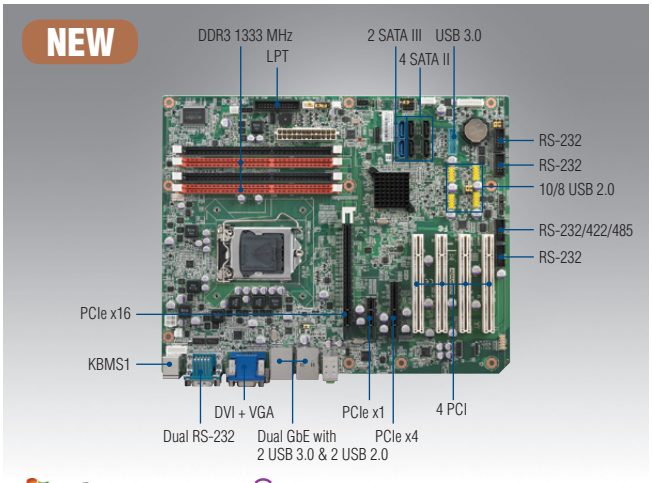
AIMB-782

3rd generation Intel® Core™ processor-based platform



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: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

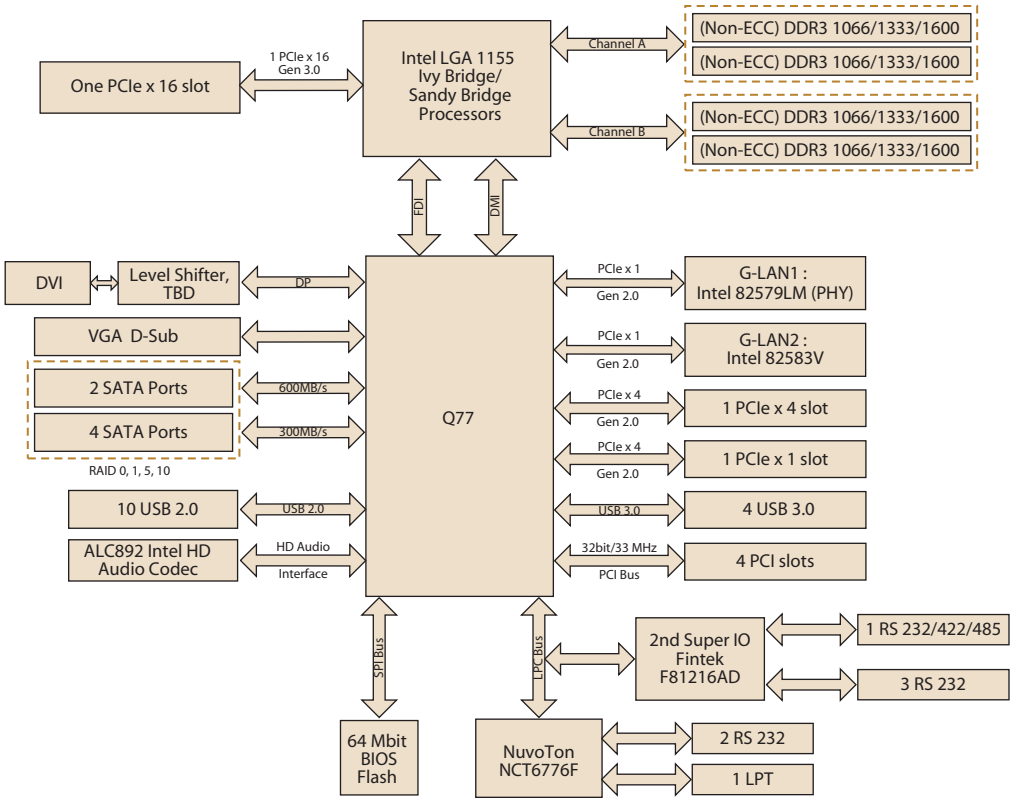
Specifications

Processor System	CPU	Core i7 3xxx/2xxx	Core i5 3xxx/2xxx	Core i3 3xxx /2xxx	
	Speed	3.4 GHz	3.4/3.3 GHz	3.4 GHz	
	L3 Cache	8 MB	6 MB	3 MB	
	Socket	LGA1155			
	Chipset	Q77			
	BIOS	AMI 64 Mbit SPI			
Expansion Slot	PCI	32-bit/33 MHz, 4 slots			
	PCIe x 1 (Gen2)	500MB/s per direction, 1 slot			
	PCIe x 4 (Gen2)	2.0GB/s per direction, 1 slot			
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot			
Memory	Technology	Dual Channel DDR3 1066/1333/1600 (1600 only supported by Core i7/i5/i3 3xxx series processors)			
	Max. Capacity	32 GB			
	Socket	4 x 240-pin DIMM			
Graphics	Controller	Intel HD Graphics 2000/2500/3000/4000 (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 82579LM, GbE LAN2: Intel 82583V			
	Connector	RJ-45 x 2			
SATA	Max Data Transfer Rate	600 MB/s			
	Channel	2			
	Max Data Transfer Rate	300 MB/s			
	Channel	4			
Rear I/O	VGA	1			
	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)			
	IDE	-			
	SATA	6 (SATA II x4 and SATA III x2)			
	Parallel	1			
	IrDA	1			
	DIO	-			
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
		0.77 A	2.23 A	3.56 A	0.46 A
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	304.8 x 244 mm (12" x 9.6")			

All product specifications are subject to change without notice

Last updated : 2-Nov-2012

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.0	USB 2.0	COM	GbE LAN	iAMT	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
1703150102	SATA power cable	x 2
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
1701092300	COM port cable kit
1960055954T000	I/O port bracket for 1U chassis

Note: Purchasing AIMB-782's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-782.
1960049408N001 supports up to 73W processor.

Bracket View



AIMB-782QG2-00A1E