacturing

[LEARN MORE](#)



Learn More: <https://www.advantech.com/campaign/compact-ipc>



Modular IPCs Selection Guide

Ultra Compact IPC



Model name		IPC-220	IPC-240	AiMC-3202	AiMC-3422
Form Factor		Compact	Compact	Compact	Compact
Processor System	Chipset	Q170/H110	Q170/H110	H110	H110
	CPU	Intel® 6th/7th Gen Core™ i CPU socket-type (LGA1151)	Intel® 6th/7th Gen Core™ i CPU socket-type (LGA1151)	Intel® 6th/7th Gen Core™ i (LGA1151)	Intel® 6th/7th Gen Core™ i (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 DDR4 2133/2400 MHz Max. 32 GB	Dual DDR4 2133/2400 MHz Max. 32 GB	DDR4 2133/2400 MHz (non-ECC) Max. 32 GB	DDR4 2133/2400 MHz (non-ECC) Max. 32 GB
Graphic	Graphics Controller	Intel® HD Graphics	Intel® HD 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	Shared system memory is subject to OS
Expansion	PCIe x16	1	1	1	1
	PCIe x8	-	-	-	-
	PCIe x4	1	IPC-240-00A1: 2 IPC-240-01A1: 1	AIMC-3202-00A1E: 1	-
	PCIe x1	-	IPC-240-00A1: 1 IPC-240-01A1: 0	-	AIMC-3422-00A1E: 1
	PCI	-	IPC-240-00A1: 0 IPC-240-01A1: 2	AIMC-3202-01A1E: 1	AIMC-3422-00A1E: 2 AIMC-3422-01A1E: 3
	Mini PCIe	1	1	-	-
Storage	Storage Bay	2 x 2.5" HDD/SSD (Max 9.5mm Height)		2 x 2.5" internal HDD bay	1 x 3.5" or 2 x 2.5" internal HDD bay
	M.2	-	-	-	-
	mSATA	1	1	1	1
	CFast	-	-	-	-
	RAID	0/1/5/10 (Q170 only)	0/1/5/10 (Q170 only)	-	-
Ethernet	Ethernet Interface	2 x RJ45	2 x RJ45	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	Q170 LAN1: Intel® I219LM, LAN2: Intel® i210AT H110 LAN1: Intel® I219V, LAN2: Intel® i210AT		LAN 1: Intel® I219V LAN 2: Intel® I211AT	LAN 1: Intel® I219V LAN 2: Intel® I211AT
Front I/O	Display	VGA + HDMI		VGA+DVI-D	VGA
	LAN	2	2	2	2
	USB	Q170: 6 x USB 3.0, 2 x USB 2.0, 2 x Internal USB 2.0 H110: 4 x USB 3.0, 4 x USB 2.0, 2 x Internal USB 2.0		3 x USB 3.0	1 x USB 3.0
	COM	2 x RS-232/422/485 support auto flow control		2 x RS-232	2 x RS-232
	Audio	2 (1 x line out and 1 x mic in)		-	-
Rear I/O	Display	-	-	-	-
	LAN	-	-	-	-
	USB	-	-	-	2 x USB 2.0
	COM	-	-	-	-
	PS/2	-	-	-	-
	Audio	-	-	-	-
Watchdog Timer	Output	System reset	System reset	System reset	System reset
	Interval	Programmable 1 ~ 255 sec/min	Programmable 1 ~ 255 sec/min	Programmable 1 ~ 255 s/min	Programmable 1 ~ 255 s/min
Power Supply	System Power Consumption	150W(Without Add on Card)~220W (With Add on card)	150W(Without Add on Card)~220W (With Add on card)	250W	300W
	DC output range	5V _{DC} , 2A MAX	5V _{DC} , 2A MAX	-	-
	Input Range	19 ~ 24 V _{DC} , 8A ~ 6.5A	19 ~ 24 V _{DC} , 8A ~ 6.5A	100 ~ 240 V _{AC}	100 ~ 240 V _{AC}
	Remote Power Switch	✓	✓	-	-
Cooling	System Fan	1 (12cm/ 82 CFM)	1 (12 cm/82 CFM)	2 (6 cm/14.1 CFM)	1 (9 cm/44.6 CFM)
	Air Filter	Yes	Yes	Yes	Yes
Physical Characteristics	Dimensions (W x H x D)	140 x 230 x 150 mm (5.51" x 9.05" x 5.9")	180 x 230 x 150 mm (7.08" x 9.0" x 5.9")	232 x 90 x 232 mm (9.13" x 3.54" x 9.13")	150 x 222 x 270 mm (5.9" x 8.74" x 10.62")
	Weight	3.0kg	3.2Kg	4.5 kg	5 kg

✓ : supported, - : not supported, △ : optional

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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 an intelligent i-Module, various add-on cards can be installed for machine automation applications.



Diverse selection of CPUs for customized performance



MIC-7300
- Atom/APL
- 4 Cores
- 4 Threads

MIC-7500
- 6 Gen Intel® Core™
- 4 Cores
- 8 Threads

MIC-7700
- 6/7 Gen Intel® Core™
- 4 Cores
- 8 Threads

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

MIC-7900
- Xeon
- **12 Cores**
- 24 Threads



Various expansion I/O for flexible communication



Innovative slot expansion for enhanced control



Be Flexible, Be Invincible

Fanless Edge Industrial PC for Industrial IoT Era

[Learn More](#)



Learn More: <http://select.advantech.com/edge-intelligent-modular-ipc-mic-7-series/>



Modular IPCs Selection Guide

Fanless Modular System: MIC-7 Series



Model name	MIC-770	MIC-7700	MIC-7500
Form Factor	Compact	Compact	Compact
Processor System	Chipset	Q370/H310	Q170/H110
	CPU	Intel® 8th/9th Gen Core™ i socket-type (LGA1151)	Intel® 6th/7th Gen Core™ i socket-type (LGA1151)
	Core	Max. 8	Max. 4
	Cache	Max. 12 MB	Max. 8 MB
	Memory	Dual DDR4 2400/2666 MHz SODIMM Max. 64 GB	Dual DDR4 2400 MHz SODIMM Max. 32 GB
Graphic	Graphics Controller	Intel® HD Graphics	Intel® HD Graphics
	VRAM	Shared system memory is subject to OS	Shared system memory is subject to OS
Expansion	PCIe x16		
	PCIe x8		
	PCIe x4	Supported via i-Module	Supported via i-Module
	PCIe x1		
	PCI		
Storage	Mini PCIe	2 (Q Sku) 1 (H Sku)	2 (Q Sku) 1 (H Sku)
	Storage Bay	1 x 2.5" internal HDD/SSD bay	1 x 2.5" internal HDD/SSD bay
	M.2	-	-
	mSATA	1	1
	CFast	-	1
Ethernet	RAID	0/1/5/10 (Q SKU only)	0/1/5/10 (Q SKU only)
	Ethernet Interface	2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps
	Controller	Q370 LAN1: Intel® I219LM, LAN2: Intel® I210IT H310 LAN1: Intel® I219V, LAN2: Intel® I210IT	Q170 LAN1: Intel® I219LM, LAN2 Intel I210IT H110 LAN1: Intel® I219V, LAN2: I210IT
Front I/O	Display	VGA+HDMI	VGA+DVI-D
	LAN	2	2
	USB	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	Q170: 8 x USB 3.0 , 1 x internal USB 2.0 H110: 4 x USB 3.0, 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
	PS/2	-	-
Rear I/O	Audio	Line out/mic in	Line out/mic in
	Display	-	-
	LAN	-	-
	USB	-	-
	COM	-	-
Watchdog Timer	PS/2	-	-
	Output	System reset	System reset
Power Supply	Interval	Programmable 1~255 s/min	Programmable 1~255 s/min
	Output Wattage	-	-
Cooling	Input Range	9 ~ 36 V _{DC}	9 ~ 36 V _{DC}
	Remote Power Switch	△	△
Physical Characteristics	System Fan	-	-
	Air Filter	-	-
Physical Characteristics	Dimensions (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")
	Weight	2.9 kg	2.9 kg

✓ : supported, - : not supported, △ : optional

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Modular IPCs Selection Guide

Fanless Modular System: MIC-7 Series



Model name	MIC-7900	MIC-7300	MIC-7420
Form Factor	Compact	Compact	19" 2U Rack Mount QM170
Processor System	Chipset	-	-
	CPU	Intel® Xeon® D-1559/D-1539 BGA-type	Intel® Celeron® N3350/ Atom™ x7-E3950 BGA-type
	Core	Max. 12	Max. 4
	Cache	Max. 18 MB	2 MB
	Memory	Dual DDR4 2400 MHz SODIMM (supports ECC) Max. 32 GB	Dual DDR3L 1867 MHz SODIMM Max. 8 GB Dual DDR4 2400 MHz Onboard 8GB & 1 SODIMM slot Max. 24GB
Graphic	Graphics Controller	ASPEED AST1400 with 256 MB VGA memory provides basic 2D VGA function	Intel® HD Graphics
	VRAM	Shared system memory is subject to OS	Shared system memory is subject to OS
Expansion	PCIe x16	Supported via i-Module	-
	PCIe x8		-
	PCIe x4		2
	PCIe x1		Supported via i-Module
	PCI		Supported via i-Module
	Mini PCIe	1	1
Storage	Storage Bay	1 x 2.5" internal HDD/SSD bay	1 x 2.5" internal HDD/SSD bay
	M.2	22110 (2280 w/ bracket), M-Key	- 2260, M-Key
	mSATA	1	1
	CFast	1	-
	RAID	-	0/1
Ethernet	Ethernet Interface	2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps
	Controller	4 x Intel® i210IT	2 x Intel® i210AT LAN 1: Intel® i219LM LAN 2: Intel® i210IT
Front I/O	Display	VGA	VGA+DVI-D
	LAN	4	2
	USB	4 x USB 3.0	2 x USB 3.0 6 x USB 2.0
	COM	2 x RS-232/422/485 supports auto flow control 2 x RS-232	2 x RS-232/422/485 supports auto flow control + 4 x RS-232
	PS/2	-	-
	Audio	Line out/mic in	Line out/mic in
Rear I/O	Display	-	- DVI-I + DVI-D
	LAN	-	- 2
	USB	-	2 x USB 3.0 4 x USB 2.0
	COM	-	2 x RS-232/422/485 supports auto flow control
	PS/2	-	1
	Audio	-	Line out/mic in
Watchdog Timer	Output	System reset	System reset
	Interval	Programmable 1~ 255 s/min	Programmable 1~ 255 s/min
Power Supply	Output Wattage	-	- 150W
	Input Range	9 ~ 36 V _{DC}	9 ~ 36 V _{DC}
	Remote Power Switch	-	1
Cooling	System Fan	-	-
	Air Filter	-	-
Physical Characteristics	Dimensions (W x H x D)	73 x 192 x 230 mm (2.91" x 7.55" x 9.05")	73 x 192 x 230 mm (2.91" x 7.55" x 9.05")
	Weight	2.9 kg	2.9 kg 10 kg

✓ : supported, - : not supported, △ : optional

i-Module Expansion Slot for MIC-7 Series



i-Module	MIC-75M10	MIC-75M11	MIC-75M20	MIC-75M20-01	MIC-75M40	MIC-75M13	MIC-75S20	MIC-75G20	MIC-75G30
Slot 1	PCIe x16*	PCIe x16*	PCIe x4*	PCIe x8*	PCIe x4	PCIe x16*	PCIe x16*	PCIe x4	-
Slot 2	-	PCI	PCIe x16*	PCIe x8*	PCIe x8	PCI	PCIe x4*	-	PCIe x16 (signal PCIe x8) for GPU card
Slot 3	-	-	-	-	PCIe x4	PCI	-	PCIe x16	-
Slot 4	-	-	-	-	PCIe x4	PCI	-	-	PCIe x16 (signal PCIe x8) for GPU card
Slot 5	-	-	-	-	-	-	-	-	PCIe x4
SATA Port	-				1				1
SATA PWR	-				1				1
2.5" HDD/SSD Bay	-	1**			2	2 x Swappable + 2 x Internal	2 x Swappable	2 x 2.5" swappable	
N.W. (kg)	0.64	0.87			1.16	1.60	2.99	5	
G.W. (kg)	1.71	2.02			2.47	2.98	4.79	7	
i-Module (W x H x D)	24 x 192 x 230	50 x 192 x 230			90 x 192 x 230	110 x 192 x 350	203 x 192 x 385		
MIC-7000 + i-Module (W x H x D)	97 x 192 x 230	123 x 192 x 230			163 x 192 x 230	184 x 192 x 350	276 x 192 x 385		
MIC-77X + i-Module (W x H x D)	101 x 192 x 230	127 x 192 x 230			167 x 192 x 230	187 x 192 x 350	280 x 192 x 385		
System Fan	-	98R175200E (Optional)***			98R1751300E (Optional)***		Embedded	Embedded	
12V _{DC} Conn				1					
12V _{DC} Conn. for GPU							2	4	
PCI/PCIe Card Max. Length (with system fan)		190.2 mm			184.75 mm		287.35 mm	331 mm	
PCI/PCIe Card Max. Length (without system fan)			210.4 mm				-	-	

* If installed on MIC-7300, this slot will be a PCIe x1 signal.

