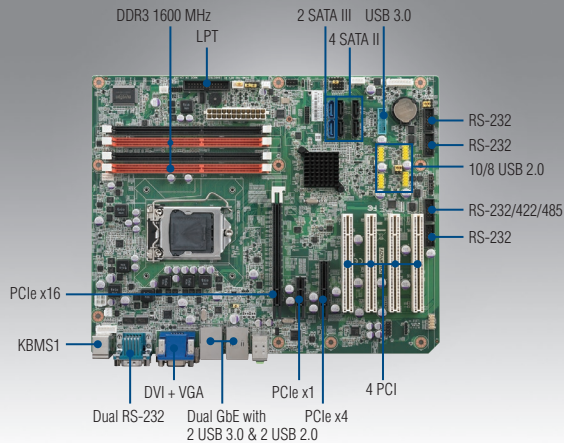


AIMB-782

LGA1155 3rd generation Intel® Core™ i7/i5/i3/
Pentium ATX with DVI/VGA, DDR3, SATA III



Features

- 3rd generation Intel® Core™ processor-based platform
- Supports Intel® Core™ i7/i5/i3/Pentium processor with Q77 chipset
- Four DIMM sockets support up to 32 GB DDR3 1066/1333/1600
- Supports dual display VGA/DVI-D and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, AMT8.0, USB 3.0
- Supports Advantech LPC modules of TPM

Software APIs:



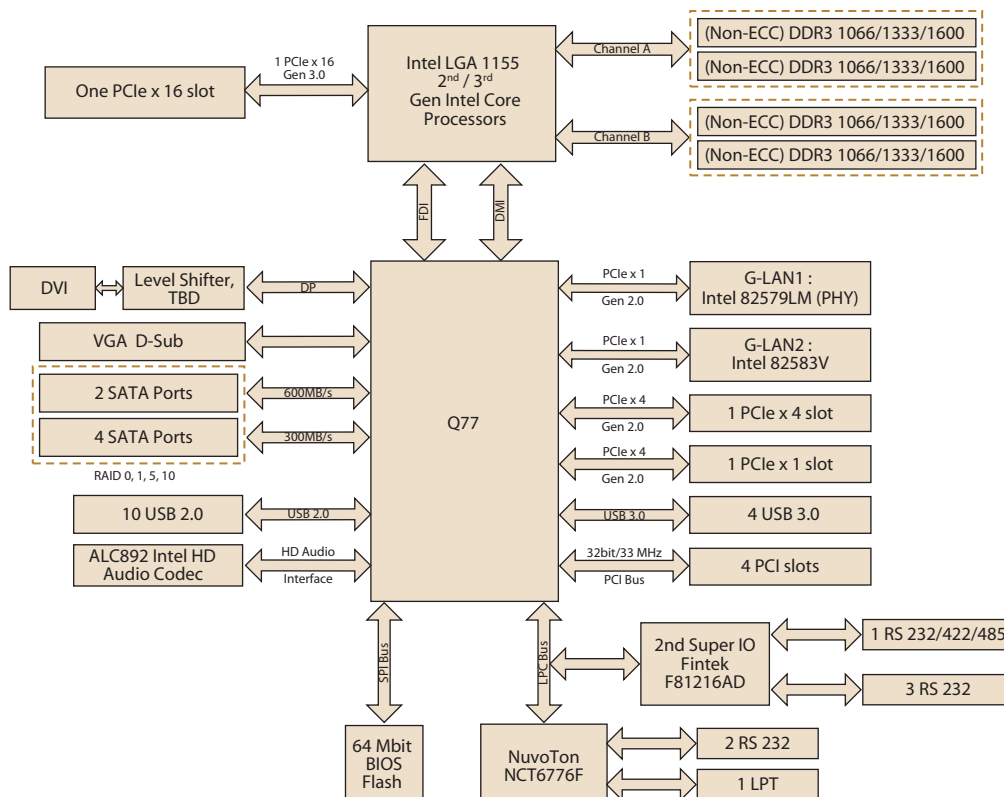
Utilities:



Specifications

Processor System	CPU	Core i7	Core i7	Core i5	Core i5	Core i3	Core i3	Pentium	Pentium	Celeron	
	Speed	3770	2600	3550S	2400	3220	2120	G2120	G850	G540	
	L3 Cache	3.4 GHz	3.4 GHz	3.0 GHz	3.1 GHz	3.3 GHz	3.3 GHz	3.1 GHz	2.9 GHz	2.5 GHz	
	Socket	8 MB	8 MB	6 MB	6 MB	3 MB	3 MB	3 MB	3 MB	2 MB	
	Chipset	LGA1155									
	BIOS	Q77									
Expansion Slot	PCI	AMI 64 Mbit SPI									
	PCIe x 1 (Gen2)	32-bit/33 MHz, 4 slots									
	PCIe x 4 (Gen2)	500 MB/s per direction, 1 slot									
	PCIe x16 (Gen3)	2.0 GB/s per direction, 1 slot									
Memory	Technology	16 GB/s per direction, 1 slot									
	Max. Capacity	Dual Channel DDR3 1066/1333/1600 (1600 only supported by Core i7/i5/i3 3xxx series processors)									
	Socket	32 GB									
Graphics	Controller	4 x 240-pin DIMM									
	VRAM	Intel HD Graphics 2000/2500/3000/4000 (Depends on processor)									
Ethernet	Interface	1 GB maximum shared memory with 2 GB and above system memory installed									
	Controller	10/100/1000 Mbps									
	Connector	GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82583V									
SATA	Max Data Transfer Rate	RJ-45 x 2									
	Channel	600 MB/s									
	Channel	2									
Rear I/O	VGA	4									
	DVI	1									
	Ethernet	2									
	USB	4 (Two USB 3.0)									
	Audio	2 (Mic-in, Line-out)									
	Serial	2 (RS-232)									
	PS/2	2 (1 x keyboard and 1 x mouse)									
Internal Connectors	USB	10 (Two USB 3.0)									
	Serial	4 (3 x RS-232, 1 x RS-232/422/485 with auto-flow control)									
	SATA	6 (SATA II x4 and SATA III x2)									
	Parallel	1									
	IrDA	1									
	GPIO	8-bit									
Watchdog Timer	Output	System reset									
	Interval	Programmable 1 ~ 255 sec									
Power Requirement	Power On	Intel Core i5 3550 3.0 GHz; DDR3 8G x 4									
		3.3 V	5 V	12 V	5 Vsb						
Environment		0.77 A	2.23 A	3.56 A	0.46 A						
	Temperature	Operating						Non-Operating			
Physical Characteristics		0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution						-40 ~ 85° C (-40 ~ 185° F)			
	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 III	SW RAID
AIMB-782QG2-00A1E	Q77	Non-ECC DDR3	VGA + DVI	4	10	6	2	Yes	2	Yes

Riser Card

Part Number	Description
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe x16 & 2 PCI expansion

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1700022749-11	SATA power cable	x 1
1960050472T000	I/O port bracket	x 1
2002078210	Startup manual	x 1
2062078200	Driver CD	x 1

Optional Accessories

Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700020277-01	Dual port USB 3.0 Cable with bracket
1960047669N001	LGA1155/1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA1155/1156 CPU cooler for 2U and wallmount chassis
1960049408N001	LGA1155/1156 CPU cooler for 1U and wallmount chassis
1700008809	Printer port cable kit (25 cm)
1700020294-01	Printer port cable kit (42 cm)
1701092300	COM port cable kit
1960055954T000	I/O port bracket for 1U chassis

Note 1: Purchasing AIMB-782's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-782.

Note 2: 1960049408N001 is design to be used with Advantech 1U chassis and supports up to 73W processor, user needs to conduct thermal test before using this cooler with other brand chassis.

Bracket View



AIMB-782QG2-00A1E