

Industrial Motherboards

- Mini-ITX Size: 170 x 170 mm
- Thin Mini-ITX Size: 170 x 170 mm
- UTX Size: 112 x 117 mm



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Motherboards

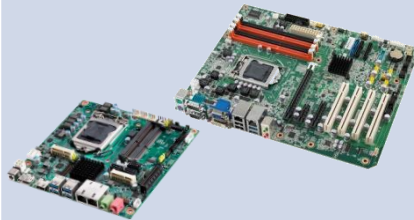
EMBEDDED

Embedded Boards



2,5" Pico-ITX™
3,5" Single Board Computer
PC/104
Slot SBC
Computer-on-Module

Industrial Mainboards



Mini-ITX™
Micro-ATX
Flex-ATX
ATX

Embedded Systems



Embedded Box PCs
Embedded Panel PCs
Embedded Server
Embedded Desktop PCs
Digital Signage Player
Industrial Monitors

Accessories & IoT



Gateways
Switches
Router
Memory, CPUs
Cables
Power Supplies

Available Features & Options:

Designed for Industrial Applications
Extended Temperature -40°C...+85°C
Design-in Support
Kits (Board with OS, Display & Cables)

Long-term Availability
Custom Design
Fixed Bill of Material
EOL / PCN Handling

FEATURES

INDUSTRIAL MOTHERBOARDS

- Long-Term Availability up to 15 Years
- For Industrial Applications e.g. 24/7 Usage
- PCN and EOL Notification
- Faster Time to Market
- Support (Customized BIOS..)
- Possibility for customization
- Fanless Designs Possible
(Depends on Product and Processor)

MINI-ITX MOTHERBOARDS

AMD® RYZEN CPU



Product	MI988	AIMB-228	mITX-VR1000 V2.0	mITX-1605A	MBD301
Vendor	iBASE	Advantech	Kontron	GigalPC	iBASE
Processor	AMD® Ryzen™ V1807B / V1756B / V1202B	AMD® Ryzen™ V1807B / V1605B / V1202B	AMD® Ryzen™ V1807B / V1756B / V1605B / V1202B	AMD® Ryzen™ V1605B	AMD® Ryzen™ 3000 Desktop Series CPU f. AM4 Socket
Chipset	SoC Ryzen™	SoC Ryzen™	SoC Ryzen™	SoC Ryzen	AMD® X470
Memory	32GB DDR4 max.	32GB DDR4 max.	2x DDR4 SO-DIMM	2x DDR4 SO-DIMM	64GB DDR4 max.
Graphic	48-bit LVDS/eDP, DP, HDMI	48-bit LVDS/eDP, 4x DP	48-bit LVDS, up to 4x DisplayPort	4x DisplayPort, 48-bit LVDS (shared)	DisplayPort
Storage	2x SATA, M.2 Key E	2x SATA, M.2 Key B	2x SATA 3.0	1x SATA	4x SATA
Ethernet	2x 10/100/1000Mbit	2x 10/100/1000Mbit	3x 10/100/1000Mbit	2x 10/100/1000Mbit	10/100/1000Mbit
I/O	2x USB 3.1, 2x USB 3.0 2x RS232/422/485 4x RS232	2x USB 3.1, 4x USB 2.0 2x RS232/422/485 4x RS232	2x USB 3.1, 4x USB 2.0 2x RS232/422/485	6x USB 2.0, 4x USB 3.0, 2x RS232/422/485	6x USB 3.1, 2x USB 2.0 1x RS232/422/485, 3x RS232
Audio	HD Audio	HD Audio	HD Audio	HD Audio w. Amplifier	HD Audio
GPIO	8-bit	16-bit	x	8-bit	
Expansion	miniPCIe M.2 Key M	TPM, M.2 Key E	3x M.2	miniPCIe, 2x M.2 Key E/M, PCIe x16, TPM Header	M.2, miniPCIe, SIM Socket, PCIe x16 or 2x PCIe x8
Power	12-24 VDC	12-24VDC	12V DC-in	12V-24V DC-in	ATX

MINI-ITX MOTHERBOARDS

INTEL® CORE™ I CPU (9TH/8TH GEN.)