** Need to order 98R1752010E (2.5" HDD/SSD kit for 2-slot i-Module)

*** Suggest 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			4-Slot		Featured		
	MIC-75M10	MIC-75M11	MIC-75M20	MIC-75M20-01	MIC-75M40	MIC-75M13	MIC-75S20	MIC-75G20	MIC-75G30
MIC-7300	✓	✓	✓	-	-	✓	✓	-	-
MIC-7500	✓	✓	✓	✓	✓	✓	✓	✓	✓
MIC-77Q/7700Q	✓	✓	✓	✓	✓	✓	✓	✓	✓
MIC-77H/7700H	✓	✓	✓	-	-	✓	✓	✓	✓
MIC-7900	✓	✓	✓	✓	✓	✓	✓	✓	✓

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Modular IPC Selection Guide

Flex I/O Expansion Kit for MIC-7 Series

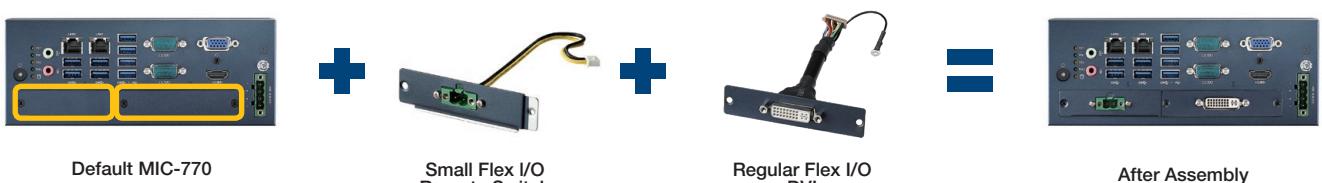
Flex I/O series modules provide flexible expansion for MIC-7 Series so customers can enjoy display, more control, and better communication via Flex I/O. All Flex I/O are attached directly from connectors reserved on the MIC-7 series main board and installed on the front panel, making it easy to fulfill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

Flex I/O Assembly Example

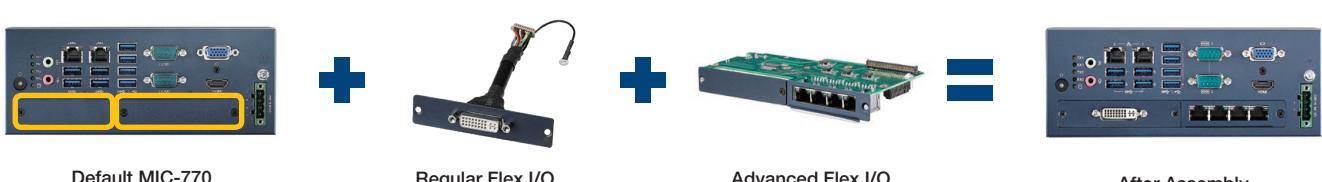
Small Flex I/O



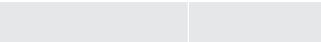
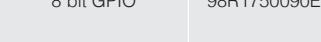
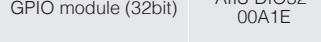
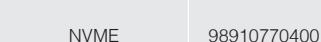
Regular Flex I/O



Advanced Flex I/O



Compatible Table

Flex I/O	Function	Part Number	MIC-7300	MIC-7500	MIC-7700		MIC-770		MIC-7900
			MIC-7700Q	MIC-7700H	MIC-770Q	MIC-770H			
Small FIO									
	Remote Switch	98R1750070E	-	-	-	-	✓	✓	-
Regular FIO									
	DVI	98R1750000E	✓	✓	✓	✓	✓	✓	-
	HDMI & Remote Switch	98R1750010E	-	✓	✓	✓	✓	✓	-
	HDMI	98R1750030E	✓	✓	✓	✓	✓	✓	-
	Remote Switch	98R1750040E	-	✓	✓	✓	✓	✓	✓
	COM Port	98R1750060E	-	-	-	-	✓	✓	-
	Reset & Remote Switch & 5VDC	98R1750080E	✓	✓	✓	✓	✓	✓	✓
	8 bit GPIO	98R1750090E	-	✓	✓	✓	✓	✓	✓
	Dual LAN	9891790040E	-	-	✓	-	-	-	-
	GPIO module (32bit)	AIIS-DIO32-00A1E	-	✓	✓	✓	-	-	✓
	TPM module	PCA-TPM-00B1E	✓	✓	✓	✓	✓	✓	-
Advanced FIO									
	NVME+ 4x LAN	98910770300	-	-	-	-	✓	-	-
	NVME	98910770400	-	-	-	-	✓	-	-
	POE	98910770500	-	-	-	-	✓	-	-

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Industrial Chassis Selection Guide



Model Name		IPC-6806S	IPC-6806/6806W	IPC-6606/6608	IPC-7132	IPC-5120/7120
Form Factor Support		PICMG 1.0/1.3 Half-size SBC	PICMG 1.0 Full-size SBC / PICMG 1.0/1.3 Full-size SBC	PICMG 1.0/1.3 Full-size SBC	ATX / Micro ATX	Micro ATX / ATX
Drive Bay	Slim Optical Drive	-	-	-	-	- / -
	2.5"	-	-	-	-	-
	3.5"	1	1 / 1	1 / 1	1	1 / 1
		1	1 / 1	1 / 1	2	1 / 1
	5.25"	-	0 / 1	1 / 2	1	1 / 1
Front I/O	USB	2	2 / 2	2 / 2	2	Front I/O chassis
	PS/2	-	- / -	- / -	-	-
Cooling	No. of Fans	1	1 / 1	1 / 1	1	1 + 1
	CFM	51.5	51.5 / 58	51.5 / 82	82	82 / 11
Power Supply	AC	250W Flex ATX 350W Flex ATX	250W Flex ATX 350W Flex ATX	300W PS/2	300W PS/2 500W PS/2	250W Flex ATX 350W Flex ATX
	AC Redundant	-	-	-	-	-
	DC	-	-	-	-	-
No. of Slots for add-on cards		4	5 / 5	5 / 7	7	4 / 7
No. of Full-size Cards		-	6 / 6	6 / 8	7	-
Passive Backplane Options	PICMG 1.0	✓	✓	✓	-	-
	PICMG 1.3	✓	- / ✓	✓	✓	-
Intelligent System Module						
Dimensions (W x H x D)	mm	191 x 178 x 290	166 x 178 x 398/ 198 x 221 x 398	173 x 254 x 396/ 173 x 315 x 410	200 x 330 x 430	320 x 164 x 316.5/ 380 x 164 x 316.5
	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	6.8 x 10 x 15.6 / 6.8 x 12.4 x 16.1	7.9 x 13 x 16.9	12.6 x 6.5 x 12.5/ 15 x 6.5 x 12.5
Weight	kg	5.6	6.3 / 8	9 / 11	9.96	6.54 / 7.01
	lb	12.3	13.9 / 17.6	19.8 / 24.2	21.93	14.42 / 15.45

✓: supported, - : not supported, △: optional



Model Name		IPC-6025	IPC-5122	IPC-7130 / IPC-7130L	IPC-7220
Form Factor Support		PICMG 1.0/1.3 Full-size SBC	Micro ATX	ATX / Micro ATX	ATX / Micro ATX
Drive Bay	Slim Optical Drive	-	1	-	-
	2.5"	-	-	-	-
	3.5"	1	1	2 (hot-swap) / 2	1
	Internal	1	1	1 / 1	1
5.25"		-	-	1 / 1	2
Front I/O	USB	2	2	2 / 2	2
	PS/2	-	-	-	-
Cooling	No. of Fans	1	1	1 + 1	1
	CFM	51.5	82	82 / 27.72	82
Power Supply	AC	350W Flex ATX	300W PS/2 500W PS/2	300W PS/2 500W PS/2	300W PS/2 500W PS/2
	AC Redundant	-	-	500W Mini RPS	-
	DC	-	-	-	-
No. of Slots for add-on cards		4	4	7	7
No. of Full-size Cards		5	-	7	7
Passive Backplane Options	PICMG 1.0	✓	-	-	-
	PICMG 1.3	✓	-	-	-
Intelligent System Module		✓	✓	✓/-	✓
Dimensions (W x H x D)	mm	111 x 212 x 420	157 x 360 x 340	200 x 320 x 480	200 x 320 x 480
	inch	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
Weight	kg	4.7	6.5	12.8	14
	lb	10.3	14.3	28.2	30.8

✓: supported, - : not supported, △: optional

Industrial Chassis Selection Guide



Model Name		1U Rackmount	2U Rackmount				4U Rackmount		
		ACP-1010	IPC-603	ACP-2000	ACP-2010/ 2320	ACP-2020	IPC-510	IPC-610-L/ IPC-611	IPC-631
Form Factor Support		ATX/MicroATX	ATX/MicroATX	PICMG 1.0/1.3 Full-Size SBC	ATX/MicroATX	ATX / MicroATX	PICMG1.0/1.3 Full size SBC ATX/Micro-ATX	PICMG1.0/1.3 Full size SBC ATX/Micro-ATX	ATX/Micro-ATX
Drive Bay	Slim Optical Drive	1	1	1	-/1	1	-	-	1
	2.5"	1 x 3.5" or 2 x 2.5"	-	-	-	2 external (optional hot-swap module) 2 internal	-	-	4 (2 external optional hot-swap)
	Hot-swap	-	-	-	- / 2 (SATA)	-	-	-	-
	3.5"	1	-	2	1 / -	-	1	1	-
	External	1	-	2	-	-	1	-	-
	Internal	1 x 3.5" or 2 x 2.5"	1	-	2	-	1	-	-
	5.25"	-	-	-	1 / -	-	3	3	-
Front I/O	USB	2	Front I/O chassis	2	2	2 (USB 3.0)	2	2	Front I/O chassis
	PS/2	-	-	1	1	-	1	-	-
Cooling	No. of Fans	2 (MB)	2	2	2 / 3	1	1	1	2
	CFM	2 x 24 (MB)	2 x 47	2 x 47	2 x 47/ 2 x 47 + 1 x 28	41	77	82	2 x 82
Power Supply	AC	250W Flex ATX 350W Flex ATX	350W Flex ATX	300W PS/2 500W PS/2	250W Flex ATX 350W Flex ATX	350W Flex ATX 850W Flex ATX	300W PS/2	300W PS/2 500W PS/2	500W PS/2 700W PS/2
	AC Redundant	-	-	-	-	500W 2U redundant	-	-	-
	DC	-	-	-	-	-	-	-	-
No. of Slots		1	3	6	3 / 3	7	14	15	7
No. of Full-size Cards ^{Note}		0	0	4	3 / 3	7	8	11	0
Passive Backplane Options	PICMG 1.0	✓	-	✓	-	-	✓	✓	-
	PICMG 1.3	✓	-	✓	-	-	✓	✓	-
Intelligent System Module		-	-	✓	✓	✓	-	-	-
Dimensions (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 177 x 348	482 x 177 x 446	482 x 177 x 480	482 x 177 x 348
	inch	19 x 1.7 x 19.6	19 x 3.46 x 12.1	19 x 3.5 x 17.8	19 x 3.5 x 18.9	19 x 7.0 x 13.7	19 x 7 x 17.6	19 x 7 x 18.9	19 x 7.0 x 13.7
Weight	kg	8	6.4	11.5	10.7/11.7	8	10.7	14.5	8
	lb	17.6	14.1	25.3	23.5/25.7	17.6 lb	23.5	31.9	17.6

Note: Depending on system configuration. Board component or CPU cooler mechanical interference might reduce supported full-size card number.

