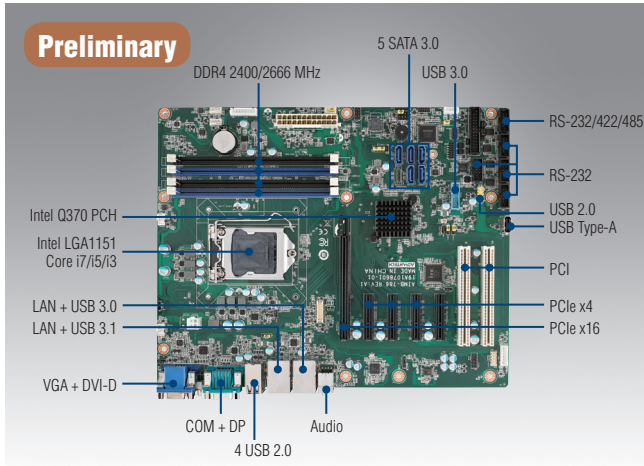


# AIMB-786

## LGA1151 8th Generation Intel® Core™ i7/i5/i3/Pentium®/Celeron® ATX with Triple Display, DDR4, USB 3.1, SATA 3.0



### Features

- Intel® 8th generation Core™ i7/i5/i3/Pentium®/Celeron® processor with Q370 chipset
- Four DIMM sockets up to 64 GB DDR4 2400/2666
- Triple display VGA/DVI-D/DP and dual GbE LAN
- SATA RAID 0, 1, 5, 10, USB 3.1/3.0
- Supports Intel vPro, AMT 11.6 & TPM technologies

Note 1: TPM module is required to enable Intel vPro and TPM technologies.

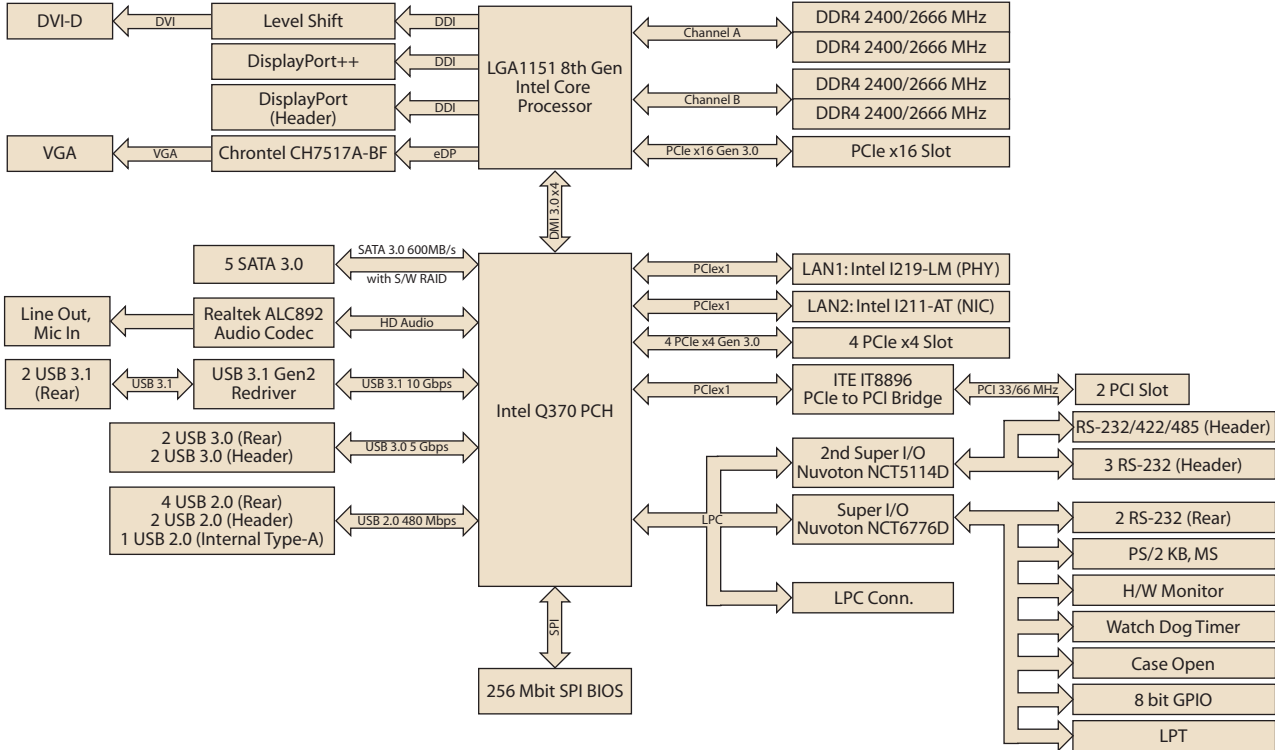
Note 2: Intel 8th generation processors only support Windows 10 (64-bit).

