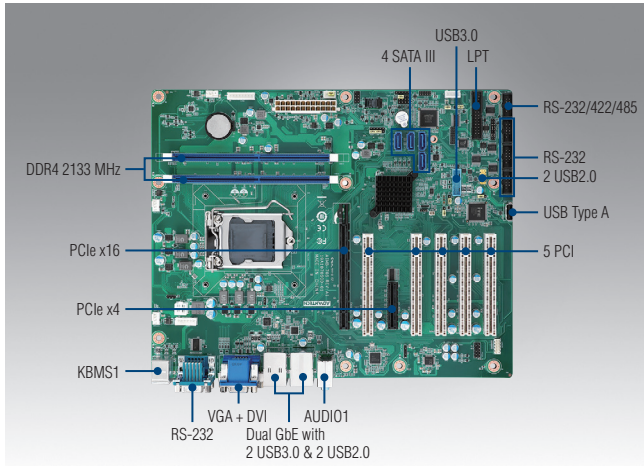


AIMB-705

LGA1151 6th/7th Generation Intel® Core™ i7/i5/i3/Pentium®/Celeron® ATX with DVI/VGA, DDR4, SATA III, USB 3.0 & 6 COMs



Features

- Intel® 6th/7th generation Core™ i7/i5/i3/Pentium®/Celeron® processor
- Dual channel (Non-ECC) DDR4 1866/2133 up to 32GB
- Supports VGA and DVI display
- Supports SATA3.0, USB3.0, dual GbEs
- Supports 5 RS-232 and 1 RS-232/422/485 serial ports
- 1 PCIe x16 (Gen3) and 1 PCIe x4 (Gen2), and 5 PCI expansion slots

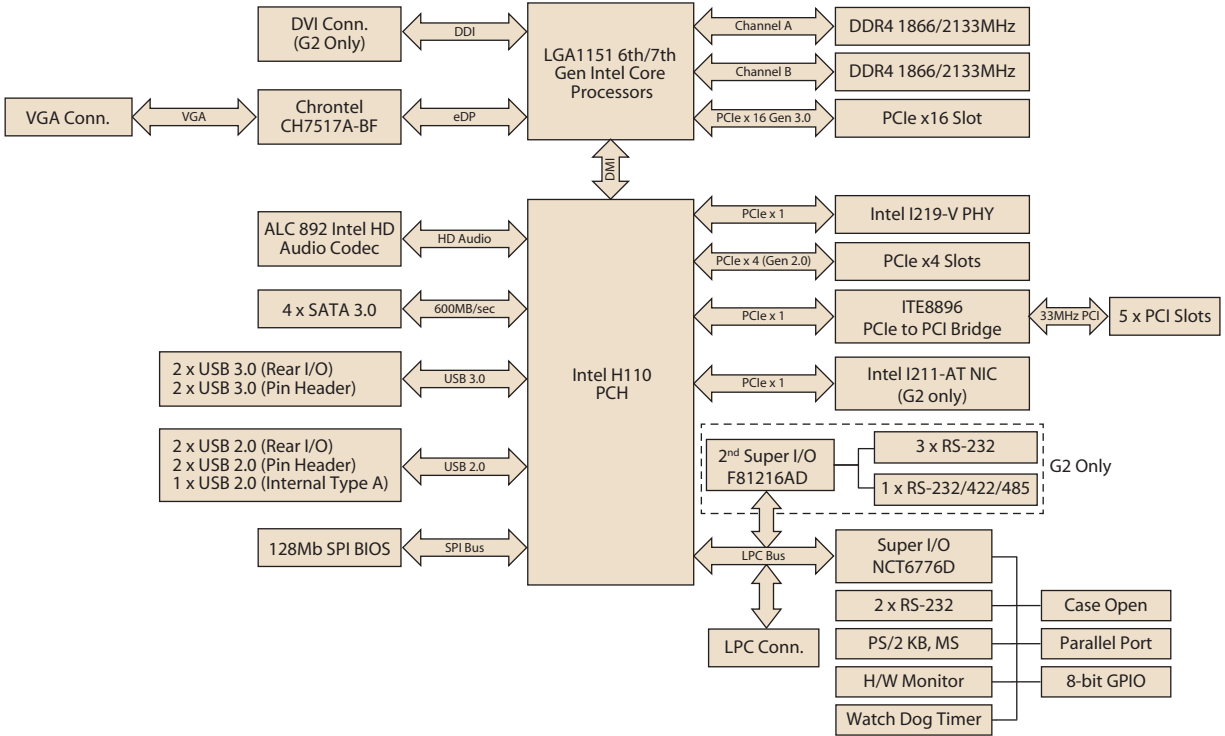
Note: Intel 7th generation processors only support Windows 10 (64-bit).

Quiet Specifications

CE FCC

Processor System	CPU	i7-7700	i7-7700T	i7-6700	i7-6700TE	i5-7500	i5-7500T	i5-6500	i5-6500TE	i3-7101E	i3-7101TE	i3-6100	i3-6100TE	G4400	G4400TE	G3900	G3900TE		
	Speed	3.6GHz	2.9GHz	3.4 GHz	2.4 GHz	3.4GHz	2.7GHz	3.2 GHz	2.3 GHz	3.9GHz	3.4GHz	3.7 GHz	2.7 GHz	3.3 GHz	2.9 GHz	2.8 GHz	2.6 GHz		
	Cache	8MB	8MB	8 MB	8 MB	6MB	6MB	6 MB	6 MB	3MB	3MB	4 MB	4 MB	3 MB	3 MB	2 MB	2 MB		
	Cores	4	4	4	4	4	4	4	4	2	2	2	2	2	2	2	2		
	TDP	65 W	35 W	65 W	35 W	65 W	35 W	65 W	35 W	54 W	35 W	65 W	35 W	65 W	35 W	65 W	35 W		
	Socket	LGA 1151																	
	Chipset	Intel H110																	
	BIOS	AMI 128Mbit SPI Flash																	
	Expansion Slot	PCI	32-bit/33 MHz, 5 slots																
		PCIe x4 (Gen2)	2 GB/s per direction, 1 slot																
PCIe x16 (Gen3)		16 GB/s per direction, 1 slot																	
Memory	Technology	Dual Channel(Non-ECC) DDR4 1866/2133 MHz																	
	Max Capacity	32 GB (16 GB per DIMM)																	
	Sockets	DDR4 288-pin DIMM x2																	
Graphics	Controller	Chipset integrated Intel HD Graphics																	
	VRAM	Shared system memory is subject to OS																	
Ethernet	Interface	10/100/1000 Mbps																	
	Controller	GbE LAN1: Intel I219-V, GbE LAN2: Intel I211-AT																	
	Connector	RJ-45 x2																	
SATA	Max Data Transfer Rate	600 MB/s																	
	Channel	4																	
Rear I/O	VGA	1 (Resolution up to 1920 x 1200 @ 60Hz)																	
	DVI	1 for G2 version (Resolution up to 1920 x 1200 @ 60Hz)																	
	Ethernet	2 for G2 version; 1 for VG version																	
	USB	4 (USB3.0 x2, USB2.0 x2)																	
	Audio	Line-out, Mic-in																	
	Serial	2																	
	PS/2	2 (1 x keyboard and 1 x mouse)																	
Internal Connectors	USB	1 (Type A); 2 (USB2.0, Pin-header); 2 (USB3.0, Box-header)																	
	Serial	4 for G2 version (3 x RS-232, box-header; 1 x RS-232/422/485 with auto-flow control, box-header)																	
	Parallel	1																	
	GPIO	8 bits																	
Watchdog Timer	Output	System reset																	
	Interval	Programmable 1 - 255 sec																	
Power Requirement	Test Environment	Intel Core i7-6700 3.4GHz; DDR4 2133 8GB x 2																	
	Voltage	3.3V			5V			12V			5Vsb			-5V			-12V		
	Current	0.49A			3.13A			7.88A			0.08A			0.07A			0.07A		
Environment	Operating	Temperature										Non-Operating							
	Humidity	0 ~ 60 °C (32 ~ 140 °F), depends on CPU speed and system thermal solution										-40 ~ 85 °C (-40 ~ 185 °F)							
Physical Characteristics	Dimensions (L x H)	304.8 x 244 mm (12" x 9.6")																	

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.0	USB 2.0	COM	GbE LAN	AMT	SATA	SW RAID	Intelligent System Module Support
AIMB-705G2-00A1E	H110	Non-ECC	VGA + DVI	4	5	6	2	No	4	No	No
AIMB-705VG-00A1E	H110	Non-ECC	VGA	4	5	2	1	No	4	No	No

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x2
1700022749-11	SATA power cable	x1
1960050472T000	I/O port bracket	x1
2001070511	Startup manual	x1
2061070501	Driver CD	x1

Optional Accessories

Part Number	Description
1701090401	Single COM port cable(40 cm)
1701092300	Dual COM port cable(28.5 cm)
1700020294-01	Printer port cable kit(42 cm)
1700028292-01	2-port USB 3.0 cable w/ BKT(30 cm)
1700002204	2-port USB 2.0 cable w/ BKT(27 cm)
1960052651N021	CPU cooler for 2U, 4U, and wallmount chassis
1960049408N001	CPU heatsink for 1U chassis
1960055954T000	IO bracket for 1U chassis
PCA-COM232-00A1E	4-port RS-232 LPC module
PCA-TPM-00A1E	TPM module (for BIOS V1.XX)
PCA-TPM-00B1E	TPM2.0 module (for BIOS V2.XX)

Note: Purchasing AIMB-705's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-705.

I/O View



AIMB-705G2-00A1E



AIMB-705VG-00A1E

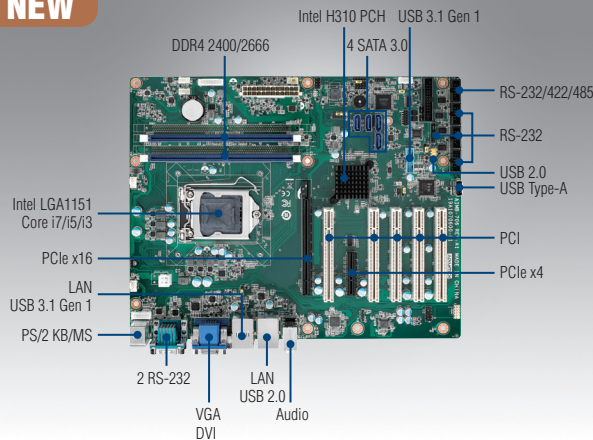
Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card providing 1 PCI slot
AIMB-RF10F-01A1E	1U riser card providing 1 PCIe x 16 slot
AIMB-RP30P-03A1E	2U riser card providing 3 PCI slots
AIMB-RP3PF-21A1E	2U riser card providing 1 PCIe x 16 and 2 PCI slots

AIMB-706

LGA1151 8th/9th Generation Intel® Core™ i7/i5/i3/Pentium®/Celeron® ATX with DVI/VGA, DDR4, SATA 3.0, USB 3.1 & 6 COMs

NEW



Features

- Intel® 8th/9th generation Core™ i7/i5/i3/Pentium®/Celeron® processor with H310 chipset
- Dual channel (Non-ECC) DDR4 2400/2666 up to 64 GB
- Support VGA and DVI display
- SATA 3.0, USB 3.1, dual GbEs
- 5 RS-232 and 1 RS-232/422/485 serial ports
- 1 PCIe x16 (Gen 3) and 1 PCIe x4 (Gen 2), and 5 PCI expansion slots