✓: supported, - : not supported, △: optional



Model Name		4U Rackmount							
		IPC-610-H	ACP-4020	ACP-4D00	ACP-4000	ACP-4010/ ACP-4320	ACP-4340	ACP-4360	IPC-623
Form Factor Support		PICMG1.0/1.3 Full size SBC ATX/Micro-ATX	PICMG1.3 Half-size SBC ATX/Micro-ATX	PICMG 1.3/PCI Half-size SBC	PICMG1.0/1.3 Full-size SBC ATX/Micro-ATX	PICMG1.0/1.3 Full-size SBC ATX/Micro-ATX	PICMG1.0/1.3 Full size SBC ATX/Micro-ATX	PICMG1.0/1.3 Full size SBC ATX/Micro-ATX	PICMG 1.0/1.3 Full size SBC
Drive Bay	Slim Optical Drive	-	1	-	-	-	1	1	-
	2.5"	-	1 (Internal)	-	-	-	1 (Internal)	-	-
	3.5"	-	-	-	-	- / 2 (SATA)	4 (SATA)	6 (SATA)	-
	External	1	2	1 / each node	1	1 / -	-	1	1
	Internal	-	-	-	-	1 / -	-	-	-
Front I/O	5.25"	3	-	-	3	2	-	-	2
	USB	2	2 (USB 3.0)	2 (USB 2.0) + 2 (USB 3.0) / each node	2	4 / 2	2 (USB 3.0)	2	-
	PS/2	1	-	-	1	-	-	-	-
Cooling	No. of Fans	2	2	1 / each node	2	2 / 2	2	3	3
	CFM	2 x 82	2 x 51.5	1 x 58 per node	2 x 82	2 x 82/ 1 x 82 + 1 x 28	1 x 82 + 1 x 56	1 x 114 + 2 x 47	3 x 150
Power Supply	AC	300W PS/2 500W PS/2 700W PS/2	300W PS/2 500W PS/2 700W PS/2	250W Flex ATX 300W Flex ATX	300W PS/2 500W PS/2 700W PS/2	300W PS/2 500W PS/2 700W PS/2	300W PS/2 500W PS/2 700W PS/2	500W PS/2 700W PS/2	500W 1200W
	AC Redundant	-	-	-	500W Mini RPS	500W Mini RPS	-	500W Mini RPS	-
	DC	-	-	-	-	-	-	-	-
No. of Slots		15	15	6 / each node	15	15 / 15	15	15	20
No. of Full-size Cards ^{Note}		11	0	0	11	15 / 10	11	8	20
Passive Backplane Options	PICMG 1.0	✓	-	✓ (PCI BP only)	✓	✓	✓	✓	✓
	PICMG 1.3	✓	✓	✓	✓	✓	✓	✓	✓
Intelligent System Module		-	✓	✓	✓	✓	✓	✓	-
Dimensions (W x H x D)	mm	482 x 177 x 479	482 x 177 x 348	430 x 177 x 350	482 x 177 x 479	482 x 177 x 479	482 x 177 x 478	482 x 177 x 501	482 x 177 x 657
	inch	19 x 7 x 18.9	19 x 7.0 x 13.7	19 x 7.0 x 13.8	19 x 7 x 18.9	19 x 7 x 18.9	19 x 7.0 x 18.8	19 x 7.0 x 19.8	19 x 7 x 26
Weight	kg	15	8.5	15	15.2	16.6/17.6	12.5	19	26
	lb	33	18.7	33	33.5	36.5/38.7	27.5	41.8	57

Note: Depending on system configuration. Board component or CPU cooler mechanical interference might reduce supported full-size card number.

✓: supported, - : not supported, △: optional

Industrial Motherboards Selection Guide

ATX Motherboards



Model Name		AIMB-706	AIMB-786
Processor System	CPU	8/9th Gen Intel Core i7/i5/i3/Pentium	
	Socket	LGA1151	
	Max. Speed	3.7 GHz	
	Cache	L3: up to 12 MB (depends on CPU)	
	Chipset	Intel® H310	Intel® Q370
	BIOS	AMI 128 Mbit SPI Flash	AMI 256 Mbit SPI flash
Expansion Slot	PCIe x16	1 (Gen3)	
	PCIe x4	1 (Gen2)	4 (Gen3)
	PCIe x1	-	-
	PCI	5	2
Memory	Technology	Dual DDR4 2400/2666 MHz	
	Max. Capacity	64 GB	128 GB
	Socket	2 x 288-pin DIMM	4 x 288-pin DIMM
Graphics	Controller	Intel HD Graphics	
	VRAM	Shared system memory is subject to OS	
Ethernet	Interface	10/100/1000 Mbps	
	Controller	GbE LAN1: Intel® I219V GbE LAN2: Intel® I211AT (for G2 version)	GbE LAN1: Intel® I219LM GbE LAN2: Intel® I211AT
SATA	Max. Date Transfer Rate	600MB/s	
	Channel	4	5 (SW RAID)
I/O Interface	VGA	1	
	DVI	1(for G2 version)	1
	DP	-	1
	USB	(4 x USB 3.1 Gen 1, and 5 x USB 2.0)	13 (2 x USB 3.1 Gen 2, 4 x USB 3.1 Gen 1, and 7 x USB 2.0)
	Serial	6 (for G2 version) 2 (for VG version)	6
	Parallel	1	
	PS/2	2 (1 x rear I/O and 1 x wafer box)	1 (internal wafer box)
	Ethernet (GbE)	2 for G2 version 1 for VG version	2
	Audio	Mic-in, Line-out	
	Watchdog Timer	Output Interval	System reset Programmable, 1-255 Sec

✓: supported, - : not supported, △: optional



Model Name		AIMB-784	AIMB-705	AIMB-785
Processor System	CPU	4th Gen Intel Core i7/i5/i3/Pentium	6th/7th Gen Intel Core i7/i5/i3/Pentium	6th/7th Gen Intel Core i7/i5/i3/Pentium
	Socket	LGA1150	LGA1151	LGA1151
	Max. Speed	3.7 GHz	3.9 GHz	3.9 GHz
	Cache	L3: up to 8 MB (depends on CPU)	L3: up to 8 MB (depends on CPU)	L3: up to 8 MB (depends on CPU)
	Chipset	Intel Q87	Intel H110	Intel Q170
	BIOS	AMI 128 Mbit SPI	AMI 128 Mbit SPI	AMI 128 Mbit SPI
Expansion Slot	PCIe x16	1 (Gen3)	1 (Gen3)	1 (Gen3)
	PCIe x4	1 (Gen2)	1 (Gen2)	3 (Gen3)
	PCIe x1	1 (Gen2)	-	-
	PCI	4	5	3
Memory	Technology	Dual Channel DDR3 1333/1600 MHz	Dual Channel DDR4 1866/2133 MHz	Dual Channel DDR4 1866/2133 MHz
	Max. Capacity	32 GB	32 GB	64 GB
	Socket	4 x 240-pin DIMM	2 x 288-pin DIMM	4 x 288-pin DIMM
Graphics	Controller	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics
	VRAM	Shared system memory up to 1 GB	Shared system memory is subject to OS	Shared system memory is subject to OS
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	GbE LAN1: Intel I217LM GbE LAN2: Intel I211AT	GbE LAN1: Intel I219V GbE LAN2: Intel I211AT (for G2 version)	GbE LAN1: Intel I219LM GbE LAN2: Intel I211AT
SATA	Max. Date Transfer Rate	600 MB/s	600 MB/s	600 MB/s
	Channel	6 (SW RAID)	4	6 (4 w/ SW RAID)
I/O Interface	VGA	1	1	1
	DVI	2	1(for G2 version)	2
	USB	13 (4 USB 3.0 and 9 USB 2.0)	9 (4 USB 3.0 and 5 USB 2.0)	13 (6 USB 3.0 and 7 USB 2.0)
	Serial	6	6 (for G2 version) 2 (for VG version)	6
	Parallel	1	1	1
	PS/2	2 (1 x keyboard and 1 x mouse)	2 (1 x rear I/O and 1 x wafer box)	1 (internal wafer box)
	Ethernet (GbE)	2	2 for G2 version; 1 for VG version	2
	Audio	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out
Watchdog Timer	Output	System reset	System reset	System reset
	Interval	Programmable, 1 ~ 255 sec	Programmable, 1-255 Sec	Programmable, 1-255 Sec