Product	MI996 / MI995	mITX-Q370A / H31CA / H310A	AIMB-286 (AIMB-286EF)	MI998	AIMB-276 – Desktop CPU
Vendor	iBASE	GigaPC	ADVANTECH	iBASE	ADVANTECH
Processor	Intel® Core™ i7/i5/i3, Xeon E3 (9th/8th Gen.) FCBGA1440	Intel® Core™ i7/i5/i3, (9th/8th Gen.) FCBGA1440	Intel® Core™ i7 / i5 / i3 Celeron®, Pentium® (8th Gen.) LGA1151	Intel® Core™ i, Xeon®, Pentium®, Celeron® LGA1151	Intel® Core™ i7/i5/i3 (8th. Gen.) LGA1151
Chipset	Intel® CM246, QM370, HM 370	Intel® Q370/H310C/H310	Intel® H310	Intel® C246, Q370, H370 9th/8th Gen.	Intel® Q370
Memory	32GB DDR4 max.	32GB DDR4 max.	32GB DDR4 max.	32GB DDR4 max.	32GB DDR4 max.
Graphic	eDP, HDMI, DisplayPort, DVI	eDP, HDMI, DisplayPort, VGA	48-bit LVDS, HDMI, DP, eDP (optional)	DVI-D, HDMI, DP and eDP or 48-bit LVDS/eDP	48-bit LVDS/eDP, HDMI, 2x DP
Storage	2x M.2m, up to 4x SATA	3x SATA	3x SATA, M.2 Key B	M.2, 4x SATA	3x SATA
Ethernet	2x 10/100/1000Mbit	2x 10/100/1000Mbit	2x 10/100/1000Mbit	2x 10/100/1000Mbit	2x 10/100/1000Mbit
I/O	2x RS232/422/485, 6x USB 3.1 4x USB 2.0	Up to 2x RS232/422/485, 2x RS232, 4x USB 3.0, 4x USB 2.0	3x USB 3.0, 4x USB 2.0 6x RS232, RS433/485 (optional)	Up to 6x USB 3.0, 2x USB 2.0	6x USB 3.1, 4x USB 3.0 1x RS232, 1x RS232/422/485
Audio	HD Audio	HD Audio	HD Audio	HD Audio	HD Audio
GPIO	8-bit	8-bit	16-bit	8-bit	8-bit
Expansion	PCIe x16, miniPCIe, M.2	2x M.2 Key E/M	1x M.2 Key E	PCIe x 16, 2x M.2, TPM	PCIe x16, M.2 Key E, M.2 Key B
Power	ATX or 12V DC-in	12V, 19V, 24V DC-in	12 VDC	ATX	12V or 12...24V

MINI-ITX MOTHERBOARDS

INTEL® CORE™ I DESKTOP CPU (7TH & 6TH GEN.)



Product	AIMB-275	MI991	AIMB-205	mITX-SKL-S H110 / C236	mITX-Q170 / H110
Vendor	ADVANTECH	iBASE	ADVANTECH	Kontron	GigaIPC
Processor	Intel® Core™ i7 / i5 / i3 (7th & 6th Gen.) LGA1151	Intel® Core™ i7 / i5 / i3 (7th & 6th Gen.) LGA1151	Intel® Core™ i7 / i5 / i3 (7th & 6th Gen.) LGA1151	Intel® Core™ i7 / i5 / i3 (6th Gen.) LGA1151	Intel® Core™ i7 / i5 / i3 (7th & 6th Gen.) LGA1151
Chipset	Intel® Q170 / H110	Intel® C236 / Q170 / H110	Intel® H110	Intel® H110 / C236	Intel® Q170 / H110
Memory	32GB DDR4 max.	32GB DDR4 max.	32GB DDR4 max.	32GB DDR4 max.	32GB DDR4 max.
Graphic	48-bit LVDS, HDMI, VGA, eDP, DP	DVI-D, HDMI, DP	48-bit LVDS/eDP, VGA, DVI-D, DP	48-bit LVDS/VGA, HDMI, DP (48-bit LVDS, 2(3)x DP)	48-bit LVDS, eDP, HDMI, DisplayPort, VGA
Storage	3x SATA	1x mSATA (shared) 3(4)x SATA	2x SATA	1x mSATA (shared), (M.2) 3(4)x SATA	3x SATA
Ethernet	2x 10/100/1000Mbit	2x 10/100/1000Mbit	2x 10/100/1000Mbit	2(3)x 10/100/1000Mbit	Up to 6x 10/100/1000Mbit
I/O	6x USB 3.0, 2x USB 2.0, 1x RS232/422/485 1x RS232	4(6)x USB 3.0, 2(0)x USB 2.0, 1x RS232/422/485 3x RS232	4x USB 3.0, 6x USB 2.0, 1x RS232/422/485 7x RS232	4(2)x USB 3.0, 2x USB 2.0, 1x RS(232)/422/485, 1(3)x RS232	Up to 6x USB 2.0, 6x USB 3.0 2x RS232/422/485
Audio	HD Audio	HD Audio	HD Audio	HD Audio	HD Audio with Amplifier
GPIO	8-bit	x	8-bit	x	8-bit
Expansion	miniPCIe, M.2 Key B	2x miniPCIe	miniPCIe, M.2 Key B	miniPCIe	M.2, miniPCIe
Power	12-24 VDC	ATX	ATX	ATX	12V, 19V, 24V DC-in