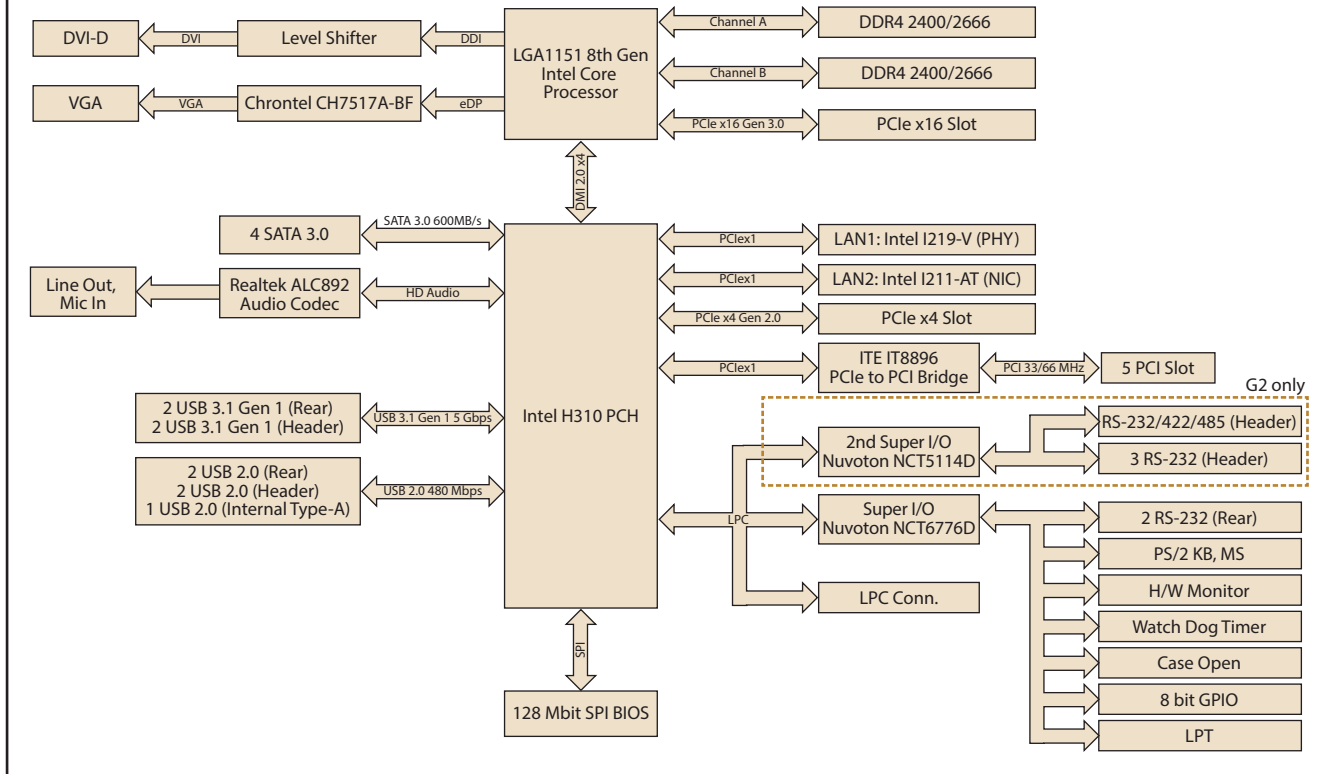
Note: Intel 8th/9th generation processors only support Windows 10 (64-bit).

Quiet Specifications

CE FCC

	CPU	i7-9700E	i7-9700TE	i7-8700	i7-8700T	i5-9500E	i5-9500TE	i5-8500	i5-8500T	i3-9100E	i3-9100TE	i3-8100	i3-8100T	G5400	G5400T	G4900	G4900T	
Processor System	Speed	2.6GHz	1.8 GHz	3.2 GHz	2.4 GHz	3.0 GHz	2.2 GHz	3.0 GHz	2.1 GHz	3.1 GHz	2.2 GHz	3.6 GHz	3.1 GHz	3.7 GHz	3.1 GHz	3.1 GHz	2.9 GHz	
	L3 Cache	12 MB	12 MB	12 MB	12 MB	9 MB	9 MB	9 MB	9 MB	6 MB	6 MB	6 MB	6 MB	4 MB	4 MB	2 MB	2 MB	
	Cores	8	8	6	6	6	6	6	6	4	4	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	58 W	35 W	54 W	35 W	
	Socket	LGA1151																
	Chipset	Intel H310																
	BIOS	AMI 128Mbit SPI Flash																
Expansion Slot	PCI	32-bit/33 MHz, 5 slots																
	PCIe x4 (Gen 2)	2 GB/s per direction, 1 slot																
	PCIe x16 (Gen 3)	16 GB/s per direction, 1 slot																
Memory	Technology	Dual Channel(Non-ECC) DDR4 2400/2666																
	Max Capacity	64 GB																
	Sockets	2 x 288-pin DIMM																
Graphics	Controller	Chipset integrated Intel HD Graphics																
	VRAM	Shared system memory is subject to OS																
Ethernet	Interface	10/100/1000 Mbps																
	Controller	GbE LAN1: Intel I219-V, GbE LAN2: Intel I211-AT																
	Connector	2 x RJ-45																
SATA	Max Data Transfer Rate	600 MB/s																
	Channel	4																
Rear I/O	VGA	1 (Resolution up to 1920 x 1200 @ 60 Hz)																
	DVI	1 for G2 version (Resolution up to 1920 x 1200 @ 60 Hz)																
	Ethernet	2 for G2 version; 1 for VG version																
	USB	4 (2 x USB 3.1 Gen 1, 2 x USB 2.0)																
	Audio	2 (Line-out, Mic-in)																
	Serial	2 (RS-232)																
	PS/2	2 (1 x keyboard and 1 x mouse)																
Internal Connectors	USB	5 (2 x USB 3.1 Gen 1 via header, 2 x USB 2.0 via header, 1 x USB 2.0 Type-A connector)																
	Serial	4 for G2 version (3 x RS-232, box-header; 1 x RS-232/422/485 with auto-flow control, box-header)																
	SATA	4																
	Parallel	1																
	GPIO	8-bit																
Watchdog Timer	Output	System reset																
	Interval	Programmable 1 - 255 sec																
Power Requirement	Test Environment	Intel Core i7-8700 3.2GHz; DDR4 2400 16 GB x 2																
	Voltage	3.3V	5V	12V	5Vsb	-5V	-12V											
	Current	2.74A	3.5A	5.92A	0.05A	0.01A	0.08A											
Environment	Operating												Non-Operating					
	Temperature	0 - 60 °C (32 - 140 °F), depends on CPU speed and system thermal solution											-40 - 85 °C (-40 - 185 °F)					
	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")																

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.1 Gen 1	USB 2.0	COM	GbE LAN	AMT	SATA	SW RAID	Intelligent System Module Support
AIMB-706G2-00A1	H310	Non-ECC	VGA + DVI	4	5	6	2	No	4	No	No
AIMB-706VG-00A1	H310	Non-ECC	VGA	4	5	2	1	No	4	No	No

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x2
1700022749-11	SATA power cable	x1
1960050472T000	I/O port bracket	x1
2001070611	Startup manual	x1

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

I/O View



AIMB-706G2-00A1



AIMB-706VG-00A1

Optional Accessories

Part Number	Description
1701090401	Single COM port cable(40 cm)
1701092300	Dual COM port cable(28.5 cm)
1700020294-01	Printer port cable kit(42 cm)
1700028292-01	2-port USB 3.0 cable w/ BKT(30 cm)
1700002204	2-port USB 2.0 cable w/ BKT(27 cm)
1960052651N021	CPU cooler for 2U, 4U, and wallmount chassis
1960049408N001	CPU heatsink for 1U chassis
1960055954T000	IO bracket for 1U chassis
PCA-COM232-00A1E	4-port RS-232 LPC module
PCA-TPM-00B1E	TPM2.0 module

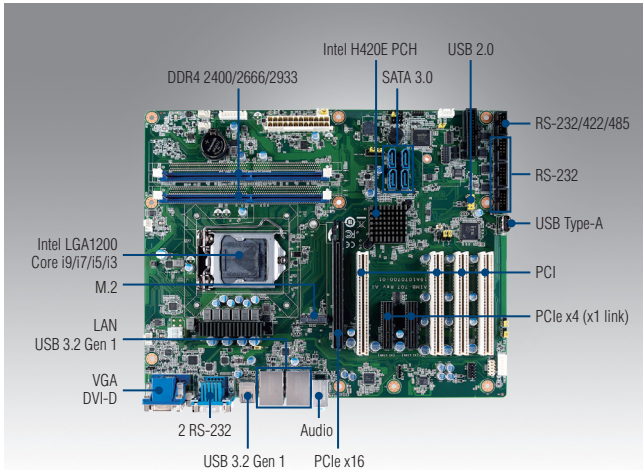
Note: Purchasing AIMB-706's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-705.

Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card providing 1 PCI slot
AIMB-RF10F-01A1E	1U riser card providing 1 PCIe x 16 slot
AIMB-RP30P-03A1E	2U riser card providing 3 PCI slots
AIMB-RP3PF-21A1E	2U riser card providing 1 PCIe x 16 and 2 PCI slots

AIMB-707

LGA1200 10th Generation Intel® Core™ i9/i7/i5/i3 & Pentium®/Celeron® ATX with DVI/VGA, DDR4, USB 3.2, M.2, 6 COMs



Features

- Intel® 10th generation Core™ i9/i7/i5/i3 & Pentium®/Celeron® processor with H420E chipset
- Dual channel (Non-ECC) DDR4 2400/2666/2933 up to 64 GB
- Support VGA and DVI display
- M.2, SATA 3.0, USB 3.2, dual GbEs
- 5 RS-232 and 1 RS-232/422/485 serial ports
- 1 PCIe x16 (Gen 3) and 2 PCIe x4 (x1 Gen 3 link), and 4 PCI expansion slots

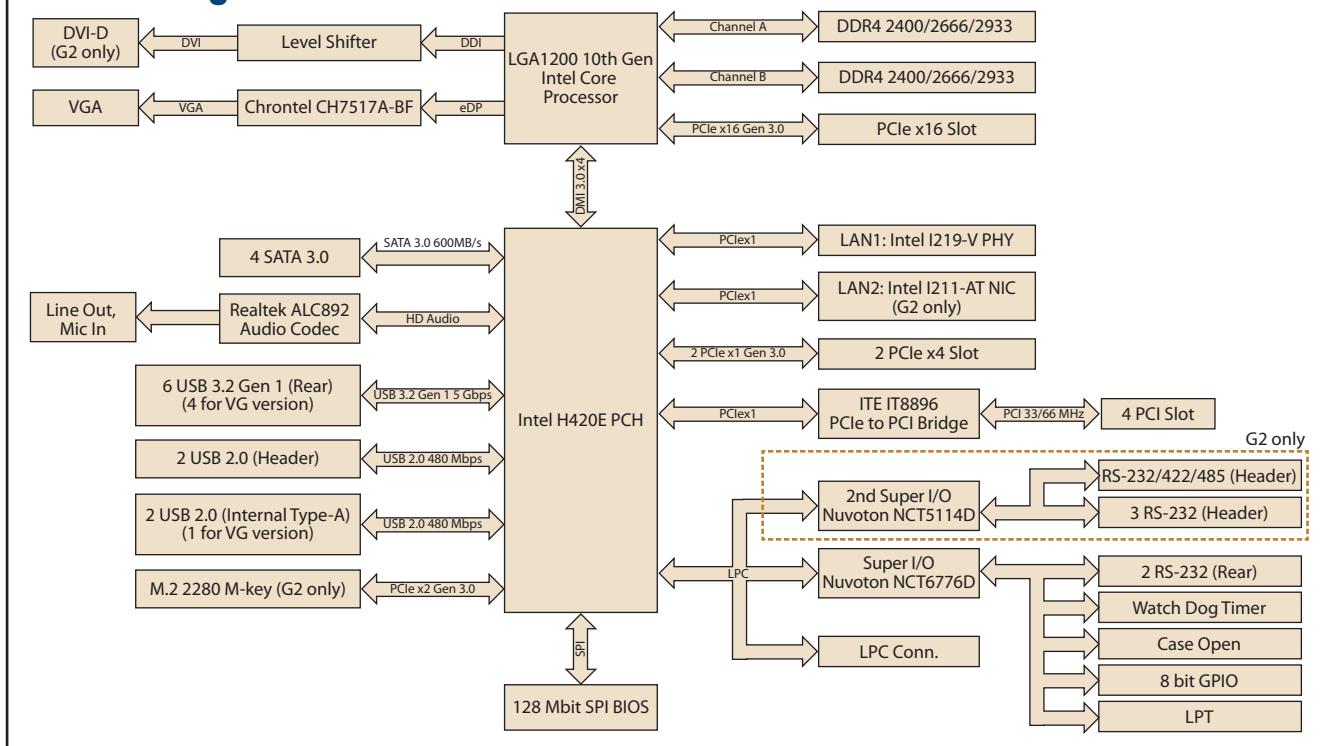
Note: Legacy platform is not supported.