✓: supported, - : not supported, △: optional

Slot SBCs and Passive Backplanes Selection Guide

PICMG 1.3 System Host Boards



Model Name		LGA1151 PICMG 1.3 SHB PCE-5029	LGA1151 PICMG 1.3 SHB PCE-5031	LGA1150 PICMG 1.3 SHB PCE-5128	LGA1151 PICMG 1.3 SHB PCE-5129
Processor System	CPU	Intel® Core™ i7/Core™ i5/ Core™ i3 LGA1151 Processors	Intel® Core™ i7/Core™ i5/ Core™ i3 LGA1151 Processors	Intel® Core™ i7/Core™ i5/ Core™ i3 LGA1150 Processors	Intel® Core™ i7/Core™ i5/ Core™ i3 LGA1151 Processors
	Max. Speed	3.4 GHz	3.7 GHz	3.1 GHz	3.4 GHz
	Cache	Up to 8 MB (Depends on CPU)	Up to 12 MB (Depends on CPU)	Up to 8 MB (Depends on CPU)	Up to 8 MB (Depends on CPU)
	Chipset BIOS	Intel® H110 AMI 128 Mbit SPI Flash PICMG1.3: One x16 & Four x1	Intel H310 AMI 256Mbit SPI Flash PICMG1.3: One x16 & Four x1	Intel® Q87 AMI 128 Mbit SPI Flash PICMG1.3: One x16 & Four x1	Intel Q170 AMI 128 Mbit SPI Flash PICMG1.3: One x16 & Four x1
Backplane Bus	PCIe				
	PCI (32bit/33 MHz)	4	4 x PCI master to backplane, 32-bit, 33 MHz	4	4
Memory	Technology	Dual-channels (Non-ECC) DDR4 1866/2133	Dual-channel (non-ECC) U-DIMM DDR4 2400/2666 MHz	Dual-channel (Non-ECC) DDR3 1333/1600	Dual-channels (Non-ECC) DDR4 1866/2133
	Max. Capacity	32 GB	32 GB (depends on CPU)	16 GB	32 GB
	Socket	2 x 288-pin DIMM	2 x DDR4 288-pin DIMM	240-pin DIMM x 2	2 x 288-pin DIMM
Graphics	Controller	Chipset integrated Intel® HD Graphics	Chipset integrated with Intel® HD Graphics	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	Shared system memory is subject to OS	Shared system memory is subject to OS
	Video Out	G2: VGA+DP/DVI (Optional DVI-D/DP cable) VG: VGA	VGA+DP/DVI-D+DP/DVI-D	VGA/DVI-D/DVI-D (Optional DVI-D cable)	VGA+DP/DVI-D+DP/DVI-D
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	LAN1/LAN2 Controller	LAN1: I219-V LAN2: I211-AT (G2 only)	LAN 1: Intel® I219-V LAN 2: Intel® I211-AT	Intel® I217LM/I211AT	Intel I219LM/I211
	Connector	G2: 2 VG: 1	RJ45 x 2	RJ45 X 2	RJ45 x 2
	Disable in BIOS	✓	✓	✓	✓
SATA	Max. Date Transfer Rate	600 MB/s SATA3.0	600 MB/s SATA3.0	600 MB/s SATA3.0	600 MB/s SATA3.0
	Channel	4 x SATA3.0	4 x SATA3.0	6 x SATA3.0 0, 1, 5, 10	5 x SATA3.0 0, 1, 5, 10
	S/W Raid	-	-	-	-
Rear I/O	VGA	1	1	1	1
	Ethernet	G2: 2 VG: 1	2	2	2
	USB2.0	-	0	0	0
	USB3.0	G2: 1 VG: -	1	1	1
	PS/2	1	1	1	1
	Serial	G2: - VG: 1	0	-	-
Internal I/O	USB 2.0	7 USB 2.0 (Pin-header x 2+USB Type A x 1+ 4 on backplane)	7 USB 2.0 (pin header*2 + USB Type A*1 + 4 on backplane)	9 USB 2.0 (Pin-Header x 4 + USB Type A x 1 + 4 on backplane)	7 USB 2.0 (Pin-header x 2+USB Type A x 1+ 4 on backplane)
	USB 3.0	2 USB3.0 (Pin header)	2 USB3.0 (Pin header)	2 USB3.0 (Pin-Header)	4 USB3.0 (Pin header)
	SATA	4	4	6	5
	M.2 (2280 Type M)	-	0	-	1 (Shared w/ SATA0 port)
	Serial	G2: 2 VG: 1	2	2 RS-232 (Pin-Header)	2 RS-232 (Pin-Header)
	Parallel	1	1	1(SPP/EPP/ECP)	1
	PS/2	1	1	1	1
	OBS(Onboard Security Hardware Monitor)	✓	✓	✓	✓
Watchdog Timer	Output	System reset	System reset	System reset	System reset
	Interval	Programable, 1~255 sec	Programmable, 1~255 sec/min	Programmable, 1~255 sec/min	Programmable, 1~255 sec/min
Miscellaneous	Advantech Audio Module	PCA-AUDIO-HDB1E	PCA-AUDIO-HDB1E	PCA-AUDIO-HDA1E	PCA-AUDIO-HDB1E
	Advantech SNMP-1000	-	-	✓	✓
	Advantech SAB-2000	G2: ✓ VG: -	✓	✓	✓
	Advantech IPMI Module	-	-	-	-
	AMT	-	✓	✓	✓

✓: supported, - : not supported, △: optional



Model Name		LGA1151 PICMG 1.3 SHB PCE-5131	LGA1150 PICMG 1.3 SHB PCE-7128	LGA1151 PICMG 1.3 SHB PCE-7129	LGA1151 PICMG 1.3 SHB PCE-7131
Processor System	CPU	Intel® Core™ i7/Core™ i5/Core™ i3 LGA1151 Processors		Intel® Xeon® and Core™ i7/Core™ i5/Core™ i3 LGA1150 Processors	Intel® Xeon and Core™ i7/Core™ i5/Core™ i3 LGA1151 Processors
	Max. Speed	3.7 GHz		3.5 GHz	3.6 GHz
	Cache	Up to 12 MB (Depends on CPU)		Up to 8 MB (Depends on CPU)	Up to 8 MB (Depends on CPU)
	Chipset	Intel Q370		Intel® C226	Intel C236
	BIOS	AMI 256 Mbit SPI		AMI 128 Mbit SPI Flash	AMI 128 Mbit SPI Flash
Backplane Bus	PCIe	One x16 & Four x1		PICMG1.3: One x16 / Two x8 & Four x1	1 x PCIe x16/2 x PCIe x8 and 1 x PCIe x4 to backplane
	PCI (32bit/33 MHz)	4 x PCI master to backplane, 32-bit, 33 MHz		4	4 x PCI master to backplane, 32-bit, 33 MHz
Memory	Technology	Dual-channel (non-ECC) DDR4 2400/2666	Dual-channel (ECC) DDR3 1333/1600	Dual-channels (ECC) DDR4 1600/1866/2133	Dual-channel (non-ECC) DDR4 2400/2666 (Note: Intel ECC-supported processor must be selected to enable ECC function)
	Max. Capacity	32 GB (depends on CPU)	16 GB	32 GB	32 GB (depends on CPU)
	Socket	2 x DDR4 288-pin DIMM	2 x 240-pin DIMM	2 x 288-pins DIMM	2 x DDR4 288-pin DIMM
Graphics	Controller	Chipset integrated with Intel® HD Graphics	Chipset integrated Intel® HD Graphics	Chipset integrated 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	Shared system memory is subject to OS
	Video Out	VGA+DP/DVI-D+DP/DVI-D	VGA/DVI-D/DVI-D (Optional DVI-D cable)	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	10/100/1000 Mbps
	LAN1/LAN2 Controller	LAN 1: Intel® I219-LM LAN 2: Intel® I210-AT	Intel® I217LM/I210AT	Intel I219LM/I210AT	LAN 1: Intel® I219-LM LAN 2: Intel® I210-AT
	Connector	RJ45 x 2	RJ45 x 2	RJ45 x 2	RJ45 x 2
	Disable in BIOS	✓	✓	✓	✓
SATA	Max. Date Transfer Rate	600 MB/s SATA3.0	600 MB/s SATA3.0	600 MB/s SATA3.0	600 MB/s SATA3.0
	Channel	5 x SATA3.0	6 x SATA3.0	5 x SATA3.0	5 x SATA3.0
	S/W Raid	0, 1, 5, 10	0, 1, 5, 10	0, 1, 5, 10	0, 1, 5, 10
Rear I/O	VGA	1	1	1	1
	Ethernet	2	2	2	2
	USB2.0	0	0	0	0
	USB3.0	1	1	1	1
	PS/2	1	1	1	1
	Serial	0	-	-	0
Internal I/O	USB 2.0	7 USB 2.0 (pin header*2 + USB Type A*1 + 4 on backplane)	9 USB 2.0 (Pin-Header x 4 + USB Type A x 1 + 4 on backplane)	7 USB2.0 (Pin-header x 2+USB Type A x 1+ 4 on backplane)	7 USB 2.0 (pin header*2 + USB Type A*1 + 4 on backplane)
	USB 3.0	6	2 USB3.0 (Pin-Header)	4 USB3.0 (Pin header)	6
	SATA	5	6	5	5
	M.2 (2280 Type M)	1	-	1 (Shared w/ SATA0 port)	1
	Serial	2	2 RS-232(Pin-Header)	2 RS-232(Pin-Header)	2
	Parallel	1	1(SPP/EPP/ECP)	1	1
	PS/2	1	1	1	1
	OBS(Onboard Security Hardware Monitor)	✓	✓	✓	✓
Watchdog Timer	Output	System reset		System reset	System reset
	Interval	Programmable, 1~255 sec/min	Programmable, 1~255 sec/min	Programmable, 1~255 sec/min	Programmable, 1~255 sec/min
Miscellaneous	Advantech Audio Module	PCA-AUDIO-HDB1E		PCA-AUDIO-HDA1E	PCA-AUDIO-HDB1E
	Advantech SNMP-1000	✓	✓	✓	✓
	Advantech SAB-2000	✓	✓	✓	✓
	Advantech IPMI Module	-	✓	-	-
	AMT	✓	✓	✓	✓

✓: supported, - : not supported, △: optional

Slot SBCs and Passive Backplanes Selection Guide

PICMG 1.0 Single Board Computers



Model Name		LGA1150 PICMG 1.0 SBC ☞ PCA-6028
Processor System	CPU	Intel Core i7/i5/i3/Pentium LGA 1150 Processors
	Max. Speed	3.2GHz
	Max. L2 Cache	Up to 8MB
	Chipset	Intel H81
	BIOS	AMI 128Mbit SPI Flash
	FSB	-
Bus	PCI	32 bit/33 MHz PCI
	ISA	HISA (ISA High Driver)
Graphics	Controller	Chipset integrated Intel HD Graphics
	VRAM	Shared system memory is subject to OS
	LCD/DVI	DVI (G2 version only)
Ethernet	Interface	10/100/1000 Mbps
	Controller	LAN 1: Intel I217V LAN 2: Intel I211 (Only in G2 Sku)
	Connector	RJ45 x 1 (VG sku); RJ45 x 2 (G2 sku)
	Disabled in BIOS	✓
Memory	Technology	Dual channel (Non-ECC) DDR3 1333/1600 MHz
	Max. Capacity	16 GB (8 GB per DIMM)
	Socket	DDR3 240-pin DIMM x 2
SATA	Max. Data Transfer Rate	600 MB/s
	Channel	4 (1x SATA2.0, 2x SATA3.0, 1x mSATA)
	RAID	-
EIDE	Mode	-
	Channel	-
I/O Interface	USB	Up to 8 x USB2.0 (6x pin header, 1x type A, 1x rear in G2 sku only) 2 x USB3.0 (Pin header)
	Serial	2 RS-232 (Pin-Header)
	Parallel	1
	FDD	-
	PS/2	1
	LAN	1 (for VG version) 2 (for G2 version)
	OBS (Hardware Monitor)	✓
Watchdog Timer	Output	System reset
	Interval	Programmable, 1~255 sec
Miscellaneous	Audio	PCA-AUDIO-HDA1E
	Advantech SNMP-1000-B	✓
	Advantech SAB-2000	✓
	Solid State Disk	mSATA

✓: supported, - : not supported, △: optional



Half-Size Single Board Computers



Specifications		PCIe Half-Size SBC	
		PCE-3028	PCE-4128
Processor System	CPU	Intel Core i7/i5/i3/Pentium LGA 1150 Processor	Intel Xeon E3 1200v3 series, Core i7/i5/i3 LGA1150 processors
	Speed	Up to 3.5 GHz	up to 3.5GHz
	L2 Cache	Up to 8MB	up to 8MB
	Chipset	Intel H81	Intel C226
	BIOS	AMI 128 Mbit SPI Flash	AMI 128Mbit SPI Flash
	FSB	-	-
Bus	PCIe	One PCIe16, Four PCIe1x	One PCIe x16/Two PCIe x8, Four PCIe x1
	PCI	-	-
	ISA	-	-
Graphics	Controller	Chipset integrated graphics with Intel HD	GT2 P4600/GT2 4600/GT1 HD graphics
	VRAM	Shared with system memory is subject to OS	Shared system memory is subject to OS
	Video output	D-sub VGA port, DVI	VGA, DP, CRT
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: Intel® I217V LAN2: Intel® I211AT	LAN1: Intel I217LM, LAN2: I210AT
	Connector	RJ-45 x2	RJ-45 x2
	Disabled in BIOS	✓	-
Memory	Technology	Dual-channel DDR3 1066/1333/1600 MHz	Dual channel DDR3 ECC 1066/1333/1600 MHz(ECC function enable depends on processor support)
	Max. Capacity	16 GB	16 GB
	Socket	204-pin SODIMM x2	DDR3 204-pin SO-DIMM x2
SATA	Max. Data Transfer Rate	600 MB/s, 300 MB/s	600 MB/sec
	Channel	4	4
EIDE	RAID	-	0,1,5,10
	Mode	-	-
I/O Interface	Channel	-	-
	USB	2 USB 3.0 + 7 USB 2.0	3 USB 3.0, 7 USB 2.0
	Serial	2 x RS-232 Optional: 4x RS-422/485 w/Auto-flow or 4 x RS-232 by COM module	2 x RS-232, Optional: RS-422/485 x4 or RS-232 x4 via module.
	Parallel	1	1
	FDD	-	0
	PS/2	1	1
	LAN	2	2
Watchdog Timer	OBS (Onboard Security Hardware Monitor)	-	-
	Output	System reset	System reset
Miscellaneous	Interval	Programmable 1-255 sec	Programmable 1-255 sec
	Audio	PCA-AUDIO-HDA1E	PCA-AUDIO-HDA1E
	Advantech SNMP-1000	-	-
	IPMI	-	-
	Solid State Disk	-	-

