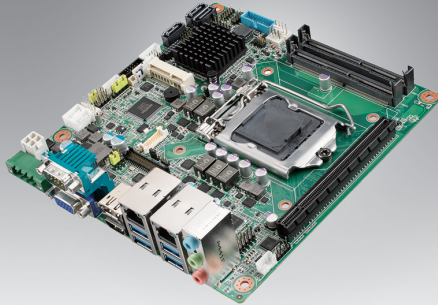


AIMB-275

Intel® Core™ i7/i5/i3 LGA 1151 Mini-ITX with VGA/DP⁺⁺/HDMI/LVDS(eDP), 2 COM, Dual LAN, PCIe x16, M.2, DDR4, DC Input

NEW



Features

- Supports Intel® 6th Gen Core™ i processor (LGA1151) with Intel Q170 chipset
- Two 260-pin SO-DIMM up to 32GB DDR4 2133 MHz SDRAM
- Supports triple display of VGA/DP/HDMI/LVDS(eDP)
- Supports PCIe x16 (Gen 3), 1 F/S miniPCIe 1 M.2 (NGFF), 6 USB 3.0 and 3 SATA III
- Support wide range 12V-24V DC Input
- Supports Intel vPro, AMT 11.0, PECC 3.0, Software RAID 0,1,5,10, TPM 1.2 / 2.0 (optional)
- Supports SUSIAccess and Embedded Software APIs

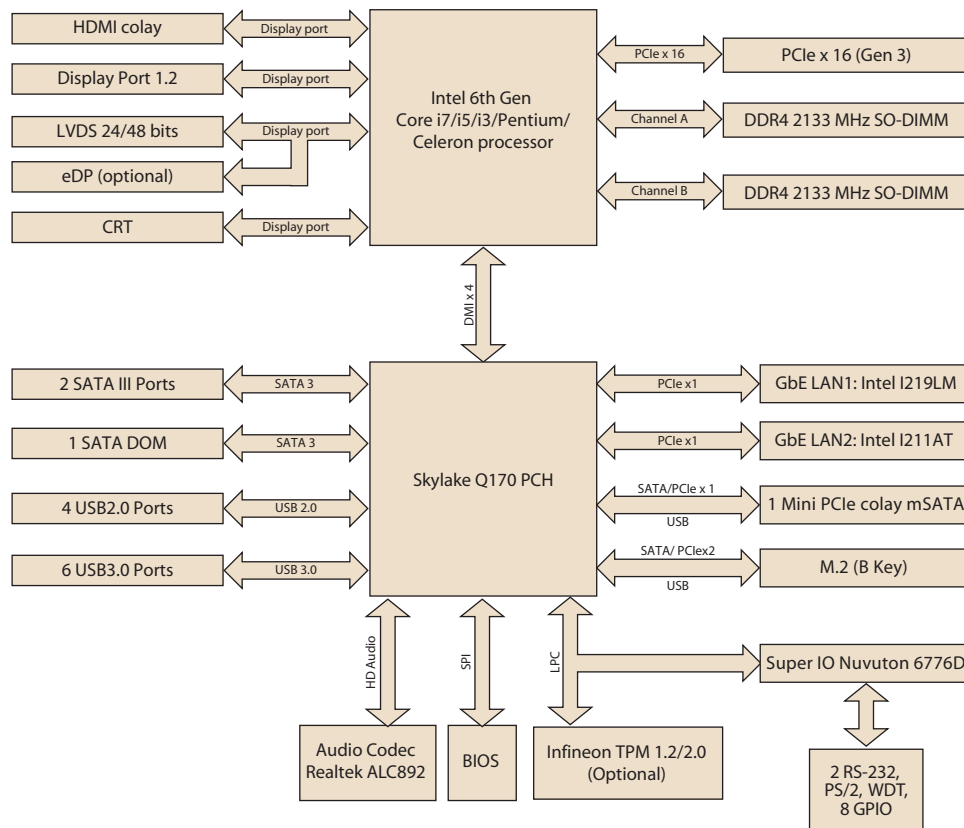
Software APIs:

Utilities:

