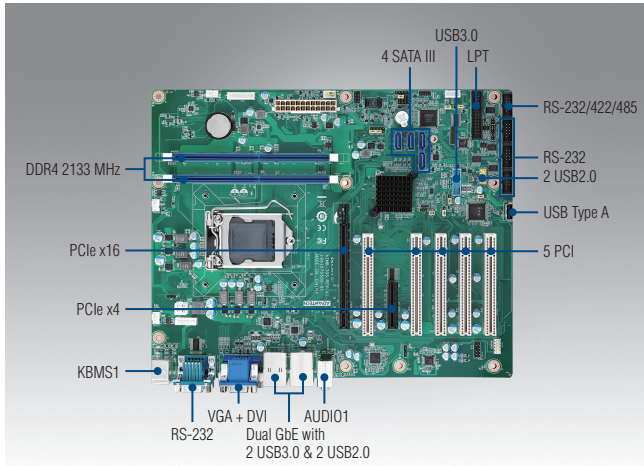


# AIMB-705

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



## Features

- Intel 6th generation Core i7/i5/i3/pentium processor
- Dual channel (Non-ECC) DDR4 1866/2133 up to 32GB
- Support VGA and DVI display
- Support SATA3.0, USB3.0, dual GbEs
- Support 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

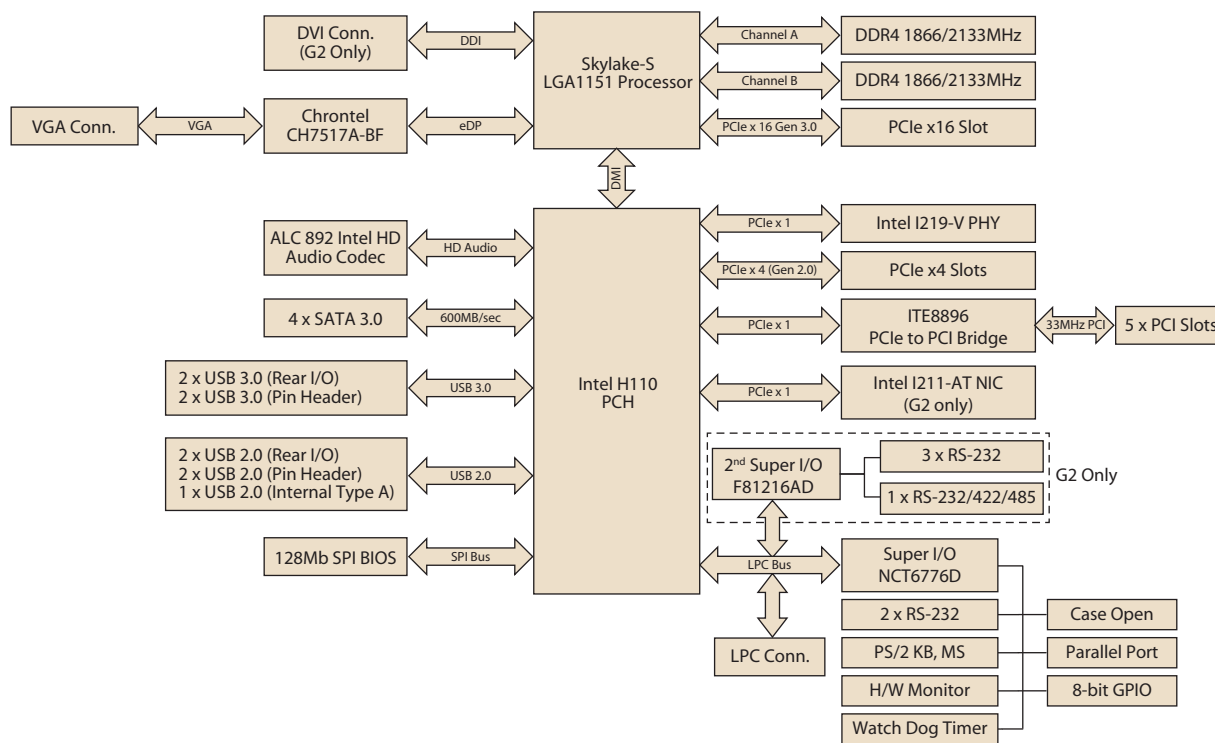
Quiet

## Specifications

CE FCC

Processor System	CPU	i7-6700	i7-6700TE	i5-6500	i5-6500TE	i3-6100	i3-6100TE	G4400	G4400TE	G3900	G3900TE	
	Speed	3.4 GHz	2.4 GHz	3.2 GHz	2.3 GHz	3.7 GHz	2.7 GHz	3.3 GHz	2.9 GHz	2.8 GHz	2.6 GHz	
	Cache	8 MB	8 MB	6 MB	6 MB	4 MB	4 MB	3 MB	3 MB	2 MB	2 MB	
	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										
Internal Connectors	PS/2	2 (1 x keyboard and 1 x mouse)										
	USB	1 (Type A); 2 (USB2.0, Pin-header); 2 (USB3.0, Box-header)										
	Serial	1 (RS-232/422/485, Box-header); 3 (RS-232, Box-header)										
	Parallel	1										
Watchdog Timer	GPIO	8 bits										
	Output	System reset										
Power Requirement	Interval	Programmable 1 - 255 sec										
	Test Environment	Intel Core Intel i7-6700 @ 3.4 GHz; DDR4 8 G x 2										
	Voltage	3.3V	5V	12V	5Vsb							
Environment	Current	0.49A	3.13A	7.88A	0.08A							
	Temperature	Operating					Non-Operating					
	Humidity	0 ~ 60° C (32 ~ 140° F)					-40 ~ 85° C (-40 ~ 185° F)					
Physical Characteristics	Humidity	40° C @ 85% RH Non-condensing					60° C @ 95% RH Non-condensing					
	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	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
-	Startup manual	x1
-	Driver CD	x1

## Optional Accessories

Part Number	Description
1701090401	Single COM cable(40 cm)
1701092300	Dual COM cable(28.5 cm)
1700020294-01	Printer port cable kit(42 cm)
1700020277-01	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 cooler for 1U chassis
PCA-COM232-00A1E	4-port RS-232 LPC module
PCA-TPM-00A1E	TPM Module

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-RP30P-03A1E	2U riser card providing 3 PCI slots
AIMB-RP3PF-21A1E	2U riser card providing 1 PCIe x 16 and 2 PCI slots