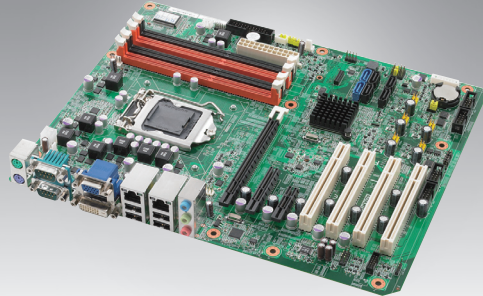


AIMB-781

LGA1155 Core i7/i5/i3 ATX with DVI/VGA,
Dual Gigabit LAN, DDR3, SATAIII/SATAII

Preliminary



Features

- Supports Intel® Core™ i7/i5/i3 processor with Q67/B65 chipset
- Four DIMM sockets support up to 16 GB DDR3 1066/1333
- Supports dual display VGA and DVI and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, AMT7.0, TPM 1.2 (optional)
- Supports embedded software APIs and utilities

Software APIs:



Utilities:



Note: eSOS need ODM BIOS by request

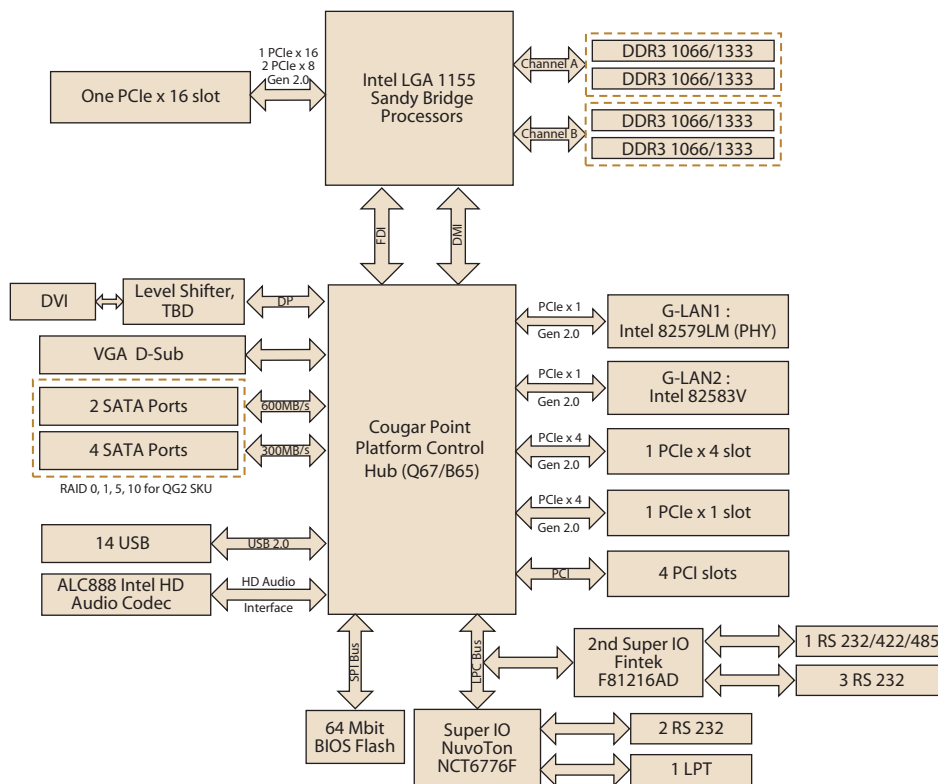


CE FCC

Specifications

Processor System	CPU	Core™ i7 2600	Core™ i5 2400	Core™ i3 2120		
	Speed	3.4 GHz	3.1 GHz	3.3 GHz		
	L3 Cache	8MB	6MB	3MB		
	Socket	LGA1155				
	Chipset	Q67 for QG2 version; B65 for QVG version				
	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 (Gen2)	8 GB/s per direction, 1 slot				
Memory	Technology	Dual Channel DDR3 1066/1333				
	Max. Capacity	16 GB				
	Socket	4 x 240-pin DIMM				
Graphics	Controller	Intel HD Graphics				
	VRAM	TBD				
Ethernet	Interface	10/100/1000 Mbps				
	Controller	GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82583V for QG2 version				
	Connector	RJ-45 x 2 for G2 version				
SATA	Max Data Transfer Rate	600 MB/s				
	Channel	2 for QG2 version; 1 for QVG version				
	Max Data Transfer Rate	300 MB/s				
	Channel	4 for QG2 version; 5 for QVG version				
Rear I/O	VGA	1				
	DVI	1 for QG2 version				
	Ethernet	2 for QG2 version; 1 for QVG version				
	USB	4				
	Audio	2 (Mic-in, Line-out)				
	Serial	2 (RS-232)				
	PS/2	2 (1 x keyboard and 1 x mouse)				
Internal Connectors	USB	10 for QG2 version; 8 for QVG version (USB 2.0 compliant)				
	Serial	4 (3 x RS-232, 1 x RS-232/422/485 with auto flow control)				
	IDE	-				
	SATA	6 (QG2 version: SATA II x4 and SATA III x2; QVG version : SATA II x5 and SATA III x1)				
	Parallel	1				
	IrDA	1				
	DIO	-				
Watchdog Timer	Output	System reset				
	Interval	Programmable 1 ~ 255 sec/min				
Power Requirement	Power On	TBD				
		5 V	3.3 V	12 V	5 Vsb	-12 V
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")				

Board Diagram



Ordering Information

Part Number	Chipset	Memory	USB	GbE LAN	iAMT	SATA III	SW RAID
AIMB-781QG2-00A1E	Q67	Non-ECC	14	2	Yes	2	Yes
AIMB-781QVG-00A1E	B65	Non-ECC	12	1	None	1	None

Riser Card

Part Number	Description
AIMB-R4104-01A1E	1U riser card with 1 PCIe x4 expansion
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R4301-03A1E	2U riser card with 3 PCIe x1 expansion
AIMB-R431F-21A1E	2U riser card with 1 PCIe x16 & 2 PCIe x1 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe x16 & 2 PCI expansion

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x2
1703150102	SATA power cable	x2
1701092300	COM port cable kit	x1
-	I/O port bracket	x1
-	Startup manual	x1
-	Driver CD	x1

Bracket View



Optional Accessories

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960047669N001	LGA1155/1156 CPU cooler for 4U and wallmount chassis
1700008809	Printer port cable kit

Note: Purchasing AIMB-781's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-781.