✓: supported, - : not supported, △: optional

Slot SBCs and Passive Backplanes Selection Guide

Half-Size Single Board Computers



Specifications		PCIe Half-Size SBC	
		PCE-3029	PCE-4129
Processor System	CPU	Intel Core i7/i5/i3/Pentium LGA 1151 Processor	Intel Xeon E3-1200v5 series, Core i7/i5/i3 LGA1151 processors
	Speed	Up to 3.7 GHz	Up to 3.7 GHz
	L2 Cache	Up to 8 MB	Up to 8 MB
	Chipset	Intel H110	Intel C236
	BIOS	AMI 128 Mbit SPI Flash	AMI 128 Mbit SPI Flash
	FSB	-	-
Bus	PCIe	One PCIe x16, Four PCIe x1	One PCIe x16 or Two PCIe x8, Four PCIe x1
	PCI	-	-
	ISA	-	-
Graphics	Controller	Chipset integrated graphics with Intel HD	Chipset integrated graphics with Intel HD
	VRAM	Shared with system memory is subject to OS	Shared with system memory is subject to OS
	Video output	VGA, DVI, DP	VGA, DVI, DP
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: Intel® I219V LAN2: Intel® I211AT	LAN1: Intel® I219LM LAN2: Intel® I210AT
	Connector	RJ-45 x2	RJ-45 x2
	Disabled in BIOS	✓	✓
Memory	Technology	Dual-channel DDR4 1866/2133 MHz	Dual channel DDR4 ECC 1866/2133 MHz (ECC function enable depends on processor support)
	Max. Capacity	32 GB	32GB
	Socket	260-pin SODIMM x2	260-pin SO-DIMM X2
SATA	Max. Data Transfer Rate	600MB/s	600MB/s
	Channel	4	4
	RAID	-	0,1,5,10
EIDE	Mode	-	-
	Channel	-	-
I/O Interface	USB	3 USB 3.0 + 7 USB 2.0	3 USB 3.0 + 7 USB 2.0
	Serial	2 x RS-232 Optional: 4x RS-422/485 w/Auto-flow or 4 x RS-232 by COM module	2 x RS-232 Optional: 4x RS-422/485 w/auto-flow or 4 x RS232 by COM module
	Parallel	1	1
	FDD	-	-
	PS/2	1	1
	LAN	2	2
	OBS (Onboard Security Hardware Monitor)	✓	✓
Watchdog Timer	Output	System reset	System reset
	Interval	Programmable 1-255 sec	Programmable 1-255 sec
Miscellaneous	Audio	PCA-AUDIO-HDB1E	PCA-AUDIO-HDA1E
	Advantech SNMP-1000	-	-
	IPMI	-	-
	Solid State Disk	mSATA x 1	mSATA x 1

✓: supported, - : not supported, △: optional



Specifications		PCI Half-Size SBC	ISA Half-Size SBC
		☛ PCI-7032	☛ PCA-6763
Processor System	CPU	Intel Celeron J1900/N2930	AMD G-Series APU T16R/T40E
	Speed	2.00/1.83 GHz	615 MHz/1GHz
	L2 Cache	2MB/2MB	512 KB
	Chipset	Intel Celeron J1900/N2930 SOC	AMD A55E
	BIOS	AMI 64 Mbit SPI Flash	AMI 32 Mbit SPI Flash
	FSB	-	-
Bus	PCIe	One PCIe x 1 (F SKU) Only	-
	PCI	32-bit/33 MHz PCI	-
	ISA	-	16-bit ISA Bus
Graphics	Controller	Chipset integrated graphics with Intel® HD	Radeon HD 6250
	VRAM	Shared with system memory is subject to OS	Shared with system memory up to 384MB
	Video output	D-sub VGA port, 48-bit LVDS, DVI	D-sub VGA port, LVDS (48-bit for G2 SKU, 18-bit for VG SKU), DVI
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: Intel® I211 LAN2: Intel® I211	LAN1: Realtek RTL8111E-VL-CG LAN2: Realtek RTL8111E-VL-CG
	Connector	RJ-45 x 2	RJ-45 x 2
	Disabled in BIOS	✓	✓
Memory	Technology	Dual-Chnnel DDR3L 1333	Onboard 1GB DDR3 1066 MHz SODIMM DDR3 1066 MHz up to 4GB
	Max. Capacity	8GB (for G2/F SKU) 4GB (for VG SKU)	5GB
	Socket	204-pin SODIMM x 2 (for G2/F SKU) 204-pin SODIMM x 1 (for VG SKU)	204-pin SODIMM x 1
SATA	Max. Data Transfer Rate	300 MB/s	300 MB/s
	Channel	2 (SATA 2 can change mSATA)	4
EIDE	RAID	-	-
	Mode	-	-
I/O Interface	Channel	-	-
	USB	1 USB 3.0 + 6 USB 2.0 (for G2/F SKU) 1 USB 3.0 + 5 USB 2.0 (for VG SKU)	7 USB 2.0 (for G2 SKU) 6 USB 2.0 (for VG SKU)
	Serial	4 x RS-232/422/485 (for G2/F SKU) 2 x RS-232/422/485 (for VG SKU) Optional: 4 x RS-422/485 w/Auto-flow or 4 RS-232 by COM module	2 x RS-232 Optional: 4 x RS-422/485 w/Auto-flow by COM module
	Parallel	1	1
	FDD	-	1
	PS/2	1	1
	LAN	2 (for G2/F SKU) 1 (for VG SKU)	2 (for G2/F SKU) 1 (for VG SKU)
Watchdog Timer	OBS (Onboard Security Hardware Monitor)	✓ (G2 SKU only)	-
	Output	System reset	System reset
Miscellaneous	Interval	Programmable, 1~255 sec/min	Programmable, 1~255 sec/min
	Audio	PCA-AUDIO-HDB1E	PCA-AUDIO-HDA1E
	Advantech SNMP-1000	-	-
	IPMI	-	-
	Solid State Disk	mSATA x 1	mSATA x 1

✓: supported, - : not supported, △: optional

Slot SBCs and Passive Backplanes Selection Guide

PICMG1.3 Full-Size SHB Backplanes

Server Grade: Compatible with PCE-7000 Series CPU Boards

Category	Model Name	PCIe				PCI-X				PCI
		x16	x8	x4	x1	64/66	64/100	64/133	32/33	
2U Butterfly BP	PCE-7B06V-04A1E	-	1	-	-	-	-	-	-	4
8 slots BP	PCE-7B08-04A1E	-	2	1	-	-	-	-	-	4
14 slots BP	PCE-7B09R-04A1E	-	1	3	-	-	-	-	-	4
	PCE-7B10-04A1E	-		5	-	-	-	-	-	4
	PCE-7B13-64C1E	-	2	-	-	4	2	-	-	4
	PCE-7B13-07A1E	-	2	3	-	-	-	-	-	7
	PCE-7B13D-04A1E	-	1, 2	-	-	-	-	-	-	4
	PCE-7B17-00A1E	-	5	11	-	-	-	-	-	
20 slots BP	PCE-7B17-00A1E	-								

Category	Model Name	Wallmount/Desktop Chassis			
		IPC-6025	IPC-6606	IPC-6806(W)	IPC-6608
2U Butterfly BP	PCE-7B06V-04A1E	-	-	-	-
8 slots BP	PCE-7B08-04A1E	-	-	-	✓
	PCE-7B09R-04A1E	-	-	-	-
	PCE-7B10-04A1E	-	-	-	-
	PCE-7B13-64C1E	-	-	-	-
	PCE-7B13-07A1E	-	-	-	-
	PCE-7B13D-04A1E	-	-	-	-
20 slots BP	PCE-7B17-00A1E	-	-	-	-

Category	Model Name	Rackmount Chassis										
		ACP-1010	ACP-2000EBP	IPC-510	IPC-610	IPC-611	ACP-4000	ACP-4010	ACP-4320	ACP-4340	ACP-4360	IPC-623
		2-slot / 1U	6-slot / 2U									
2U Butterfly BP	PCE-7B06V-04A1E	-	✓	-	-	-	-	-	-	-	-	-
8 slots BP	PCE-7B08-04A1E	-	-	-	-	-	-	-	-	-	-	-
	PCE-7B09R-04A1E	-	-	✓	✓	✓	✓	✓	✓	✓	✓	-
	PCE-7B10-04A1E	-	-	✓	✓	✓	✓	✓	✓	✓	✓	-
	PCE-7B13-64C1E	-	-	✓	✓	✓	✓	✓	✓	✓	✓	-
	PCE-7B13-07A1E	-	-	✓	✓	✓	✓	✓	✓	✓	✓	-
	PCE-7B13D-04A1E	-	-	-	-	-	-	-	-	-	-	-
20 slots BP	PCE-7B17-00A1E	-	-	-	-	-	-	-	-	-	-	✓

Desktop: Compatible with PCE-5000 Series CPU Boards

Category	Model Name	PCIe				PCI-X				PCI
		x16	x8	x4	x1	64/66	64/100	64/133	32/33	
1U Butterfly BP	PCE-5B03V-01A1E	1	-	-	-	-	-	-	-	1
	PCE-5B03V-00A1E	1		1	-	-	-	-	-	
2U Butterfly BP	PCE-5B05V-30B1E	1	-	-	-	-	2	1	-	
	PCE-5B06V-00A1E	1	-	-	4	-	-	-	-	
5 slot BP	PCE-5B06V-04A1E	1	-	-	-	-	-	-	-	4
	PCE-5B04-20B1E	1	-	-	-	-	-	-	-	
	PCE-5B05-02A1E	1	-	1	-	-	-	-	-	2
	PCE-5B05-03A1E	1	-	-	-	-	-	-	-	3
6 slot BP	PCE-5B05-04A1E	-	-	-	-	-	-	-	-	4
	PCE-5B06-00A1E	1	-	-	4	-	-	-	-	
	PCE-5B06-03A1E	1	-	1	-	-	-	-	-	3
8 slot BP	PCE-5B06-04A1E	1	-	-	-	-	-	-	-	
	PCE-5B07-04A1E	1	-	1	-	-	-	-	-	4
10 slot BP	PCE-5B08-02A1E	1	-	-	4	-	-	-	-	2
	PCE-5B09-04A1E	1	-	3	-	-	-	-	-	4
14 slot BP	PCE-5B09-06A1E	1	-	1	-	-	-	-	-	6
	PCE-5B10-04A1E	1	-	-	4	-	-	-	-	4
20 slot BP	PCE-5B12-07A1E	1	-	3	-	-	-	-	-	7
	PCE-5B12-64C1E	1	-	-	-	4	2	-	-	4
	PCE-5B13-08A1E	1	-	-	3	-	-	-	-	8
	PCE-5B12D-04A1E	1	-	-	-	-	-	-	-	4
20 slot BP	PCE-5B12-00A1E	10	-	1	-	-	-	-	-	
	PCE-5B16Q-02A1E	1	-	-	-	-	-	-	-	2
	PCE-5B18-88B1E	1	-	-	-	8	-	-	-	8
	PCE-5B19-00A1E	17	-	1	-	-	-	-	-	

