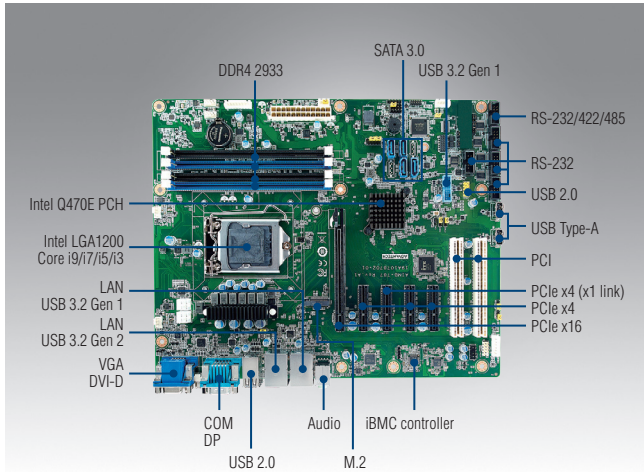


# AIMB-787

**LGA1200 10th Generation Intel® Core™ i9/i7/i5/i3 & Pentium®/Celeron® ATX with DP/DVI/VGA, DDR4, USB 3.2, M.2**



## Features

- Intel® 10th generation Core™ i9/i7/i5/i3 & Pentium®/Celeron® processor with Q470E chipset
- Four DIMM sockets up to 128 GB DDR4 2933
- Triple display DP/DVI-D/VGA and dual GbE LAN
- M.2, SATA RAID 0, 1, 5, 10, USB 3.2
- Supports Intel vPro, AMT & TPM technologies
- Advantech iBMC 1.2 remote out-of-band power management solution on DeviceOn

Note 1: dTPM 2.0 module is required to enable Intel vPro and TPM technologies.

Note 2: Legacy platform is not supported.

Note 3: Intel® Platform Trust Technology (Intel® PTT) ready for Windows 11.

