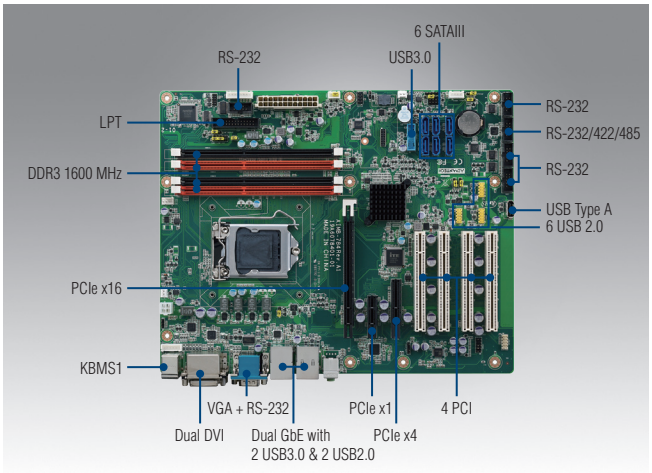
AIMB-784

LGA1150 4th Generation Intel® Core™ i7/i5/i3/Pentium® ATX with DVI/VGA, DDR3, SATA III



Features

- 4th generation Intel® Core™ processor-based platform
- Supports Intel® Core™ i7/i5/i3 processor with Q87 chipset
- Four DIMM sockets support up to 32 GB DDR3 1333/1600
- Supports triple display VGA/2 DVI-D and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, USB 3.0
- Supports Intel vPro, iAMT 9.0 & TPM technologies
- Note: PCA-TPM-00A1E module is required to enable Intel vPro and TPM technologies

