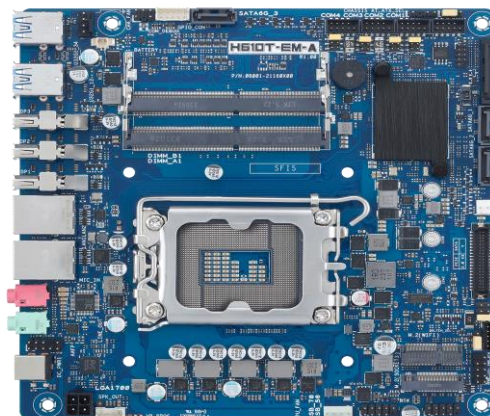


# H610T-EM-A

Thin Mini-ITX, LGA1700 socket for the 12<sup>th</sup> /13<sup>th</sup> /14<sup>th</sup> Gen CPU, H610 chipset, 2\*SO-DIMM, 3\*DP, 1\*eDP, 1\*LVDS, 2\*M.2 slot

## Features

- Support up to 65W Intel® 12<sup>th</sup> /13<sup>th</sup> /14<sup>th</sup> Gen. CPU
- Two SO-DIMM up to 64GB DDR4 3200 MHz
- Supports COM Headers 1 x RS232/422/485, 3 x RS232
- Support 12V & 19V DC-in