## Quiet Specifications

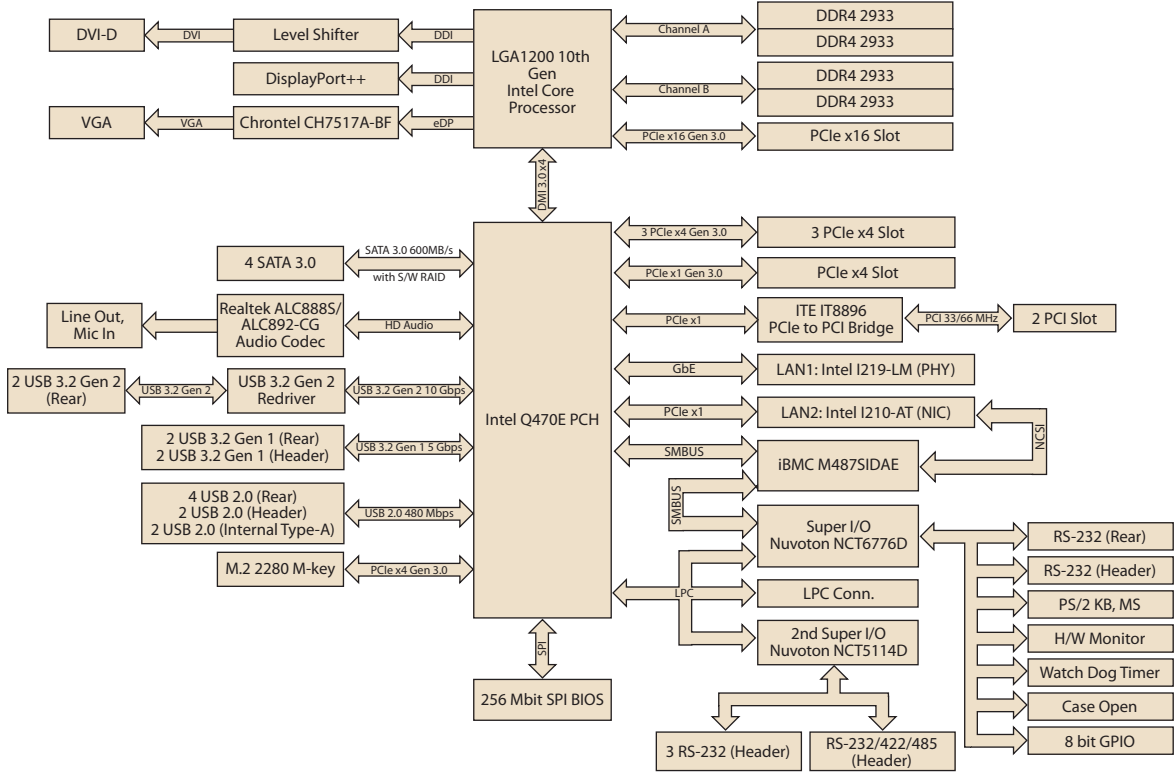
CE FCC

Processor System	CPU	i9-10900E	i9-10900TE	i7-10700E	i7-10700TE	i5-10500E	i5-10500TE	i3-10100E	i3-10100TE	G6400E	G6400TE	G5900E	G5900TE	
	Base Frequency	2.8 GHz	1.8 GHz	2.9 GHz	2.0 GHz	3.1 GHz	2.3 GHz	3.2 GHz	2.3 GHz	3.8 GHz	3.2 GHz	3.2 GHz	3.0 GHz	
	L3 Cache	20 MB	20 MB	16 MB	16 MB	12 MB	12 MB	6 MB	6 MB	4 MB	4 MB	2 MB	2 MB	
	Cores	10	10	8	8	6	6	4	4	2	2	2	2	
	TDP	65 W	35 W	65 W	35 W	65 W	35 W	65 W	35 W	65 W	35 W	65 W	35 W	
	Socket	LGA1200												
	Chipset	Q470E												
Expansion Slot	BIOS	AMI 256 Mbit SPI												
	PCI	2 (32-bit/33 MHz)												
	PCIe x4 (Gen 3)	4 (3 x link x4, 1 x link x1)												
Memory	PCIe x16 (Gen 3)	1												
	Technology	Dual Channel (Non-ECC) DDR4 2933												
	Max. Capacity	128 GB												
Graphics	Socket	4 x 288-pin DIMM												
	Controller	Intel® UHD Graphics 610												
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed												
Ethernet	Interface	10/100/1000 Mbps												
	Controller	GbE LAN1: Intel I219-LM, GbE LAN2: Intel I210-AT (iBMC supported)												
	Connector	2 x RJ-45												
SATA	Max Data Transfer Rate	600 MB/s												
	Channel	4												
	RAID	0,1,5,10												
Rear I/O	VGA	1 (Resolution up to 1920 x 1200 @ 60 Hz)												
	DVI-D	1 (Resolution up to 1920 x 1200 @ 60 Hz)												
	DisplayPort	1 (Resolution up to 4096 x 2304 @ 60 Hz)												
	Ethernet	2												
	USB	8 (2 x USB 3.2 Gen 2, 2 x USB 3.2 Gen 1, 4 x USB 2.0)												
	Audio	2 (Line-out, Mic-in)												
	Serial	1 (RS-232)												
Internal Connectors	USB	6 (2 x USB 3.2 Gen 1 via header, 2 x USB 2.0 via header, 2 x USB 2.0 Type-A connector)												
	Serial	5 (4 x RS-232, 1 x RS-232/422/485)												
	SATA	4												
	M.2	1 (PCIe x4 M-key 2280 type)												
	LPC	1 (Optional dTPM 2.0 module available)												
	GPIO	8-bit												
	PS/2 KB/Mouse	1 (Optional PS/2 KB/Mouse Cable is required)												
Watchdog Timer	Output	System reset												
	Interval	Programmable 1 ~ 255 sec												
Power Requirement*	Power On	Intel Core i5-10500E; DDR4 32 GB x 4												
	Voltage	+12V		+5V	+3.3V	+5Vsb	-12V							
	Current	0.59A		1.92A	0.87A	0.14A	0.08A							
Environment	Operating										Non-Operating			
	Temperature	0 ~ 60 °C (32 ~ 140 °F), depends on CPU speed and system thermal solution												
	Humidity	40 °C @ 95% RH Non-condensing									60 °C @ 95% RH Non-condensing			
Physical Characteristics	Dimensions (L x H)	304.8 x 244 mm (12" x 9.6")												

Note: A 8-pin 12V CPU power plug connected to MB's CPU 12V connector is required to support i9-10900K CPU. Core i9-10900K has no long life time due to not belong to embedded segment.

