

Industrial Computer Chassis

As a leading hardware provider in embedded SBC, IEC offers complete industrial computer chassis from ATX/microATX/Mini-ITX support chassis to 1U~7U chassis to support different embedded single board computers, and provides flexibility and scalability for industrial applications. Customers can choose different platform to integrate and fulfil different demanding application and vertical application.

1. SBC Embedded System



Model Name	ECN-380A Series	ECN-360A Series	ECW-281B Series
MB Model No.	NANO Series (EPIC SBC)*	NANO Series (EPIC SBC)*	WAFER Series (3.5" SBC)*

*Please refer to the ECN & ECW datasheets for the NANO & WAFER support list.

2. Embedded Chassis Series



Model Name	BRICK-KINO BRICK-WAFER/NANO	EBC-3220	EBC-3200	EBC-3100 / EBC-3000
MB Model No.	KINO Series (Mini-ITX)* WAFER Series (3.5" SBC)* NANO Series (EPIC SBC)*	KINO Series (Mini-ITX)*	KINO Series (Mini-ITX)*	KINO Series (Mini-ITX)*



Model Name	EBC-3300	EBC-2200	EBC-2100	EBC-1100
MB Model No.	tKINO Series (Mini-ITX)	NANO Series (EPIC SBC)*	NANO Series (EPIC SBC)*	WAFER Series (3.5" SBC)

*Please refer to the EBC datasheets for the support list.

3. Industrial Computer Chassis



Model Name	RACK-1150G 1U	RACK-220G 2U 6-slot	RACK-360 4U 14-slot
MB Model No.	Full-size CPU card	Full-size CPU card microATX, Mini-ITX	Full-size CPU card ATX, microATX, Mini-ITX



Model Name	ECA-300	ECA-200	ECA-100
MB Model No.	ATX/mATX	mATX	ATX/mATX



Model Name	PAC-125G 10-slot	PAC-700G 7-slot	PAC-53GH 3-slot
MB Model No.	Full-size CPU card	Half-size CPU card	Half-size CPU card

