

OUR GLOBAL COMPETENCE CENTRES



 APOLLO DISPLAY TECHNOLOGIES



 DISTEC



 DISPLAY TECHNOLOGY



 DISTEC
A FORTEC GROUP MEMBER

Industrial Motherboards

Industrial Motherboards

PRODUCT HIGHLIGHTS

- Mini-ITX Size: 170 x 170 mm
- Thin Mini-ITX Size: 170 x 170 mm
- Qbi Size: 105 x 110 mm
- UTX Size: 112 x 117 mm



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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)



11th / 10th GEN. INTEL® DESKTOP CPU

MINI-ITX MOTHERBOARD



Product	MI999	AIMB-277	mITX-Q470A / mITX-W480E	AIMB-287 (Thin Mini-ITX)
Vendor	iBASE	Advantech	GigaPC	Advantech
Processor	Intel® Xeon®, Core™ i9/i7/i5/i3, Pentium® & Celeron®, LGA1200	Intel® Core™ i9/i7/i5/i3, Pentium® & Celeron®, LGA1200	Intel® Core™ i9/i7/i5/i3, Pentium® & Celeron®, LGA1200	Intel® Core™ i9/i7/i5/i3, Pentium® & Celeron®, LGA1200
Chipset	Intel® W480E, Q470E, H420E	Intel® Q470E, H420E	Intel® Q470E, (W480/H420W opt.)	Intel® H420E
Memory max.	64GB, 2x DDR4 SO-DIMM	64GB, 2x DDR4 SO-DIMM	32GB, 2x DDR4 SO-DIMM	64GB, 2x DDR4 SO-DIMM
Graphic	DVI-D, HDMI, DP, eDP or LVDS	HDMI, DP, VGA LVDS, eDP (colay w. LVDS)	HDMI, DP, VGA, eDP	2x HDMI, eDP
Storage	4x SATA	Up to 3x SATA	3x SATA	2x SATA
Ethernet	2x 10/100/1000Mbit	2x 10/100/1000Mbit	2x 10/100/1000Mbit	2x 10/100/1000Mbit
I/O	2x RS232/422/485 or 2x RS232 2x RS232 (COM 3~4) 6x USB 3.2, 4x USB 2.0	G2 sku: 8x USB 3.2 L sku: 6x USB 3.2, 2x USB 2.0 1xRS232, 1xRS232/422/485	4x USB 3.1, 6x USB 2.0 4x RS232/422/485	6x USB 3.2, 2x USB 2.0 2xRS232, 2xRS232/422/485 (opt.)
Audio	HD Audio	HD Audio	HD Audio	HD Audio
GPIO	8-bit	8-bit	8-bit & SMBus	8-bit
Expansion	2x M.2 (M-Key 2280, E-Key 2230), PCIe x16, TPM 2.0	2x M.2 (M-Key 2280, E-Key 2230), PCIe x16, TPM 2.0	2x M.2 (M-Key 2280/2242, E-Key2230), PCIe x16, TPM Header	2x M.2 (M-Key 2280, E-Key 2230), TPM2.0
Power	ATX	ATX	12V, 19V, 24V DC-in	12-24V DC-in

