

AIMB-503YH

Intel® Core™ i7/i5/i3 LGA1150 MicroATX
with DVI-I/DVI-D, 10 COM, 2 USB 3.0,
14 USB 2.0, Dual LAN

NEW



Features

- Supports Intel® Core™ i7/i5/i3 processor with H81 chipset
- Two DIMM sockets support up to 16 GB DDR3 1333/1600 MHz SDRAM
- Supports Dual display of DVI-I, DVI-D and two GbE LAN
- Supports 10 COM, 2 USB 3.0, 14 USB 2.0, TPM 1.2 (optional)
- Supports SUSIAccess, McAfee, Acronis and Embedded Software APIs

Software APIs:



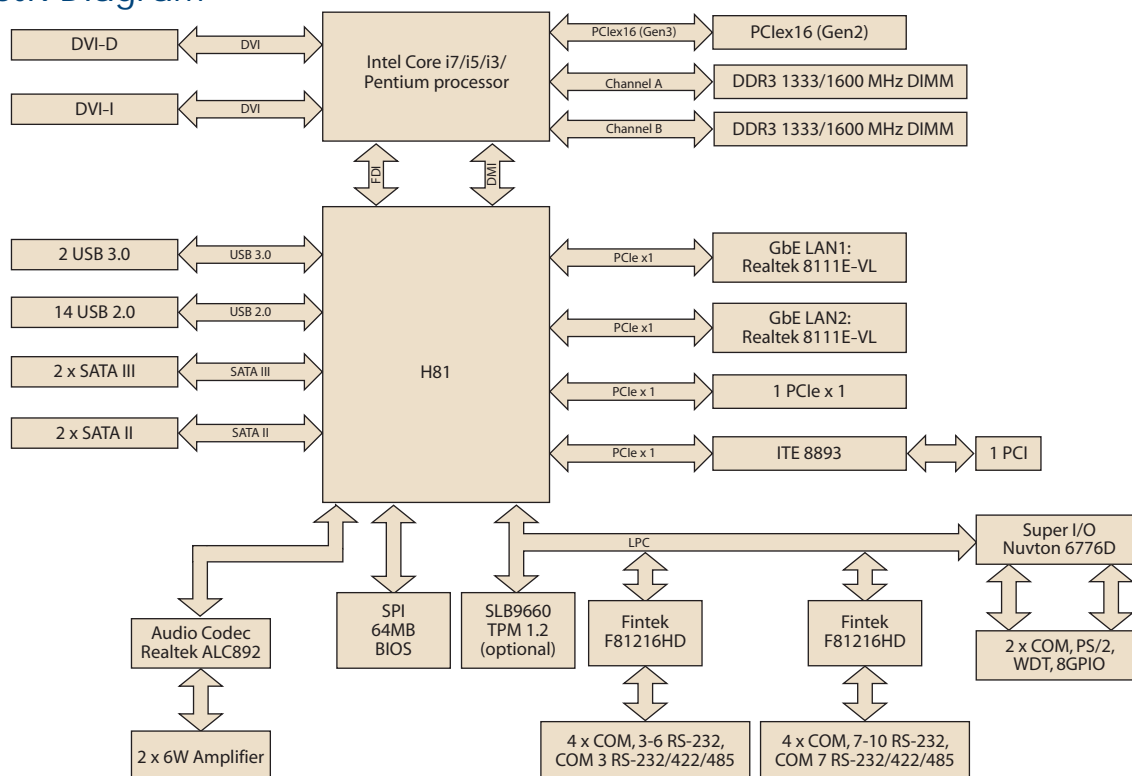
Utilities:



Specifications

	CPU	i7-4790S	i7-4770S	i7-4770TE	i5-4590S/ i5-4590T	i5-4570S	i5-4570TE	i3-4360/ i3-4350T/ i3-4340TE	i3-4330	i3-4330TE	Pentium G3320TE	Pentium G3420
Processor System	Core Number	4	4	4	4/4	4	2	2/2/2	2	2	2	2
	Max. Speed	3.2 GHz	3.1 GHz	2.3 GHz	3.0G/2.0 GHz	2.9 GHz	2.7 GHz	3.7G/ 3.1G/ 2.6 GHz	3.5 GHz	2.4 GHz	2.3 GHz	3.2GHz
	L3 Cache	8M	8M	8M	6M/6M	6M	4M	4M/4M/ 4M	4M	4M	3M	3M
	TDP (W)	65W	65W	45W	65W/35W	65W	35W	54W/35W/ 35W	54W	35W	35W	54W
	Chipset	H81										
	BIOS	AMI EFI 64 Mbit SPI										
Expansion Slot	PCI	32-bit/33 MHz, 1 slot										
	PCIe x 1 (Gen2)	500 MB/s per direction, 1 slot										
	PCIe x16 (Gen2)	16 GB/s per direction, 1 slot										
	Technology	Dual Channel DDR3 @1.5V 1333/1600 MHz SDRAM										
Memory	Max. Capacity	16 GB/8 GB per DIMM										
	Socket	2 x 240-pin DIMM (Non-ECC)										
	Graphics	Controller	Intel HD Graphics									
DVI-I/DVI-D		Up to 1920 x 1200 @ 60Hz refresh rate										
Dual Display		DVI-I+DVI-D										
Interface		10/100/1000 Mbps										
Ethernet	Controller	GbE LAN1:Realtek RTL8111E GbE LAN2:Realtek RTL8111E										
	Connector	RJ-45 x 2										
	SATA	Max Data Transfer Rate	600 / 300 MB/s (SATA 3.0 / SATA 2.0)									
Channel		2 / 1										
Rear I/O	DVI-D/DVI-I	1 / 1										
	Ethernet	2										
	USB	16 (USB 3.0 x 2, USB 2.0 x 14) with separately power switch on all USB 2.0, so USB2.0 can be controlled by GPIO										
	Audio	3 (Mic-In, Line-out, Line-in)										
	Serial	0										
Internal Connector	Serial	10 (10 x RS-232; COM1, 2 support 5V/12V by jumper selection, COM3, 7 support RS-232/422/485 auto flow control)										
	SATA	2 x 600 MB/s (SATA 3.0), 2 x 300 MB/s (SATA 2.0)										
	DVI	-										
	GPIO	8-bit GPIO										
Watchdog Timer	Output	System reset										
	Interval	Programmable 1 ~ 255 sec/min										
Power Requirements		Intel® Core™ i7-4770S CPU @ 3.10GHz + DDR3 8G X2 1600 + SATA H.D.D										
	Power On	5V		+3.3V		12V	-12V		5VSB			
		1.41A		1.14A		4.8A	0.13A		0.42A			
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	244 mm x 244 mm (9.6" x 9.6")										

Block Diagram



Ordering Information

Part Number	PCH	Memory	DVI-I/DVI-D	USB 3.0/2.0	COM	SATA III/ SATA II	LAN	PCIe x 16	PCIe x 1	PCI slot	AMP
AIMB-503G2-YHA1E	H81	Non ECC	1/1	2/14	10	2/2	2	1	1	1	1

*() BOM options available on MP version.

Riser Card

Part Number	Description
AIMB-RR4101-01A1E	1U riser card with 1 PCIe x 4 expansion
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R4301-03A1E	2U riser card for 3 PCIe x 1 abd 2 PCI expansion
AIMB-R431F-21A1E	2U riser card with 1 PCIe x 16 + 2 PCIe x 1 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe x16 + 2 PCI slots expansion

Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	2
17AD14GS0000083V04	DB 9P/M to IDC 10P cable 600mm	2
17AD14GS1400013V04	4 in 1 COM cable 500mm (IDE 40-pin 2.0mm)	2
19Z0001028T000	I/O port bracket	1

I/O View



Optional Accessories

Part Number	Description
1960053207N001	LGA1150 CPU cooler for CPU TDP 65W, 92.9 (W) x 92.9 (L) x 46 (H) mm
1960060732N001	LGA1150 CPU cooler for CPU TDP 45W, 80 (W) x 80 (L) x 32.2 (H) mm
1700000447	1-to-4 serial ports cable kit, 45cm
1701400181	1-to-4 serial ports cable kit, 18cm
17AD14GS1400013V04	4 in 1 COM cable 500mm (IDE 40-pin 2.0mm)

Note: Purchasing AIMB-503's proprietary CPU cooler from Advantech is a must; other brands of CPU coolers are NOT compatible with AIMB-503.

Embedded OS/API

OS/API	Description
WES7	TBD
Software API	TBD