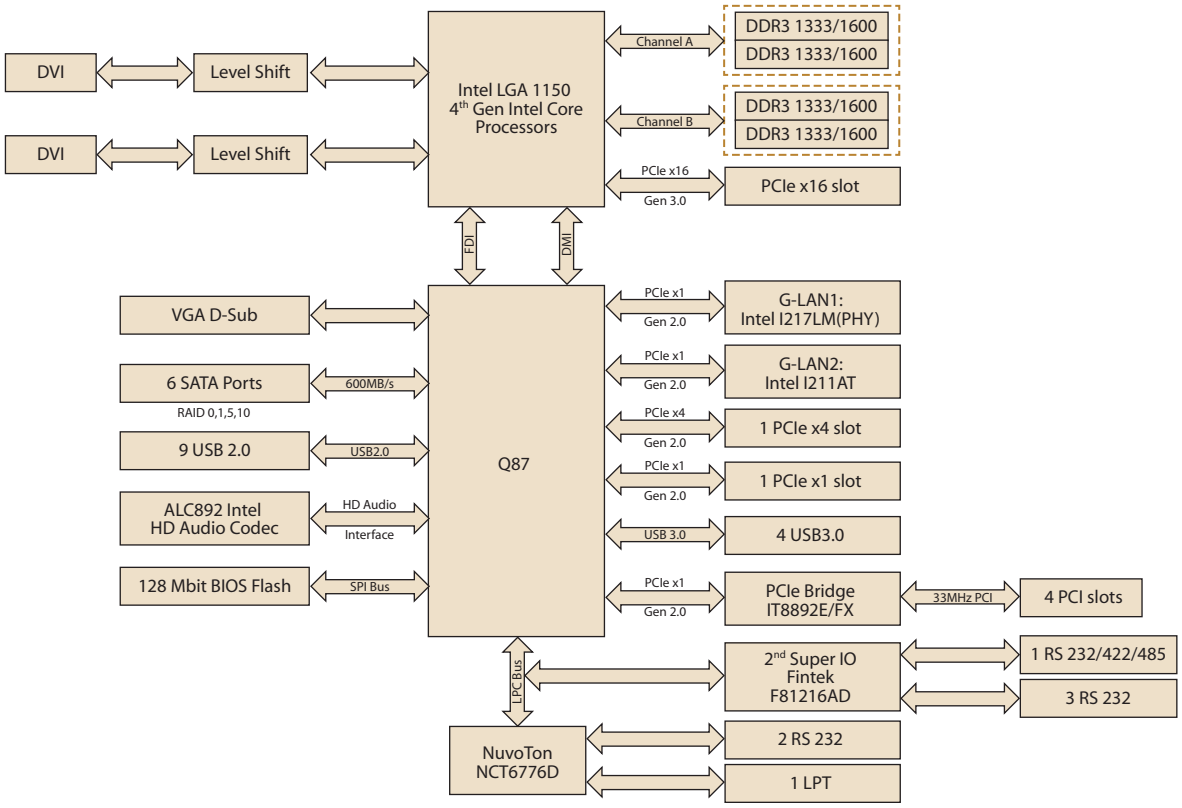
Quiet

Specifications

Processor System	CPU	i7-4790S	i7-4790T	i7-4770S	i7-4770TE	i5-4590S	i5-4590T	i5-4570S	i5-4570TE	i3-4360	i3-4350T	i3-4330	i3-4330TE	G3420	G3320TE	G1820	G1820TE
	Speed	3.2GHz	2.7GHz	3.1GHz	2.3GHz	3.0GHz	2.0GHz	2.9GHz	2.7GHz	3.7GHz	3.1GHz	3.5GHz	2.4GHz	3.2 GHz	2.3 GHz	2.7 GHz	2.2 GHz
	L3 Cache	8MB	8MB	8MB	8MB	6MB	6MB	6MB	4MB	4MB	4MB	4MB	4MB	3MB	3MB	2MB	2MB
	Socket	LGA1150															
	Chipset	Q87															
	BIOS	AMI 128 Mbit SPI															
Expansion Slot	PCI	32-bit/33 MHz, 4 slots															
	PCIe x 1 (Gen2)	500 MB/s per direction, 1 slot															
	PCIe x 4 (Gen2)	2.0 GB/s per direction, 1 slot															
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot															
Memory	Technology	Dual Channel DDR3 1333/1600															
	Max. Capacity	32 GB															
	Socket	4 x 240-pin DIMM															
Graphics	Controller	Intel HD Graphics (Depends on processor)															
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed															
Ethernet	Interface	10/100/1000 Mbps															
	Controller	GbE LAN1: Intel I217LM, GbE LAN2: Intel I211AT															
	Connector	RJ-45 x 2															
SATA	Max Data Transfer Rate	600 MB/s															
	Channel	6															
Rear I/O	VGA	1															
	DVI	2															
	Ethernet	2 (GbE)															
	USB	4 (Two USB 3.0)															
	Audio	2 (Mic-in, Line-out)															
	Serial	1 (RS-232)															
	PS/2	2 (1 x keyboard and 1 x mouse)															
Internal Connectors	USB	9 (Two USB 3.0)															
	Serial	5 (4 x RS-232, 1x RS-232/422/485 with auto-flow control)															
	SATA	6															
	Parallel	1															
	Display Port	-															
	IrDA	-															
	GPIO	-															
Watchdog Timer	Output	System reset															
	Interval	Programmable 1 ~ 255 sec															
Power Requirement	Power On	Intel Core i7-4790S processor; DDR3 8GB x4															
		3.3V		5V			12V			5VSB			-12V				
		1.060		1.554			4.922			0.048			0.044				
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 (L x H)	304.8 x 244 mm (12" x 9.6")															

研伟科技 15323776600

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.0	USB 2.0	COM	GbE LAN	AMT	SATA III	SW RAID
AIMB-784G2-00A1E	Q87	Non-ECC DDR3	VGA + dual DVI	4	9	6	2	Yes	6	Yes

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1700022749-11	SATA power cable	x 2
19Z0000454T000	I/O port bracket	x 1
2006078410	Startup manual	x 1
2066078401	Driver CD	x 1

I/O View

AIMB-784G2-00A1E

Optional Accessories

Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700028292-01	Dual port USB 3.0 Cable with bracket
1960047669N001	CPU cooler for 4U and wallmount chassis
1960047831N001	CPU cooler for 2U and wallmount chassis
1960049408N001	CPU passive heatsink for 1U chassis
1960069682N001	I/O port bracket for 1U chassis
1700020294-01	Printer port cable kit (42 cm)
1701092300	COM port cable kit
PCA-TPM-00A1E	TPM module to enable TPM and vPro technologies

Note: Purchasing AIMB-784's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-784.

Riser Card

Part Number	Description
AIMB-RF10F-01A1E	1U riser card with 1 PCIe x 16 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe x16 & 2 PCI expansion