9th / 8th GEN. INTEL® DESKTOP CPU

MINI-ITX MOTHERBOARD



Product	MI998	AIMB-276	AIMB-286 / AIMB-286EF (Thin)	mITX-Q370A / H310A	iTXL-Q370A (Thin Mini-ITX)
Vendor	iBASE	ADVANTECH	ADVANTECH	GigalPC	GigalPC
Processor	Intel® Xeon®, Core™ i7 / i5 / i3, Celeron®, Pentium®, LGA1151	Intel® Core™ i7 / i5 / i3, Celeron®, Pentium®, LGA1151	Intel® Core™ i7 / i5 / i3, Celeron®, Pentium®, LGA1151	Intel® Core™ i7 / i5 / i3, Celeron®, Pentium®, LGA1151	Intel® Core™ i7 / i5 / i3, Celeron®, Pentium®, LGA1151
Chipset	Intel® C246, Q370, H110	Intel® Q370	Intel® H310	Intel® Q370 / H310	Intel® Q370
Memory	32GB DDR4 max.	32GB DDR4 max.	32GB DDR4 max.	32GB DDR4 max.	32GB DDR4 max.
Graphic	DVI-D, HDMI, DP, eDP or LVDS	48-bit LVDS/eDP, HDMI, 2x DP	48-bit LVDS, HDMI, DP, eDP (optional)	eDP, HDMI, DisplayPort, VGA	LVDS, HDMI, DP
Storage	4x SATA	3x SATA	3x SATA, M.2 Key B	3x SATA	4x SATA
Ethernet	2x 10/100/1000Mbit	2x 10/100/1000Mbit	2x 10/100/1000Mbit	2x 10/100/1000Mbit	1x 10/100/1000Mbit
I/O	Up to 6x USB 3.0, 2x USB 2.0 2x RS232, up to 2x RS232/422/485	6x USB 3.1, 4x USB 3.0 1x RS232, 1x RS232/422/485	3x USB 3.0, 4x USB 2.0 6x RS232, RS433/485 (optional)	4x USB 3.0, 4x USB 2.0, up to 2x RS232/422/485, 2x RS232,	5x USB 3.0, 1x USB3.0 Type C, 5x USB 2.0, 1x RS232
Audio	HD Audio	HD Audio	HD Audio	HD Audio	HD Audio
GPIO	8-bit	8-bit	16-bit	8-bit	N/A
Expansion	2x M.2 (M-Key 2280, E-Key 2230), TPM2.0, PCIe x 16	PCIe x16, M.2 Key E, M.2 Key B	1x M.2 Key E	2x M.2 Key E/M	2x M.2 (M-Key 2280/2260, E-Key 2230), TPM2.0 Header
Power	ATX	12V or 12...24V	12 VDC	12V, 19V, 24V DC-in	+12V/+19V DC-in

9th / 8th GEN. INTEL® MOBILE CPU

MINI-ITX MOTHERBOARD



Product	MI996	MI995
Vendor	iBASE	iBASE
Processor	Intel® Core™ i7/i5/i3, Xeon E3 (9th/8th Gen.) FCBGA1440	Intel® Core™ i7/i5/i3, Xeon E3 (9th/8th Gen.) FCBGA1440
Chipset	Intel® CM246, QM370, HM370	Intel® CM246, QM370, HM370
Memory	32GB DDR4 max.	32GB DDR4 max.
Graphic	eDP, HDMI, DisplayPort, DVI	48-bit LVDS/eDP, HDMI, 2x DP
Storage	2x M.2, up to 4x SATA	2x M.2, up to 4x SATA
Ethernet	2x 10/100/1000Mbit	2x 10/100/1000Mbit
I/O	2x RS232/422/485, 6x USB 3.1 4x USB 2.0	2x RS232/422/485, 6x USB 3.1 4x USB 2.0
Audio	HD Audio	HD Audio
GPIO	8-bit	8-bit
Expansion	PCIe x16, miniPCIe, M.2	PCIe x16, miniPCIe, M.2
Power	ATX	ATX



AIMB-233 (ULV Series)	conga-IC370 (ULV Series)
ADVANTECH (Thin Mini-ITX)	congatec (Thin Mini-ITX)
Intel® Core™ i7-8665UE, i5-8365UE, i3-8145UE & Celeron® 4305UE	Intel® Core™ i7-8665UE, i5-8365UE, i3-8145UE & Celeron® 4305UE
SoC Whiskey Lake	SoC Whiskey Lake
32GB DDR4 max.	2x32GB DDR4 max.
HDMI, Type C, HDMI	LVDS, DP, HDMI, DP
2x SATA	2x SATA, microSD Card slot
2x 10/100/1000Mbit	1x 2.5 Gbit LAN, 1x Gbit LAN
3x USB3.1, 2x USB3.0, 2x USB2.0, 6x COM	5x USB 3.0, 1x USB3.0 Type C, 5x USB 2.0, 1x RS232
HD Audio	HD Audio
8-bit	N/A
2x M.2 (M-Key 2280/2242, E-Key 2230), miniPCIe colay w. M.2, TPM 2.0 (opt.)	miniPCIe, 2x M.2 (B-Key 2242/2280, E-Key 2230), PCIe x4, TPM2.0, SIM Card Slot,
12V-24V DC-in	+12V-24V DC-in

AMD® RYZEN V2000 CPU

*New in
2021*

MINI-ITX MOTHERBOARDS



Product	AIMB-229	MI989
Vendor	ADVANTECH	iBASE
Processor	AMD® Ryzen™ Embedded V2000 Series	AMD® Ryzen™ Embedded V2000 Series
Chipset	SoC	SoC
Memory max.	Tbd.	64GB DDR4 SO-DIMM
Graphic	2x DP++ (USB-C, 2x HDMI)	4x DisplayPort
Storage	tbd.	SATA
Ethernet	2x 10/100/1000	1x 10/100/1000
I/O	8x USB 6x COM	3x USB 3.1, 2x USB 2.0, 4x COM
Audio	HD Audio	HD Audio
GPIO	16-bit	tbd.
Expansion	2.x M.2, TPM2.0	3x M.2 (B-Key, M-Key, E-Key)
Power	tbd.	tbd.