Quiet Specifications

CE FCC

	CPU	i9-10900E	i9-10900TE	i7-10700E	i7-10700TE	i5-10500E	i5-10500TE	i3-10100E	i3-10100TE	G6400E	G6400TE	G5900E	G5900TE			
Processor System	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	Intel H420E														
	BIOS	AMI 128Mbit SPI Flash														
Expansion Slot	PCI	4 (32-bit/33 MHz)														
	PCIe x4 (Gen 3)	2 (link x1)														
	PCIe x16 (Gen 3)	1														
Memory	Technology	Dual Channel(Non-ECC) DDR4 2400/2666/2933														
	Max Capacity	64 GB														
	Sockets	2 x 288-pin DIMM														
Graphics	Controller	Chipset integrated Intel HD Graphics														
	VRAM	Shared system memory is subject to OS														
Ethernet	Interface	10/100/1000 Mbps														
	Controller	GbE LAN1: Intel I219-V, GbE LAN2: Intel I211-AT														
	Connector	2 x RJ-45														
SATA	Max Data Transfer Rate	600 MB/s														
Rear I/O	Channel	4														
	VGA	1 (Resolution up to 1920 x 1200 @ 60 Hz)														
	DVI	1 for G2 version (Resolution up to 1920 x 1200 @ 60 Hz)														
	Ethernet	2 for G2 version; 1 for VG version														
	USB	6 (USB 3.2 Gen 1 for G2 version; 4 for VG version)														
	Audio	2 (Line-out, Mic-in)														
	Serial	2 (RS-232)														
Internal Connectors	USB	4 (2 x USB 2.0 via header, 2 x USB 2.0 Type-A) for G2 version; 3 (2 x USB 2.0 via header, 1 x USB 2.0 Type-A) for VG version														
	Serial	4 for G2 version (3 x RS-232, box-header; 1 x RS-232/422/485 with auto-flow control, box-header)														
	SATA	4														
	M.2	1 for G2 version (PCIe x2 M-key 2280 type)														
	Parallel	1														
	GPIO	8-bit														
Watchdog Timer	Output	System reset														
	Interval	Programmable 1 - 255 sec														
Power Requirement	Test Environment	Intel Core i9-10900E; DDR4 32 GB x 2														
	Voltage	3.3V			5V			12V			5Vsb			-12V		
	Current	0.72A			1.29A			6.5A			0.11A			0.04A		
Environment	Operating	Non-Operating														
	Temperature	0 ~ 60 °C (32 ~ 140 °F), depends on CPU speed and system thermal solution														
Physical Characteristics	Humidity	40 °C @ 95% RH Non-condensing														
	Dimensions (L x H)	304.8 x 244 mm (12" x 9.6")														

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.2 Gen 1	USB 2.0	COM	GbE LAN	AMT	M.2	SATA	SW RAID	Intelligent System Module Support
AIMB-707G2-00A1	H420E	Non-ECC	VGA + DVI	6	4	6	2	No	1	4	No	No
AIMB-707VG-00A1	H420E	Non-ECC	VGA	4	3	2	1	No	0	4	No	No

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x2
1960097974T001	I/O port bracket	x1
2041070700	Startup manual	x1

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

I/O View



AIMB-707G2-00A1



AIMB-707VG-00A1

Optional Accessories

Part Number	Description
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	I/O bracket for PS/2 KB/Mouse cable
1700002204	2-port USB 2.0 cable w/ BKT(27 cm)
1960052651N021	CPU cooler for 2U, 4U, and wallmount chassis
1960049408N001	CPU heatsink for 1U chassis
TBD	IO bracket for 1U chassis
PCA-COM232-00A1E	4-port RS-232 LPC module
PCA-COM485-00A1E	4-port RS-422/485 LPC module
PCA-TPM-00B1E	TPM2.0 module

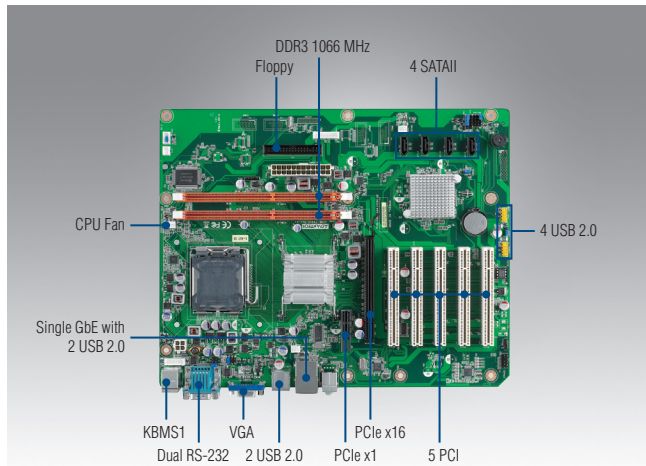
Note: Purchasing AIMB-707's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-707.

Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card providing 1 PCI slot
AIMB-RF10F-01A1E	1U riser card providing 1 PCIe x 16 slot
AIMB-RP30P-03A1E	2U riser card providing 3 PCI slots
AIMB-RP3PF-21A1E	2U riser card providing 1 PCIe x 16 and 2 PCI slots

AIMB-769

LGA775 Intel® Core™2 Quad ATX with VGA, 2 COM, Single LAN



Features

- Intel® G41 chipset supports 800/1066/1333 MHz FSB
- Dual channel DDR3 800/1066 supports up to 8 GB
- Chipset integrated VGA
- Supports dual core and quad core processors with 45 nm processing
- Supports single 10/100/1000 Mbps Ethernet via dedicated PCIe x1 bus
- Supports Embedded Software APIs and Utilities

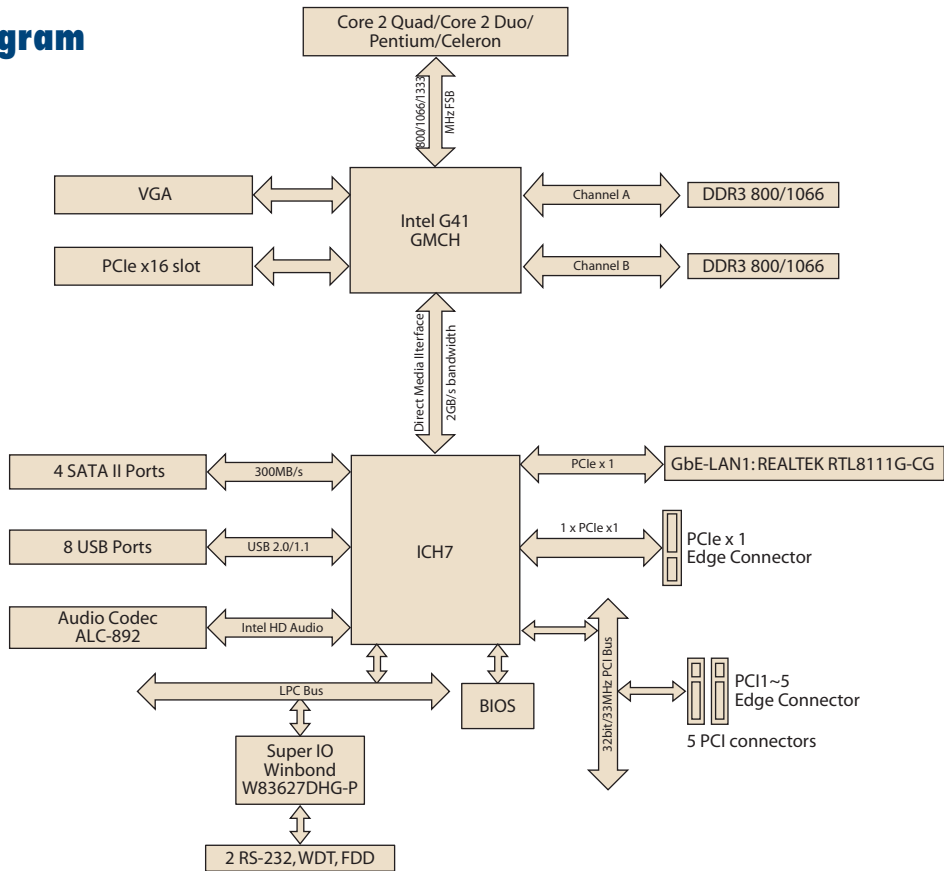
Quiet

Specifications

CE FCC

Processor System	CPU (45nm/65nm)	Intel Core 2 Quad	Intel Core 2 Duo	Intel Pentium	Intel Celeron	
	Max. Speed	Q9650 3.0GHz	E8500 3.16 GHz	E6500 2.93 GHz	E1500 2.2 GHz	
	L2 Cache	12 MB	6 MB	8 MB	512 KB	
	Chipset	Intel G41 + ICH7				
	BIOS	AMI 16 Mbit, SPI				
	Front Side Bus	800/1066/1333 MHz				
Expansion Slot	PCIe x16	4.0 GB/s per direction, 1 slot				
	PCIe x1	250 MB/s per direction, 1 slot				
	PCI	32-bit/33 MHz, 5 slots				
Memory	Technology	Dual channel DDR3 800/1066 MHz				
	Max. Capacity	8 GB				
	Socket	2 x 240-pin DIMM				
Graphics	Embedded	Intel GMA X4500 shared 352 MB system memory				
	Add-on	PCIe x16 slot				
Ethernet	Interface	10/100/1000 Mbps				
	Controller	GbE LAN: REALTEK RTL8111G-CG				
	Connector	RJ-45 x 1				
SATA II	Max. Data Transfer Rate	300 MB/s				
	Channel	4				
Rear I/O	VGA	1				
	Ethernet	1				
	USB	4				
	Audio	2 (Line-out, Mic-in)				
	Serial	2 (2 x RS-232 to support DC power on 9th pin)				
	PS/2	2 (1 x keyboard and 1 x mouse)				
Internal Connectors	USB	4				
	SATA	4				
	FDD	1				
	GPIO	8-bit				
Watchdog Timer	Output	System reset				
	Interval	Programmable 1 ~ 255 sec				
Power Requirements	Power On	Intel Core 2 Quad Q6600 2.4 GHz				
		3.3 V	5 V	12 V	5 Vsb	-12 V
		2.33 A	1.75 A	5.01 A	0.14 A	0.08 A
Environment		Operating		Non-Operating		
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution		-40 ~ 85° C (-40 ~ 185° F)		
Physical Characteristics	Dimensions (W x D)	304.8 x 244 mm (12" x 9.6")				

Block Diagram



Ordering Information

Part Number	Chipset	Display	GbE LAN	PCIe x16	PCIe x1
AIMB-769VG-00A2E	G41/ICH7	VGA	1	1	1

Packing List

Description	Quantity
Serial ATA HDD data cable	x 2
Serial ATA HDD power cable	x 1
I/O port bracket	x 1
Startup manual	x 1
Utility CD	x 1

I/O View



AIMB-769VG-00A2E

Optional Accessories

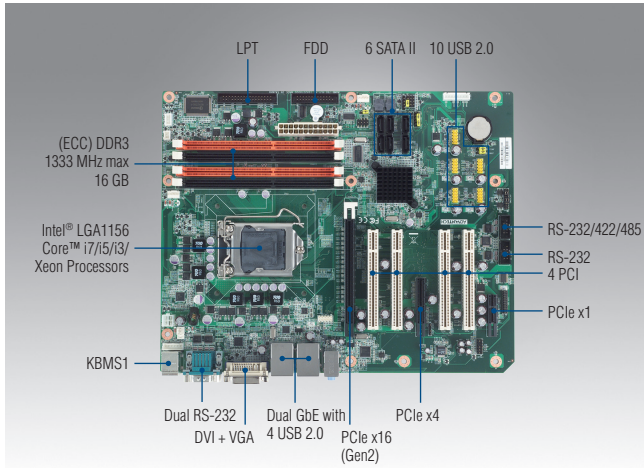
Part Number	Description
1750000334	LGA775 CPU cooler for 4U chassis (115 W)
1750000332	LGA775 CPU cooler for 2U chassis
1700008461	USB cable with four ports (30.5 cm)
1700002204	USB cable with dual ports (27 cm)
1700003195	USB cable with dual ports (17.5 cm)
1960048353T000	I/O port bracket for 1U chassis

Riser Card

Part Number	Description
AIMB-R4104-01A1E	1U riser card for 1 PCIe x4 expansion
AIMB-R430P-03A2E	2U riser card for 3 PCI expansion