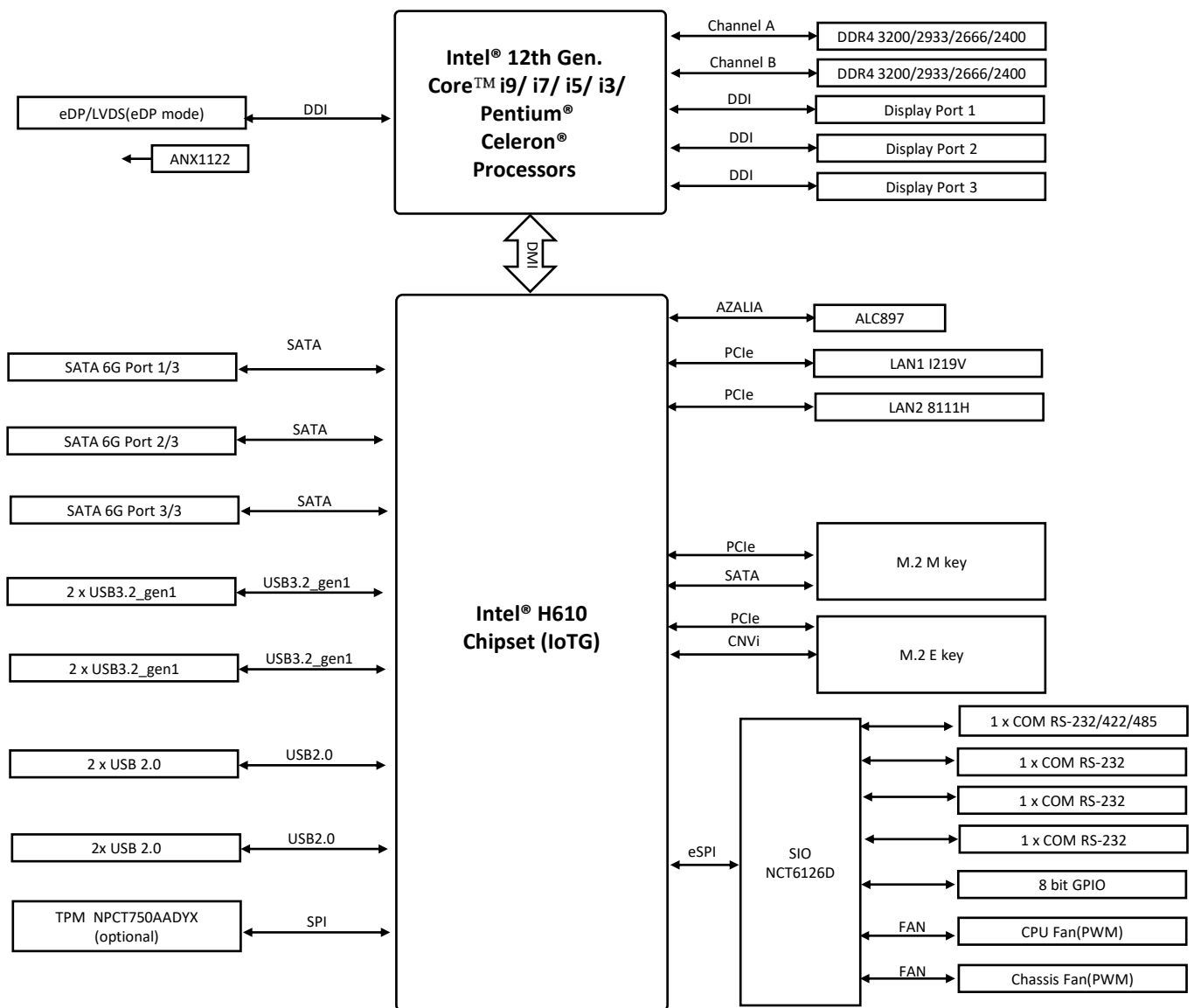


## Specifications

Processor System	CPU	LGA1700 for Intel® 12 <sup>th</sup> /13 <sup>th</sup> /14 <sup>th</sup> Gen. Core™ i9/ i7/ i5/ i3/ Pentium® /Celeron® Processors Max. 65W TDP
	Chipset	Intel® H610 Chipset
Memory	Technology	DDR4
	Max.	2 x 32GB (Total 64GB)
	Socket	2 x SO-DIMM
Display	DP	3
	eDP	1 x eDP (colay LVDS)
Ethernet	Speed	10/100/1000 Mbps
	Connector	2 x RJ-45
	Controller	1 x Realtek 8111H, 1 x Intel® I219V
Audio	Codec	Realtek ALC897
Storage	SATA port	3 port x SATA Gen 3.0, Up to 6Gb/s
Rear I/O	Display Port	3
	USB 3.2 Gen1	4
	Ethernet	2 x RJ45
	Audio Jack	2 (Mic-in, Line-out)
	DC-in Jack	1
Expansion Slot	M.2	1 x M.2 E key, Type 2230 for WIFI/BT device (PCIe & CNVi) 1 x M.2 M key, Type 2242/2260/2280 (PCIe x4 & SATA mode)
Internal Connector	COM Header	4 x COM Header (1 x RS232/422/485, 3 x RS232)
	USB2.0 Header	2 headers for 4 port
	CPU Fan/ Chassis Fan Header	1 (PWM Mode) / 1 (PWM Mode)
	Panel signal connector	1 x eDP
	LCD Panel Monitor Switch Header	1
	Panel VCC Power Selection Jumper	1
	Panel Backlight Enable Signal Selection	1
	Backlight Panel Header	1
	Panel SW Header	1
	System Panel Header	1 x Header (10-1 Pin)
	Power in Connector	1 (DC in)
	Chassis Intrusion Header	1
	Clear CMOS Header	1
	COM Debug Header	1
	GPIO	1 x 8 Bit
	Speaker	1 x Header
	AMP	8Ω/1.5W (Max. 2.0W)
	Buzzer	1
	Front Panel Audio (AAFP)	1

<b>Watchdog Timer</b>	H/W	YES
<b>Security</b>	TPM	SKU1: TPM IC onboard (default) SKU2: Non TPM
<b>Power Type</b>	Power Type	12V & 19V DC-in
<b>OS &amp; Software Support</b>	Microsoft Windows	Windows® 10 (64bit)
	Linux	Ubuntu, RedHat Enterprise, Fedora Workstation, OpenSUSE
	ASUS IoT Suite	<input checked="" type="checkbox"/> HW Monitor <input checked="" type="checkbox"/> Power Scheduling <input checked="" type="checkbox"/> Fan Control <input checked="" type="checkbox"/> Watch Dog Timer <input checked="" type="checkbox"/> GPIO
	User Interfaces	<input checked="" type="checkbox"/> API <input checked="" type="checkbox"/> GUI
<b>Environment</b>	Operating Temperature	0~70° C
	Non-Operating Temperature	-40~85° C
	Relative Humidity	Operational humidity: 40° C@10%~95%
<b>Mechanical</b>	Dimensions	Thin Mini-ITX, 170 x 170 mm
<b>Certification</b>	EMC (CLASS B)	CE, FCC, BSMI, VCCI, RCM
	Safety	CE-LVD

## Block Diagram



## Order Information

Model name	Part number	Description
H610T-EM-A	90ME07C*	LGA1700, H610, DP, HDMI, LVDS

\* 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
13020*	IO shield	2 (1 for Mini ITX; 1 for Thin Mini ITX)
14013*	SATA 6G CABLE	1
13020*	M.2 SCREW PACK	1

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