MINI-ITX MOTHERBOARDS

INTEL® CORE™ I MOBILE CPU (7TH & 6TH GEN.)



Product	MI992	MI990
Vendor	iBASE	iBASE
Processor	Intel® Core™ i7-7820EQ, i5-7440EQ, i3-7100E, Xeon® E3-1505M v6 (7th Gen.)	Intel® Core™ i, Xeon (6th Gen.) E3-1505M / i7-6820EQ / i5-6440EQ / i3-6100E
Chipset	Intel® CM238 / HM175	Intel® CM236 / HM170
Memory	32GB DDR4 max.	32GB DDR4 max.
Graphic	48-bit LVDS, DVI-D, HDMI, DP	48-bit LVDS DVI-D, HDMI, DP
Storage	1x mSATA, 1.M.2 up to 4x SATA	1x mSATA (shared) 4(2)x SATA
Ethernet	2x 10/100/1000Mbit	2x 10/100/1000Mbit
I/O	6x USB 3.0, 4x USB 2.0, 6x COM	6x USB 3.0, 2x USB 2.0 1x RS232/422/485 5x RS232
Audio	HD Audio	HD Audio
GPIO	8-bit GPIO	x
Expansion	PCIe x16, 2x miniPCIe, 1x M.2	2x miniPCIe
Power	ATX	ATX

THIN MINI-ITX MOTHERBOARDS

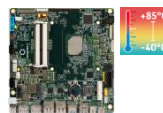
INTEL® CORE™ I CPU (7TH & 6TH GEN.)



Product	AIMB-285	AIMB-232	conga-IC175	conga-IC170
Vendor	ADVANTECH	ADVANTECH	congatec	congatec
Processor	Intel® Core™ i7 / i5 / i3 (7th & 6th Gen.) LGA1151	Intel® Core™ i7 / i5 / i3 (7th & 6th Gen.) i7-6600U / i6-6300 / i3-6100U / 3955U / 3965U	Intel® Core™ (7th Gen.) i7-7600U, i5-7300U, i3-7100U, Celeron® 3965U	Intel® Core™ i (6th Gen.) i7-6600U, i5-6300U, i3-6100U, Celeron® 3955U
Chipset	Intel® H110	U-Series Kaby Lake & Skylake SoC	U-Series Kaby Lake SoC	U-Series Kaby Lake SoC
Memory	32GB DDR4 max.	16GB DDR4 max.	32GB DDR4 max.	32GB DDR4 max.
Graphic	48-bit LVDS, HDMI, VGA, DP	48-bit LVDS, HDMI, DP, eDP	48-bit LVDS or eDP, 2x DP	48-bit LVDS or eDP, 2x DP
Storage	1x mSATA (shared), 3x SATA	2x SATA	1x M.2 (shared), 2x SATA	1x M.2 (shared), 2x SATA
Ethernet	2x 10/100/1000Mbit	2x 10/100/1000Mbit	2x 10/100/1000Mbit	2x 10/100/1000Mbit
I/O	4x USB 3.0, 4x USB 2.0 2x RS232	6x USB 3.0, 2x USB 2.0	4x USB 3.0, 4x USB 2.0 2x COM	4x USB 3.0, 4x USB 2.0 2x COM
Audio	HD Audio	HD Audio	HD Audio	HD Audio
GPIO	x	x	8-bit	8-bit
Expansion	2x miniPCIe	2x miniPCIe	PCIe x4, miniPCIe, M.2 Key B	PCIe x4, miniPCIe, M.2 Key B
Power	12 VDC	12 VDC	12-24 VDC	12-24 VDC