AIMB-780

LGA1156 Intel® Core™ i7/i5/i3/Pentium®/Xeon® ATX with DVI/VGA, 4 COM, Dual LAN, DDR3



Features

- Supports Intel® Core™ i7/i5/i3/Pentium®/Xeon® processor with Q57/3450 chipset
- Four DIMM sockets support up to 16 GB DDR3 800/1066/1333
- Supports dual display VGA and DVI and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, AMT6.0, TPM1.2 (optional)
- Supports embedded software APIs and utilities

Software APIs:



Utilities:



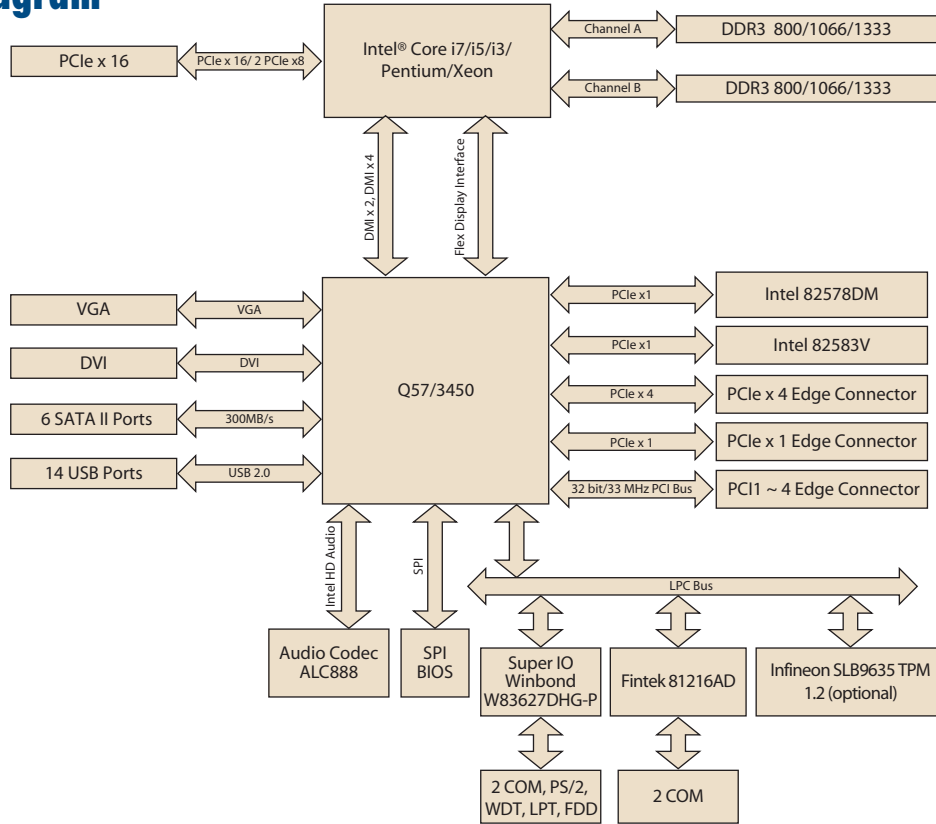
Note: eSOS needs ODM BIOS available by request



Specifications

Processor System	CPU	Xeon 34xx	Core i7 8xx	Core i5 7xx	Core i5 6xx	Core i3 5xx	Pentium G69xx
	Core Number	4	4	4	2	2	2
	Speed	2.93 GHz	2.93 GHz	2.66 GHz	3.3 GHz	3.06 GHz	2.8 GHz
	Integrated Graphics	-	-	-	Yes	Yes	Yes
	L3 Cache	8 MB	8 MB	8 MB	4 MB	4 MB	3 MB
	Support Model	WG2	QG2	QG2	WG2/QG2	WG2/QG2	WG2/QG2
	Socket	LGA1156					
	Chipset	Q57 for QG2 version; 3450 for WG2 version (WG2 only supports Xeon 34xx, Core i5 6xx, Core i3 5xx, and Pentium G69XX CPUs)					
Expansion Slot	BIOS	AMI 64 Mbit SPI					
	PCI	32-bit/33 MHz, 4 slots					
	PCIe x1	250 MB/s per direction, 1 slot					
	PCIe x4	1.0 GB/s per direction, 1 slot					
Memory	PCIe x16 (Gen2)	8 GB/s per direction, 1 slot					
	Technology	Dual Channel DDR3 800/1066/1333 (Only WG2 SKU supports ECC memory)					
	Max. Capacity	16 GB					
Graphics	Socket	4 x 240-pin DIMM					
	Controller	Intel HD Graphics (Only the Core i5 6xx, Core i3 and Pentium CPUs with dual core are embedded with integrated graphics)					
Ethernet	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed					
	Interface	10/100/1000 Mbps					
	Controller	GbE LAN1: Intel 82578DM, GbE LAN2: Intel 82583V					
SATA	Connector	RJ-45 x 2					
	Max Data Transfer Rate	300 MB/s					
Rear I/O	Channel	6					
	VGA	1					
	DVI	1					
	Ethernet	2					
	USB	4 (USB 2.0 compliant)					
	Audio	2 (Mic-in, Line-out)					
	Serial	2 (RS-232)					
Internal Connectors	PS/2	2 (1 x keyboard and 1 x mouse)					
	USB	10 (USB 2.0 compliant)					
	Serial	2 (1 x RS-232, 1 x RS-232/422/485 for auto-flow control support)					
	SATA	6					
	FDD	1					
	Parallel	1					
Watchdog Timer	IrDA	1					
	Output	System reset					
Power Requirement	Interval	Programmable 1 ~ 255 sec					
	Power On	Intel Core i5-660 processor; DDR3 2 GB x 4					
		5 V	3.3 V	12 V	5 Vsb	-12 V	
Environment		4.23 A	0.96 A	3.93 A	1.18 A	0.01 A	
	Temperature	Operating 0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution				Non-Operating -40 ~ 85° C (-40 ~ 185° F)	
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")					

Block Diagram



Ordering Information

Part Number	Chipset	Memory	USB	COM	GbE LAN	TPM
AIMB-780QG2-00A1E	Q57	Non-ECC	14	4	2	Optional
AIMB-780WG2-00A1E	3450	ECC/Non-ECC	14	4	2	Optional

Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card with 1 PCI expansion
AIMB-RP30P-03A1E	2U riser card with 3 PCI expansion
AIMB-RP3PF-21A1E	2U riser card with 1PCIe x16 & 2 PCI slot expansion
AIMB-RP3P8-12A1E	2U riser card with 2PCIe x8 & 1 PCI slot expansion (only for WG2 Sku)

Note: Purchasing 1950014302N001 is a must when installing AIMB-RP3P8-12A1E with ACP-2010MB/2320MB chassis.

Bracket View



AIMB-780QG2-00A1E
AIMB-780WG2-00A1E

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1703150102	SATA power cable	x 2
1701092300	COM port cable kit	x 1
1960019193T000	I/O port bracket	x 1
2002078010	Startup manual	x 1
2062078000	Driver CD	x 1

Optional Accessories

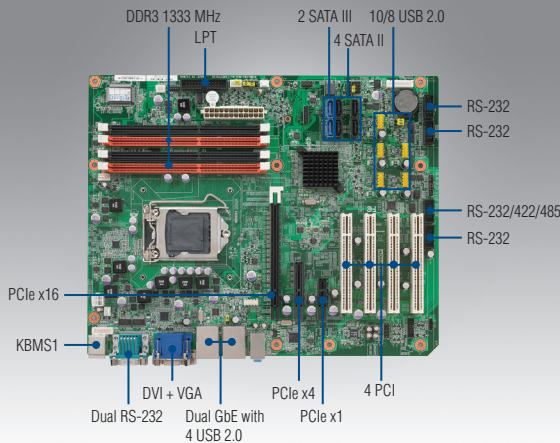
Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960047669N001	LGA1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA1156 CPU cooler for 2U and wallmount chassis
1960049408N001	LGA1156 CPU cooler for 1U and wallmount chassis
1700020294-01	Printer port cable kit
1960048353T000	I/O port bracket for 1U chassis

Note 1: Purchasing AIMB-780's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-780.

Note 2: 1960049408N001 is design to be used with Advantech 1U chassis, user needs to conduct thermal test before using this cooler with other brand chassis.

AIMB-781

**LGA1155 2nd generation Intel® Core™ i7/i5/i3/
Pentium ATX with DVI/VGA, Dual Gigabit LAN,
DDR3, SATA III**



Features

- Supports Intel® Core™ i7/i5/i3/Pentium processor with Q67/B65 chipset
- Four DIMM sockets support up to 32 GB DDR3 1066/1333
- Supports dual display VGA/DVI and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, AMT7.0
- Supports Advantech LPC modules of TPM and additional RS-232/422/485 ports

Software APIs:



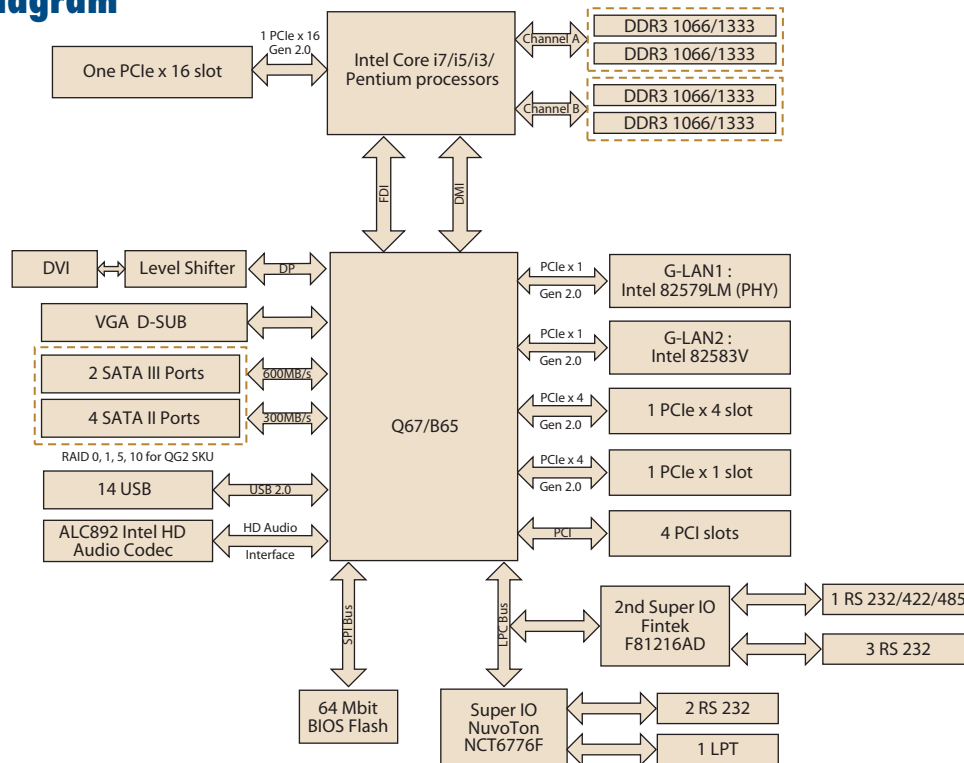
Utilities:



Specifications

Processor System	CPU	Core i7 2xxx	Core i5 2xxx	Core i3 2xxx	Pentium G8xx
	Speed	3.4 GHz	3.3 GHz	3.3 GHz	2.9 GHz
	L3 Cache	8MB	6MB	3MB	3MB
	Socket	LGA1155			
	Chipset	Q67 for QG2 version; B65 for QVG version			
Expansion Slot	BIOS	AMI 64 Mbit SPI			
	PCI	32-bit/33 MHz, 4 slots			
	PCIe x 1 (Gen2)	500 MB/s per direction, 1 slot			
	PCIe x 4 (Gen2)	2.0 GB/s per direction, 1 slot			
Memory	PCIe x16 (Gen2)	8 GB/s per direction, 1 slot			
	Technology	Dual Channel DDR3 1066/1333			
	Max. Capacity	32 GB			
	Socket	4 x 240-pin DIMM			
Graphics	Controller	Intel HD Graphics			
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed			
Ethernet	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82583V for QG2 version			
	Connector	RJ-45 x 2 for QG2 version			
SATA	Max Data Transfer Rate	600 MB/s			
	Channel	2 for QG2 version (SATA1-2); 1 for QVG version (SATA1)			
	Max Data Transfer Rate	300 MB/s			
	Channel	4 for QG2 version (SATA3-6); 5 for QVG version (SATA2-6)			
Rear I/O	VGA	1			
	DVI	1 for QG2 version			
	Ethernet	2 for QG2 version; 1 for QVG version			
	USB	4			
	Audio	2 (Mic-in, Line-out)			
	Serial	2 (RS-232)			
	PS/2	2 (1 x keyboard and 1 x mouse)			
Internal Connectors	USB	10 for QG2 version; 8 for QVG version (USB 2.0 compliant)			
	Serial	4 for QG2 (3 x RS-232, 1 x RS-232/422/485 with auto-flow control)			
	SATA	6 (QG2 version: SATA II x4 and SATA III x2; QVG version: SATA II x5 and SATA III x1)			
	Parallel	1			
	IrDA	1			
	GPIO	8-bit			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1 ~ 255 sec			
Power Requirement	Power On	Intel Core i5 2400 3.1 GHz; DDR3 4 GB x 4			
		3.3 V	5 V	12 V	5 Vsb
		1.02 A	2.89 A	5.88 A	0.5 A
Environment		Operating		Non-Operating	
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution		-40 ~ 85° C (-40 ~ 185° F)	
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")			