\* CPU power requirement, +V12\_8P, is not included.

### Block Diagram



### Ordering Information

Part Number	Chipset	Memory	Display	USB 3.2 Gen 2	USB 3.2 Gen 1	USB 2.0	COM	GbE LAN	AMT	M.2	SATA 3.0	SW RAID
AIMB-787G2-00A3	Q470E	Non-ECC DDR4 2933 up to 128 GB	VGA + DVI-D + DP	2	4	8	6	2	Yes	1	4	Yes
AIMB-787G2-00A3U	Q470E	Non-ECC DDR4 2933 up to 128 GB	VGA + DVI-D + DP	2	4	8	6	2	Yes	1	4	Yes

### Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1960086615T001	I/O port bracket	x 1
2041078710	Startup manual	x 1

Note: Driver CD is not provided. Please visit Advantech support website for driver download.

### I/O View



AIMB-787G2-00A3  
AIMB-787G2-00A3U

### Optional Accessories

Part Number	Description
1700002204	2-port USB 2.0 cable w/ BKT(27 cm)
1700028292-01	2-port USB 3.0 cable w/ BKT(30 cm)
1960052651N021	CPU cooler for 2U, 4U and wallmount chassis (for CPU TDP=35-65W)
1960067860N001	CPU cooler for 4U chassis (for CPU TDP=95-125W)
1960047669N001	CPU cooler for 4U chassis (for CPU TDP=65-125W)
1701090401	Single COM port cable(40 cm)
1701092300	Dual COM port cable(28.5 cm)
1700022749-11/ 1700022749-12/ 1700022749-13	SATA power cable
1700019268-11	PS/2 KB/Mouse cable
1960063434N000	IO bracket for PS/2 KB/Mouse cable
PCA-TPM-00B1E	dTPM 2.0 LPC module to enable TPM and vPro technologies

Note 1: Purchasing AIMB-787's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-787.  
Note 2: 1960067860N001 cooler for 95-125W CPU is tested with ACP-4000/IPC-610H chassis.

### Riser Card

Part Number	Description
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R431F-21A1E	2U riser card with 1 PCIe x16 & 1 PCIe x1 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe x16 & 2 PCI expansion
AIMB-R4301-03A2E	2U riser card with 1 PCIe x1 expansion

Note: AIMB-787 is not compatible with 1U chassis.

# Tento produkt můžete zakoupit u společnosti AutoCont IPC a.s.



## AutoCont IPC a.s.

Váš dodavatel průmyslových počítačů, komponent a speciálních průmyslových IT systémů.

 Uhlířská 1064/3, 710 00 Ostrava, Česká republika

 obchod@autocont-ipc.cz

 +420 552 301 002

 [www.autocont-ipc.cz](http://www.autocont-ipc.cz)



### PRŮMYSLOVÉ POČÍTAČE

fanless embedded PC, do racku, ...



### POČÍTAČE S DISPLEJEM

panelové PC, terminály, do vozidel, ...



### AUTOMATIZACE A SBĚR DAT

převodníky, karty, moduly, switche, ...



### PERIFERIE A KOMPONENTY

monitory, klávesnice, desky, skříně, ...



### NOTEBOOKY A TABLETY

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### SOFTWAREVÁ ŘEŠENÍ

pro výrobu, zaměstnance, kiosky, ...



### PŘEJÍT DO E-SHOPU

[eshop.autocont-ipc.cz](http://eshop.autocont-ipc.cz)



### DOPRAVA ZDARMA

Doprava zdarma v ČR a SR při objednávce nad 10 000 Kč bez DPH nebo nad 400 EUR.



### PRODLOUŽENÁ ZÁRUKA

Záruka 2 roky na vyráběné počítače s možností jejího prodloužení až na 5 let.



### ODMĚNA ZA VĚRNOST

Pravidelní zákazníci u nás nakupují za nižší ceny. Výše slevy se odvíjí od realizovaného obrátu.



### SERVIS ON-SITE A IN-TIME

K projektovým dodávkám nabízíme rozšířenou podporu a servis s garancí výměny zařízení do 48 hodin.