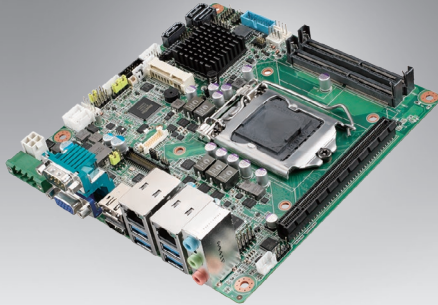


AIMB-275

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



Specifications

Processor System	CPU	E3-1268L v5	i7-6700	i7-6700TE	i5-6500	i5-6500TE
	Core Number	4	4	4	4	4
	Max Speed	2.4G	3.4G	2.4G	3.2G	2.3G
	L3 Cache	8M	8M	8M	6M	6M
	TDP	35W	65W	35W	65W	35W
	Chipset	Q170				
Expansion Slot	BIOS	AMI EFI 128 Mbit SPI				
	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	16 GB/8 GB 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				
Ethernet	Triple Display	VGA+HDMI+DP ⁺⁺ , VGA+DP ⁺⁺ +LVDS(eDP), VAG+HDMI+LVDS (eDP), DP ⁺⁺ +HDMI+LVDS (eDP)				
	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)				
	IrDA	-				
Watchdog Timer	GPIO	8-bit				
	Output	System reset				
Power Requirements	Interval	Programmable 1 ~ 255 sec/min				
	Input power	12 ~ 24V DC Input				
Environment		TBD				
	Operating	Non-Operating				
Physical Characteristics	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution				
	Dimensions	-40 ~ 85° C (-40 ~ 185° F)				
Physical Characteristics		170 mm x 170 mm (6.69" x 6.69")				

Features

- Supports Intel® 6th Gen Core™ i processor (LGA1151) with Intel Q170 chipset
- Two 260-pin SO-DIMM up to 16GB 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, PECI 3.0, Software RAID 0,1,5,10, TPM 1.2 / 2.0 (optional)
- Supports SUSIAccess and Embedded Software APIs

Software APIs:



SMBus



H/W Monitor



Watchdog



GPIO



Brightness

Utilities:

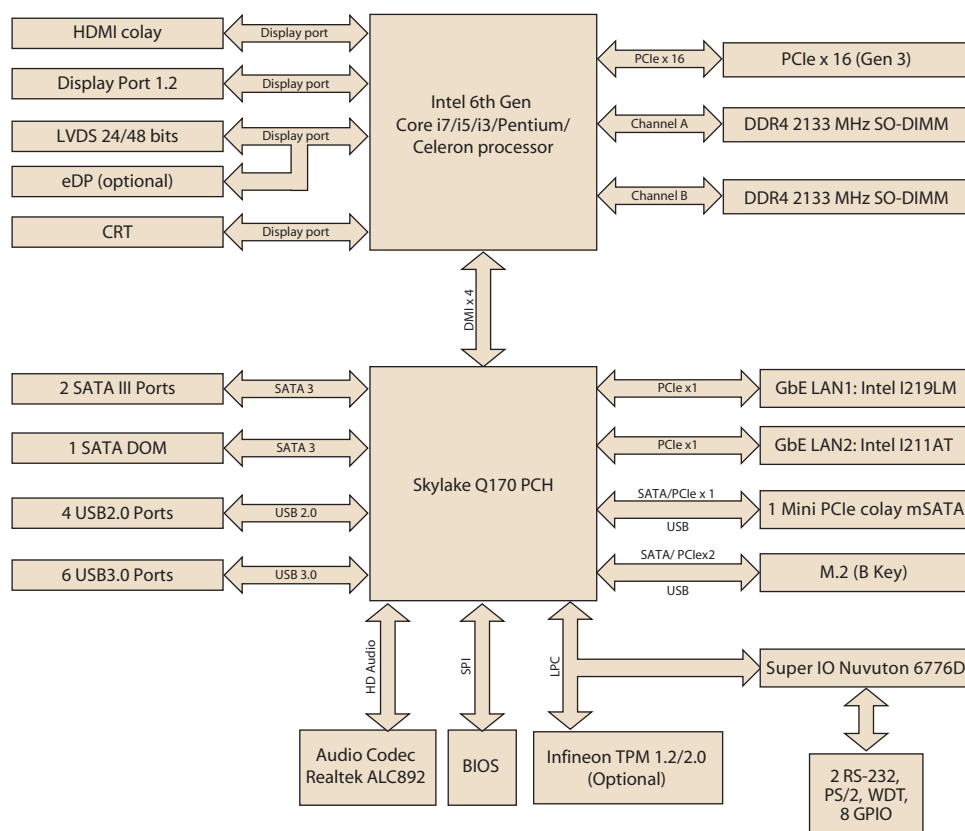


BIOS flash



Monitoring

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-275L-00A1E	Q170	1	0	0	1 (HDMI 1.2)	1	2	0	2	4/4	1 (F/S)	0	0	1

*() BOM options available on MP version.

Packing List

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

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
1700021877-01	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
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	