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB	COM	GbE LAN	AMT	SATA III	SW RAID
AIMB-781QG2-00A1E	Q67	Non-ECC DDR3	VGA + DVI	14	6	2	Yes	2	Yes
AIMB-781QVG-00A1E	B65	Non-ECC DDR3	VGA	12	2	1	None	1	None

Riser Card

Part Number	Description
AIMB-R4104-01A1E	1U riser card with 1 PCIe x4 expansion
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R4301-03A1E*	2U riser card with 3 PCIe x1 expansion
AIMB-R431F-21A1E*	2U riser card with 1 PCIe x16 & 2 PCIe x1 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe x16 & 2 PCI expansion

* When installing AIMB-R4301-03A1E and AIMB-R431F-21A1E, please set PCIE STRAP as "4 PCIE x1" in chipset sector's south bridge page of BIOS menu.

Bracket View



AIMB-781QG2-00A1E



AIMB-781QVG-00A1E

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1703150102	SATA power cable	x 2
1960050472T000	I/O port bracket	x 1
2002078110	Startup manual	x 1
2062078100	Driver CD	x 1

Optional Accessories

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960047669N001	LGA1155/1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA1155/1156 CPU cooler for 2U and wallmount chassis
1960049408N001	LGA1155/1156 CPU cooler for 1U and wallmount chassis
1700020294-01	Printer port cable kit
1701092300	COM port cable kit
1960055954T000	I/O port bracket for 1U chassis

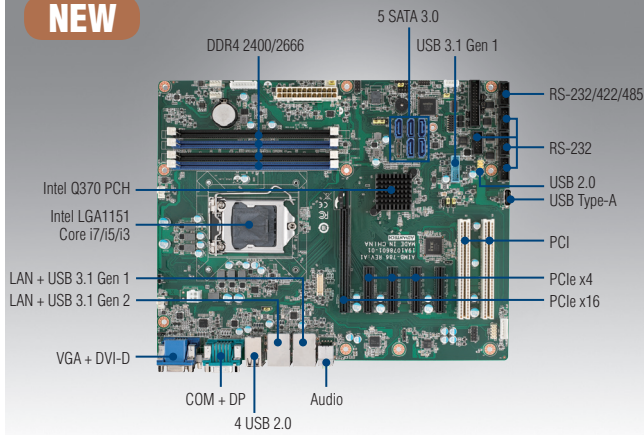
Note 1: Purchasing AIMB-781's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-781.

Note 2: 1960049408N001 is design to be used with Advantech 1U chassis and supports up to 73W processor, user needs to conduct thermal test before using this cooler with other brand chassis.

AIMB-786

LGA1151 8th/9th Generation Intel® Core™ i7/i5/i3/Pentium®/Celeron® ATX with Triple Display, DDR4, USB 3.1, SATA 3.0

NEW



Features

- Intel® 8th/9th generation Core™ i7/i5/i3/Pentium®/Celeron® processor with Q370 chipset
- Four DIMM sockets up to 128 GB DDR4 2400/2666
- Triple display VGA/DVI-D/DP and dual GbE LAN
- SATA RAID 0, 1, 5, 10, USB 3.1
- Supports Intel vPro, AMT & TPM technologies

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

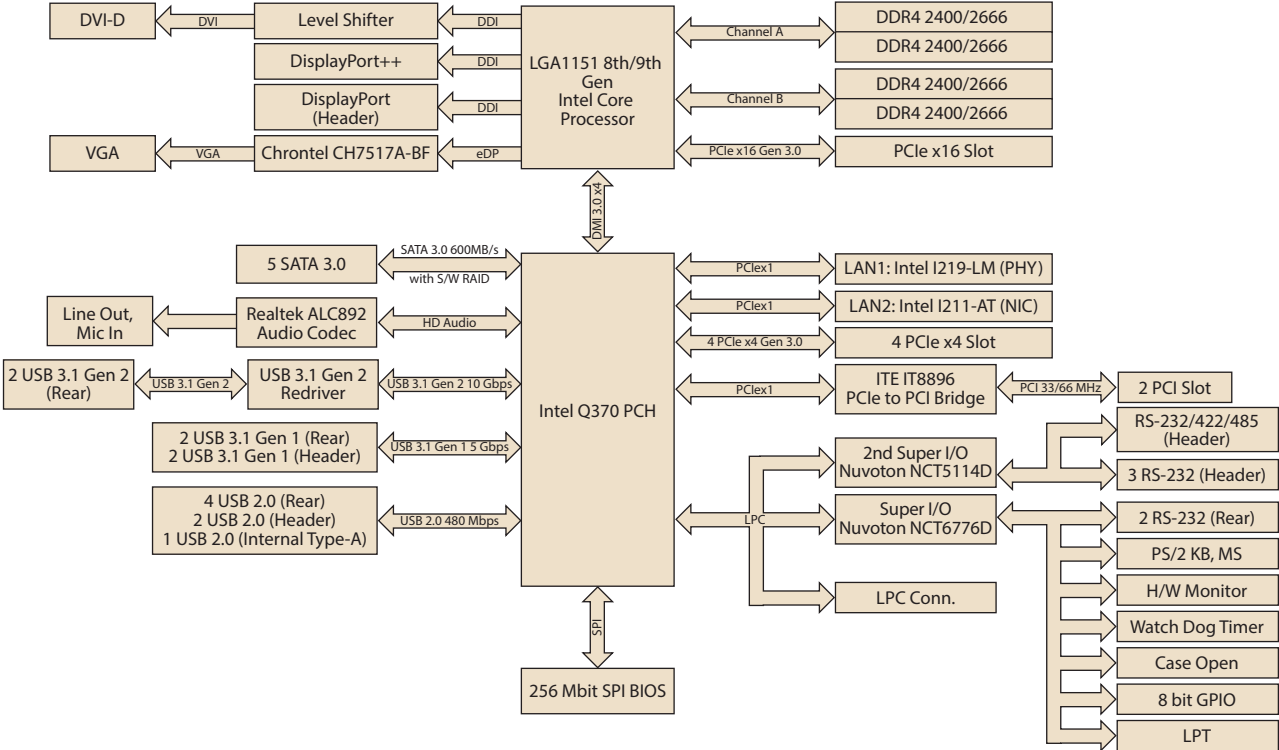
Note 2: Intel 8th/9th generation processors only support Windows 10 (64-bit).

Quiet Specifications

CE FCC

	CPU	i7-9700E	i7-9700TE	i7-8700	i7-8700T	i5-9500E	i5-9500TE	i5-8500	i5-8500T	i3-9100E	i3-9100TE	i3-8100	i3-8100T	G5400	G5400T	G4900	G4900T	
Processor System	Speed	2.6GHz	1.8 GHz	3.2 GHz	2.4 GHz	3.0 GHz	2.2 GHz	3.0 GHz	2.1 GHz	3.1 GHz	2.2 GHz	3.6 GHz	3.1 GHz	3.7 GHz	3.1 GHz	3.1 GHz	2.9 GHz	
	L3 Cache	12 MB	12 MB	12 MB	12 MB	9 MB	9 MB	9 MB	9 MB	6 MB	6 MB	6 MB	6 MB	4 MB	4 MB	2 MB	2 MB	
	Cores	8	8	6	6	6	6	6	6	4	4	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	58 W	35 W	54 W	35 W	
	Socket	LGA1151																
	Chipset	Q370																
	BIOS	AMI 256 Mbit SPI																
Expansion Slot	PCI	32-bit/33 MHz, 2 slots																
	PCIe x4 (Gen 3)	4 GB/s per direction, 4 slots																
	PCIe x16 (Gen 3)	16 GB/s per direction, 1 slot																
Memory	Technology	Dual Channel (Non-ECC) DDR4 2400/2666																
	Max. Capacity	128 GB																
	Socket	4 x 288-pin DIMM																
Graphics	Controller	Intel HD Graphics																
	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 I211-AT																
	Connector	2 x RJ-45																
SATA	Max Data Transfer Rate	600 MB/s																
	Channel	5																
	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 3.1 Gen 2, 2 x USB 3.1 Gen 1, 4 x USB 2.0)																
	Audio	2 (Line-out, Mic-in)																
	Serial	1 (RS-232)																
Internal Connectors	PS/2	-																
	USB	5 (2 x USB 3.1 Gen 1 via header, 2 x USB 2.0 via header, 1 x USB 2.0 Type-A connector)																
	Serial	5 (4 x RS-232, 1 x RS-232/422/485)																
	SATA	5																
	Parallel	1																
	DisplayPort	1																
Watchdog Timer	GPIO	8-bit																
	PS/2 KB/Mouse	1 (Optional PS/2 KB/Mouse Cable is required)																
	Output Interval	System reset Programmable 1 ~ 255 sec																
Power Requirement	Power On	Intel Core i7-8700 3.2 GHz; DDR4 2400 16 GB x 4																
	Voltage	+12V	+5V	+3.3V	+5Vsb	-12V	-5V											
	Current	3.77A	1.77A	2.8A	0.1A	0.04A	0.06A											
Environment	Operating Temperature	0 ~ 60 °C (32 ~ 140 °F), depends on CPU speed and system thermal solution											Non-Operating -40 ~ 85 °C (-40 ~ 185 °F)					
	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")																

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.1 Gen 2	USB 3.1 Gen 1	USB 2.0	COM	GbE LAN	AMT	SATA 3.0	SW RAID
AIMB-786G2-00A1	Q370	Non-ECC DDR4 2400/2666 up to 128 GB	VGA + DVI-D + DP	2	4	7	6	2	Yes	5	Yes

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1700022749-11	SATA power cable	x 2
1960086615T001	I/O port bracket	x 1
2001078611	Startup manual	x 1

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

I/O View



AIMB-786G2-00A1

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
1700020294-01	Printer port cable kit (42 cm)
1701092300	Dual COM port cable(28.5 cm)
1700019268-11	PS/2 KB/Mouse cable
1960063434N000	IO bracket for PS/2 KB/Mouse cable
PCA-TPM-00B1E	TPM2.0 module to enable TPM and vPro technologies

Note: Purchasing AIMB-786's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-786.

Riser Card

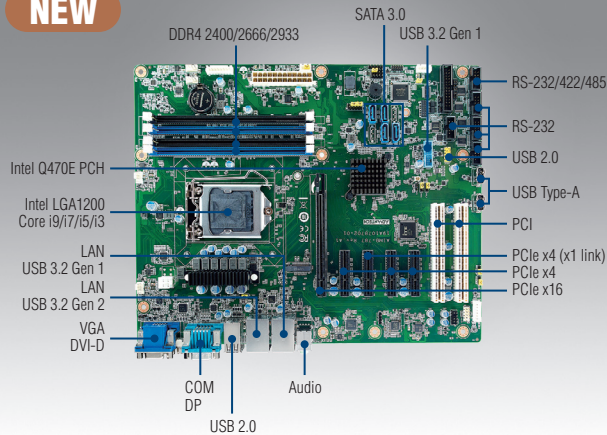
Part Number	Description
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R431F-21A1E	2U riser card with 1 PClex16 & 1 PClex1 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PClex16 & 2 PCI expansion
AIMB-R4301-03A1E	2U riser card with 1 PClex1 expansion

Note: AIMB-786 is not compatible with 1U chassis.

