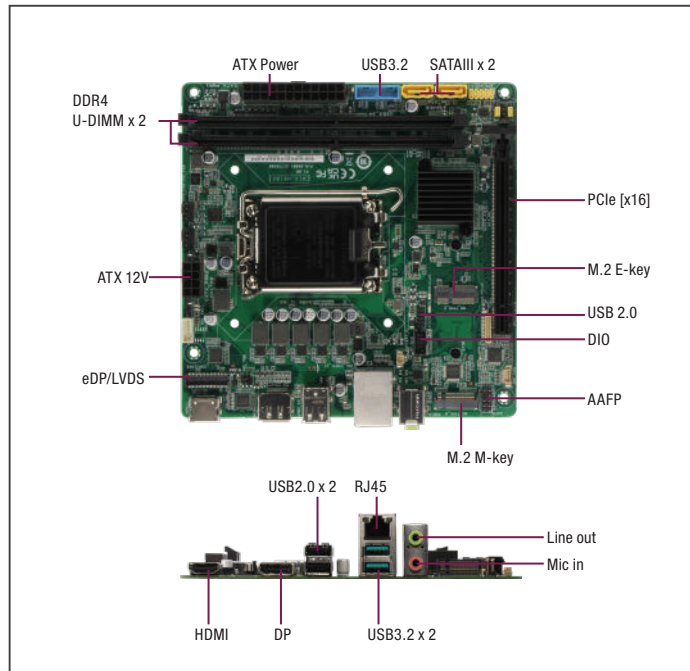


MIX-H610A2

Mini-ITX with 12th/13th/14th Generation Intel® Core™ LGA 1700 Socket Processors, Max. 65W TDP



Specifications

System	
Processor	12th/13th/14th Generation Intel® Core™ LGA1700 Socket Processors
Chipset	Intel® H610E Chipset
Memory	Dual Channel DDR4 3200MHz U-DIMM x 2 (Max. 32GB)
I/O Chipset	NCT5525D
Ethernet	Realtek® RTL8111H x 1
Audio	Realtek® ALC897
TPM	fTPM
Expansion Slots	M.2 2230 E-Key x 1 (PCIe [x1], USB 2.0) PCIe Gen 5 [x16] x 1
BIOS	256Mbit Flash ROM, AMI BIOS
H/W Monitor	Temperature Monitor on CPU/System, Voltage Monitor on Vcore/5V/3.3V/12V, Fan Monitor on Chassis
WatchDog Timer	1~255 steps by software program
Smart Fan Control	CPU Fan/Chassis Fan
Wake On LAN/ PXE	Yes (WOL / PXE)
Power State	S3, S4, S5
Graphics	
Graphics Chipset	Intel® UHD Graphics
Graphics Multi Display	Triple Independent Display
VGA	—
DVI	—
HDMI	HDMI 1.4, Up to 4096 x 2160 @30Hz/2560 x 1600 @60Hz, with Digital Audio
Display Port	DP 1.4a, up to 4096 x 2160 @60Hz
LVDS	Dual-Channel 18/24 bit, up to 1920 x 1080 @60Hz
eDP	Up to 4096 x 2340 @60Hz
Backlight Control	PWM
Environment & Power & ME	
Battery	Lithium battery
Power Requirement	ATX Voltage/Current(A) requirement: +3.3V/1.45A; +5V/7.63A; +12V/18.08A; +5VS B/O.24A
Operating Temperature	32°F ~ 140°F (0 ~ 60°C) (Operational humidity: 60°C @ 90% RH Non-Condensing)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Certificate	CE & FCC (Class A)
Form Factor	Mini-ITX: 6.7" x 6.7" (170mm x 170mm)
Weight	1.1 lb. (0.5Kg)
MTBF (Hours)	422,390
Rear Panel I/O Ports	
USB	USB 3.2 Gen 2 x 2 + USB 2.0 x 2