### Quiet Specifications



Processor System	CPU	i7-8700	i7-8700T	i5-8500	i5-8500T	i3-8100	i3-8100T	G5400	G5400T	G4900	G4900T	
	Speed	3.2 GHz	2.4 GHz	3.0 GHz	2.1 GHz	3.6 GHz	3.1 GHz	3.7 GHz	3.1 GHz	3.1 GHz	2.9 GHz	
	L3 Cache	12 MB	12 MB	9 MB	9 MB	6 MB	6 MB	4MB	4 MB	2 MB	2 MB	
	Socket	LGA1151										
	Chipset	Q370										
	BIOS	AMI 256 Mbit SPI										
Expansion Slot	PCI	32-bit/33 MHz, 2 slots										
	PCIe x4 (Gen3)	4 GB/s per direction, 4 slots										
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot										
Memory	Technology	Dual Channel DDR4 2400/2666										
	Max. Capacity	64 GB										
	Socket	4 x 288-pin DIMM										
Graphics	Controller	Intel HD Graphics										
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed										
Ethernet	Interface	10/100/1000 Mbps										
	Controller	GbE LAN1: Intel I219-LM, GbE LAN2: Intel I211-AT										
	Connector	RJ-45 x 2										
SATA	Max Data Transfer Rate	600 MB/s										
	Channel	5										
	RAID	0,1,5,10										
Rear I/O	VGA	1 (Up to 1920 x 1200 @ 60 Hz)										
	DVI-D	1 (Up to 1920 x 1200 @ 60 Hz)										
	DisplayPort	1 (Up to 4096 x 2304 @ 60 Hz)										
	Ethernet	2										
	USB	8 (USB 3.1 x 2, USB 3.0 x 2, USB 2.0 x 4)										
	Audio	2 (Mic-in, Line-out)										
	Serial	1 (RS-232)										
	PS/2	N/A										
Internal Connectors	USB	5 (USB 3.0 with wafer box x 2, USB 2.0 with wafer box x 2, USB 2.0 with type A connector x 1)										
	Serial	5 (4 x RS-232, 1 x RS-232/422/485)										
	SATA	5										
	Parallel	1 (SPP/EPP)										
	DisplayPort	1										
	IrDA	N/A										
	GPIO	8-bit										
	PS/2 KB/Mouse	1 (Optional PS/2 KB/Mouse Cable is required)										
Watchdog Timer	Output	System reset										
	Interval	Programmable 1 ~ 255 sec										
Power Requirement	Power On	Intel Core i7-8700 3.2 GHz; DDR4 2400 16 GB x 4										
	Voltage	+12V	+5V	+3.3V	+5Vsb	-12V	-5V					
	Current	3.77A	1.77A	2.8A	0.1A	0.04A	0.06A					
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 (L x H)	304.8 x 244 mm (12" x 9.6")										

### Block Diagram



### Ordering Information

Part Number	Chipset	Memory	Display	USB 3.1	USB 3.0	USB 2.0	COM	GbE LAN	AMT	SATA 3.0	SW RAID
AIMB-786G2-00A1	Q370	Non-ECC DDR4 2400/2666 up to 64GB	VGA + DVI-D + DP	2	4	7	6	2	Yes	5	Yes

### Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1700022749-11	SATA power cable	x 2
TBD	I/O port bracket	x 1
2001078610	Startup manual	x 1

Note: Driver CD is not provided. Please visit Advantech support website for driver download.

### I/O View



AIMB-786G2-00A1

### Optional Accessories

Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700028292-01	Dual port USB 3.0 Cable with bracket
1960052651N021	CPU Cooler for 2U, 4U and wallmount chassis
1700020294-01	Printer port cable kit (42 cm)
1701092300	COM port cable kit
1700019268-11	PS/2 KB/Mouse Cable
1960063434N000	IO Bracket for PS/2 KB/Mouse Cable
PCA-TPM-00B1E	TPM2.0 module to enable TPM and vPro technologies

Note 1: Purchasing AIMB-786's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-786.

Note 2: AIMB-786 is not compatible with 1U chassis.

### Riser Card

Part Number	Description
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R431F-21A1E	2U riser card with 1 PCIe x16 & 1 PCIe x1 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe x16 & 2 PCI expansion
AIMB-R4301-03A1E	2U riser card with 1 PCIe x1 expansion