AIMB-787

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

NEW



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

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

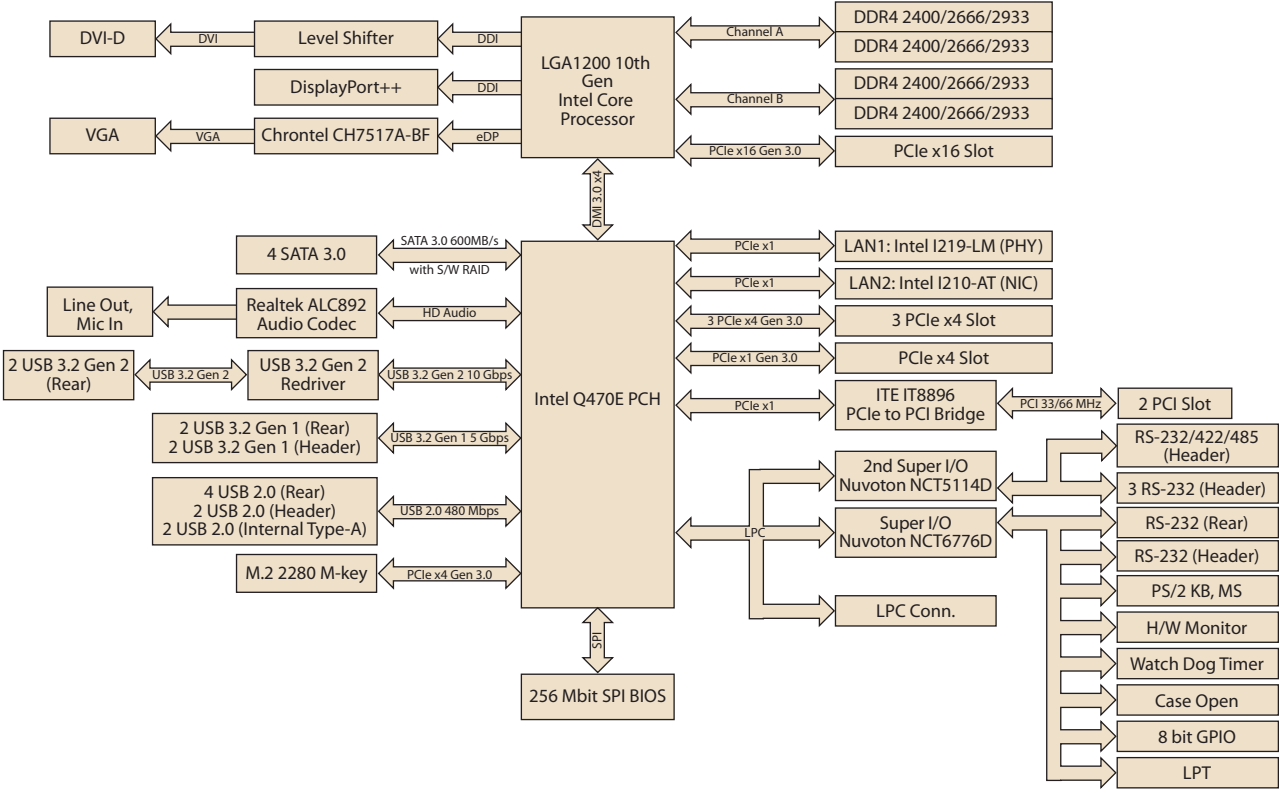
Note 2: Legacy platform is not supported.

Quiet Specifications

CE FCC

Processor System	CPU	i9-	i9-	i7-	i7-	i5-	i5-	i3-	i3-	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												
	BIOS	AMI 256 Mbit SPI												
	Expansion Slot	PCI	2 (32-bit/33 MHz)											
		PCIe x4 (Gen 3)	4 (3 x link x4, 1 x link x1)											
PCIe x16 (Gen 3)		1												
Memory	Technology	Dual Channel (Non-ECC) DDR4 2400/2666/2933												
	Max. Capacity	128 GB												
	Socket	4 x 288-pin DIMM												
Graphics	Controller	Intel HD Graphics												
	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												
	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)												
	Parallel	1												
	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	7.58A	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									-40 ~ 85 °C (-40 ~ 185 °F)			
	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")												

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-787G2-00A1	Q470E	Non-ECC DDR4 2400/2666/2933 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-787G2-00A1

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
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	TPM2.0 module to enable TPM and vPro technologies

Note: Purchasing AIMB-787's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-787.

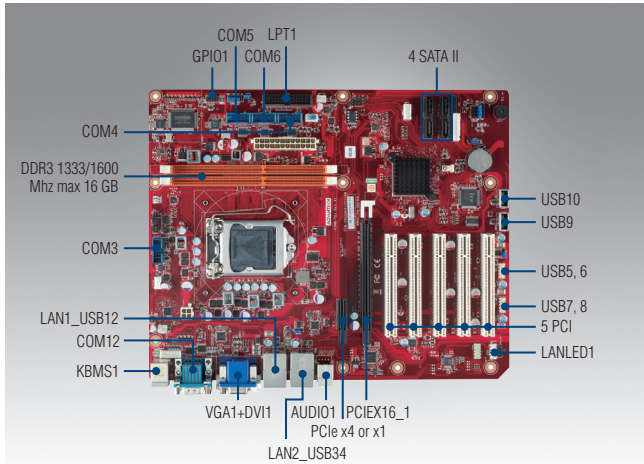
Riser Card

Part Number	Description
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R431F-21A1E	2U riser card with 1 PCIe16 & 1 PCIe1 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe16 & 2 PCI expansion
AIMB-R4301-03A1E	2U riser card with 1 PCIe1 expansion

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

AIMB-701

LGA1155 3rd Intel® Core™ i7/i5/i3/
Pentium® ATX with DVI/VGA, Dual GbE LAN



Features

- Supports Intel® Core™ i7/i5/i3/Pentium® processor with H61 chipset
- Two DIMM sockets support up to 16 GB DDR3 1066/1333/1600
- Supports dual display VGA/DVI-D and dual GbE LAN
- Supports RS-232/422/485 with auto flow control
- Supports one PCIe x16 and 5 PCI expansion slots

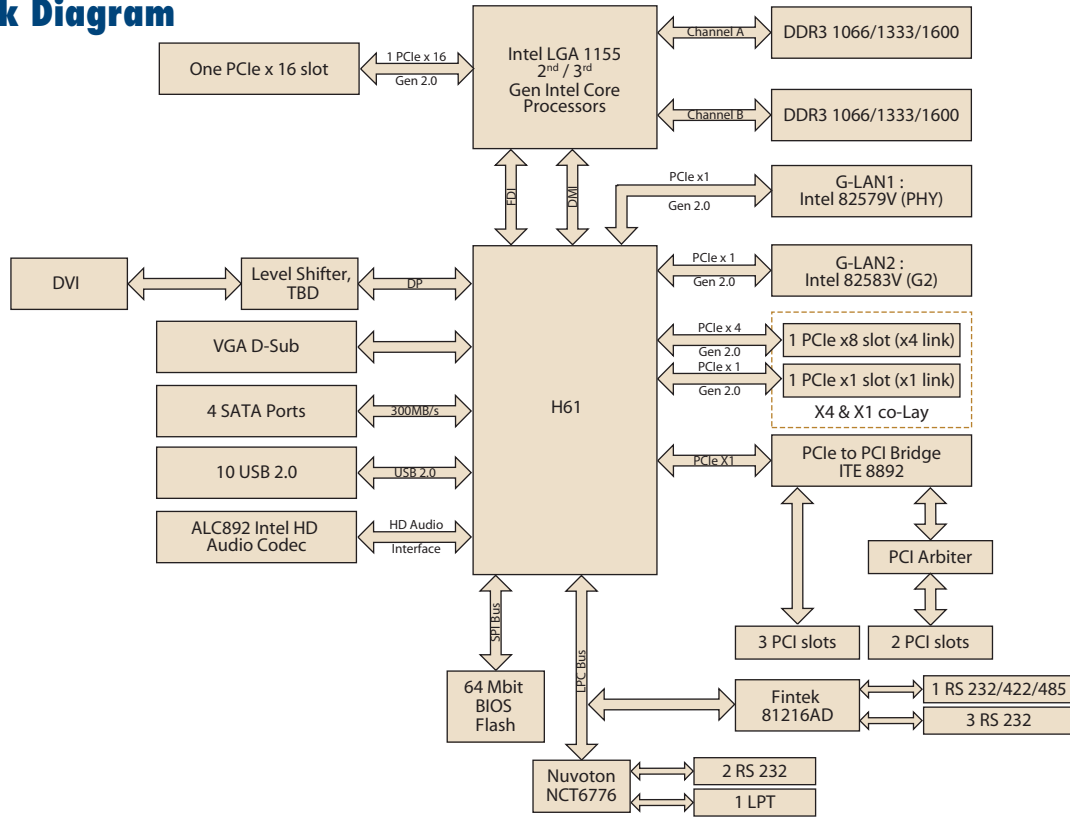
Quiet

Specifications

CE FCC

Processor System	CPU	Core i7 3xxx	Core i5 3xxx	Core i3 3xxx	Pentium G8xx
	Speed	3.4 GHz	3.4/3.3 GHz	3.4 GHz	2.9 GHz
	L3 Cache	8 MB	6 MB	3 MB	3 MB
	Socket	LGA1155			
	Chipset	H61			
	BIOS	AMI 64 Mbit SPI			
Expansion Slot	PCI	32-bit/33 MHz, 5 slots			
	PCIe x 1 (Gen2)	500 MB/s, 1 slot for G2 SKU			
	PCIe x 4 (Gen2)	2.0 GB/s, 1 slot for VG SKU			
	PCIe x16 (Gen2)	8 GB/s, 1 slot			
Memory	Technology	Dual Channel DDR3 1066/1333/1600 (1600 is only supported by Core i7/i5/i3 3xxx series processors)			
	Max. Capacity	16 GB			
	Socket	2 x 240-pin DIMM			
Graphics	Controller	Intel HD Graphics			
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed			
Ethernet	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Intel 82579V, GbE LAN2: Intel 82583V			
	Connector	RJ-45 x 2			
SATA	Max Data Transfer Rate	300 MB/s			
	Channel	4			
Rear I/O	VGA	1			
	DVI	1 for G2 version			
	Ethernet	2 for G2 version; 1 for VG version			
	USB	4			
	Audio	2 (Mic-in, Line-out)			
	Serial	2 (RS-232)			
	PS/2	2 (1 x keyboard and 1 x mouse)			
Internal Connectors	USB	6			
	Serial	4 for G2 version (3 x RS-232, 1 x RS-232/422/485 with auto-flow control)			
	IDE	-			
	SATA	4			
	Parallel	1			
	IrDA	1			
Watchdog Timer	GPIO	8-bit			
	Output	System reset			
Power Requirement	Interval	Programmable 1 ~ 255 sec			
	Power On	Intel i7 2600 3.4 GHz processor, DDR3 4 GB x 2			
		3.3 V	5 V	12 V	5 Vsb
Environment		1.01 A	1.08 A	5.48 A	1.76 A
	Operating	0 ~ 60° C (32 ~ 140° F)			Non-Operating
	Temperature	(Depends on CPU speed and cooler solution)			-40 ~ 85° C (-40 ~ 185° F)
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")			

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 2.0	COM	GbE LAN	PCIe x1	PCIe x4	SW RAID
AIMB-701G2-00A1E	H61	Non-ECC	VGA + DVI	10	6	2	Yes	NA	NA
AIMB-701VG-00A1E	H61	Non-ECC	VGA	10	2	1	NA	Yes	NA

Packing List

Description	Quantity
SATA HDD cable	x 2
SATA power cable	x 1
I/O port bracket	x 1
Startup manual	x 1
Driver CD	x 1

Optional Accessories

Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1960047669N001	LGA1155/1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA1155/1156 CPU cooler for 2U and wallmount chassis
1960049408N001	LGA1155/1156 CPU cooler for 1U and wallmount chassis
1700020294-01	Printer port cable kit (42 cm)
1701092300	COM port cable kit (28.5 cm)
1700018633-05A4	COM port cable kit (60 cm)
1960055954T000	I/O port bracket for 1U chassis

Note 1: Purchasing AIMB-701's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-701.