Features

- 12th/13th/14th Generation Intel® Core™ LGA1700 Socket Processor
- Dual Channel DDR4 Support, 3200MHz, Max. 32GB
- HDMI 1.4 x 1 + DP 1.4 x 1
- M.2 2280 M-Key x 1, M.2 2230 E-Key x 1
- USB 3.2 Gen 2 Port x 2, USB 2.0 Port x 2
- Realtek RTL8111H Ethernet x 1
- SATA 6Gb/s x 2
- PCIe [x16] slot x 1
- ATX power



Display I/O	HDMI 1.4 x 1, DP 1.4 x 1
Audio I/O	Line-out x 1, MIC-in x 1
LAN I/O	RJ-45 LAN Port x1
Serial Port	—
PS/2 Port	—
Others	—

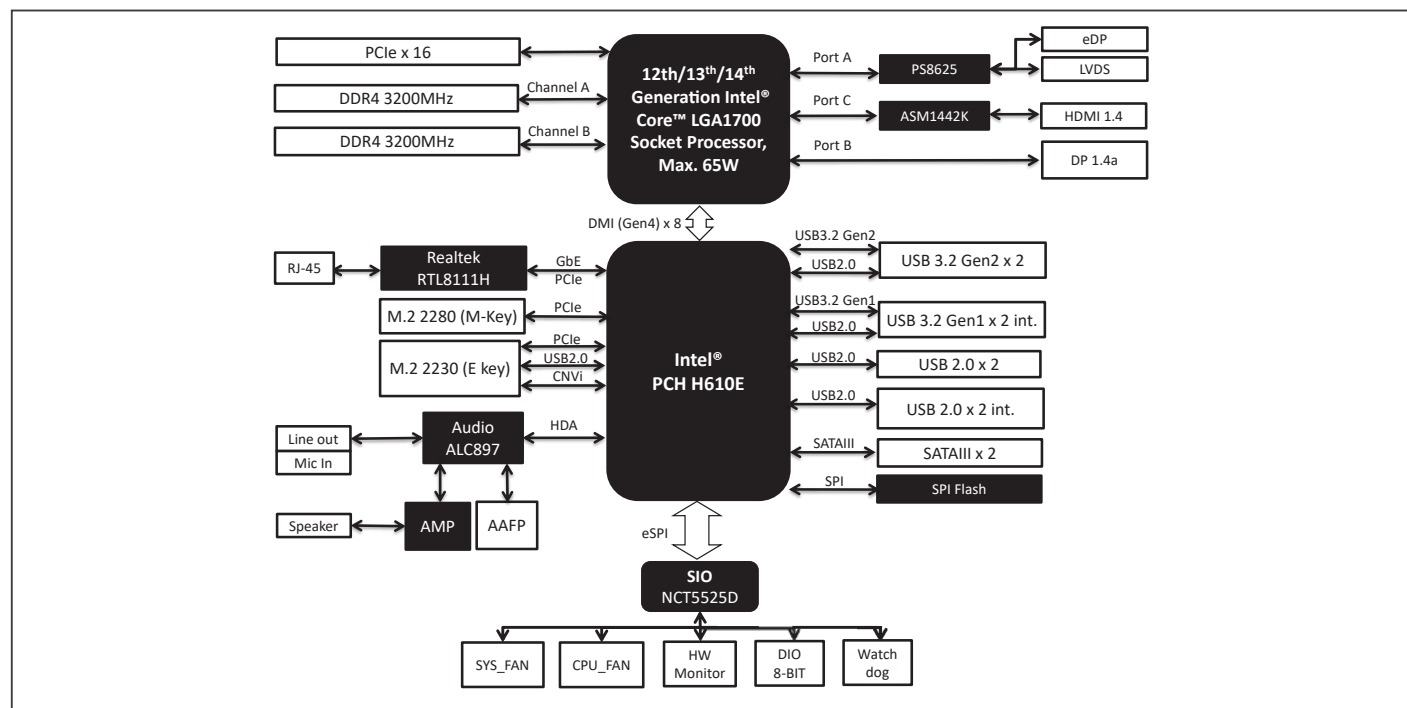
Internal I/O Connectors	
Storage	SATA 6Gb/s x 2 M.2 2280 M-Key x 1 (PCIe [x4]/NVMe)
USB	USB 2.0 x 2 via Pin Header x 1 USB 3.2 Gen 1 x 2 via Box Header x 1
Display I/O	40-pin LVDS/eDP Connector x 1 (Default: LVDS)
Audio I/O	HD Audio x 1 via Pin Header
Serial Port	—
PS/2 Port	—
Parallel Port	—
DIO	8-bit programmable (4-in/4-out) x 1
FAN	4-pin Chassis Fan connector x 1 4-pin CPU Fan connector x 1
Power	ATX
Others	Clear CMOS jumper x 1, Front Panel connector x 1, ATX/AT mode select x 1, ME disable x 1, eDP/LVDS Tcon IC voltage select x 1, Backlight Voltage Select x 1
OS	
OS Support	Windows® 10 64-bit, Windows® 11 64-bit