Category	Model Name	Wallmount/Desktop Chassis				
		IPC-6025	IPC-6606	IPC-6806	IPC-6806W	IPC-6608
1U Butterfly BP	PCE-5B03V-01A1E	-	-	-	-	-
	PCE-5B03V-00A1E	-	-	-	-	-
2U Butterfly BP	PCE-5B05V-30B1E	-	-	-	-	-
	PCE-5B06V-00A1E	-	-	-	-	-
	PCE-5B06V-04A1E	-	-	-	-	-
5 slot BP	PCE-5B04-20B1E	✓	-	-	-	-
	PCE-5B05-02A1E	✓	-	-	-	-
	PCE-5B05-03A1E	✓	-	-	-	-
	PCE-5B05-04A1E	✓	-	-	-	-
6 slot BP	PCE-5B06-00A1E	-	✓	-	✓	-
	PCE-5B06-03A1E	-	✓	-	✓	-
	PCE-5B06-04A1E	-	✓	-	✓	-
8 slot BP	PCE-5B07-04A1E	-	-	-	-	✓
	PCE-5B08-02A1E	-	-	-	-	✓
10 slot BP	PCE-5B09-04A1E	-	-	-	-	-
	PCE-5B09-06A1E	-	-	-	-	-
14 slot BP	PCE-5B10-04A1E	-	-	-	-	-
	PCE-5B12-07A1E	-	-	-	-	-
	PCE-5B12-64C1E	-	-	-	-	-
	PCE-5B13-08A1E	-	-	-	-	-
	PCE-5B12D-04A1E	-	-	-	-	-
20 slot BP	PCE-5B12-00A1E	-	-	-	-	-
	PCE-5B16Q-02A1E	-	-	-	-	-
	PCE-5B18-88B1E	-	-	-	-	-
	PCE-5B19-00A1E	-	-	-	-	-

✓: supported, - : not supported, △: optional



PCI/ISA Backplanes

Category	Model Name	Slot per segment					Segment	AT	ATX	1U Chassis	2U Chassis	4U Chassis		
		ISA	PCI	PICMG	PICMG/PCI	ISA/PCI				ACP-1010	ACP-2000	IPC-510	IPC-610	IPC-611
										2-slot	6-slot	15-slot	15-slot	15-slot
1U Butterfly BP	PCA-6103P2V-0A2E*	-	2	1	-	-	1	-	✓	✓	-	-	-	-
2U Butterfly BP	PCA-6105P4V-0B3E*	-	4	1	-	-	1	-	✓	-	✓	-	-	-
	PCA-6106P3V-0B2E*	1	3	2	-	-	1	✓	✓	-	✓	-	-	-
5 Slot BP	PCA-6105P3-5A1E	1	2	1	-	1	1	-	✓	-	-	-	-	-
6/8 Slot BP	PCA-6106P4-0A2E	-	4	2	-	-	1	✓	✓	-	-	-	-	-
	PCA-6106P3-0D2E	2	2	1	1	-	1	✓	✓	-	-	-	-	-
	PCA-6108P6-0C1E	1	5	1	1	-	1	✓	✓	-	-	-	-	-
	PCA-6108P4-0C2E	3	3	1	1	-	1	✓	✓	-	-	-	-	-
	PCA-6108-0B2E	8	-	-	-	-	1	✓	✓	-	-	✓	✓	✓
14/15 Slot BP	PCA-6114P12-0B3E	1	11	1	1	-	1	✓	✓	-	-	✓	✓	✓
	PCA-6114P10-0B2E	2	10	2	-	-	1	✓	✓	-	-	✓	✓	✓
	PCA-6114P7-0E1E	4	6	3	-	1	1	✓	✓	-	-	✓	✓	✓
	PCA-6114P4-0C2E	8	4	2	-	-	1	✓	✓	-	-	✓	✓	✓
	PCA-6113P4R-0C2E	7	4	2	-	-	1	✓	✓	-	-	✓	✓	✓
	PCA-6114-0B2E	14	-	-	-	-	1	✓	✓	-	-	-	-	-
20 Slot BP	PCA-6113DP4-0A2E	1	3,4	1,2	1,0	-	2	✓	✓	-	-	-	-	-
	PCA-6120P18-0A2E	1	17	1	1	-	1	✓	△	-	-	-	-	-
	PCA-6120P4-0B2E	14	4	2	-	-	1	✓	△	-	-	-	-	-
	PCA-6120P12-0A2E	7	11	1	1	-	1	✓	△	-	-	-	-	-
	PCA-6119P7-0C1E	10	7	2	-	-	1	✓	△	-	-	-	-	-
	PCA-6120Q-0B2E	5	-	-	-	-	4	✓	△	-	-	-	-	-

Category	Model Name	4U Chassis						Wallmount/Desktop Chassis				Cage
		ACP-4000	ACP-4010	ACP-4320	ACP-4340	ACP-4360	IPC-623	IPC-6608	IPC-6606	IPC-6806/IPC-6806W	IPC-6025	IPC-6006
		15-slot	15-slot	15-slot	15-slot	15-slot	20-slot	8-slot	6-slot	6-slot	5-slot	6-slot
1U Butterfly BP	PCA-6103P2V-0A2E*	-	-	-	-	-	-	-	-	-	-	-
2U Butterfly BP	PCA-6105P4V-0B3E*	-	-	-	-	-	-	-	-	-	-	-
	PCA-6106P3V-0B2E*	-	-	-	-	-	-	-	-	-	-	-
5 Slot BP	PCA-6105P3-5A1E	-	-	-	-	-	-	-	-	-	✓	-
6/8 Slot BP	PCA-6106P4-0A2E	-	-	-	-	-	-	-	✓	✓	-	✓
	PCA-6106P3-0D2E	-	-	-	-	-	-	-	✓	✓	-	✓
	PCA-6108P6-0C1E	-	-	-	-	-	-	✓	-	-	-	-
	PCA-6108P4-0C2E	-	-	-	-	-	-	✓	-	-	-	-
	PCA-6114P12-0B3E	✓	✓	✓	✓	✓	-	-	-	-	-	-
14/15 Slot BP	PCA-6114P10-0B2E	✓	✓	✓	✓	✓	-	-	-	-	-	-
	PCA-6114P7-0E1E	✓	✓	✓	✓	✓	-	-	-	-	-	-
	PCA-6114P4-0C2E	✓	✓	✓	✓	✓	-	-	-	-	-	-
	PCA-6113P4R-0C2E	✓	✓	✓	✓	✓	-	-	-	-	-	-
	PCA-6114-0B2E	✓	✓	✓	✓	✓	-	-	-	-	-	-
	PCA-6113DP4-0A2E	-	✓	-	-	-	-	-	-	-	-	-
20 Slot BP	PCA-6120P18-0A2E	-	-	-	-	-	✓	-	-	-	-	-
	PCA-6120P4-0B2E	-	-	-	-	-	✓	-	-	-	-	-
	PCA-6119P7-0C1E	-	-	-	-	-	✓	-	-	-	-	-
	PCA-6119P7-0B3E	-	-	-	-	-	✓	-	-	-	-	-
	PCA-6120Q-0B2E	-	-	-	-	-	✓	-	-	-	-	-

Remarks:

*: only compatible with Advantech's 1U/2U chassis

✓: supported, - : not supported, △: optional

Slot SBCs and Passive Backplanes Selection Guide

Backplanes Compatible with Half-Size SBCs

Interface	Category	Model Name	Slots per segment							Segment
			ISA	PCI	PCIe x16	PCIe x 8	PCIe x4	PCIe x1	PICMG	
Pure ISA Backplane	-	PCA-6104-0C2E	3	-	-	-	-	-	-	1
	6-slot	PCA-6106-0B2E	5	-	-	-	-	-	-	1
	-	PCA-6108-0B2E *	7	-	-	-	-	-	-	1
	8-slot	PCA-6108E-0C2E	7	-	-	-	-	-	-	1
Pure PCI Backplane	-	PCA-6104P4-0B2E	-	3	-	-	-	-	-	1
	6-slot	PCA-6105P5-0B2E	-	4	-	-	-	-	-	1
PICMG1.3 Half-Size Backplanes	6-slot	PCE-3B03-00A1E	-	-	1	-	1	-	-	1
	6-slot	PCE-3B06-00A1E	-	-	1	-	-	4	1	1
	6-slot	PCE-3B06-03A1E	-	3	1	-	-	1	1	1
	6-slot	PCE-3B06-02A1E	-	2	1	-	-	2	1	1
	3-slot	PCE-3B03A-00A1E	-	-	1	-	1	-	1	1
	3-slot	PCE-3B03-01A1E	-	1	1	-	-	-	1	1
	14-slot	PCE-3B12-08A1E	-	8	1	-	-	2	1	1
	14-slot	PCE-4B13-08A1E	-	8	-	2	-	2	1	1
	14-slot	PCE-4B12-03A1E	-	3	-	1	4	3	1	1
	14-slot	PCE-4B13-00A1E	-	-	-	1	11	-	-	-

Interface	Model Name	AT	ATX	ACP-4020	ACP-4D00	IPC-6806S*	IPC-6006S	IPC-3012
				Rackmount	Rackmount	Wallmount	Wallmount	Wallmount
				14-slot	6-slot	6-slot	6-slot	3-slot
Pure ISA Backplane	PCA-6104-0C2E	✓	✓	-	-	-	-	-
	PCA-6106-0B2E	✓	✓	-	-	✓	✓	-
	PCA-6108-0B2E	✓	✓	-	-	-	-	-
	PCA-6108E-0C2E	✓	✓	-	-	-	-	-
Pure PCI Backplane	PCA-6104P4-0B2E	✓	✓	-	-	-	-	-
	PCA-6105P5-0B2E	✓	✓	-	✓	✓	✓	-
	PCA-6108P8-0A2E	✓	✓	-	-	-	-	-
Half-Size Backplanes	PCE-3B03-00A1E	-	✓	-	✓	✓	-	-
	PCE-3B06-00A1E	-	✓	-	✓	✓	-	-
	PCE-3B06-03A1E	-	✓	-	✓	✓	-	-
	PCE-3B06-02A1E	-	✓	-	✓	✓	-	-
	PCE-3B03A-00A1E	-	✓	-	-	-	-	✓
	PCE-3B03-01A1E	-	✓	-	-	-	-	✓
	PCE-3B12-08A1E	-	✓	✓	-	-	-	-
	PCE-4B13-08A1E	-	✓	✓	-	-	-	-
	PCE-4B12-03A1E	-	✓	✓	-	-	-	-
	PCE-4B13-00A1E	-	✓	✓	-	-	-	-

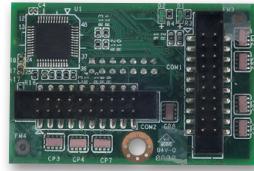
✓: supported, - : not supported, △: optional

☞ Extension Modules for Slot SBCs



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"inch x 4.92")



PCA-COM232-00A1E

- 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")



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")



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")
- Supports Model: PCE-3029, PCE-4128, PCE-4129



PCA-5650-00A1E

- 2 VGA output Mini PCI Express Graphic card
- GPU: Silicon Motion SM750
- VGA output: 1920 x 1080, up to 75Hz vertical rate
- 16 Mb of embedded DDR memory



IPMI-1000-00A1E

- IPMI2.0 Server-grade remote control solution
- OS independent hardware-based solution
- Real-time and centralized management
- KVM over IP remote control function
- User friendly UI and utility
- Supports Model: PCE-5126WG2, PCE-7127, PCE-5128