Note 2: 1960049408N001 is design to be used with Advantech 1U chassis and supports up to 73W processor, user needs to conduct thermal test before using this cooler with other brand chassis.

I/O View



AIMB-701G2-00A1E



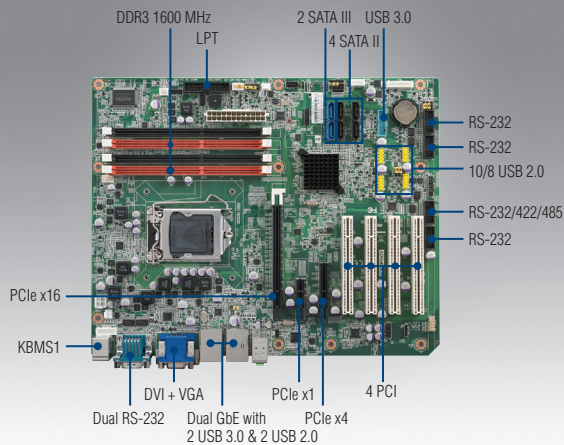
AIMB-701VG-00A1E

Riser Card

Part Number	Description
AIMB-R4104-01A1E	1U riser card with 1 PCIe x4 expansion
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion

AIMB-782

LGA1155 3rd Generation Intel® Core™ i7/i5/i3/Pentium ATX with DVI/VGA, DDR3, SATA III



Features

- 3rd generation Intel® Core™ processor-based platform
- Supports Intel® Core™ i7/i5/i3/Pentium processor with Q77 chipset
- Four DIMM sockets support up to 32 GB DDR3 1066/1333/1600
- Supports dual display VGA/DVI-D and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, AMT8.0, USB 3.0
- Supports Advantech LPC modules of TPM

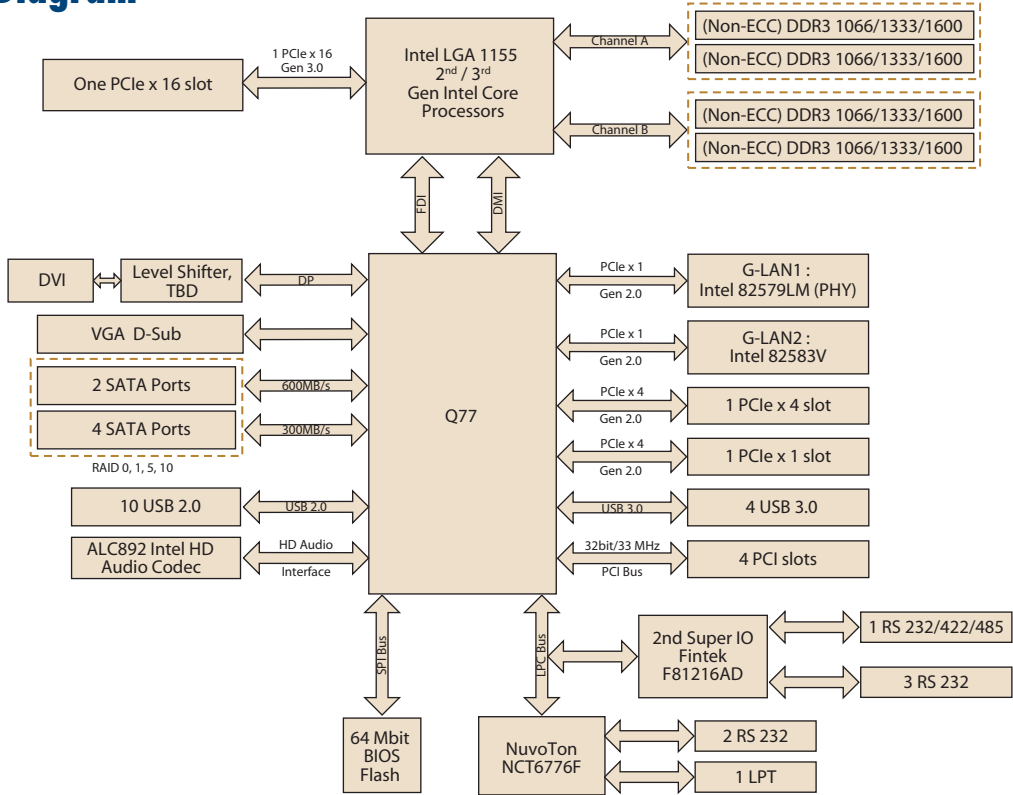
Quiet

Specifications

CE FCC

Processor System	CPU	Core i7	Core i7	Core i5	Core i5	Core i3	Core i3	Pentium	Pentium	Celeron
	Speed	3770	2600	3550S	2400	3220	2120	G2120	G850	G540
	L3 Cache	3.4 GHz	3.4 GHz	3.0 GHz	3.1 GHz	3.3 GHz	3.3 GHz	3.1 GHz	2.9 GHz	2.5 GHz
	Socket	8 MB	8 MB	6 MB	6 MB	3 MB	3 MB	3 MB	3 MB	2 MB
	Chipset	LGA1155								
Expansion Slot	BIOS	Q77								
	PCI	AMI 64 Mbit SPI								
	PCIe x 1 (Gen2)	32-bit/33 MHz, 4 slots								
	PCIe x 4 (Gen2)	500 MB/s per direction, 1 slot								
Memory	Technology	2.0 GB/s per direction, 1 slot								
	Max. Capacity	16 GB/s per direction, 1 slot								
	Socket	Dual Channel DDR3 1066/1333/1600 (1600 only supported by Core i7/i5/i3 3xxx series processors)								
Graphics	Controller	32 GB								
	VRAM	4 x 240-pin DIMM								
Ethernet	Interface	Intel HD Graphics 2000/2500/3000/4000 (Depends on processor)								
	Controller	1 GB maximum shared memory with 2 GB and above system memory installed								
	Connector	10/100/1000 Mbps								
SATA	Controller	GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82583V								
	Max Data Transfer Rate	RJ-45 x 2								
	Channel	600 MB/s								
	Channel	2								
Rear I/O	Max Data Transfer Rate	300 MB/s								
	Channel	4								
	VGA	1								
	DVI	1								
	Ethernet	2								
	USB	4 (Two USB 3.0)								
	Audio	2 (Mic-in, Line-out)								
Internal Connectors	Serial	2 (RS-232)								
	SATA	6 (SATA II x4 and SATA III x2)								
	Parallel	1								
	IrDA	1								
	GPIO	8-bit								
	Watchdog Timer	Output	System reset							
Power Requirement	Interval	Programmable 1 ~ 255 sec								
	Power On	Intel Core i5 3550 3.0 GHz; DDR3 8G x 4								
	Operating	3.3 V	5 V	12 V	5 Vsb					
Environment	Non-Operating	0.77 A	2.23 A	3.56 A	0.46 A					
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution							-40 ~ 85° C (-40 ~ 185° F)	
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")								

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.0	USB 2.0	COM	GbE LAN	AMT	SATA III	SW RAID
AIMB-782QG2-00A1E	Q77	Non-ECC DDR3	VGA + DVI	4	10	6	2	Yes	2	Yes

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1700022749-11	SATA power cable	x 1
1960050472T000	I/O port bracket	x 1
2002078210	Startup manual	x 1
2062078200	Driver CD	x 1

Optional Accessories

Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700028292-01	Dual port USB 3.0 Cable with bracket
1960047669N001	LGA1155/1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA1155/1156 CPU cooler for 2U and wallmount chassis
1960049408N001	LGA1155/1156 CPU cooler for 1U and wallmount chassis
1700008809	Printer port cable kit (25 cm)
1700020294-01	Printer port cable kit (42 cm)
1701092300	COM port cable kit
1960055954T000	I/O port bracket for 1U chassis

I/O View



AIMB-782QG2-00A1E

Note 1: Purchasing AIMB-782's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-782.

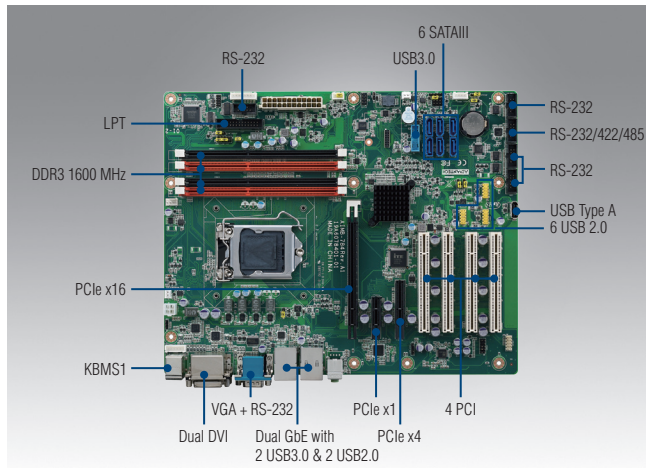
Note 2: 1960049408N001 is design to be used with Advantech 1U chassis and supports up to 73W processor, user needs to conduct thermal test before using this cooler with other brand chassis.

Riser Card

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

AIMB-784

**LGA1150 4th Generation Intel® Core™
i7/i5/i3/Pentium® ATX with DVI/VGA,
DDR3, SATA III**



Features

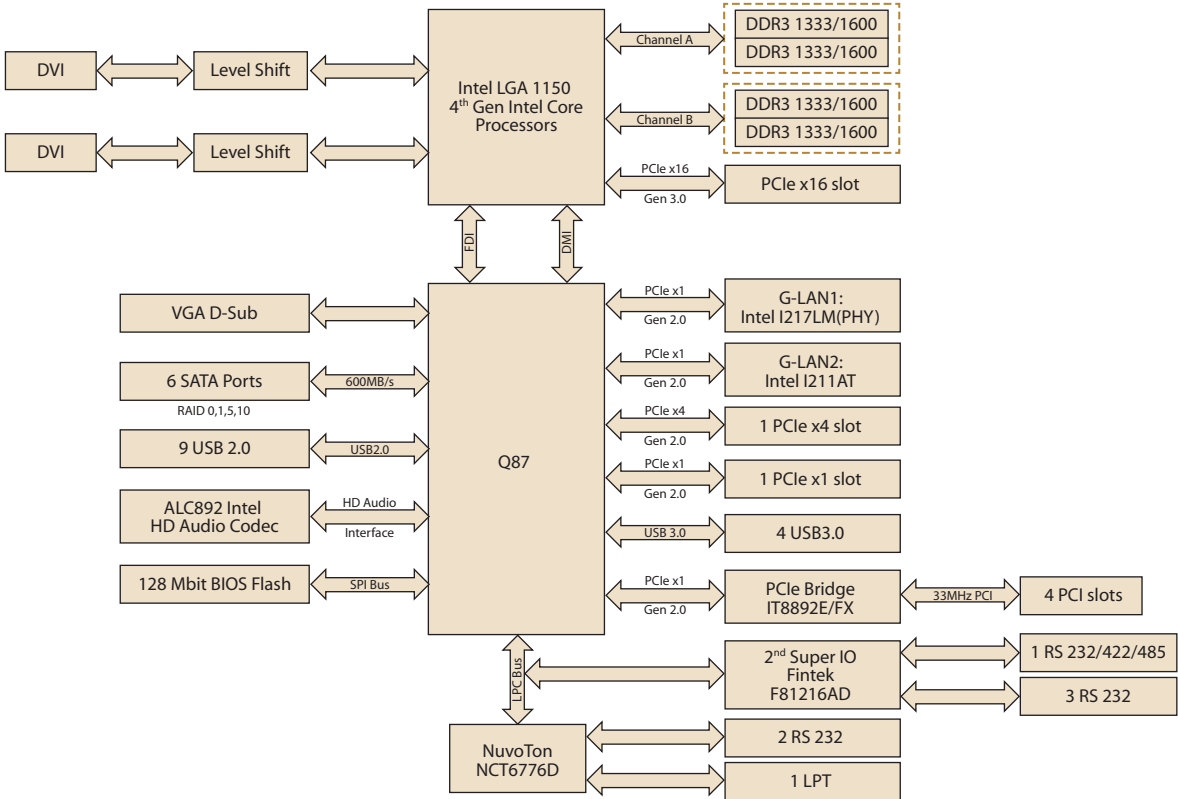
- 4th generation Intel® Core™ processor-based platform
- Supports Intel® Core™ i7/i5/i3 processor with Q87 chipset
- Four DIMM sockets support up to 32 GB DDR3 1333/1600
- Supports triple display VGA/2 DVI-D and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, USB 3.0
- Supports Intel vPro, iAMT 9.0 & TPM technologies
- Note: PCA-TPM-00A1E module is required to enable Intel vPro and TPM technologies

