

# H610M-IM-A

Micro-ATX, LGA1700 socket for the 13<sup>th</sup>/12<sup>th</sup> Gen CPU, H610 chipset, 2\*U-DIMM, 1\*PCIe x16, 1\*PCIe x4, 2\*PCI, 1\*M.2 Slot, 1\* Mini PCIe, 4\*SATA , 9\*USB, 6\*COM, Triple Display



## Features

- Two U-DIMM up to 64GB DDR4
- Supports 3 displays configuration by multiple interface: VGA/DP/HDMI1/HDMI2
- 7-year longevity supply
- Wide temperature Range: 0~60°C

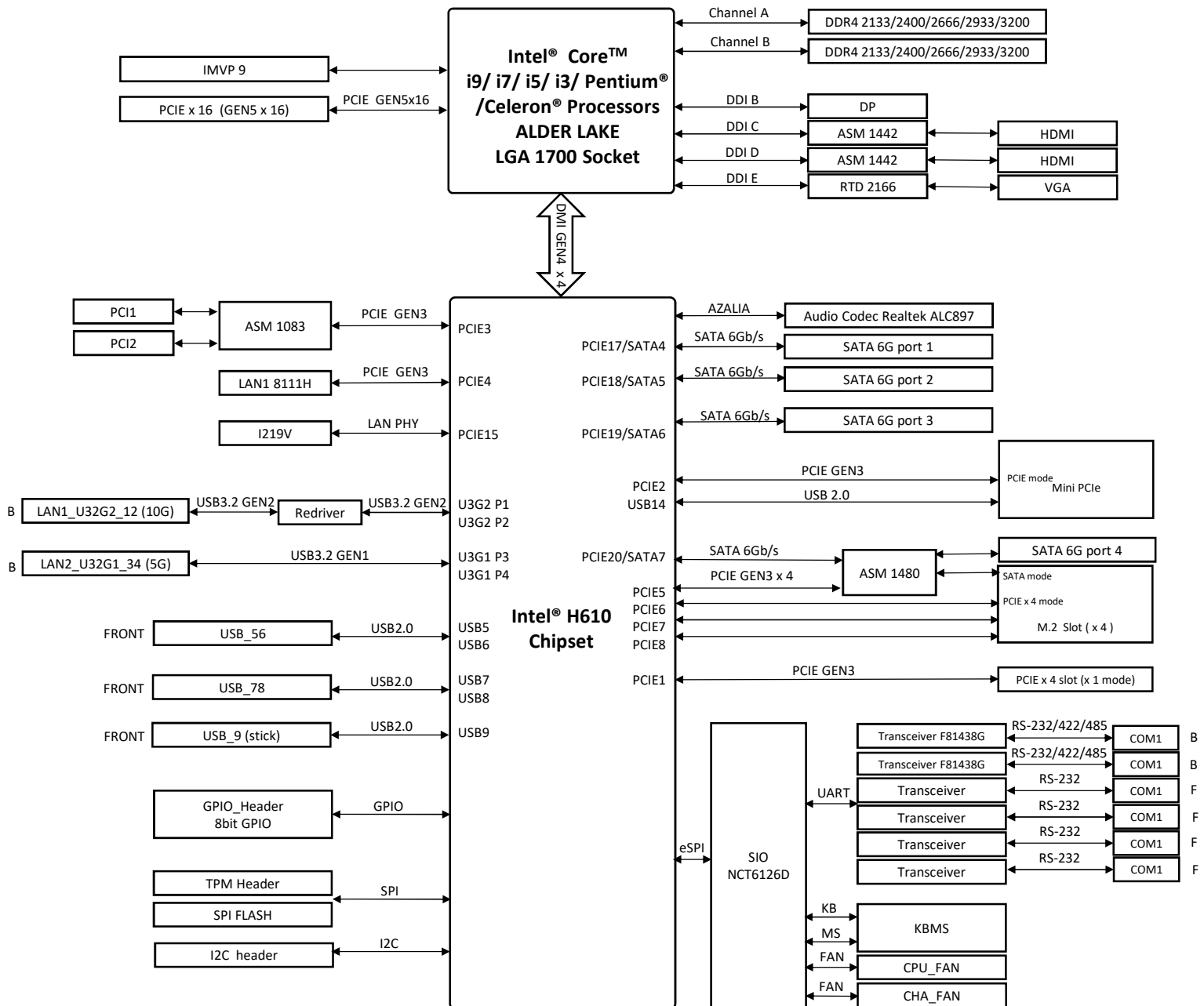
## Specifications

<b>Processor System</b>	CPU	LGA1700 Socket for Intel® Core™ i9/ i7/ i5/ i3/ Pentium® /Celeron® Processors support 13 <sup>th</sup> /12 <sup>th</sup> Gen CPU, Max. 65W TDP
	CHIPSET	Intel® H610 chipset
<b>Memory</b>	Technology	DDR4 2133/2400/2666/2933/3200 MHz
	Max.	64GB
	Socket	2 x U-DIMM
<b>Display</b>	HDMI	2, Supports HDMI 2.1 up to 4096 X 2160 @ 60 Hz
	Display Port	1, Supports 1.4 up to 4096 x 2160 @ 60 Hz
	VGA	1, Supports 1920 x 1200 @60 Hz
	Triple Display	VGA / DP / HDMI1 / HDMI2
<b>Expansion Slot</b>	PCIe x16	1 x PCIe 5.0 x16 slot
	PCIe x4	1 x PCIe 3.0/2.0 x4 slot(x1 speed)
	PCI	2 x PCI slot
	Mini PCIe	1 x full/half mini-PCIe
<b>Ethernet</b>	Speed	10/100/1000Mbps
	Controller	1 x Realtek® 8111H, 1 x Intel® i219V
	Connector	2 x RJ-45
<b>Audio</b>	Codec	Realtek ALC897 High Definition Audio
	Connector	Line-Out, Mic-in
<b>Storage</b>	SATA port	4 x SATA Gen 3.0, up to 6Gb/s *No.4 SATA port shared with M.2
	M.2	1 x M.2 Socket with M key, type 2242/2260/2280(SATA/PCIe x4 mode)
<b>Rear I/O</b>	HDMI	2
	Display Port	1
	VGA	1
	USB3.2 GEN2	2
	USB3.2 GEN1	2
	Ethernet	2