AMD® RYZEN V1000 CPU

MINI-ITX MOTHERBOARDS



Product	MI988	AIMB-228	mITX-1605A
Vendor	iBASE	Advantech	GigalPC
Processor	AMD® Ryzen™ V1807B / V1756B / V1202B	AMD® Ryzen™ V1807B / V1605B / V1202B	AMD® Ryzen™ V1605B
Chipset	SoC Ryzen™	SoC Ryzen™	SoC Ryzen
Memory	32GB DDR4 max.	32GB DDR4 max.	2x DDR4 SO-DIMM
Graphic	48-bit LVDS/eDP, DP, HDMI	48-bit LVDS/eDP, 4x DP	4x DisplayPort, 48-bit LVDS (shared)
Storage	2x SATA, M.2 Key E	2x SATA, M.2 Key B	1x SATA
Ethernet	2x 10/100/1000Mbit	2x 10/100/1000Mbit	2x 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	6x USB 2.0, 4x USB 3.0, 2x RS232/422/485
Audio	HD Audio	HD Audio	HD Audio w. Amplifier
GPIO	8-bit	16-bit	8-bit
Expansion	miniPCIe M.2 Key M	TPM, M.2 Key E	miniPCIe, 2x M.2 Key E/M, PCIe x16, TPM Header
Power	12-24 VDC	12-24VDC	12V-24V DC-in

INTEL® ATOM™ CPU (ELKHARD LAKE)

MINI-ITX MOTHERBOARDS

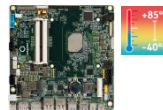


Product	AIMB-218 (Thin Mini-ITX)
Vendor	ADVANTECH
Processor	Intel® Atom™ x6000e Serie, Celeron®, Pentium® J6000 Serie
Chipset	SoC Elkhard Lake
Memory	2x DDR4 SO-DIMM, max 32GB
Graphic	HDMI, DisplayPort eDP or LVDS (optional)
Storage	1x SATA, M.2 (see expansion)
Ethernet	2x 10/100/1000Mbit
I/O	3x USB 3.2, 5x USB 2.0 Up to 6x COM
Audio	HD Audio
GPIO	8-bit
Expansion	M.2 Key E shared with PCIe x1, M.2 Key B, TPM 2.0 (opt.)
Power	12 VDC

*New in
2021*

INTEL® ATOM™ CPU (APOLLO LAKE)

MINI-ITX MOTHERBOARDS



Product	AIMB-217 (Thin Mini-ITX)	MI811	conga-IA5 (Thin Mini-ITX)
Vendor	ADVANTECH	iBASE	congatec
Processor	Intel® Atom™, Celeron®, Pentium® N4200/N3350/x7-E3950	Intel® Celeron®, Pentium® N4200/N3350	Intel® Atom™ E3950, E3940, E3930, Celeron® N3350, Pentium® N4200
Chipset	SoC Apollo Lake	SoC Apollo Lake	SoC Apollo Lake
Memory	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
Storage	2x SATA, 1x mSATA (shared)	2x SATA, 1x mSATA	2x SATA, (1x shared with M.2)
Ethernet	2x 10/100/1000Mbit	2 x 10/100/1000Mbit	2 x 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,
Audio	HD Audio	HD Audio	HD Audio
GPIO	8-bit	8-bit	8-bit
Expansion	miniPCIe (shared) M.2 Key E	1 x miniPCIe	1x PCIe shared with miniPCIe,
Power	12 VDC	12-24 VDC	12-24VDC

Compact SBC

Size: 105 x 110 mm



INTEL® CORE™ & ATOM™ CPU

COMPACT SBC 10,5X11CM



Product	QBi-4200A / QBi-4200B
Vendor	GIGAIPC
Processor	Intel® Pentium® N4200
Chipset	SoC Apollo Lake
Memory	8GB DDR3L max.
Graphic	eDP VGA, HDMI
Storage	1x SATA
Ethernet	10/100/1000Mbit
I/O	3x USB 3.0, 2x USB 2.0 1x RS232
Audio	HD Audio
GPIO	-
Expansion	1x M.2 Key E
Power	12-24V DC-in

