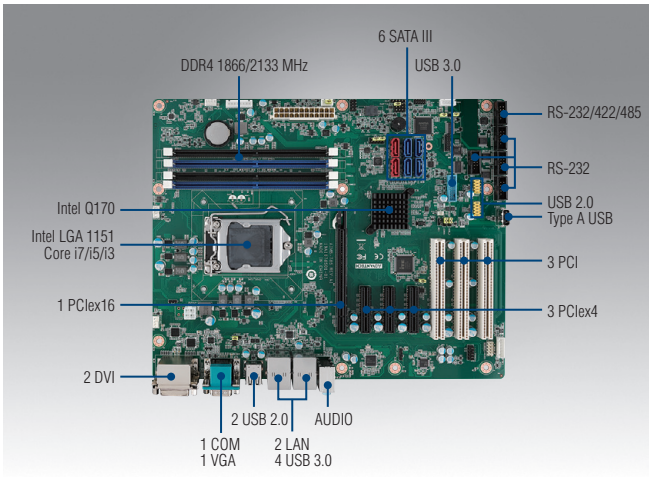
AIMB-785

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

Note 2: Only Intel 6th generation processor can support Windows 7.

Quiet

CE FCC

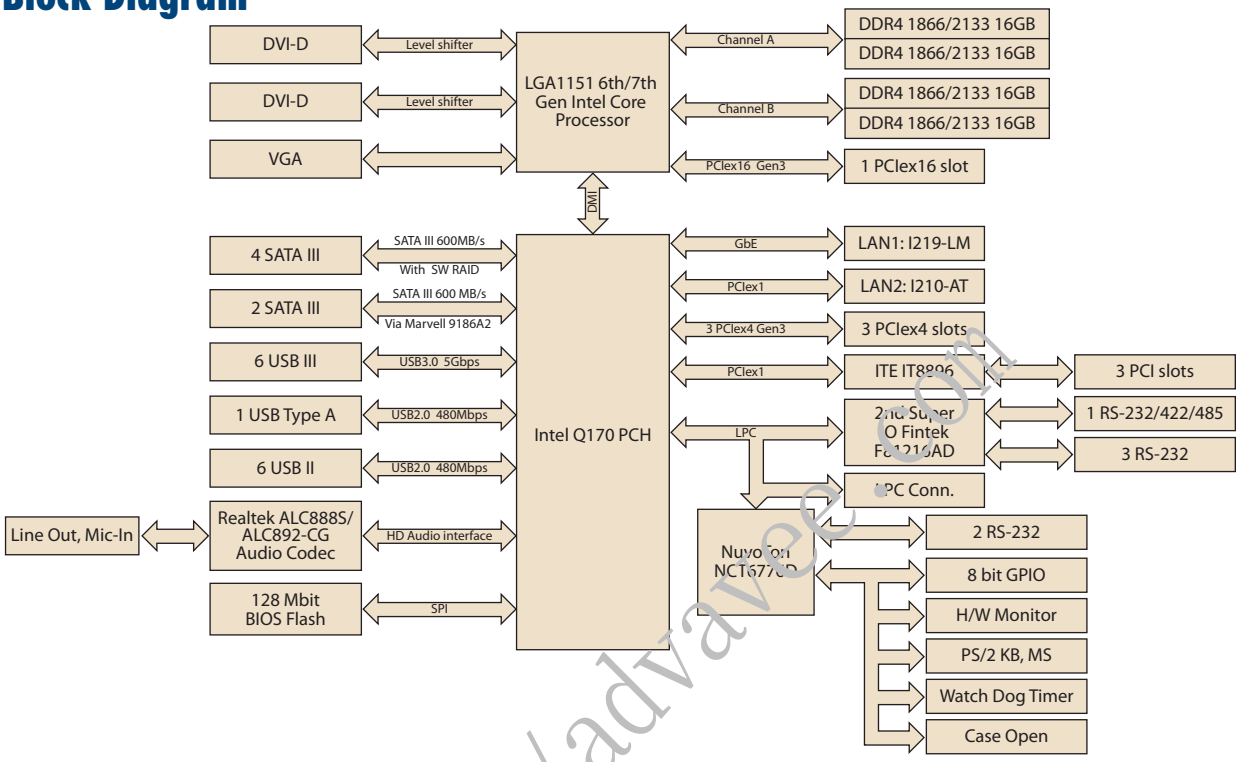
Specifications

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
	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	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 Non-ECC UDIMM DDR4 1866/2133															
	Max. Capacity	64 GB															
	Socket	4 (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 I210-AT															
	Connector	2 (RJ-45)															
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)															
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															
	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 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												Non-Operating			
	Temperature	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")															

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All product specifications are subject to change without notice.

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.0	USB 2.0	COM	GbE LAN	AMT	SATA III	SW RAID
AIMB-785G2-00A3	Q170	Non-ECC DDR4 1866/2133 up to 64GB	VGA + dual DVI	6	7	6	2	Yes	6	Yes
AIMB-785G2-00A3U (Made in Taiwan)	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/ 1700022749-12/ 1700022749-13/	SATA power cable	x 2
19Z0000884T000	I/O port bracket	x 1
2006078512	Startup manual	x 1
2066078502	Driver CD	x 1

I/O View



AIMB-785G2-00A3
AIMB-785G2-00A3U

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
1960049408N001	CPU heatsink for 1U chassis (for CPU TDP=35W only)
1960069666N101	IO bracket for 1U chassis ACP-1010MB only
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	dTPM 2.0 LPC module to enable TPM and vPro technologies

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 PCIex16 expansion
AIMB-R4104-01A1E	1U riser card with 1 PCIex4 expansion
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R431F-21A1E	2U riser card with 1 PCIex16 & 1 PCIex1 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIex16 & 2 PCI expansion
AIMB-R4301-03A2E	2U riser card with 1 PCIex1 expansion

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