	Serial Port	2(RS232/422/485)
	Audio jack	2
<b>Internal Connector</b>	Serial Port	4 (RS232)
	USB2.0	2x Header Support Additional 4x USB2.0 Connectors, 1x stick socket
	CPU Fan Connector	1 (PWM Mode)
	Chassis Fan Header	1 (PWM Mode)
	Chassis Intruder Header	1
	Front Panel Audio Header (AAFP)	1
	System Panel Header	1 (10-1 Pin)
	Clear CMOS Jumper	1
	Speaker Connector	1 (4-pin)
	GPIO Header	1 (8 Bit)
	AT/ATX Select Header	1
	PS/2(KBMS)	1
	I2C header	1
	Power Connector	1 X 8-pin ATX Power Connector, 1 X 24-pin ATX Power Connector

# Specifications

<b>Watchdog Timer</b>	H/W	YES
<b>Security</b>	TPM	1 x SPI TPM header
<b>Power</b>	Power Type	both ATX/AT mode
<b>Operating System</b>	Microsoft Windows	Windows® 10 (64bit ) / Win10 IoT Enterprise
	Linux	Ubuntu, RedHat Enterprise, Fedora Workstation, OpenSUSE
<b>Environment</b>	Operating Temperature	0~60° C
	Non-Operating Temperature	-40~85° C
	Relative Humidity	10%~95%, non-coagulation
<b>Dimension</b>	Form Factor	Micro-ATX 244X244mm
<b>Certification</b>	Safety	CE, FCC

# Block Diagram



## Order Information

Model name	Part number	Description
H610M-IM-A	90ME04k0*	H610M-IM-A//LGA1700, H610, VGA, DP, HDMI, COM, MB

\* The part number might vary for different regulations and package. Please consult the TPM in your region for exact 90PN.

## Packing List

Part number	Description	Quantity	Remark
13020*	IO shield	1	default
14013*	SATA 6G CABLE	1	default
13020*	M.2 screw pack	2	default
13071*	M.2 HEATSINK	1	Optional

\* The part number might vary due to part number revision