

AIMB-274

Intel® Core™ i7/i5/i3 LGA 1150 Mini-ITX
with VGA/DP/HDMI(DP)/LVDS(eDP), 2COM,
Dual LAN, PCIe x16

Preliminary



iManager susiAccess RoHS COMPLIANT CE FCC

Features

- Supports Intel® Shark Bay desktop processor (LGA1150) with Intel Q87 chipset
- Supports triple display of VGA/DP/HDMI(DP)/LVDS(eDP)
- Supports PCIe x16 (Gen 3) and two mini PCIe
- Supports Intel vPro, AMT 9.0, PECI 3.0, Software RAID 0,1,5,10, TPM 1.2 (optional)
- Supports iManager, SUSIAccess and Embedded Software APIs

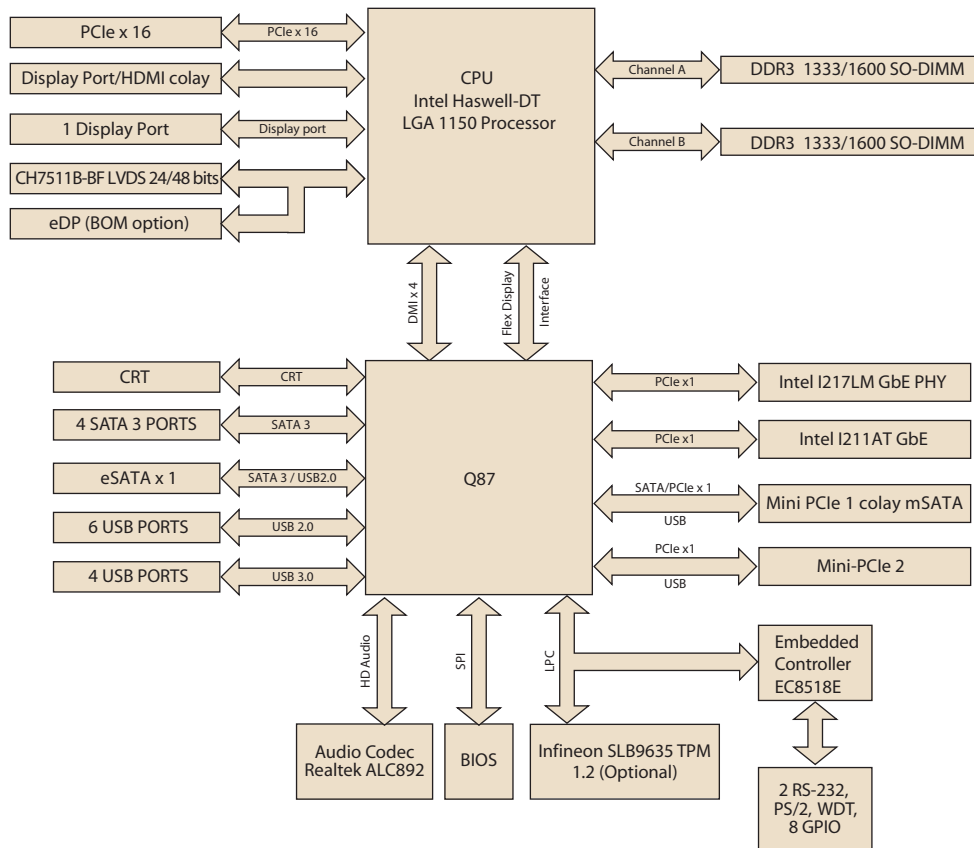
Software APIs:

Utilities:

Specifications

	CPU	E3-1268L V3	i7-4770S	i7-4770TE	i5-4570S	i5-4570TE	i3-4330	i3-4330TE
Processor System	Core Number	4	4	4	4	2	2	2
	Max Speed	2.3GHz	3.1 GHz	2.3 GHz	2.9 GHz	2.7 GHz	TBD	2.4GHz
	L3 Cache	8M	8M	8M	6M	4M	3M	3M
	TDP (W)	45W	65W	45W	65W	35W	65W	35W
	Chipset	Q87	Q87	Q87	Q87	Q87	Q87	Q87
	BIOS	AMI 64Mbit SPI						
Expansion Slot	PCI	-						
	Mini-PCIe	2, F/S x 1 support mSATA, H/S x 1 with SIM card holder						
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot						
Memory	Technology	Dual Channel DDR3 1333/1600 MHz SDRAM						
	Max. Capacity	16 GB						
	Socket	2 x 204 PIN DDR3 SODIMM						
Graphics	Controller	Integrated Gfx Gen 8, supports DirectX11.1, OpenGL 3.2 and OpenCL 1.2						
	VRAM	Shared system memory, 2 GB and above, total system memory shared 1 GB maximum video memory						
	CRT	Yes, supports max. resolution 1920 x 1080 @ 60 MHz						
	LVDS	Single channel 24-bit/dual channel 48-bit LVDS, supports max resolution 1920 x 1200						
	HDMI	Supports HDMI 1.4, 1650 Mbps/channel with 165 MHz						
	Triple Display	VGA+LVDS+HDMI, VGA+LVDS+DP, VGA+DP+HDMI; VGA+DP+DP; VGA+eDP+HDMI, VGA+eDP+DP, LVDS+DP+HDMI, LVDS+DP+DP, eDP+DP+HDMI, eDP+DP+DP						
Ethernet	Interface	10/100/1000 Mbps						
	Controller	GbE LAN1: Intel I217LM; LAN2: Intel I211AT						
	Connector	RJ-45 x 2						
SATA	Max Data Transfer Rate	600 MB/s (SATA 3.0)						
	Channel	4						
Rear I/O	CRT	1						
	HDMI	1, shared with DP by BIOS selection						
	Display Port	1						
	Ethernet	2						
	USB	4 (USB 3.0 compliant)						
	Audio	3 (Mic-in, Line-out, Line-in)						
	Serial	1						
Internal Connector	eSATA	1						
	USB	6 (USB 2.0 compliant)						
	LVDS/inverter	1						
	Serial	1 (RS-232/422/485)						
	IDE	-						
	SATA	4 (SATA 3.0)						
	Mini-PCIe	2						
	Parallel	-						
	IrDA	-						
Watchdog Timer	GPIO	8-bit						
	Output	System reset						
	Interval	Programmable 1 ~ 255 sec/min						
Power Requirements	Power On	Intel Core i7-4770S 3.1GHz, 8GB DDR3 1600 SDRAM						
		+5V	+3.3V	+12V	5VSB			
Environment		1.69A	0.87A	3.71A	0.52A			
	Temperature	Operating 0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution					Non-Operating -20 ~ 70° C (-4 ~ 158° F)	
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")						

Block Diagram



Ordering Information

Part Number	Chipset	DP	CRT	LVDS	HDMI	GbE LAN	COM	TPM	AMP
AIMB-274G2-00A1E	Q87	1	1	1	1	2	2	(1)	(1)

"() : optional"

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	2
1700018785	SATA power cable	2
1700001788	Serial port cable, 30cm	1
1960060539T000	I/O port bracket	1
2006027410	Startup manual	1
2066027400	Driver CD	1

Optional Accessories

Part Number	Description
1703100121	USB cable with two ports, 12 cm
1703100261	USB cable with two ports, 26 cm
1703100350	USB cable with two ports, 34.5 cm
1703060191	KB/MS cable 1*6P-2.0/M-DIN 6P(F)*2, 19cm
1960053207N001	LGA1150 CPU cooler for CPU TDP ≤ 65W, 92.9 (W) x 92.9 (L) x 46 (H) mm
1960060732N001	LGA1150 CPU cooler for CPU TDP ≤ 45W, 80 (W) x 80 (L) x 32.2 (H) mm

I/O View



AIMB-274G2-00A1E

Embedded OS/API

OS/API	Description
WES7	
iManager	iManager 2.0