SBC Embedded System



Model Name		ECN-380-QM87	ECN-360A-ULT3	ECN-360A-D2550	ECW-281B-BT	
Chassis	Color	Silver	Black	Black	Black	
	Dimensions (WxDxH) (mm)	265 x 134 x 56.7	255 x 130 x 75	255 x 130 x 63	229 x 132 x 64	
	System Fan	Fanless	Fanless	Fanless	Fanless	
	Chassis Construction	Aluminum alloy with heavy duty metal	SECC	SECC	Aluminum alloy with heavy duty metal	
Motherboard	Motherboard Model	NANO-QM871-i1	NANO-ULT3	NANO-CV-D25502	WAFER-BT-i1	
	SBC Size (mm)	EPIC (165 x 115)	EPIC, 165 x 115	EPIC (165 x 115)	3.5", 146 x 102	
	CPU	Intel® Core™ i5-4400E 2.7 GHz Intel® Celeron® 2000E 2.2 GHz	Intel® Core™ i5-6300U Intel® Celeron® 3855U	Intel® Atom™ D2550 dual-core 1.86GHz	Intel® Celeron® J1900 quad-core 2.42GHz	
	Chipset	Intel® QM87	N/A	Intel® NM10	SoC	
IPMI	System Memory	One 204-pin DDR3 4GB SO-DIMM pre-installed (system max: 8GB)	2 x 260-pin 2133/1866 MHz dual-channel DDR4 SO-DIMMs support up to 32GB Pre-install 4GB DDR4	1 x 204-pin DDR3 SDRAM SO-DIMM (system max: 4 GB) Pre-installed 2 GB DDR3 memory	1 x 204-pin 2 GB 1066/1333 MHz single-channel DDR3L SO-DIMM (system max. 4 GB)	
	iRIS Solution	1 x iRIS-1010	N/A	N/A	1 x iRIS-1010-R10	
	Hard Drive	2 x 2.5" SATA 6Gb/s HDD/SSD bay	2 x 2.5" SATA HDD bay (No RAID support)	1 x 2.5" SATA HDD bay	1 x 2.5" SATA 3Gb/s HDD bay	
I/O Interfaces	CF Card/CFast	N/A	N/A	N/A	N/A	
	USB 3.1 Gen 1	2	4	0	1	
	USB 2.0	4	N/A	6	3	
	Ethernet	2 x RJ-45 LAN1: Intel® I217LM PHY with Intel® AMT 9.0 support LAN2: Intel® I210-AT PCIe controller	LAN1: Intel® I219-LM LAN2: Intel® I211-AT	2 x Realtek RTL8111E with ASF 2.0 support	LAN 1: PCIe GbE by Intel® I210 controller LAN 2: PCIe GbE by Intel® I211 controller	
	COM Port	2 x RS-232	1 x RS-232/422/485 2 x RS-232	3 x RS-232 1 x RS-422/485	3 x RS-232 1 x RS-422/485	
	Digital I/O	N/A	8-bit digital I/O	N/A	8-bit digital I/O (4-bit input, 4-bit output)	
	Display	2 x HDMI, 1 x VGA	2 x HDMI	2 x VGA	1 x VGA	
	Resolution	VGA: Up to 1920x1200@60Hz HDMI: Up to 2500x1600@60Hz	HDMI: up to 4096x2160@24Hz	VGA: Up to 1920 x 1200@60Hz	VGA: 2560x1600@60Hz	
	Audio	1 x Line-out, 1 x Mic-in	1 x Line-out	1 x Line-out	1 x Line out	
	Wireless	1 x 802.11b/g/n	2 x 802.11b/g/n (optional)	1 x 802.11b/g/n	1 x 802.11b/g/n	
Power	Expansions	1 x Full-size PCIe Mini (supports mSATA, SATA 6Gb/s signal only) 1 x Half-size PCIe Mini (only for iRIS-1010)	1 x Full-size PCIe Mini card slot (with SIM holder & mSATA support) 1 x Half-size PCIe Mini card slot	1 x Full-size (supports mSATA) 1 x Half-size	1 x Full-size PCIe Mini card slot (supports mSATA) 1 x Half-size PCIe Mini card (only for iRIS)	
	Power Input	DC Jack: 12 V DC 3-pin terminal: 9 V~36 V DC	DC 12V (Optional 9~36V) Power 1: DC jack Power 2: Terminal block for optional 9~36V only)	9 V~36 V DC Power 1: DC Jack Power 2: Terminal block	DC jack: 12 V DC 3-pin terminal: 9 V~36 V DC	
Reliability	Power Consumption	12 V@4.6 A (Intel® mobile Core™ i5-4400E CPU with 4GB 1333MHz DDR3 memory)	12 V@2.4 A (Intel® i5-6300U with 4GB DDR4 memory)	12 V@1.59 A (Intel® Atom™ D2550 CPU with 2GB DDR3 memory)	12V@1.45A (Intel® Celeron® J1900 CPU and one 8 GB 1333 MHz DDR3 memory)	
	Mounting	Wall mount, VESA 100	Wall mount, VESA 100	Wall mount, VESA 100	Wall mount, VESA 100	
	Operating Temperature	-20°C ~60°C with air flow (SSD), 10% ~ 95%, non-condensing	-20°C~60°C with air flow (SSD), 5% ~ 95%, non-condensing	-10°C~60°C with air flow (SSD), 5% ~ 95%, non-condensing	-20°C~60°C with air flow (SSD), 10% ~ 95%, non-condensing	
	Operating Shock	Half-sine wave shock 5G, 11ms, 3 shocks per axis			Half-sine wave shock 3G, 11ms, 3 shocks per axis	Half sine wave 5G, 11ms 3-axis (non-operational)
	Operating Vibration	MIL-STD-810F 514.5C-2 (with SSD)	MIL-STD-810F 514.5C-2 (with SSD)	MIL-STD-810F 514.5C-2 (with SSD)	MIL-STD-810F 514.5C-1 (HDD)	
Weight (Net/Gross)	2.4 kg/4.2 kg	2.2 kg/3 kg	2.2 kg/3 kg	2.1 kg / 3.9 kg		

*Systems with hard drive meet MIL-STD-810F 514.5C-1 specifications. SSD/CF systems meet MIL-STD-810F 514.5C-2 specifications.