Quiet Specifications

CE FCC

Processor System	CPU	i7-	i7-	i7-	i7-	i5-	i5-	i5-	i5-	i3-	i3-	i3-	i3-	G3420	G3320TE	G1820	G1820TE				
	Speed	4790S	4790T	4770S	4770TE	4590S	4590T	4570S	4570TE	4360	4350T	4330	4330TE	3.2 GHz	2.3 GHz	2.7 GHz	2.2 GHz				
	L3 Cache	8MB	8MB	8MB	8MB	6MB	6MB	6MB	4MB	4MB	4MB	4MB	4MB	3MB	3MB	2MB	2MB				
	Socket	LGA1150																			
	Chipset	Q87																			
	BIOS	AMI 128 Mbit SPI																			
Expansion Slot	PCI	32-bit/33 MHz, 4 slots																			
	PCIe x 1 (Gen2)	500 MB/s per direction, 1 slot																			
	PCIe x 4 (Gen2)	2.0 GB/s per direction, 1 slot																			
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot																			
Memory	Technology	Dual Channel DDR3 1333/1600																			
	Max. Capacity	32 GB																			
	Socket	4 x 240-pin DIMM																			
Graphics	Controller	Intel HD Graphics (Depends on processor)																			
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed																			
Ethernet	Interface	10/100/1000 Mbps																			
	Controller	GbE LAN1: Intel I217LM, GbE LAN2: Intel I211AT																			
	Connector	RJ-45 x 2																			
SATA	Max Data Transfer Rate	600 MB/s																			
	Channel	6																			
Rear I/O	VGA	1																			
	DVI	2																			
	Ethernet	2 (GbE)																			
	USB	4 (Two USB 3.0)																			
	Audio	2 (Mic-in, Line-out)																			
	Serial	1 (RS-232)																			
	PS/2	2 (1 x keyboard and 1 x mouse)																			
Internal Connectors	USB	9 (Two USB 3.0)																			
	Serial	5 (4 x RS-232, 1x RS-232/422/485 with auto-flow control)																			
	SATA	6																			
	Parallel	1																			
	Display Port	-																			
	IrDA	-																			
	GPIO	-																			
Watchdog Timer	Output	System reset																			
	Interval	Programmable 1 ~ 255 sec																			
Power Requirement	Power On	Intel Core i7-4790S processor; DDR3 8GB x4																			
		3.3V				5V				12V				5VSB				-12V			
		1.060				1.554				4.922				0.048				0.044			
Environment		Operating																			
	Temperature	0 ~ 60 °C (32 ~ 140 °F), depends on CPU speed and cooler solution								Non-Operating											
Physical Characteristics	Dimensions (L x H)	304.8 x 244 mm (12" x 9.6")																			

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.0	USB 2.0	COM	GbE LAN	AMT	SATA III	SW RAID
AIMB-784G2-00A1E	Q87	Non-ECC DDR3	VGA + dual DVI	4	9	6	2	Yes	6	Yes

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1700022749-11	SATA power cable	x 2
19Z0000454T000	I/O port bracket	x 1
2006078410	Startup manual	x 1
2066078401	Driver CD	x 1

Optional Accessories

Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700028292-01	Dual port USB 3.0 Cable with bracket
1960047669N001	CPU cooler for 4U and wallmount chassis
1960047831N001	CPU cooler for 2U and wallmount chassis
1960049408N001	CPU passive heatsink for 1U chassis
1960069682N001	I/O port bracket for 1U chassis
1700020294-01	Printer port cable kit (42 cm)
1701092300	COM port cable kit
PCA-TPM-00A1E	TPM module to enable TPM and vPro technologies

Note: Purchasing AIMB-784's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-784.

I/O View



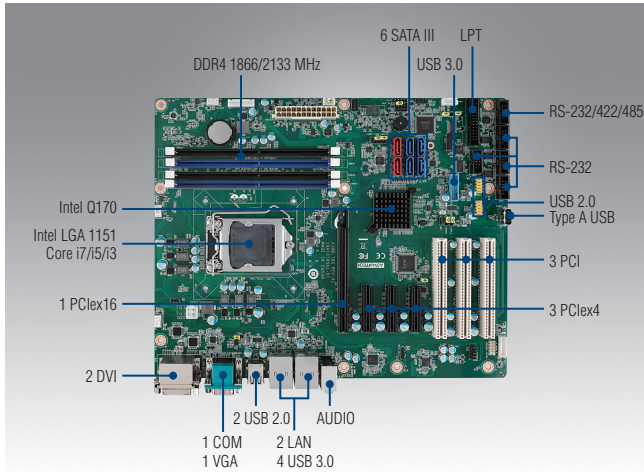
AIMB-784G2-00A1E

Riser Card

Part Number	Description
AIMB-RF10F-01A1E	1U riser card with 1 PCIe x 16 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe x16 & 2 PCI expansion

AIMB-785

LGA1151 6th/7th Generation Intel® Core™ i7/i5/i3/Pentium®/Celeron® ATX with Triple Display, DDR4, SATA III



Features

- Supports Intel® 6th/7th generation Core™ i7/i5/i3/Pentium®/Celeron® processor with Q170 chipset
- Four DIMM sockets support up to 64 GB DDR4 1866/2133
- Supports triple display VGA/2 DVI-D and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, USB 3.0
- Supports Intel vPro, AMT 11.0 & TPM technologies

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

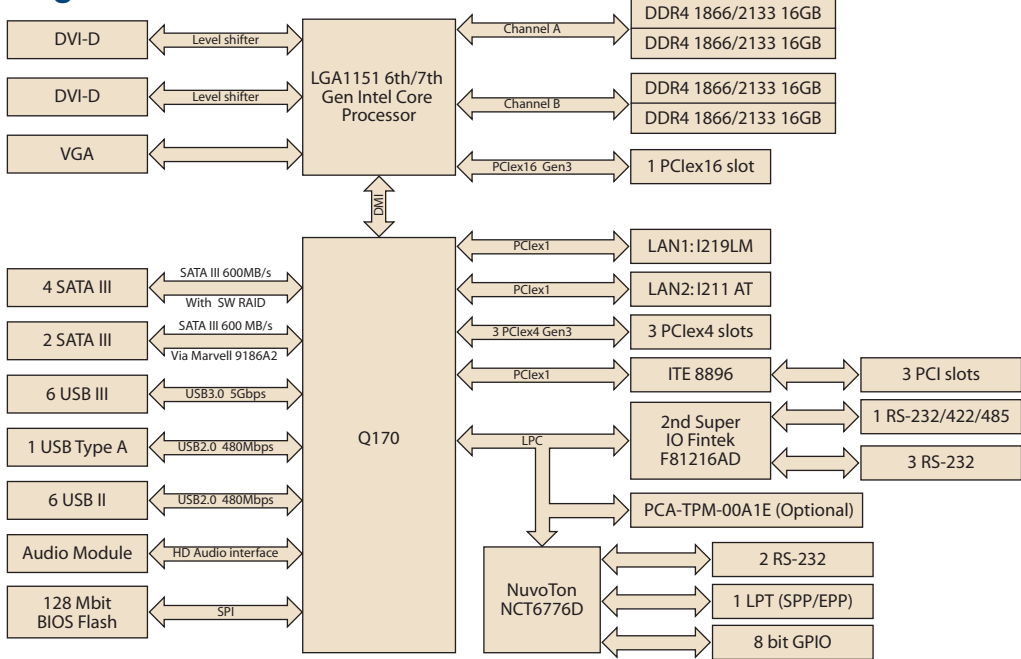
Note 2: Intel 7th generation processors only support Windows 10 (64-bit).

Quiet Specifications

CE FCC

Processor System	CPU	i7-7700	i7-7700T	i7-6700	i7-6700TE	i5-7500	i5-7500T	i5-6500	i5-6500TE	i3-7101E	i3-7101TE	i3-6100	i3-6100TE	G4400	G4400TE	G3900	G3900TE		
	Speed	3.6GHz	2.9GHz	3.4GHz	2.4GHz	3.4GHz	2.7GHz	3.2GHz	2.3GHz	3.9GHz	3.4GHz	3.7GHz	2.7GHz	3.3GHz	2.9GHz	2.8GHz	2.6GHz		
	L3 Cache	8MB	8MB	8MB	8MB	6MB	6MB	6MB	6MB	3MB	3MB	4MB	4MB	3MB	3MB	2MB	2MB		
	Socket	LGA1151																	
	Chipset	Q170																	
	BIOS	AMI 128 Mbit SPI																	
Expansion Slot	PCI	32-bit/33 MHz, 3 slots																	
	PCIe x 4 (Gen3)	4 GB/s per direction, 3 slots																	
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot																	
Memory	Technology	Dual Channel DDR4 1866/2133																	
	Max. Capacity	64 GB																	
	Socket	4 x 288-pin DIMM																	
Graphics	Controller	Intel HD Graphics																	
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed																	
Ethernet	Interface	10/100/1000 Mbps																	
	Controller	GbE LAN1: Intel I219LM, GbE LAN2: Intel I211AT																	
	Connector	RJ-45 x 2																	
SATA	Max Data Transfer Rate	600 MB/s																	
	Channel	6 (4 from Intel® Q170 and 2 from Marvell 9186A2)																	
	RAID	0,1,5,10 (4 SATAIII ports from Intel®)																	
Rear I/O	VGA	1 (Up to 1920x1200@60Hz)																	
	DVI-D	2 (Up to 1920x1200@60Hz)																	
	Ethernet	2																	
	USB	6 (USB3.0 x 4, USB2.0 x 2)																	
	Audio	2 (Mic-in, Line-out)																	
	Serial	1 (RS-232)																	
	PS/2	-																	
Internal Connectors	USB	7 (USB 3.0 with wafer box x 2, USB 2.0 with wafer box x 4, USB 2.0 with type A connector x 1)																	
	Serial	5 (4 x RS-232, 1 x RS-232/422/485)																	
	SATA	6																	
	Parallel	1 (SPP/EPP)																	
	Display Port	-																	
	IrDA	-																	
	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 i7-6700 3.4GHz; DDR4 2133 8GB x 4																	
	Voltage	+12V					+5V			+3.3V		+5Vsb		-12V		-5V			
	Current	6.78A					1.38A			1.35A		0.12A		0.05A		0.05A			
Environment	Operating	0 ~ 60 °C (32 ~ 140 °F), depends on CPU speed and cooler solution												Non-Operating					
	Temperature													-40 ~ 85 °C (-40 ~ 185 °F)					
Physical Characteristics	Dimensions (L x H)	304.8 x 244 mm (12" x 9.6")																	

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.0	USB 2.0	COM	GbE LAN	AMT	SATA III	SW RAID
AIMB-785G2-00A1E	Q170	Non-ECC DDR4 1866/2133 up to 64GB	VGA + dual DVI	6	7	6	2	Yes	6	Yes

Note: SATA0 and SATA1(red SATA ports) don't support RAID function.

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1700022749-11	SATA power cable	x 2
19Z0000884T000	I/O port bracket	x 1
2006078511	Startup manual	x 1
2066078502	Driver CD	x 1

I/O View



AIMB-785G2-00A1E

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
1960049408N001	CPU cooler for 1U chassis
1960069666N101	IO bracket for 1U chassis
1700020294-01	Printer port cable kit (42 cm)
1701092300	Dual COM port cable(28.5 cm)
1700019268-11	PS/2 KB/Mouse cable
1960063434N000	IO bracket for PS/2 KB/Mouse cable
PCA-TPM-00A1E	TPM module to enable TPM and vPro technologies (for BIOS V1.XX)
PCA-TPM-00B1E	TPM2.0 module to enable TPM and vPro technologies (for BIOS V2.XX)

Note: Purchasing AIMB-785's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-785.

Riser Card

Part Number	Description
AIMB-RF10F-01A1E	1U riser card with 1 PCIe16 expansion
AIMB-R4104-01A1E	1U riser card with 1 PCIe4 expansion
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R431F-21A1E	2U riser card with 1 PCIe16 & 1 PCIe1 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe16 & 2 PCI expansion
AIMB-R4301-03A1E	2U riser card with 1 PCIe1 expansion