ACP-4000 Barebone PC
4U Rackmount chassis with AIMB ATX MB

Features

- ACP-4000 barebone PC supports the latest Intel 12th/13th/14th generation Core™ i9/i7/i5/i3 & Pentium®/Celeron® processor with Q670E chipset
- Supports ATX motherboard with up to 7 slots
- Shock-resistant disk drive bay design holds up to three 5.25" and one 3.5" disk drives
- LED indicators and alarm notification for system fault detection
- Low noise PWM controlled system fans
- Built-in Intelligent System Module enables whole system fan control and remote manageability

Quiet

CE FCC

Specifications

14th gen	CPU	I9-14900	I9-14900T	I7-14700	I7-14700T	I5-14500	I5-14500T	I5-14400	I5-14400T	I5-14400F	I3-14100	I3-14100T	I9-14901E	I9-14901TE
	P-core Base Frequency	2.0 GHz	1.1 GHz	2.1 GHz	1.3GHz	2.6 GHz	1.7 GHz	2.5 GHz	1.5 GHz	2.5 GHz	3.5 GHz	2.7 GHz	2.8 GHz	2.3 GHz
	L3 Cache	36 MB	36 MB	33 MB	33 MB	24 MB	24 MB	20 MB	20 MB	20 MB	12 MB	12 MB	36 MB	36 MB
	Cores	24	24	20	20	14	14	10	10	10	4	4	8	8
	Processor Base Power	65W	35W	65W	35W	65W	35W	65W	35W	65W	60 W	35W	65W	45 W
	CPU	I7-14701E	I7-14701TE	I5-14501E	I5-14501TE	I5-14401E	I5-14401TE	300	300T					
	P-core Base Frequency	2.6 GHz	2.1 GHz	3.3 GHz	2.2 GHz	2.5 GHz	2 GHz	3.9 GHz	3.4 GHz					
	L3 Cache	33 MB	33 MB	24 MB	24 MB	24 MB	24 MB	6 MB	6MB					
	Cores	8	8	6	6	6	6	2	2					
	Processor Base Power	65W	45 W	65W	45 W	65W	45 W	65W	35W					

13th gen	CPU	I9-13900(E)	I9-13900TE	I7-13700(E)	I7-13700(E)	I5-13500(E)	I5-13500T(E)	I5-13400(E)	I3-13100(E)	I3-13100T(E)
	P-core Base Frequency	2.0 GHz	1.1 GHz	2.1 GHz	2.1 GHz	2.5 GHz	1.6 GHz	2.5 GHz	3.4 GHz	2.5 GHz
	L3 Cache	36 MB	36 MB	30 MB	30 MB	24 MB	24 MB	20 MB	12 MB	12 MB
	Cores	24	24	16	16	14	14	10	4	4
	Processor Base Power	65W	35W	65W	35W	65W	35W	65W	60 W	35W

12th gen	CPU	I9-12900(E)	I9-12900TE	I7-12700(E)	I7-12700TE	I5-12500(E)	I5-12400	I5-12500TE	I3-12100(E)	I3-12100TE	Pentium G7400E	Pentium G7400TE	Celeron G6900E	Celeron G6900TE
	P-core Base Frequency	2.4 GHz	1.1 GHz	2.1 GHz	1.4 GHz	3.0 GHz	2.5 GHz	1.9 GHz	3.3 GHz	2.1 GHz	3.6 Ghz	3.0 GHz	3.0 GHz	2.4 GHz
	L3 Cache	30 MB	30 MB	25 MB	25 MB	18 MB	18 MB	18 MB	12 MB	12 MB	6 MB	6 MB	4 MB	4 MB
	Cores	16	16	12	12	6	6	6	4	4	2	2	2	2
	Processor Base Power	65W	35W	65W	35W	65W	65W	35W	60W	35W	46W	35W	46W	35W

Drive Bay		External	Internal
	5.25"	3	-
	3.5"	1*	-
	2.5"	-	-

Cooling	Fan	2 (12 cm PWM / 82 CFM)
	Filter	Yes

Front IO	USB	USB 2.0 x 2
	PS/2	1

Rear	DB9	5 (COM cable is required)
	DB25	1 (COM cable is required)

Memory	Technology	Dual Channel DDR4 3200 Non-ECC UDIMM
	Maximum Capacity	32GB per slot; 128 GB total
	Socket	4 x 288-pin DIMM

