Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

AIMB-270

Intel® Core™ i7/i5/Celeron uFC-PGA989 Mini-ITX
with CRT/2DVI/LVDS, 6 COM, Dual LAN, PCIe x16
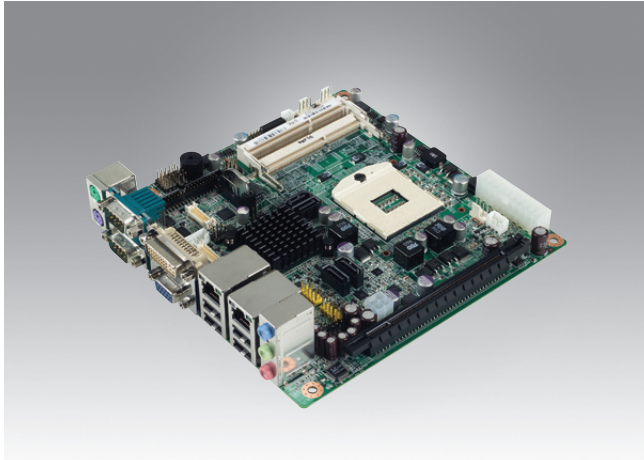
Features

- Supports Intel® Core™ i7 and i5 mobile processor (PGA) with Intel QM57 chipset
- Two 204-pin SO-DIMM up to 8 GB DDR3 800/1066/1333 MHz SDRAM
- Supports dual display of 2 DVI, LVDS, and CRT
- Supports PCIe x16 (Gen 2) and mini PCIe
- Supports, AMT6.0 and software RAID 0, 1, 5, 10
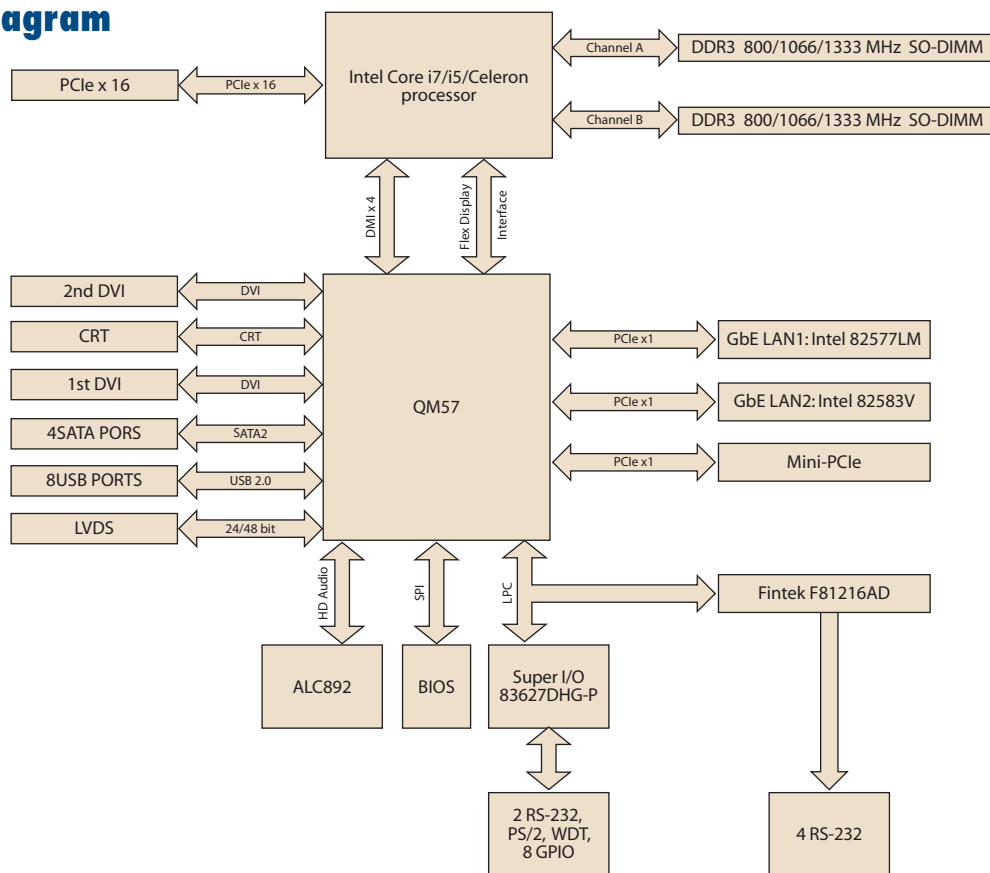- Supports SUSIAccess and Embedded Software APIs

