

# AIMB-501CW

Intel® Core™ i7/i5/i3 LGA1155 MicroATX  
with Triple CRT, 10 COM, 4 USB 3.0,  
6 USB 2.0, Dual LAN



Quiet susiAccess



CE FCC

## Features

- Supports Intel® Core™ i7/i5/i3 processor with B75 chipset
- Two DIMM sockets support up to 16 GB DDR3 1600/1333 MHz SDRAM
- Supports triple display of VGA and two GbE LAN
- Supports 10 COM, LPT, TPM 1.2 (Optional)
- Supports 4 USB 3.0 and 6 USB 2.0, 4 SATA Ports
- Support PCIe16 (Gen3), PCIe4, 2 PCI expansion slots
- Supports SUSIAccess, McAfee, Acronis and Embedded Software APIs

### Software APIs:



SMBus



H/W Monitor



Watchdog



GPIO

### Utilities:



BIOS flash

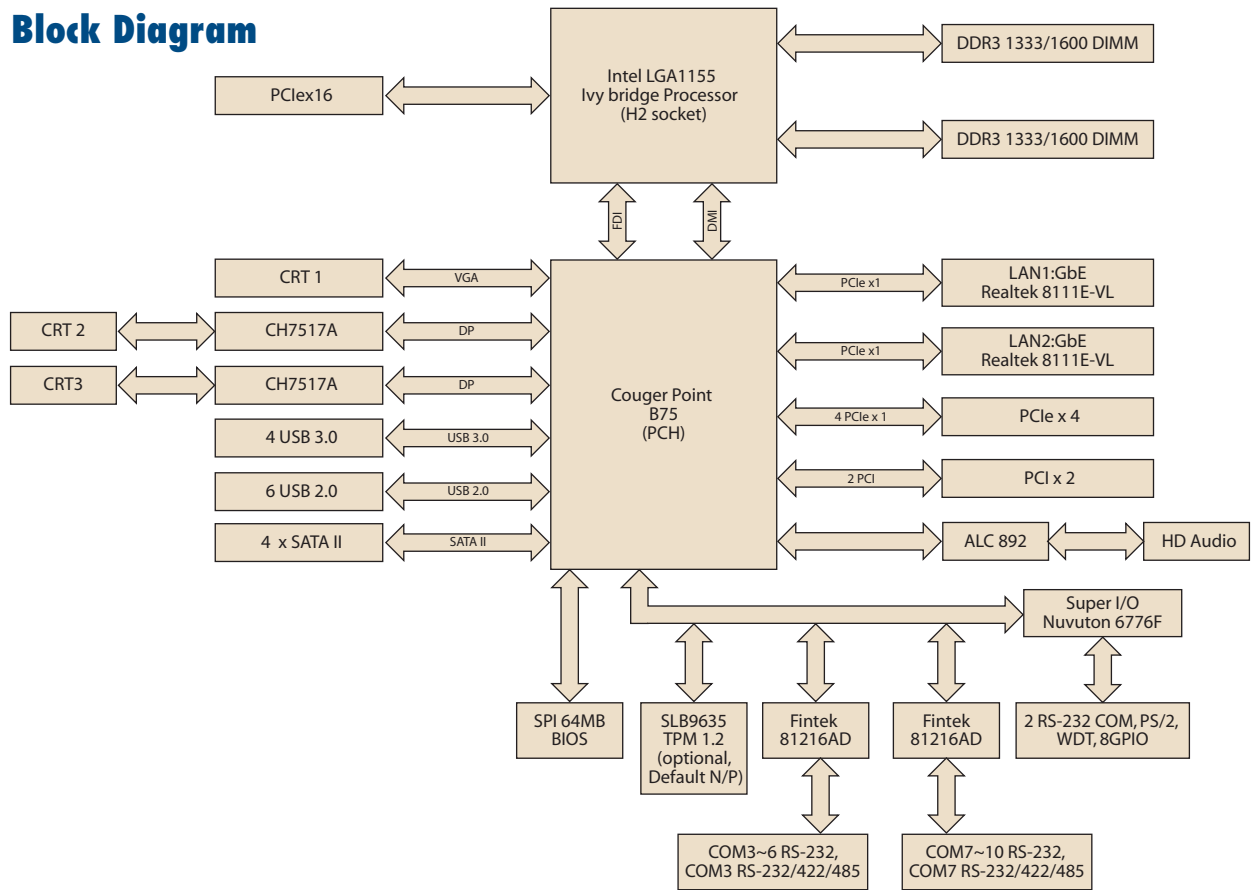


Monitoring

## Specifications

Processor System	CPU	Intel Core i7-3770	Intel Core i5-3550S	Intel Core i3-3220	Intel Core i7-2600	Intel Core i5-2400	Intel Core i3-2120	Pentium G850	Celeron G540
	Core Number	4	4	2	4	4	2	2	2
	Max. Speed	3.4 GHz	3.0 GHz	3.3 GHz	3.4 GHz	3.1 GHz	3.3 GHz	2.9 GHz	2.50 GHz
	Integrated Graphics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	L3 Cache	8 MB	6 MB	3 MB	8 MB	6 MB	3 MB	3 MB	2 MB
	Chipset	B75							
Expansion Slot	BIOS	AMI EFI 64 Mbit SPI							
	PCI	2							
	PCIe x 4 (Gen2)	500MB/s per direction, 1 slot							
Memory	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot							
	Technology	Dual Channel DDR3 1600/1333 MHz SDRAM							
	Max. Capacity	16 GB/8 GB per DIMM							
Graphics	Socket	2 x 240-pin DIMM (Non-ECC)							
	Controller	Intel HD Graphics							
	VRAM	1GB maximum shared memory with 2GB and above system memory installed							
	LVDS	N/A							
	CRT	Yes, supports max. resolution 2048 x 1536 (VGA1)							
	Dual Display	CRT1 + CRT2, CRT2 + CRT3, CRT1 + CRT3							
Ethernet	Triple Display	CRT1 + CRT2 + CRT3							
	Interface	10/100/1000 Mbps							
	Controller	GbE LAN: Realtek 8111E							
SATA	Connector	RJ-45 X 2							
	Max Data Transfer Rate	300 MB/s (SATA 2.0)							
Rear I/O	Channel	4							