Display	Chipset	Intel UHD Graphics
	HDMI	1 (Resolution up to 3840 x 2160 @ 60Hz)
	DP	1 (Resolution up to 4096 x 2304 @ 60Hz)
	VGA	1 (Resolution up to 1920 x 1200 @ 60Hz)

Ethernet	Controller	GbE LAN1: Intel I219-LM (PHY); GbE LAN2: Intel I210-AT
	Interface	2 x RJ-45

Storage	HDD/SSD	4 x SATA 3.0
	NVMe M.2	1 (PCIex4 Gen4 M-key 2280 type)
	RAID	0, 1, 5, 10

MB I/O Interface	USB	8 (2 x USB 3.2 Gen 2, 2 x USB 3.2 Gen 1, 4 x USB 2.0)
	Serial Port	6 (5 x RS-232, 1 x RS-232/422/485)
	Audio	2 (Line-out, Mic-in)

Expansion	PCIe x16	1 (Gen4 x16 link)
	PCIe x8	1 (Gen3 x4 link)
	PCIe x4	3 (Gen3 x4 link)
	PCI	2

LED and Switch	LED	Power, HDD, Temperature, Fan, and Power Voltage Status
	Button	Power, Reset, Alarm Reset

Specifications (Cont.)

Power	Type	ATX/AT (Default ATX)	
	Input Voltage	100-240V~, 50-60Hz	
Watchdog Timer	Output	System reset	
	Interval	Programmable 1 ~ 255 sec/min	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40 °C (32 ~ 104 °F)	-20 ~ 60 °C (-4 ~ 140 °F)
	Humidity	95% @ 40 °C, non-condensing	95% @ 60 °C, non-condensing
	Vibration	1 Grms	2 Grms
	Shock	10G, IEC60068-2-27, 11ms duration	
Mechanical	Dimensions (W x H x D)	482 x 177 x 479 mm (19" x 7" x 18.9")	
	Weight	16.3 kg (35.94 lbs)	
Certifications	EMC	CE/FCC Class A, CCC	
	Safety	CB/UL, CCC	
OS Support		Windows 11, Windows 10, Windows 10 IoT, Linux OS	

*allow one 2.5" HDD/SSD installed without convert bracket.

Dimensions

Unit: mm [inch]

426.0 [16.77]

468.0 [18.43]
482.1 [18.98]

101.6 [4.00]
177.0 [6.97]

523.1 [20.59]
478.6 [18.84]

172.7 [6.80]
86.4 [3.40]

M4 TAPPING

92.0 [3.62] 92.0 [3.62] 92.0 [3.62] 98.0 [3.86]

Front View

System reset button
Alarm reset button
USB
PS/2 keyboard connector
Power switch

Three 5.25" drive bays (Devices not included)
One 3.5" drive bay for internal HDD use only (Not compatible with mobile rack)