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")

Industrial Computer Peripherals Selection Guide

GPU Cards



Quadro RTX Series

- Turing GPU Technology
- Revolutionary Realtime Ray Tracing Acceleration
- Enhanced Tensor Cores for deep learning
- H.264 and HEVC Encode/Decode Engines



Quadro P Series

- Pascal GPU Technology
- Huge Frame Buffer and Memory Bandwidth
- Pascal Dynamic Load Balancing
- H.264 and HEVC Encode/Decode Engines

Part Number	Description
SKY-QUAD-GV100	QUADRO GV100 32GB PCI-Ex16 DP*4 FS
SKY-QUAD-P1000R	QUADRO P1000 4GB PCI-Ex16 MDP*4 FS (PG178)
SKY-QUAD-P1000R-B	QUADRO P1000 4GB PCI-Ex16 MDP*4 FS BULK (PG178)
SKY-QUAD-P2200	QUADRO P2200 5GB PCI-Ex16 DP*4 FS
SKY-QUAD-P2200-BLK	QUADRO P2200 5GB PCI-Ex16 DP*4 FS BULK
SKY-QUAD-P400R	QUADRO P400 2GB PCI-Ex16 MDP*3 FS (PG178)
SKY-QUAD-P400R-B	QUADRO P400 2GB PCI-Ex16 MDP*3 FS BULK (PG178)
SKY-QUAD-P620R	QUADRO P620 2GB PCI-Ex16 MDP*4 FS (PG178)
SKY-QUAD-P620R-B	QUADRO P620 2GB PCI-Ex16 MDP*4 FS BULK (PG178)
SKY-QUAD-RTX4000	QUADRO RTX4000 8GB PCI-Ex16 DP*3 FS
SKY-QUAD-RTX5000	QUADRO RTX5000 16GB PCI-Ex16 DP*4 FS
SKY-QUAD-RTX6000	QUADRO RTX6000 24GB PCI-Ex16 DP*4 FS
SKY-QUAD-RTX8000	QUADRO RTX8000 48GB PCI-Ex16 DP*4 FS
SKY-QUAD-RTX4000-B	QUADRO RTX4000 8GB PCI-Ex16 DP*3 FS BULK
SKY-QUAD-RTX5000-B	QUADRO RTX5000 16GB PCI-Ex16 DP*4 FS BULK
SKY-QUAD-RTX6000-B	QUADRO RTX6000 24GB PCI-Ex16 DP*4 FS BULK
SKY-QUAD-RTX8000-B	QUADRO RTX8000 48GB PCI-Ex16 DP*4 FS BULK

Riser Cards



Model Name		AIMB-RP10P-01A1E	AIMB-RF10F-01A1E	AIMB-RP30P-03A1E	AIMB-RP3PF-21A1E	AIMB-RP3P8-12A1E
Interface		PCI	PCIe x 16	PCI	PCIe x16/PCI	PCIe x16/PCI
Expansion Slots		1 PCI	1 PCIe x 16	3 PCI	1 PCIe x16 + 2 PCI	2 PCIe x8 + 1 PCI
Chassis	1U	✓	✓	-	-	-
	2U	-	-	✓	✓	✓
	AIMB-785	-	✓	-	-	-
	AIMB-784	-	✓	-	-	-
	AIMB-782	-	-	-	-	-
	AIMB-781	-	✓	-	-	-
	AIMB-780	✓	✓	✓	✓	✓ (WG2 Only)*
	AIMB-705	✓	-	✓	✓	-
	AIMB-701	-	✓	-	-	-
	AIMB-769	-	✓	-	-	-
ATX	AIMB-767	✓	✓	✓	✓	-
	AIMB-766	✓	-	✓	✓	-
	AIMB-763	-	✓	-	✓	-

*Note: AIMB-RP3P8-12A1E is not compatible with ACP-2010MB/2320MB, IPC-603MB chassis unless riser card bracket is changed to P/N: 1950014302N001.



Model Name		AIMB-R4104-01A1E	AIMB-R430P-03A2E	AIMB-R4301-03A1E	AIMB-R431F-21A1E	AIMB-R43PF-21A1E
Interface		PCIe x4	PCIe x4	PCIe x4	PCIe x16/PCIe x4	PCIe x16/PCIe x4
Expansion Slots		1 PCIe x4	3 PCI	3 PCIe x1	1 PCIe x16 + 2 PCIe x1	1 PCIe x16 + 2 PCI
Chassis	1U	✓	-	-	-	-
	2U	-	✓	✓	✓	✓
	AIMB-785	✓	✓	△	□	✓
	AIMB-784	-	-	-	□	✓
	AIMB-782	-	✓	-	□	✓
	AIMB-781	✓	✓	✓	✓	✓
	AIMB-780	-	-	-	-	-
	AIMB-701	✓	✓	△	-	-
	AIMB-769	✓	✓	△	-	-
	AIMB-767	-	-	-	-	-
ATX	AIMB-766	-	-	-	-	-
	AIMB-763	-	-	-	-	-

✓: Fully compatible

□: Only the PCIe x16 and PCIe x1 (bottom slot) connectors work.

△: Only one PCIe x1 connector works (top slot).

Industrial Computer Peripherals Selection Guide

Power Supplies

80 Plus PS/2 Single Power Supplies



Part Number	PS8-300ATX-ZBE	PS8-500ATX-BB	PS8-700ATX-BB
Form Factor	PS/2	PS/2	PS/2
Wattage	300W	500W	700W
80 Plus Grade	Bronze	Bronze	Bronze
Input Range	90 ~ 264 V _{AC}	90 ~ 264 V _{AC}	90 ~ 264 V _{AC}
Output Range	+3.3V @ 11.12 A +5 V @ 13.2 A +12 V @ 7.64 A +12 VCPU @ 8 A -12 V @ 0.1 A -5V @ 0.05 A +5 Vsb @ 1.39 A	+3.3V @ 19 A +5 V @ 16 A +12 V1 @ 17 A +12 V2 @ 17 A -12 V @ 0.3 A -5V @ 0.3 A +5 Vsb @ 2.5 A	+3.3V @ 24 A +5 V @ 30 A +12 V1 @ 16 A +12 V2 @ 16 A +12 V3 @ 16 A +12 V4 @ 16 A -12 V @ 0.5 A -5V @ 0.5 A +5 Vsb @ 4 A
MTBF(hrs)	100,000 @ 25° C	100,000 @ 25° C	100,000 @ 25° C
Dimensions (W x H x D)	150 x 86 x 140 mm (5.91" x 3.39" x 5.51")	150 x 86 x 140 mm (5.91" x 3.39" x 5.51")	150 x 86 x 140 mm (5.91" x 3.39" x 5.51")
Safety	CE, FCC, UL, CB, TUV, CCC, KC, BSMI	CE, FCC, UL, CB, TUV, CCC, KC	CE, FCC, UL, CB, TUV, CCC, KC
Compatible Chassis	ACP-2000/IPC-602, ACP-4000, ACP-4010, ACP-4020, ACP-4320, ACP-4340, ACP-4360, IPC-6606, IPC-6608, IPC-5122, IPC-7130, IPC-7130L, IPC-7132, IPC-7220, IPC-510, IPC-610-F, IPC-610-H, IPC-610-L, IPC-611, IPC-619, HPC-5000	ACP-2000/IPC-602, ACP-4000, ACP-4010, ACP-4020, ACP-4320, ACP-4340, ACP-4360, IPC-6606, IPC-6608, IPC-5122, IPC-7130, IPC-7130L, IPC-7132, IPC-7220, IPC-510, IPC-610-F, IPC-610-H, IPC-610-L, IPC-611, IPC-619, IPC-631, HPC-7442	ACP-2000/IPC-602, ACP-4000, ACP-4010, ACP-4020, ACP-4320, ACP-4340, ACP-4360, HPC-7442

Remark: Only 500W or higher wattage PSUs support 1700029268-01 and 1700024754-01 PCIe power cables for high end GPU cards. If GPU card has 2 power connectors, please use 1700029268-01 x 1 + 1700024754-01 x 1; if GPU card has 1 power connector, please use 1700029268-01 instead of 1700024754-01.

PS/2 DC Power Supplies



Model Name	96PS-D500WPS2
Wattage	500W
Input Range	93.5 ~ 253 V _{DC}
Outputs	+3.3 V @ 20 A +5 V @ 20 A +12 V1 @ 16 A +12 V2 @ 16 A +12 V3 @ 16 A -12 V @ 0.5 A -5 V @ 0.3 A +5 Vsb @ 3 A
MTBF (hrs)	100,000 @ 25° C
Dimensions (W x H x D)	150 x 86 x 140 mm (5.91" x 3.39" x 5.51")
Safety	CE, CB
Compatible Chassis	ACP-2000, ACP-4000, ACP-4010, ACP-4320, ACP-4360, IPC-6606, IPC-6608, IPC-5122, IPC-7130, IPC-7130L, IPC-7132, IPC-7220, IPC-510, IPC-610-H, IPC-610-L, IPC-611



80 Plus Flex ATX Power Supplies



Part Number	PS8-250FATX-BB	PS8-350FATX-GB	PS8-500FATX-GB
Form Factor	Flex ATX	Flex ATX	Flex ATX
Wattage	250W	350W	500W
80 Plus Grade	Bronze	Gold	Gold
Input Range	90 ~ 264 V _{AC}	90 ~ 264 V _{AC}	90 ~ 264 V _{AC}
Output Range	+3.3V @ 13 A +5 V @ 15 A +12 V1 @ 17 A +12 V2 @ 17 A -12 V @ 0.3 A +5 Vsb @ 2.5 A	+3.3V @ 14 A +5 V @ 16 A +12 V @ 29 A -12 V @ 0.3A +5 Vsb @ 3 A	+3.3V @ 14 A +5 V @ 16 A +12 V @ 41 A -12 V @ 0.3A +5 Vsb @ 3 A
MTBF(hrs)	100,000 @ 25° C	100,000 @ 25° C	100,000 @ 25° C
Dimensions (W x H x D)	81.5 x 40.5 x 150 mm (3.2" x 1.59" x 5.9")	81.5 x 40.5 x 150 mm (3.2" x 1.59" x 5.9")	81.5 x 40.5 x 150 mm (3.2" x 1.59" x 5.9")
Safety	CE, FCC, UL, CB, TUV, CCC, KC, BSMI	CE, FCC, UL, CB, TUV, CCC, KC	CE, FCC, UL, CB, TUV, CCC, KC
Compatible Chassis	ACP-1010/ACP-1320, ACP-2010/ACP-2320, ACP-4D00, IPC-3012, IPC-6806S, IPC-6806S-D, IPC-6806, IPC-5120, IPC-7120	ACP-1010/ACP-1320, ACP-2010/ACP-2320, ACP-4D00, IPC-603, IPC-3012, IPC-6806S, IPC-6806S-D, IPC-6806, IPC-5120, IPC-7120, ACP-2020	ACP-1010 , ACP-2010/ACP-2320, ACP-4D00