Embedded Chassis Series



Model Name		BRICK-KINO	BRICK-WAFER	BRICK-NANO
Chassis	Platform	Case only		
	Color	Black		
	Dimensions (WxDxH) (mm)	203 x 178 x 64	220 x 143 x 55	
Motherboard	Motherboard Model	tKINO-ULT3 KINO-DAL KINO-DBT tKINO-AL tKINO-BW eKINO-BT	WAFER-AL WAFER-BT	NANO-AL NANO-BT
	SBC Size (mm)	Mini-ITX (170 x 170)	3.5" (146 x 102)	3.5" (165 x 115)
	Buttons	Power switch		
Reliability	Operating Temperature	0°C ~ 40°C		
	Weight (Net/ Gross)	1.25kg/1.5kg	1.2kg/1.5kg	

Embedded Chassis Series



Model Name	EBC-3300	EBC-3220	EBC-3200	EBC-3100	
Platform	Case only	Case only	Case only	Case only	
Chassis	Color	Black	Black	Black	
	Dimensions (WxDxH) (mm)	190 x 190 x 43	190 x 180 x 55	260 x 180 x 55	260 x 250 x 156
	System Fan	--	1 x 4 cm	2 x 4 cm	1 x 8 cm
	Chassis Construction	Heavy duty metal	Heavy duty metal	Heavy duty metal	Heavy duty metal with plastic front panel
	Motherboard Model	EBC-3300-ULT3-R10: tKINO-ULT3 EBC-3300-AL-R10 :tKINO-AL EBC-3300-BW-R10: tKINO-BW	tKINO-BW KINO-DQM170 KINO-DH810 KINO-DBT eKINO-BT KINO-DA750-i2 KINO-KBN/SE-i2 KINO-DQM871-i1 KINO-DH610 KINO-QM770 KINO-QM670 KINO-QM57A KINO-HM551	tKINO-BW KINO-DQM170 KINO-DH810 KINO-DBT eKINO-BT KINO-DA750-i2 KINO-KBN/SE-i2 KINO-DQM871-i1 KINO-DH610 KINO-QM770 KINO-QM670 KINO-QM57A KINO-HM551	KINO-AQ170 KINO-ABT KINO-AA750-i2 KINO-AQ870 KINO-AQ670 KINO-AH611 KINO-AH612
SBC Size (mm)	Mini-ITX (170 x 170)	Mini-ITX (170 x 170)	Mini-ITX (170 x 170)	Mini-ITX (170 x 170)	
Storage	Hard Drive	1 x 2.5" SATA HDD drive bay	1 x 2.5" SATA HDD drive bay	2 x 2.5" SATA HDD space	1 x 3.5" SATA HDD space
	CF Card/CFast	N/A	N/A	Refer to optional module	Refer to SBC
	SD Card	Refer to SBC	Refer to SBC	Refer to SBC	Refer to SBC
I/O Interfaces	PS2 (KB/MS)	N/A	N/A	N/A	Refer to SBC
	USB 3.1 Gen 1	Refer to SBC	Refer to SBC	Refer to SBC	Refer to SBC
	USB 2.0	Refer to SBC	Refer to SBC	Refer to SBC	Refer to SBC
	Ethernet	2	2	2	2
	COM Port	Refer to SBC	Refer to SBC	Refer to SBC	Refer to SBC
	LPT	Refer to SBC	Refer to SBC	Refer to SBC	Refer to SBC
	Display	Refer to SBC	Refer to SBC	Refer to SBC	Refer to SBC
	Resolution	Refer to SBC	Refer to SBC	Refer to SBC	Refer to SBC
	Audio	Refer to SBC	Refer to SBC	Refer to SBC	Refer to SBC
Wireless	Refer to SBC	Refer to SBC	Refer to SBC	Refer to SBC	
Expansions	PCI	N/A	N/A	1 x low profile expansion slot*	N/A
	PCIe	N/A	N/A	1 x low profile expansion slot*	1 x Full-height expansion slot
	PCIe Mini	Refer to SBC	Refer to SBC	Refer to SBC	Refer to SBC
	Others	1 x E-Window	N/A	N/A	N/A
Power	Power Input	12V DC	12V DC	12V DC in	90~264V AC
	Power Supply	12V DC	12V DC	12V DC in	ACE-A618B 180W ACE-A627A 270W
Reliability	Mounting	VESA 100, wall mount	VESA 100, wall mount	Desktop, wall mount	Desktop, wall mount
	Operating Temperature	-10°C~50°C	-10°C~50°C	0°C ~ 50°C	0°C ~ 50°C
	Operating Shock	Half-sine wave 3G, 11ms 3 shocks per axis			
	Operating Vibration	MIL-STD-810F 514.5C-1			
Weight (Net/ Gross)	1 kg/2 kg	1 kg/2 kg	1.1 kg/2 kg	2.5 kg/3.9 kg	