THIN MINI-ITX MOTHERBOARDS

INTEL® ATOM™ CPU (APOLLO LAKE)



Product	AIMB-217	MI811	conga-IA5	mITX-APL
Vendor	ADVANTECH	iBASE	congatec	Kontron
Processor	Intel® Atom™, Celeron®, Pentium® N4200/N3350/x7-E3950	Intel® Celeron®, Pentium® N4200/N3350	Intel® Atom™ E3950, E3940, E3930, Celeron® N3350, Pentium® N4200	Intel® Atom™, Celeron® E39xx/N3350
Chipset	SoC Apollo Lake	SoC Apollo Lake	SoC Apollo Lake	SoC Apollo Lake
Memory	8GB DDR3L max.	8GB DDR3L max.	8GB DDR3L max.	8GB DDR3L max.
Graphic	VGA/eDP**, HDMI, DP++/48-bit LVDS**	eDP or 48-bit LVDS, HDMI, HDMI or DVI-D	48-bit LVDS or eDP(opt.), 2x DisplayPort	48-bit LVDS, 2x DP
Storage	2x SATA, 1x mSATA (shared)	2x SATA, 1x mSATA	2x SATA, (1x shared with M.2)	2x SATA, eMMC
Ethernet	2x 10/100/1000Mbit	2 x 10/100/1000Mbit	2 x 10/100/1000Mbit	2x 10/100/1000Mbit
I/O	4x USB 3.0, 4x USB 2.0 1x RS232/422/485 5x RS232	4x USB 3.0, 4x USB 2.0 1x RS232/422/485 3x RS232	3x USB 3.0, 2x USB 2.0, 2x COM 1x M.2, MicroSD Socket,	4x USB 3.0, 2x USB 2.0 1x RS422/485, 1x RS232, CAN Bus
Audio	HD Audio	HD Audio	HD Audio	HD Audio
GPIO	8-bit	8-bit	8-bit	x
Expansion	miniPCIe (shared) M.2 Key E	1 x miniPCIe	1x PCIe shared with miniPCIe,	1x miniPCIe
Power	12 VDC	12-24 VDC	12-24VDC	12-24 VDC

MINI-ITX MOTHERBOARDS

INTEL® ATOM™ CPU (BAY TRAIL)



Product	AIMB-215	MI805	mITX-E38
Vendor	ADVANTECH	iBASE	Kontron
Processor	Intel® Celeron® J1900/N2930/N2807	Intel® Celeron® J1900	Intel® Atom™ E3815/E3826/E3845
Chipset	SoC Bay Trail	SoC Bay Trail	SoC Bay Trail
Memory	8GB DDR3L max.	8GB DDR3L max.	8GB DDR3 max.
Graphic	48-bit LVDS, VGA, DP or eDP	48-bit LVDS, VGA, DVI-D	48-bit LVDS, 2x DP
Storage	2x SATA, 1x mSATA (shared)	1x mSATA, 2x SATA	2x SATA, eMMC, 1x SD Card Slot
Ethernet	2x 10/100/1000Mbit	2x 10/100/1000Mbit	1x 10/100/1000Mbit
I/O	1x USB 3.0, 7x USB 2.0, 1x RS232/422/485, 5x RS232	1x USB 3.0, 4x USB 2.0, 1x RS232/422/485, 5x RS232	1x USB 3.0, 8x USB 2.0, 6x COM
Audio	HD Audio	HD Audio	HD Audio
GPIO	8-bit	8-bit	x
Expansion	2x miniPCIe (1x shared)	1 x miniPCIe	1x miniPCIe
Power	12 VDC	12-24 VDC	12 VDC

Industrial UTX Motherboards

Size: 112 x 117 mm



UTX MOTHERBOARDS

INTEL® ATOM™ CPU (APOLLO LAKE)



Product	AIMB-U117
Vendor	ADVANTECH
Processor	Intel® Atom™ E3950, E3930
Chipset	SoC Apollo Lake
Memory	8GB DDR3L max.
Graphic	eDP, 48-bit LVDS (optional) DP, HDMI
Storage	1x mSATA (shared) 1x SATA
Ethernet	2x 10/100/1000Mbit
I/O	4x USB 3.0, 1x RS422/485, 1x RS232 (Optional)
Audio	HD Audio
GPIO	8-bit
Expansion	miniPCle , M.2 Key E
Power	12-24 VDC

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