80 Plus Redundant Power Supplies



Part Number	RPS8-500ATX-GB	RPS8-750ATX-XE	RPS8-500U2-XE
Form Factor	Mini Redundant	Mini Redundant	2U Redundant
Wattage	500W 1+1	750W 1+1	500W 1+1
80 Plus Grade	Gold	Gold	Bronze
PMBus	Ver. 1.2	Ver. 1.2	-
Input Range	90 ~ 264 V _{AC}	90 ~ 264 V _{AC}	90 ~ 264 V _{AC}
Output Range	+3.3V @ 20 A +5 V @ 20 A +12 V @ 40 A -5 V @ 0.3 A -12 V@ 0.5 A +5 Vsb @3 A	+3.3V @ 24 A +5 V @ 30 A +12 V @ 60.9 A -12 V@ 0.5 A +5 Vsb @ 4 A	+3.3V @ 20 A +5 V @ 25 A +12 V @ 40.2 A -12 V@ 0.5 A +5 Vsb @3.52 A
MTBF(hrs)	100,000 @ 25° C	100,000 @ 25° C	100,000 @ 25° C
Dimensions (W x H x D)	150 x 84 x 190 mm (5.9" x 3.3" x 7.48")	150 x 84 x 200 mm (5.9" x 3.3" x 7.87")	85 x 86.6 x 217 mm (3.34" x 3.4" x 8.54")
Safety	CE , FCC, UL , CB, TUV, CCC, KC	CE , FCC, UL , CB, TUV, CCC, KC	CE , FCC, UL , CB, TUV, CCC, KC
Compatible Chassis	IPC-7130, IPC-7130L, IPC-7220, IPC-610, IPC-611,ACP-4000, ACP-4010, ACP-4320, ACP-4340, ACP-4360, IPC-622, HPC-7442, IPC-631	ACP-4000, ACP-4010, IPC-622, HPC-7442	HPC-7242, HPC-7282, HPC-7320, HPC-8316, ACP-2020
Single Module Part Number	96PSRM-A500WMING	96PSRM-A750W1U	96PSRM-A500WFX

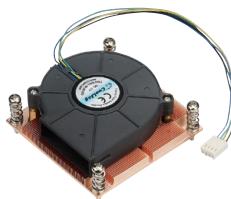
Industrial Computer Peripherals Selection Guide

CPU Coolers

Intel® LGA1150/1151/1155/1156



Model Name	1960049408N001	1960047831N001	1960077101N001	1960052651N021	1960047669N001
Thermal Dispatch Performance	Intel LGA1156/1155/1150/1151 84W	Intel LGA1156/1155/1150/1151 95W	Intel LGA1156/1155/1150/1151 95W	Intel LGA1156/1155/1150/1151 80W	Intel LGA1156/1155/1150/1151 95W
Fan	-	7 cm/35.5CFM 5400 ± 10% RPM	7 cm/35.5CFM 5400 ± 10% RPM	6 cm/28.77 CFM 5800 ± 10% RPM	8 cm/57.5 CFM 4500 ± 10% RPM
Heatsink Material	Copper	Copper	Aluminum & Copper heart	Aluminum	Aluminum & Copper heart
Heatsink Dimensions	85 x 85 x 26 mm (3.35" x 3.35" x 1.02")	83 x 83 x 39.26 mm (3.27" x 3.27" x 1.54")	83 x 83 x 39.26 mm (3.27" x 3.27" x 1.54")	90x 90x 68 mm (3.54" x 3.54" x 2.68")	90 x 90 x 35 mm (3.54" x 3.54" x 1.38")
Dimensions	-	83 x 83 x 55.73 mm (3.27" x 3.27" x 2.17")	83 x 83 x 55.73 mm (3.27" x 3.27" x 2.17")	90x 90x 68 mm (3.54" x 3.54" x 2.68")	120 x 120 x 77 mm (4.72" x 4.72" x 3.03")
Weight	611 g	582 g	245g	417g	500 g
Minimum Chassis Height	1U	2U	2U	2U/4U	4U
Recommended Chassis	ACP-1010/1320 HPC-7140/7180	Backplane version of chassis	Backplane version of chassis	Motherboard/ backplane version of chassis	Motherboard version of chassis
Supported Boards	AIMB-580/701/780/781/782/784; PCE-5125/5126/5127/7127/5026 ASMB-584/585/781/782/784/785	AIMB-580/581/582; PCE-5125/5126/5127/5026/7127/5128/7128	AIMB-580/581/582; PCE-5125/5126/5127/5026/7127/5128/7128	AIMB-705/785 PCE-5029/5129/7129/3029/4129 ASMB-584/585/781/782/784/785	AIMB-580/581/582/ 701/780/781/782/784



Model Name	1960053065N001	1960053207N001
Thermal Dispatch Performance	Intel LGA1155/1150/1151 55W Up to Core i3	Intel LGA1155/1150/1151 65W Up to Core i7
Fan	77 x 75 x 15.4 mm/11.83 CFM 5500 ± 10% RPM	9 cm/45.09 CFM 4400 ± 10% RPM
Heatsink Material	Copper	Aluminum & Copper
Heatsink Dimensions	84 x 84 x 13 mm (3.32" x 3.32" x 0.51")	92.9 x 92.2 x 46 mm (3.67" x 3.67" x 1.82")
Dimensions	84 x 84 x 28 mm (3.32" x 3.32" x 1.11")	92.9 x 92.2 x 46 mm (3.67" x 3.67" x 1.82")
Weight	382g	250g
Minimum Chassis Height	1U	1.5U
Recommended Chassis	IPC-3026, IPC-3012	IPC-3026, IPC-3012
Supported Boards	PCE-3026/3028/3029/4128/4129 AIMC-3200/3201/3420/3421/3202/3422	PCE-3026/3028/3029/4128/4129 AIMC-3200/3420/3201/3421/3202/3422

Intel® Xeon® LGA2011



Part number	1960055362N001	1960065684N001	1960063011N001	1960063011N011	1960065593N001	1960065591N001	1960057226N001
Thermal Dispatch Performance	Up to 145W	Up to 160W	Up to 135W	Up to 120W	Up to 135W	Up to 135W	Up to 95W
Fan	6cm / 38.8CFM 6800 ± 10% RPM	9cm/108.08CFM 5000 ± 10% RPM	6cm/50.40CFM 9000± 10% RPM	6cm/50.40CFM 9000+/- 10% RPM(Puller Fan)	-	-	-
Heatsink Material	Aluminum Fins & Cu Block with 3 Heat Pipes	Aluminum Fins & Copper base with 3 Heat Pipes	Aluminum fins soldered Copper base with Heatpipe	Aluminum fins soldered Copper base with Heatpipe	Copper with vapor chamber	Copper with vapor chamber	Aluminum fins soldered Copper base with Heatpipe
Heatsink Dimensions (L x W x H)	90.0 x 90.0 x 63.9 mm (3.54" x 3.54" x 2.51")	88.2 x 88.2 x 112.15 mm (3.47" x 3.47" x 4.41")	107 x 70 x 64.0 mm (4.21" x 2.75" x 2.51")	107 x 70 x 64.0 mm (4.21" x 2.75" x 2.51")	106 x 82 x 27 mm (4.17" x 3.22" x 1.06")	106 x 82 x 27 mm (4.17" x 3.22" x 1.06")	90 x 90 x 25.5 mm (3.54" x 3.54" x 1")
Dimensions	90.0 x 90.0 x 65.6 mm (3.54" x 3.54" x 2.58")	88.2 x 88.2 x 112.15 mm (3.47" x 3.47" x 4.41")	94.0 x 70.0 x 64.0 mm (3.7" x 2.75" x 2.51")	94.0 x 70.0 x 64.0 mm (3.7" x 2.75" x 2.51")	106 x 82 x 27 mm (4.17" x 3.22" x 1.06")	106 x 82 x 27 mm (4.17" x 3.22" x 1.06")	90 x 90 x 25.5 mm (3.54" x 3.54" x 1")
Weight	413g	583g	319g	319g	405g	385g	197g
Minimum Chassis Height	2U	4U	2U	2U	1U	1U	1U
Supported Boards	ASMB-823/913/ 920/923	ASMB-823/913/ 920/923	ASMB-822/922/ 813	PCE-9228	ASMB-822/813 & 922 (For CPU1)	ASMB-922 (For CPU0)	ASMB-823/913/ 920/923
Remark	Square Type	Square Type	Narrow Type	Narrow Type	Narrow Type	Narrow Type	Square Type

Intel® Xeon® LGA3647



Part number	1960081603N001	1960081155N001
Thermal Dispatch Performance	Up to 205W	Up to 165W
Fan	6 cm/50.4 CFM 9000 ± 10% RPM	-
Heatsink Material	Aluminum Stack Fin & CU Block with heatpipe	Aluminum Stack Fin & CU Block with Heatpipe
Heatsink Dimensions (L x W x H)	108 x 78 x 64 mm (4.25" x 3.07" x 2.51")	107.75 x 78 x 25.5 mm (4.24" x 3.07" x 1")
Dimensions	108 x 78 x 64 mm (4.25" x 3.07" x 2.51")	107.75 x 78 x 25.5 mm (4.24" x 3.07" x 1")
Weight	464g	257.6g
Minimum Chassis Height	2U	1U
Supported Boards	ASMB-815/825/925/975	ASMB-815/825/925/975
Remark	Narrow Type	Narrow Type

Industrial Computer Peripherals Selection Guide

Accessories

Slide Rails



For 1U rackmount chassis

- 26" P/N: 9680009153
- Maximum acceptable load: 25kg
- 1 pair included



For 2U and higher rackmount chassis

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

Industrial Disk Trays/Bays



IPC-DT-5121 / IPC-DT-5121B

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 mm³ (5.84" x 1.67" x 6.73")



989K008733

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

- Accepted Device: 3.5" HDD x 1



IPC-DT-3120E

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



989K008734

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

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



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



96RACK-5SS-CAGE-CR

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

- Accepted Device: 2.5" SAS/SATA HDD/SSD x 4
- Dimension (W x H x D): 146 x 41 x 170 mm³ (5.74" x 1.61" x 6.69")



IPC-DT-5230E

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



96RACK-5-SS-CR-B2

Mobile rack for converting one 5.25" drive bay to one slim ODD and two 2.5" SAS/SATA HSS/SSD trays

- Accepted Device : slim ODD x 1 , 2.5" SAS/SATA HDD/SSD x 2
- Dimension (W x H x D): 146 x 41.3 x 170 mm³ (5.74" x 1.62" x 6.69")

Add-on Card Hold Down Kits



98RKBTOS09E

Add-on card hold down kit (short)

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



98RKBTOS10E

Add-on card hold down kit (long)

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

USB Cables



Part Number	1700008461	1700003195	1700002204	1700014398	1700020277-01
Description	USB 2.0 cable with 4 ports	USB 2.0 cable with 2 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")	17.5 cm (6.89")	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 connector	SATA data cable with 1 right angle and 1 vertical connector	SATA data cable with vertical connectors with locks

COM and Printer Ports Cables



Part Number	1701092300	1701090401	1700020294-01	1700008762
Description	COM cable with 2 ports	COM cable with 1 port	Printer (Parallel) port cable	COM cable with 2 ports
Cable Length	28.5 cm (11.22")	40 cm (15.75")	42.0 cm (16.54")	22.5 cm (8.86")
Remark	For ATX/Micro-ATX MB, full-sized SBC		For ATX/Micro-ATX MB, full-sized SBC	For half-sized SBC

Industrial Computer Peripherals Selection Guide

☞ Accessories

Video Cables



Part Number	PCE-DP10-00A1E	1700021831-01	1700008822-11
Description	Display port cable	DP to DVI port cable	DVI to DVI port cable
Cable Length	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	Video cable for converting on board DP connector to external DVI-D port	Video cable for converting on board DVI connector to external DVI-D port

Other Cables



Part Number	1700006915	1700006916	1700029268-01	1700024754-01
Description	Cable for ACP-4000MB front LED board	Cable for IPC-610MB-H front LED board	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 pins PCIe power connector)
Cable Length	60 cm (23.62")	60 cm (23.62")	10 cm (3.93")	10 cm (3.93")
Remark	For those Advantech motherboards with VOLT1 connector too far away from the chassis LED board			If GPU card has 2 power connectors, please use 1700029268-01 x 1 + 1700024754-01 x 1; if GPU card has 1 power connector, please use 1700029268-01 instead of 1700024754-01 Only 500W or higher wattage PSUs support 1700029268-01 and 1700024754-01 for high end GPU cards All product