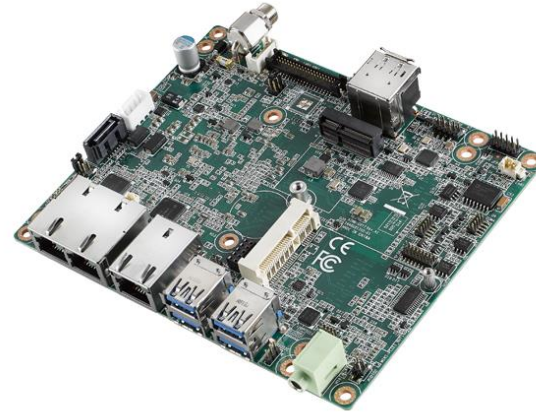
INTEL® 8TH / 7TH GEN. CORE™ I CPU



QBi-8565 / QBi-8265 / QBi-8145	QBi-7100B / QBi-3965A
GIGAIPC	GIGAIPC
Intel® Core™ i (8th Gen.) i3-8145UE, i5-8265U, i7-8565U	Intel® Core™ i3-7100U Intel® Celeron® 3965U
SoC 8th Gen.	SoC 7th Gen.
2x DDR4, max 32GB	32GB DDR4 max.
eDP 2x HDMI	eDP DP, HDMI
1x SATA, M.2 (see Expansion)	1x SATA
2x 10/100/1000Mbit	10/100/1000Mbit
1x RS232/422/485 4x USB 3.1, 2x USB 2.0, USB 3.0 connector (flexible to PCIe x1)	3x USB 3.0, 2x USB 2.0 1x RS232
HD Audio	HD Audio
8-bit, SMBus	-
1x M.2 2280 Key M 1x M.2 2230 Key E	1x M.2 Key M, 1x M.2 Key E
9-36V DC-in	12-24V DC-in

Industrial UTX Motherboards

Size:
112 x 117 mm (AIMB-U1xx)
or
112 x 137 mm (AIMB-U2xx)



INTEL® CORE™ & ATOM™ CPU

UTX MOTHERBOARDS



Product	AIMB-U117	AIMB-U217
Vendor	ADVANTECH	ADVANTECH
Processor	Intel® Atom™ E3950, E3930	Intel® Atom™ E3950, E3930
Chipset	SoC Apollo Lake	SoC Apollo Lake
Memory	8GB DDR3L max.	8GB DDR3L max.
Graphic	eDP or 48-bit LVDS (optional) DP, HDMI	eDP or 48-bit LVDS (optional) DP, HDMI
Storage	1x mSATA (shared) 1x SATA	1x mSATA (shared) 1x SATA
Ethernet	2x 10/100/1000Mbit	Up to 3x 10/100/1000Mbit
I/O	4x USB 3.0, 1x RS422/485, 1x RS232 (Optional)	4x USB 3.0, 2x USB 2.0 2x RS232/422/485, 2x RS232 Isolated CANBus (optional)
Audio	HD Audio	HD Audio
GPIO	8-bit	16-bit
Expansion	miniPCIe, M.2 Key E	miniPCIe, M.2 Key E, TPM 2.0
Power	12-24 VDC	12-24 VDC

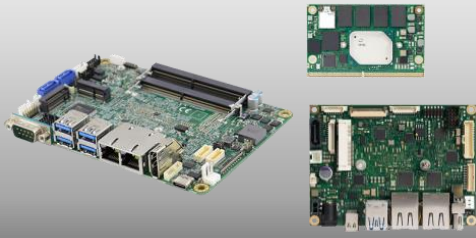


Product	AIMB-U233
Vendor	ADVANTECH
Processor	Intel® Core™ i (8th Gen.) i3-8145UE, i5-8365UE, i7-8665UE
Chipset	SoC 8th Gen. WHL-U Series
Memory	16GB DDR4 max.
Graphic	eDP or 48-bit LVDS (optional) 2x HDMI
Storage	M.2 (see expansion) 1x SATA
Ethernet	2x 10/100/1000Mbit
I/O	2x USB 3.1, 2x USB 2.0 2x RS232/422/485, 2x RS232 Isolated CANBus (optional)
Audio	HD Audio
GPIO	16-bit
Expansion	3x M.2 (Key M 2280, Key B 2242, Key E 2230, TPM 2.0)
Power	12 VDC

EMBEDDED

OVERVIEW

Embedded Boards



- 2,5" Pico-ITX™
- Single-Board Computer
- PC/104
- COM Express® module
- COM HPC® module
- SMARC™ module
- Qseven® 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



- Memory, SSD, CPUs
- Extension cards
- Cables
- Power supplies
- Gateways
- Switches
- Router

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

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