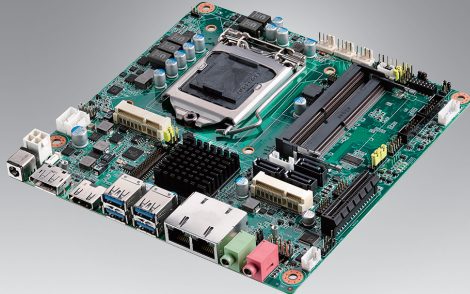


# AIMB-285

Intel® Core™ i7/i5/i3 LGA 1151 Mini-ITX with DP++/HDMI/VGA, 2 COM, Dual LAN, PCIe x4, miniPCle, DDR4, DC Input

NEW



WISE-PaaS/RMM RoHS COMPLIANT CE FCC

## Features

- Supports Intel® 7th & 6th Gen Core™ i processor (LGA1151) with Intel H110 chipset
- Two 260-pin SO-DIMM up to 32GB DDR4 2133 MHz SDRAM
- Supports Dual display of DP/HDMI/VGA
- Supports PCIe x4 (Gen 3), 1 F/S miniPCle and 1 H/S miniPCle
- Support 12V DC Input and low profile height
- Supports 4 USB 3.0, 4 USB 2.0, 3 SATAIII, TPM 1.2 / 2.0 (optional)
- Supports WISE-PaaS/RMM and Embedded Software APIs

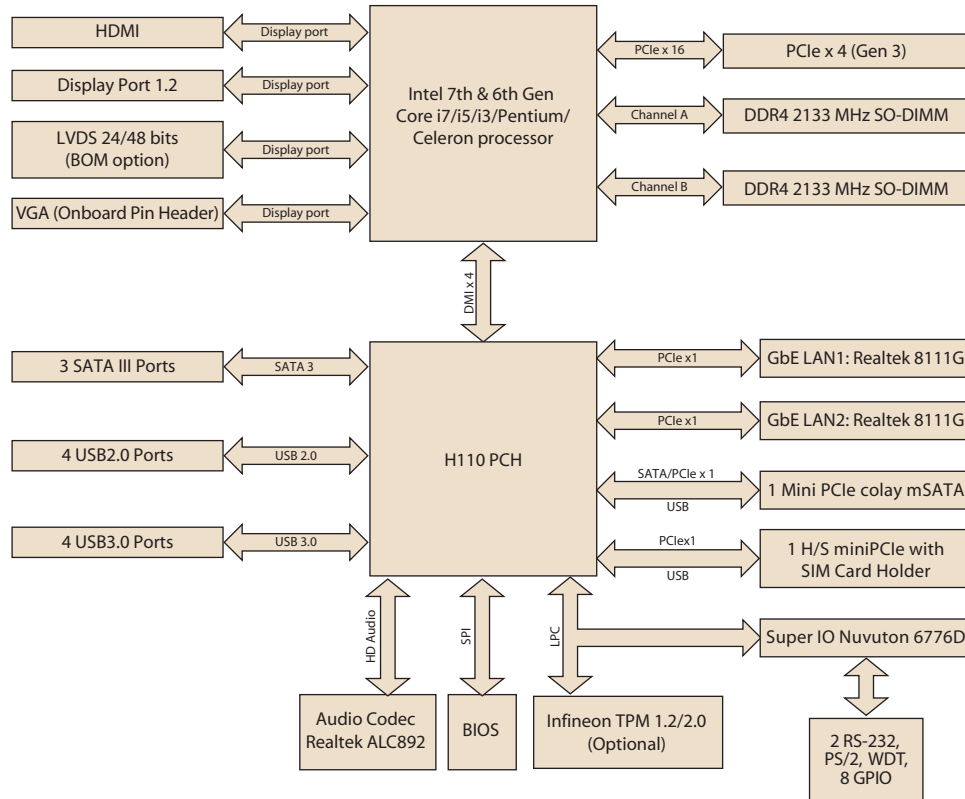
Software APIs: SMBus H/W Monitor Watchdog GPIO Brightness