Two 82 CFM cooling fans
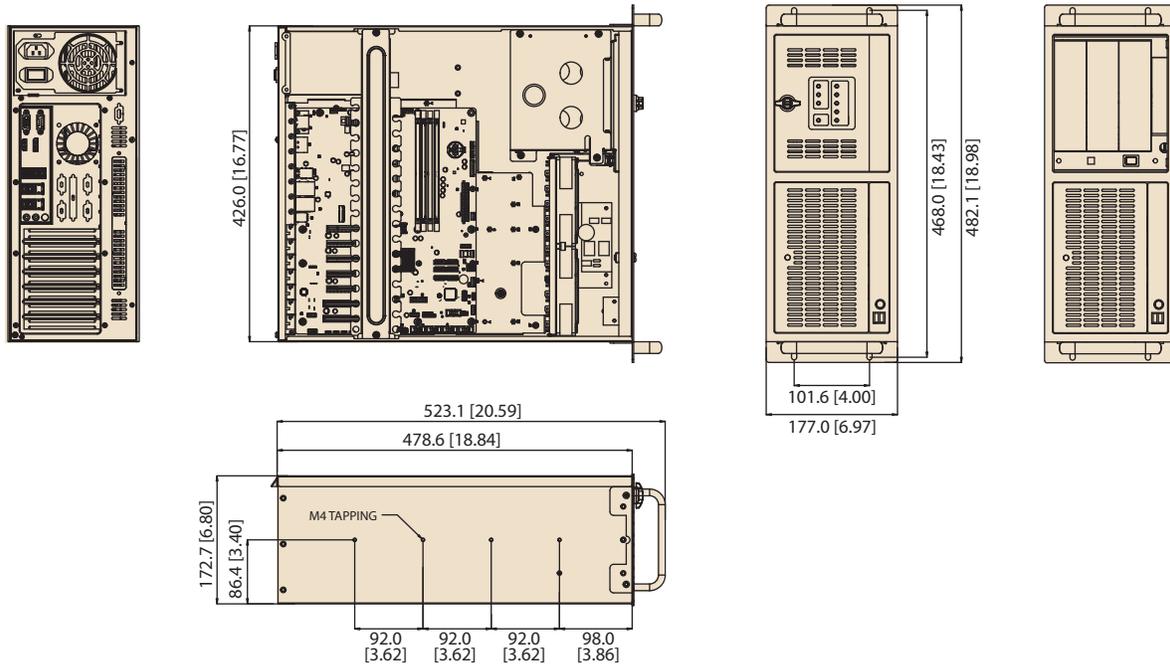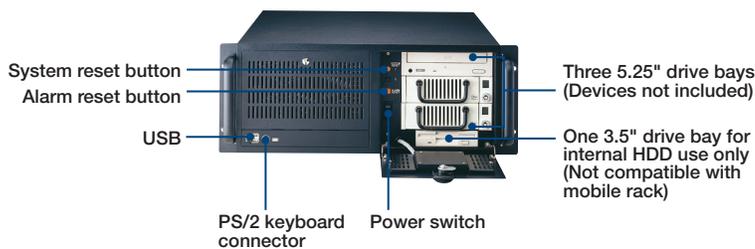
Ordering Information

Part Number	Power Supply	Wattage	80 plus grade	MotherBoard	Chipset	Memory	USB 3.2 Gen 2	USB 3.2 Gen 1	USB 2.0	COM	M.2	SATA 3.0	iBMC
ACP-4000MB-Q685A1U	PS8-850ATX-GZ	850W	Gold	AIMB-788G2-00A1U	Q670E	Non-ECC UDIMM DDR4 3200 up to 128 GB	2	4	8	6	1	4	Yes

Packing List

Part number	Description	Quantity
ACP-4000	4U chassis with handle set	1
1750008561-01	system fan	2
1700030260-01	system fan cable (MB version)	2
2130006147S000	Door filter 97.6 x 36.6 x 5 mm	2
2130004803S000	Fan filter 115 x 195 x 5 mm	1
1960002462	key set	1
98R24000000	Handle set	1
	Screws/nuts and rubber for motherboard and devices	one bag
AIMB-788	ATX MB	1
2002061063	User manual	1
1700003194	SATA data cable	2
1960104181T001	I/O port bracket	1
2041078800	Startup manual	1

MB I/O View

AIMB-788G2-00A1U

Optional Accessories

Part Number	Description
IPC-DT-5230E	Mobile rack for converting dual 5.25" drive bays to three 3.5" SATA HDD trays
PCA-TPMSPI-00A1U	TPM 2.0 Module
1700002204	2-port USB 2.0 cable w/ BKT(27 cm)
1700028292-01	2-port USB 3.0 cable w/ BKT(30 cm)
1970005349T000	CPU cooler for 2U, 4U, and wallmount chassis (for CPU Base Power=35~65W)
1970005436T001	CPU cooler for 2U, 4U, and wallmount chassis (for CPU Base Power=125W)
1701090401	Single COM port cable(40 cm)
1701092300	Dual COM port cable(28.5 cm)
1700022749-13	SATA power cable

Embedded OS

Part Number	Description
20706WX1HS0038	img W10 21HL AIMB-788 64b 21H2 ENU
20706WX1VS0038	img W10 21VL AIMB-788 64b 21H2 ENU
20706WX1ES0038	img W10 21EL AIMB-788 64b 21H2 ENU
20706WLH1S0035	img W11 24HL AIMB-788 64b 24H2 ENU
20706WLV1S0035	img W11 24VL AIMB-788 64b 24H2 ENU
20706WLE1S0035	img W11 24EL AIMB-788 64b 24H2 ENU
20706U22DS0011	img UbuntuD AIMB-788 64b 22.04 ENU