	CRT	2							
	Ethernet	2							
	USB	8 (4 USB 3.0 and 4 USB 2.0)							
	Audio	2 (Mic-in, Line-out)							
	Serial	-							
	PS/2	2 (1 x keyboard and 1 x mouse)							
Internal Connector	VGA	1 (Pin header on board)							
	USB	2 (USB 2.0)							
	Serial	10 (8 x RS-232, 2 x RS-232/422/485; COM 3 and COM 7 support RS-232/422/485 auto flow control; COM 1 and COM 2 supported 5V/12V by jumper selection)							
	Parallel	1 (pin header)							
	SATA	4 (SATA 2.0)							
	LVDS & Inverter	1							
Watchdog Timer	IrDA	-							
	GPIO	8-bit GPIO							
Power Requirements	Output	System reset							
	Interval	Programmable 1 ~ 255 sec/min							
Environment	Power On	+3.3 V	+12 V	-12 V	5 VSB	5 V			
	Temperature	1.05 A	6.66 A	0.13 A	0.49 A	2.25 A			
Physical Characteristics	Operating	Intel Core i7-2600 3.4GHz, 4GB DDR3 1333MHz x 2pcs						Non-Operating	
	Dimensions	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution						-40 ~ 85° C (-40 ~ 185° F)	

### Block Diagram



### Ordering Information

Part Number	PCH	Memory	VGA	DVI	LVDS	USB 3.0/2.0	SATA 2.0	COM	TPM	LAN	PCIe x 16	PCI	PCIe x 4	AMP
AIMB-501F-CWA1E	B75	Non ECC	3	0	0	4/6	4	10	(1)	2	1	2	1	Yes (6W)

\*( ) BOM options available on MP version.

### Riser Card

Part Number	Description
AIMB-RF10F-01A1E	1U riser card with 1 PCI e x 16 expansion

### Optional Accessories

Part Number	Description
1700002204	USB cable with dual ports, 27 cm
1700008822	DVI cable
1960047669N001	LGA1156 CPU cooler for 4U and wallmount chassis
1700018699	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm
1700000447	1-to-4 serial ports cable kit, 45cm
1701400181	1-to-4 serial ports cable kit, 18cm

Note: Purchasing AIMB-501's proprietary CPU cooler from Advantech is a must; other brands of CPU coolers are NOT compatible with AIMB-501

### Packing List

Description	Quantity
Serial ATA HDD data cable	2
Com port cable kit	3
I/O port bracket	1
Startup manual	1
Driver CD	1

### Rear I/O

