

AIMB-286EF

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

NEW



WISE-PaaS/RMM 

Features

- Supports Intel® 8th Gen Core™ i processor (LGA1151) with Intel H310 chipset
- One 260-pin SO-DIMM up to 16GB DDR4 2666 MHz SDRAM
- Supports dual display of DP++/HDMI/LVDS (or eDP)
- Supports PCIe x16 (Gen 3), 1 M.2 B key & 1 M.2 E key, 4 USB 3.0 & 4 USB 2.0 and 3 SATA III
- Supports 12V DC Input and low profile height
- Supports TPM 1.2 / 2.0 (optional)
- Supports WISE-PaaS/RMM and Embedded Software APIs

Software APIs:



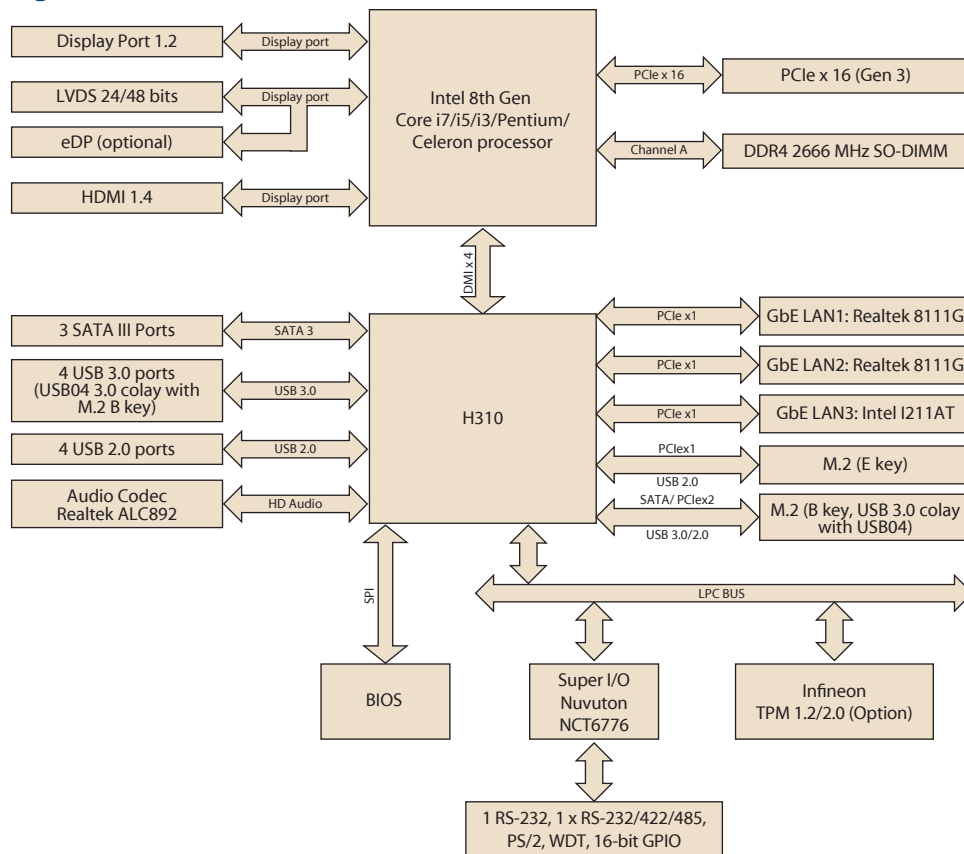
Utilities:



Specifications

	CPU	i7-8700/i7-8700T	i5-8500/i5-8500T	i3-8100/i3-8100T	Pentium G5400/G5400T	Celeron G4900/G4900T	
Processor System	Core Number	6/6	6/6	4/4	2/2	2/2	
	Max Speed	3.2/2.4 GHz	3.0/2.1 GHz	3.6/3.1 GHz	3.7/3.1 GHz	3.1/2.9 GHz	
	SmartCache	12/12 MB	9/9 MB	6/6 MB	4/4 MB	2/2 MB	
	TDP	65/35 W	65/35 W	65/35 W	54/35 W	54/35 W	
	Chipset	H310					
	BIOS	AMI EFI 128 Mbit SPI					
Expansion Slot	M.2	2, 1 x B key for SSD and 3G/4G (Type: 2242, 3042mm); with SIM card holder 1 x E key for wireless (Type: 2230mm)					
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot					
Memory	Technology	Single Channel DDR4 2666 MHz SDRAM					
	Max. Capacity	16GB (up to 16GB per SO-DIMM)					
	Socket	1 x 260 PIN DDR4 SO-DIMM (Non-ECC)					
Graphics	Controller	Intel HD Graphics					
	LVDS	Supports dual channel 24-bit up to 1920 x 1200 (colay with eDP)					
	HDMI 1.4	Yes, supports max. resolution 4096 x 2160 @ 24 Hz					
	eDP	Yes, with internal pin header, supports max. resolution 4096 x 2304 @ 60 Hz (BOM optional)					
	Display Port 1.2	Yes, supports 1 x DP++ with max resolution 4096 x 2304 @ 60 Hz					
Ethernet	Dual Display	DP+HDMI, DP+LVDS (or eDP), HDMI + LVDS (or eDP)					
	Interface	10/100/1000 Mbps					
	Controller	GbE LAN1/2: Realtek 8111G GbE LAN3: Intel i211AT					
SATA	Connector	RJ-45 x 3					
	Max Data Transfer Rate	600 MB/s (SATA 3.0)					
Rear I/O	Channel	3 (SATA III)					
	HDMI	1 (HDMI 1.4)					
	Display Port 1.2	1					
	Ethernet	3					
	USB	4 USB 3.0 (USB04 colay with M.2 B key for USB 3.0)					
	Audio	2 (Mic-in, Line-out)					
Internal Connector	DC Jack	1					
	USB	4 (USB 2.0)					
	LVDS/inverter	1					
	Serial	2 x RS-232 (COM1: RS-232, supports 5V/12V by jumper selection; COM2: RS-232/422/485 w/auto flow control, supports RS-232 by default, RS-422/485 supports by BOM option)					
	SATA	3 (SATA 3.0)					
	M.2	2, 1 x B key for SSD and 3G/4G (M.2 B key USB 3.0 colay with USB04), Type: 2242, 3042mm; 1 x E key for wireless, Type: 2230mm					
	IrDA	-					
Watchdog Timer	GPIO	16-bit					
	Output	System reset					
Power Requirements	Interval	Programmable 1 ~ 255 sec/min					
	Input power	12V DC Input					
Environment	Intel Core i7-8700 3.2GHz, 1pcs 16GB DDR4 2666MHz SDRAM, +12V @ 17.095A						
	Temperature	Operating			Non-Operating		
Physical Characteristics	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution						
	Dimensions	170 mm x 170 mm (6.69" x 6.69")					

Block Diagram



Ordering Information

P/N	Chipset	SO-DIMM	DP	LVDS/eDP	HDMI 1.4	GbE LAN	COM	SATAIII	USB3.0/2.0	M.2 B key	M.2 E key	PCIex16	TPM	AMP
AIMB-286F-EFA1E	H310	1	1	1/(1)	1	3	2	3	4/4	1	1	1	(1)	0

*() BOM options available on MP version.

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	1
1700018785	SATA power cable (1 port, 25cm)	1
1701200220	1-to-2 serial port cable, 22cm	1
1960090424T001	I/O port bracket	1
2046286E00	Startup manual	1
1700023082-11	ATX 2*10P to 1*3P-2.0 25cm cable	1

Optional Accessories

Part Number	Description
1700029428-01	M cable USB-A 4P(F)*2/2*4P-2.0 25cm
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

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)

Embedded OS/API

OS/API	Part No.	968 P/N	Description
Windows 10			

I/O View