Software APIs: SMBus | H/W Monitor | Watchdog | GPIO | Brightness

Utilities: BIOS flash | Monitoring

Windows Embedded | Linux | QNX | SUSIAccess | RoHS COMPLIANT 2002/95/EC | CE FCC

Specifications

Processor System	CPU	Intel Core i7-620M	Intel Core i5-520M	Intel Celeron		
	Max. Speed	2.66 GHz	2.4 GHz	1.86 GHz		
	DMI/FDI	DMI/FDI				
	L2 Cache	4 MB	3 MB	2 MB		
	Chipset	QM57				
	BIOS	AMI EFI 64 Mbit SPI				
Expansion Slot	PCI	-				
	Mini-PCIe	1				
	PCIe x16 (Gen2)	8 GB/s per direction, 1 slot				
Memory	Technology	Dual Channel DDR3 800/1066/1333 MHz SDRAM				
	Max. Capacity	8 GB/4 GB per SO-DIMM				
	Socket	2 x 204-pin DDR3 SO-DIMM (Non-ECC)				
Graphics	Controller	Integrated Gfx Gen5.75, supports DirectX 10 and OpenGL 2.1				
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed				
	CRT	Supports max. resolution 2048 x 1536				
	LVDS	Supports dual channel 48 bit up to 1920 x 1200				
	1st DVI	Supports max. resolution 1920 x 1200				
	2nd DVI	Internal pin header, supports max. resolution 1920 x 1200				
	Dual Display	CRT+LVDS, CRT+DVI, LVDS+DVI				
Ethernet	Interface	10/100/1000 Mbps				
	Controller	GbE LAN1: Intel 82577LM, LAN2: Intel 82583V				
	Connector	RJ-45 x 2				
SATA	Max Data Transfer Rate	300 MB/s (SATA 2.0)				
	Channel	4				
Rear I/O	CRT	1				
	DVI	1				
	Ethernet	2				
	USB	4 (USB 2.0)				
	Audio	3 (Mic-in, Line-out, Line-in)				
	Serial	2 (RS-232)				
	PS/2	2 (1 x keyboard and 1 x mouse)				
Internal Connector	USB	4 (USB 2.0)				
	LVDS/Inverter	1				
	2nd DVI	1				
	Serial	4 (RS-232)				
	IDE	-				
	SATA	4 (SATA 2.0)				
	Mini-PCIe	1				
	Parallel	-				
	IrDA	-				
	GPIO	8-bit				
Watchdog Timer	Output	System reset				
	Interval	Programmable 1 ~ 255 sec/min				
Power Requirements	Power On	Intel Core i7-620M 2.66 GHz, 4 GB DDR3 1333 MHz SDRAM				
		5 V	3.3 V	12 V	5 Vsb	-12 V
		3.42 A	1.1 A	1.19 A	0.5 A	0.07A
Environment	Temperature	Operating		Non-Operating		
		0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution		-40 ~ 85° C (-40 ~ 185° F)		
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")				

ADVANTECH | **Industrial Motherboards & Systems**

Block Diagram

PCIe x 16	← PCIe x 16 →

Intel Core i7/i5/Celeron processor

Channel A → DDR3 800/1066/1333 MHz SO-DIMM

Channel B → DDR3 800/1066/1333 MHz SO-DIMM

DMI x 4 / Flex Display Interface

QM57

2nd DVI ← DVI →
CRT ← CRT →
1st DVI ← DVI →
4SATA PORS ← SATA2 →
8USB PORTS ← USB 2.0 →
LVDS ← 24/48 bit →

PCIe x1 → GbE LAN1: Intel 82577LM
PCIe x1 → GbE LAN2: Intel 82583V
PCIe x1 → Mini-PCIe

HD Audio / SPI / LPC

ALC892

BIOS

Super I/O 83627DHG-P

Fintek F81216AD

2 RS-232, PS/2, WDT, 8 GPIO

4 RS-232

Ordering Information

Part Number	CRT	2 DVI	GbE LAN	COM
AIMB-270G2-00A1E	Yes	Yes	2	6

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	2
1703150102	SATA power cable	2
1960051292N001	CPU cooler	1
1700008876	1-to-4 serial ports cable kit, 35 cm	1
1960019193T100	I/O port bracket	1
20060270010	Startup manual	1
20660270000	Driver CD	1

I/O View

AIMB-270G2-00A1E

Optional Accessories

Part Number	Description
1700003195	USB cable with two ports, 17.5 cm
1700002204	USB cable with two ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm
1700008822	DVI cable

Optional Chassis

Part Number	Description
AIMB-B2000-15ZE	Mini-ITX chassis with 150W ATX power supply

Embedded OS/API

OS/API	Part No.	Description
Win XPE	2070009655	XPE WES2009 QM57 AIMB-270 V4.0 ENG
	2070009656	XPE WES2009 QM57 AIMB-270 V4.0 MUI24
Software API	205E270001	SUSI 3.0 SW API for AIMB-270 XP