* Optional items

** Systems with hard drive meet MIL-STD-810F 514.5C-1 specifications. SSD/CF systems meet MIL-STD-810F 514.5C-1 specifications.

Embedded Chassis Series



New



Model Name	EBC-3000	EBC-2200	EBC-2100	EBC-1100	
Platform	Case only	Case only	Case only	Case only	
Chassis	Color	Black	Black	Cool gray	Black
	Dimensions (WxDxH) (mm)	280 x 230 x 88	215 x 150 x 55	262 x 134 x 56	190 x 140 x 46
	System Fan	1 x 6 cm	1 x 4 cm	1 x 4 cm*	Refer to MB
	Chassis Construction	Heavy duty metal with plastic front panel	Aluminum alloy with heavy duty metal		
	Motherboard Model	KINO-AQ170 KINO-ABT KINO-AA750-i2 KINO-AQ870 KINO-AQ670 KINO-AH611 KINO-AH612	NANO-BT-i1 NANO-BTW2 NANO-QM871	NANO-LX	WAFER-BT-E38001W2
SBC Size (mm)	Mini-ITX (170 x 170)	EPIC (165 x 115)	EPIC (165 x 115)	3.5" SBC (146x102)	
Storage	Hard Drive	1 x 3.5" SATA HDD space	1 x 2.5" SATA 6Gb/s HDD/SSD drive bay	1 x 2.5" SATA HDD space	
	CF Card/CFast	Refer to SBC	N/A	1	N/A
	SD Card	Refer to SBC	N/A	N/A	N/A
I/O Interfaces	PS2 (KB/MS)	Refer to SBC	Refer to SBC	1	Refer to SBC
	USB 3.1 Gen 1	Refer to SBC	Refer to SBC	N/A	1
	USB 2.0	Refer to SBC	Refer to SBC	4	3
	Ethernet	2	2	1	2
	COM Port	Refer to SBC	Refer to SBC	1+2 RS-232*	1x RS232, 1 x RS-232 & 1 x RS-422/485*
	LPT	Refer to SBC	N/A	*1	N/A
	Display	Refer to SBC	Refer to SBC	1 x VGA	1 x VGA
	Resolution	Refer to SBC	Refer to SBC	N/A	VGA (up to 2560x1600@60Hz)
	Audio	Refer to SBC	1 x Line out, 1 x Mic-in	3 x Audio jack*	1 x Line out, 1 x Mic-in
	Wireless	Refer to SBC	1 x 802.11b/g/n	N/A	802.11b/g/n *
Expansions	PCI	N/A	N/A	N/A	N/A
	PCIe	N/A	N/A	N/A	N/A
	PCIe Mini	Refer to SBC	1 x Full-size PCIe Mini card slot	N/A	3
	Others	N/A	N/A	1 x PCI-104	N/A
Power	Power Input	90~264V AC	12V DC	12V DC in	12V DC in
	Power Supply	ACE-A618B 180W ACE-A627A 270W	12V, 5A	12 V DC in, AT mode only, with 60W power adapter	12V DC in
Reliability	Mounting	Desktop, wall mount	Wall mount, VESA 100	Desktop, wall mount	Wall mount, VESA 75
	Operating Temperature	0°C ~ 50°C	-20°C ~ 60°C	0°C ~ 50°C	-40°C ~ 75°C (refer to MB)
	Operating Shock	Half-sine wave 3G, 11ms 3 shocks per axis	Half-sine wave shock 5G, 11ms, 3 shocks per axis	Half-sine wave 3G, 11ms 3 shocks per axis	Half-sine wave shock 5G, 11ms, 3 shocks per axis
	Operating Vibration	MIL-STD-810F 514.5C-1			MIL-STD-810F 514.5C-1 (with SSD)
	Weight (Net/Gross)	2.5 kg/3.9 kg	1.1kg/2kg	1 kg/3 kg	1.2Kg/2.2Kg