Specifications

	CPU	i7-6700	i7-6700TE	i5-6500	i5-6500TE	i3-6100	i3-6100TE	Pentium G4400/4400GE	Pentium G3900/3900GE	
Processor System	Core Number	4	4	4	4	2	2	2 / 2	2 / 2	
	Max Speed	3.4GHz	2.4GHz	3.2GHz	2.3GHz	TBD	2.7GHz	3.3GHz / 2.9GHz	2.8GHz / 2.6GHz	
	L3 Cache	8M	8M	6M	6M	4M	4M	3M / 3M	2M / 2M	
	TDP	65W	35W	65W	35W	51W	35W	65W / 35W	65W / 35W	
	Chipset	Q170								
	BIOS	AMI EFI 128 Mbit SPI								
Expansion Slot	M.2	1, B key for SSD and 3G supported (Type: 2242, 2280mm)								
	Mini-PCIe	1, F/S miniPCIe slot (with mSATA supported)								
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot								
Memory	Technology	Dual Channel DDR4 2133 MHz SDRAM								
	Max. Capacity	32GB (up to 16GB per SO-DIMM)								
	Socket	2 x 260 PIN DDR4 SO-DIMM (Non-ECC)								
Graphics	Controller	Supports OpenGL 5.x, DirectX12, OpenCL 2.X								
	VRAM	Shared system memory, 2 GB and above, total system memory shared 1 GB maximum video memory								
	CRT	Yes, supports max. resolution 1920 x 1200 @ 60 Hz								
	LVDS	Supports dual channel 48-bit up to 1920 x 1200								
	HDMI	Yes, supports max. resolution 4096 x 2160 @60 Hz (HDMI 2.0)								
	eDP	Yes, with internal pin header, supports max. resolution 4096 x 2160 @ 60 Hz								
	Display Port 1.2	Yes, supports max. resolution 3840 x 2160 @ 60 Hz								
Triple Display	VGA+HDMI+DP ⁺⁺ , VGA+DP ⁺⁺ +LVDS(eDP), VAG+HDMI+LVDS (eDP), DP ⁺⁺ +HDMI+LVDS (eDP)									
Ethernet	Interface	10/100/1000 Mbps								
	Controller	GbE LAN1: Intel i219LM; LAN2: Intel I211AT								
	Connector	RJ-45 x 2								
SATA	Max Data Transfer Rate	600 MB/s (SATA 3.0)								
	Channel	3 (2 SATAIII, 1 SATA DOM)								
Rear I/O	CRT	1								
	HDMI	1 (HDMI 2.0 or HDMI 1.2)								
	Display Port 1.2	1								
	Ethernet	2								
	USB	4 (USB 3.0)								
	Audio	3 (Mic-in, Line-out, Line-in)								
	Serial	1 (RS-232, supports 5V/12V)								
Phoenix Connector	1									
Internal Connector	USB	6 (2 USB 3.0, 4 USB 2.0)								
	LVDS/inverter	1								
	Serial	1 (RS-232/422/485)								
	IDE	-								
	SATA	3 (SATA 3.0)								
	Mini-PCIe	1 (F/S x1, mSATA supported)								
	M.2	1 (B Key for SSD and 3G supported)								
Watchdog Timer	Output	System reset								
	Interval	Programmable 1 ~ 255 sec/min								
Power Requirements	Input power	12 ~ 24V DC Input								
		TBD								
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	170 mm x 170 mm (6.69" x 6.69")								

Block Diagram



Ordering Information

P/N	Chipset	DP	CRT	LVDS/eDP	HDMI	GbE LAN	COM	M.2	SATA	USB 3.0/2.0	MiniPCIe	TPM	AMP	PClex16
AIMB-275G2-00A1E	Q170	1	1	1 (1)	1 (HDMI 2.0)	2	2	1	3	6/4	1 (F/S)	(1)	(1)	1
AIMB-275VG-00A1E	Q170	1	1	0	1 (HDMI 1.2)	1	2	0	2	4/4	1 (F/S)	0	1	1

*() BOM options available on MP version.

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	2 (G2) / 1 (VG)
1700018785	SATA power cable (1 port, 25cm)	2 (G2) / 1 (VG)
1700100250	Serial port cable	1
TBD	I/O port bracket	1
2006027510	Startup manual	1

Optional Chassis

Part Number	Description
AIMB-B2000-15ZE	Mini-ITX chassis with 150W ATX power supply
AIMB-B2000-00YE	Mini-ITX chassis (Optional external AC-DC 60W/84W Adaptor)

I/O View



Optional Accessories

Part Number	Description
1703100121	USB 2.0 cable with two ports, 12 cm
1703100261	USB 2.0 cable with two ports, 26 cm
TBD	USB 3.0 cable with screw holes (2 ports, 50 cm)
1703060191	KB/MS cable 1*6P-2.0/M-DIN 6P(F)*2, 19cm
1700023768-01	1x4P Phoenix to DC Jack 15cm cable
1700025084-01	ATX 2*10P to 1*3P-2.0 25cm cable
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

Embedded OS/API

OS/API	Part No.	Description
WES7	TBD	
WES8	TBD	