Utilities: BIOS flash Monitoring

## Specifications

Processor System	CPU	i7-7700/7700T	i7-6700/ i7-6700TE	i5-7500/ i5-7500T	i5-6500/ i5-6500TE	i3-7101/ i3-7101TE	i3-6100/ i3-6100TE	Pentium G4400	Pentium G4400TE	Celeron G3900	Celeron G3900TE	
	Core Number	4/4	4/4	4/4	4/4	2/2	2/2	2	2	2	2	
	Max Speed	3.6GHz/ 2.9GHz	3.4GHz/ 2.4GHz	3.4GHz/ 2.7GHz	3.2GHz/ 2.3GHz	3.9GHz/ 3.4GHz	3.7GHz/ 2.7GHz	3.3G	2.4G	2.8G	2.6G	
	L3 Cache	8M/8M	8M/8M	6M/6M	6M/6M	3M/3M	3M/4M	3M	3M	2M	2M	
	TDP	65W/35W	65W/35W	65W/35W	65W/35W	54W/35W	51W/35W	54W	35W	51W	35W	
	Chipset	H110										
	BIOS	AMI EFI 128 Mbit SPI										
Expansion Slot	Mini-PCle	1 F/S miniPCle slot support mSATA; 1 H/S miniPCle slot with SIM card holder										
	PCIe x4 (Gen3)	4 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										
	VGA	Yes, supports max. resolution 1920 x 1200 @ 60 Hz										
	LVDS	Supports dual channel 48-bit up to 1920 x 1200 (BOM Option)										
	HDMI	Yes, supports max. resolution 4096 x 2160 @ 24 Hz (HDMI 1.4)										
	Display Port 1.2	Yes, supports max. resolution 4096 x 2160 @ 60Hz										
Dual Display	DP+HDMI, DP+VGA, HDMI+VGA, DP+LVDS, HDMI+LVDS, VGA+ LVDS											
Ethernet	Interface	10/100/1000 Mbps										
	Controller	GbE LAN: Realtek 8111G x2										
	Connector	RJ-45 x 2										
SATA	Max Data Transfer Rate	600 MB/s (SATA 3.0)										
	Channel	3 (SATA III)										
Rear I/O	HDMI	1 (HDMI 1.4)										
	Display Port 1.2	1										
	Ethernet	2										
	USB	4 (USB 3.0)										
	Audio	2 (Mac-in, Line-out) (*"Mic-in" could be configured as "Line-in" under Win OS.)										
	DC Jack	1										
Internal Connector	USB	4 (USB 2.0)										
	LVDS/ inverter	1 (bom optional)										
	Serial	2 (one support RS-232/422/485 and one support 5V/12V)										
	SATA	3 (SATA III)										
	Mini-PCle	2 (1 F/S and 1 H/S)										
	GPIO	8-bit										
Watchdog Timer	Output	System reset										
	Interval	Programmable 1 ~ 255 sec/min										
Power Requirements	Input power	12V DC Input										
	Win Idle 8.52W (Intel core i7-6700 3.4GHz / DDR4 2133MHz 16G x 2)											
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	VGA	LVDS	HDMI	GbE LAN	COM	SATA	USB 3.0/2.0	MiniPCIe	TPM	AMP	PCIEx4
AIMB-285G2-00A1E	H110	1	1 (pin header)	(1)	1 (HDMI 1.4)	2	2	3	4/4	2 (1 F/S & 1 H/S)	(1)	(1)	1
AIMB-285L-00A1E	H110	1	0	(1)	1 (HDMI 1.4)	1	1	2	4/0	1(F/S)	(1)	0	0
AIMB-285G2-LVA1E	H110	1	1 (pin header)	1	1 (HDMI 1.4)	2	2	3	4/4	2 (1 F/S & 1 H/S)	(1)	(1)	1

\*( ) BOM options available on MP version.

## Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	1
1700018785	SATA power cable	1
1700100250	Serial port cable (1 port, 25cm)	2
1920001209T000	I/O port bracket	1
2006028510	Startup manual	1

## Optional Chassis

Part Number	Description
AIMB-B2000-00YE	Mini-ITX chassis (Optional external AC-DC 84W/120W Adaptor)
EPC-T2000	Mini-ITX chassis (optional external AC-DC 120W adapter)

## Rear I/O



## Optional Accessories

Part Number	Description
1700026162-01	USB 2.0 cable with two ports, 30 cm with bracket
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 ≤ 35W, 80 (W) x 80 (L) x 32.2 (H) mm
96PSA-A120W12V1	ADP A/D 100-240V 120W 12V C14 DC Plug 180°
1700023082-11	A cable 2*10P-4.2/1 *3P-2.0 15cm
1700025816-01	VGA cable (M cable 2*5P-2.0/D-SUB 15P(F) 35cm)

## Embedded OS/API

OS/API	Part No.	968 P/N	Description
windows 10	2070014483	968QW10LTE	Win10 IoT Enterprise x64 multi-language (SKL-S)
WE8.1	2070014246	968QWE81P1	WE8.1 Industry Pro x64 multi-language (SKL-S)