* Optional items

** Systems with hard drive meet MIL-STD-810F 514.5C-1 specifications. SSD/CF systems meet MIL-STD-810F 514.5C-1 specifications.

Chassis Selection Guide

Model No.	Type	Board Type		Max. Slots	Drive Capacity				Fan Spec.			
		SBC Slot	Motherboard		5.25" F.P.	3.5" F.P.	2.5" Int	3.5" Int	4 cm	6 cm	8 cm	12 cm
RACK-1150G	1U	PICMG 1.0 full-size/ PICMG 1.3 full-size		3	1			1	3			
RACK-220G	2U	PICMG 1.0 full-size	*microATX, Mini-ITX	6	1	1		1			2	
RACK-305G	4U	Full-size	*ATX, microATX, Mini-ITX	14	2	1		1		***2	2	
RACK-360G	4U	Full-size	*ATX, microATX, Mini-ITX	14	2	1		1		***2		1
RACK-3000G	4U	Full-size	*ATX, microATX, Mini-ITX	14	3	2		1		***2	2	
ECA-300			ATX, microATX	7	2		1	1				
ECA-200			microATX	4			1	1				
ECA-100			ATX, microATX	7			1	1				
PAC-1000G		Full-size		6	1	1		1			1	
PAC-106G		Full-size		6		1		1			1	
PAC-1700G		Full-size		7	1	1		2			1	
PAC-125G		Full-size		10	2	1		1			1	
PAC-53GH		Half-size		3			1					
PAC-42GH		Half-size		4		△1		△1			1	
PR-1500G		Half-size		5	◇1	1		1			1	
PAC-400G		Half-size		5				△1			1	
PAC-700G		Half-size		7	1	△1		1			1	

Model No.	Indicators		Front Panel Control						Back Panel Control		PSU	Dimensions (mm)			Color	
	Power	HDD	Power	Reset	KB	USB	Keylock	COM	USB	COM		Depth	Height	Width	Black	White
RACK-1150G	○	○	○	○		2					1U	449	44	431	○	
RACK-220G	○	○	○	○		2	○				PS/2	487.5	88	431	○	○
RACK-305G	○	○	○	○	○	2	○				PS/2 or mini redundant	413	176	431	○	○
RACK-360G	○	○	○	○	○	2	○				PS/2 or mini redundant	435.5	176	431	○	○
RACK-3000G	○	○	○	○			○				PS/2 or mini redundant	520	176	431	○	○
ECA-300	○	○	○	○		2		6			1U	291	162	365	○	
ECA-200	○	○	○	○		2		6			1U	310	162	310	○	
ECA-100	○	○	○	○		2			4	2	PS/2	320	480.5	210		○
PAC-1000G	○	○	○	○							PS/2	421	176	232	○	
PAC-106G	○	○	○	○		2					1U	400	175.5	166		○
PAC-1700G	○	○	○	○							PS/2	433	253.7	192.4	○	
PAC-125G	○	○	○	○		2	○				PS/2	420	176	321		○
PAC-53GH	○	○	○	○		2					1U	218	200	95		○
PAC-42GH	○	○	○	○		2					1U	269	230	140		○
PR-1500G	○	○	○	○		2					1U	254	132	286		○
PAC-400G	○	○	○	○		2					1U	269	230.5	140		○
PAC-700G	○	○	○	○		2	○				1U	279	176	321	○	

■ Rackmount chassis
■ Full-size wall mount chassis
■ Half-size wall mount chassis

* For ATX model
 *** Optional fans for ATX model
 ◇ Slim-type CD-ROM
 △ Please refer to datasheet for detail information