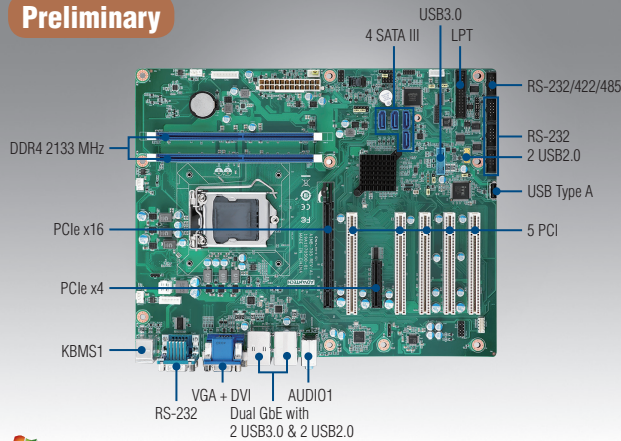


AIMB-705

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

Preliminary



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 (Gen3), and 5 PCI expansion slots

Software APIs:

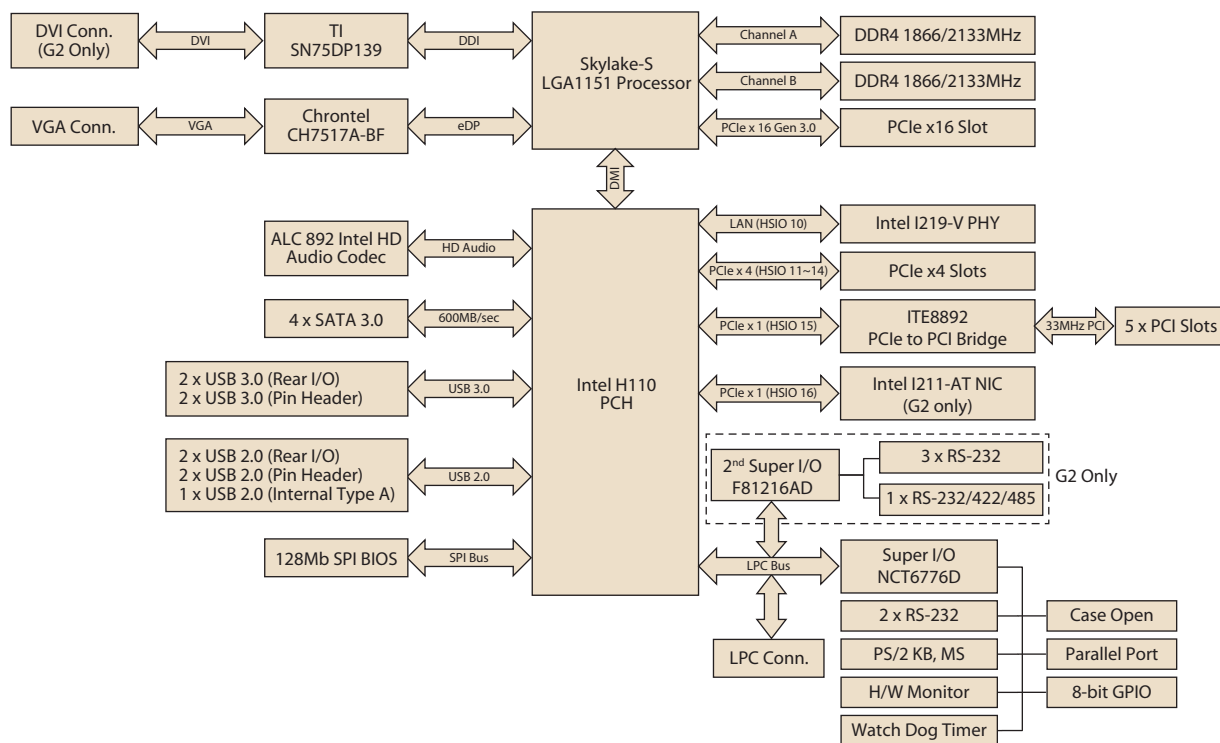


Utilities:



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	TBD	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 (Gen3)	4 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 @ 60MHz)										
	DVI	1 for G2 version (Resolution up to 1920 x 1200 @ 60MHz)										
	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										
	Interval	Programmable 1 - 255 sec										
Power Requirement	Test Environment	4 core LGA 2.2GHz 65W processor; DDR4 2133 8GB x2										
	Voltage	3.3V	5V	12V	5Vsb							
	Current	0.99A	4.76A	4.19A	0.06A							
Environment	Operating						Non-Operating					
	Temperature	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

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

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

Bracket View



AIMB-705G2-00A1E



AIMB-705VG-00A1E

Optional Accessories

Part Number	Description
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(30cm)
1700002204	2-port USB 2.0 cable w/ BKT(27cm)
1960047669N001	CPU cooler for 4U and wallmount chassis
1960052651N001	CPU cooler for 2U and wallmount chassis (quiet version)
1960047831N001	CPU cooler for 2U and wallmount chassis
1960049408N001	CPU cooler for 1U and wallmount chassis
1960055954T000	I/O port bracket for 1U chassis
PCA-COM232-00A1E	Quad COM-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.