Packing List

- MIX-H610A2
- I/O Shield
- SATA Cable

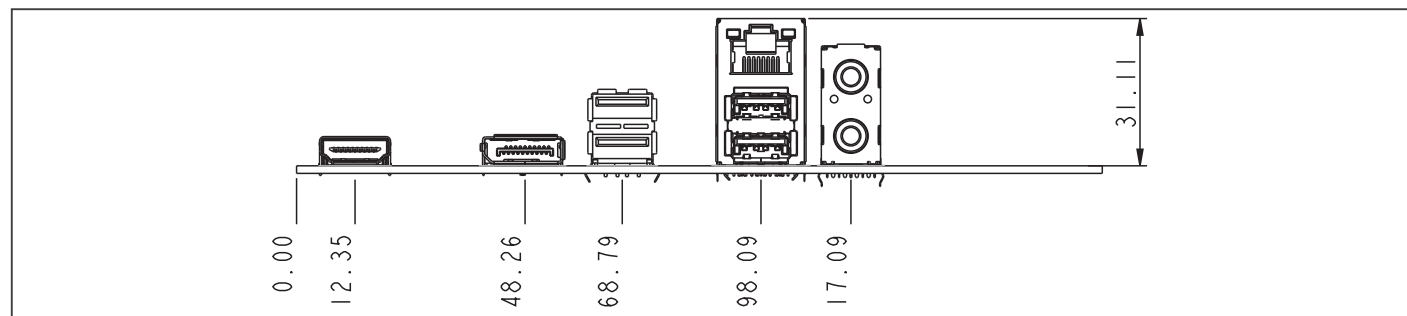


Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	CPU	RAM	Fan/Fanless	Display	LVDS/eDP	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	TPM	Temp.
MIX-H610A2-A10	Socket	U-DIMM x 2	Fan	HDMI x 1, DP x 1	1	SATA 6Gb/s x 2, M.2 M-Key	GbE x 1	USB 2.0 x 2, USB 3.2 x 2	—	—	M.2 E-Key x 1, PCIe [x16] x 1	ATX	1TPM	0~60°C

Optional Accessories

Part Number	Description
1701100206	COM Cable (200MM, p=2.00mm)
AP-FNTH11700020	(TF).1U CPU cooler for LGA1700,TDP up to 125W.12V.5400RPM.Smart FAN.90*90*25mm.Ablecom.ACL-D11122
AP-FNTH11700030	(TF).2U CPU cooler for LGA1700,TDP up to 125W.12V.8400RPM.Smart FAN.95*95*63.5mm.Ablecom.ACL-D21120
AP-FNTH11700010	(TF).2U CPU cooler for LGA1700,TDP up to 95W.12V.2500RPM.Smart FAN.91*91.Ablecom.ACL-S41120