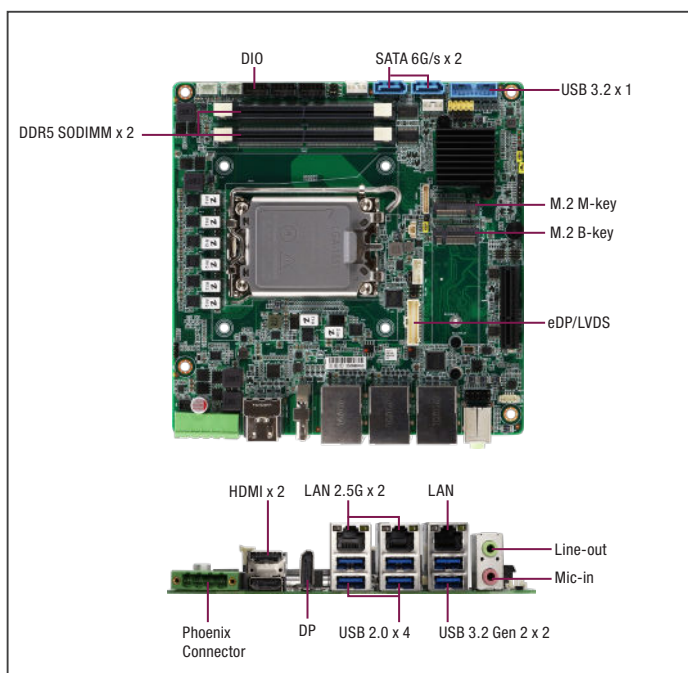


MIX-H810WV1 PRELIMINARY

Mini-ITX with Intel® Core™ Ultra 200S Series Processors



Specifications

System	
Processor	Intel® Core™ Ultra 200S Series Processors, 65W, LGA1851 socket; up to 24C (8+16) 24T
Chipset	Intel® H810 Chipset
Memory	SODIMM/CSODIMM x 2, Dual Channel DDR5 up to 6400 MHz, Max 96GB
I/O Chipset	Nuvoton NCT6126D
Ethernet	Intel® Ethernet Controller I226-V, 2.5GbE x 2 Intel® Ethernet Controller I210-AT, 1GbE x 1
Audio	Realtek® ALC897
TPM	Infineon SLB9672 TPM2.0 onboard (BOM option; default: no)
Expansion Slots	PCIe Gen 5 [x4] x 1 (close edge) M.2 3042/52 B-Key x 1 (PCIe [x1] with SIM socket or SATA x 1 optional by BOM)
BIOS	256Mbit Flash ROM
H/W Monitor	Temperature Monitor on CPU/System, Voltage Monitor on Vcore/5V, 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® Graphics
Graphics Multi Display	Triple Independent Display
VGA	—
DVI	—
HDMI	Up to 4096 x 2160 @60Hz with Digital Audio
Display Port	Up to 4096 x 2160 @60Hz
LVDS	Up to 1920 x 1080 @60Hz, Dual Channel 18/24 bit co-layout eDP (default LVDS)
eDP	Up to 1920 x 1080 @60Hz (co-layout LVDS)
Backlight Control	Voltage/PWM
Environment & Power & ME	
Battery	Lithium battery
Power Requirement	19V ~ 24V (±5%)
Operating Temperature	32°F ~ 140°F (0°C ~ 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 (0.5 Kg)
MTBF (Hours)	—

Features

- Intel® Core™ Ultra 200S Series
- DDR5 up to 6400MHz
- PCIe [x4] x 1, M.2 3042/52 B-key x 1
- USB 2.0 x 6, USB 3.2 Gen 1 x 2, USB 3.2 Gen 2 x 2
- SATA 6Gb/s x 2
- HDMI 2.0 x 2, DP 1.4 x 1
- Intel® Ethernet Controller I226-V, 2.5GbE x 2
- DC-in 19V ~ 24V
- Supports OOB function by BOM option



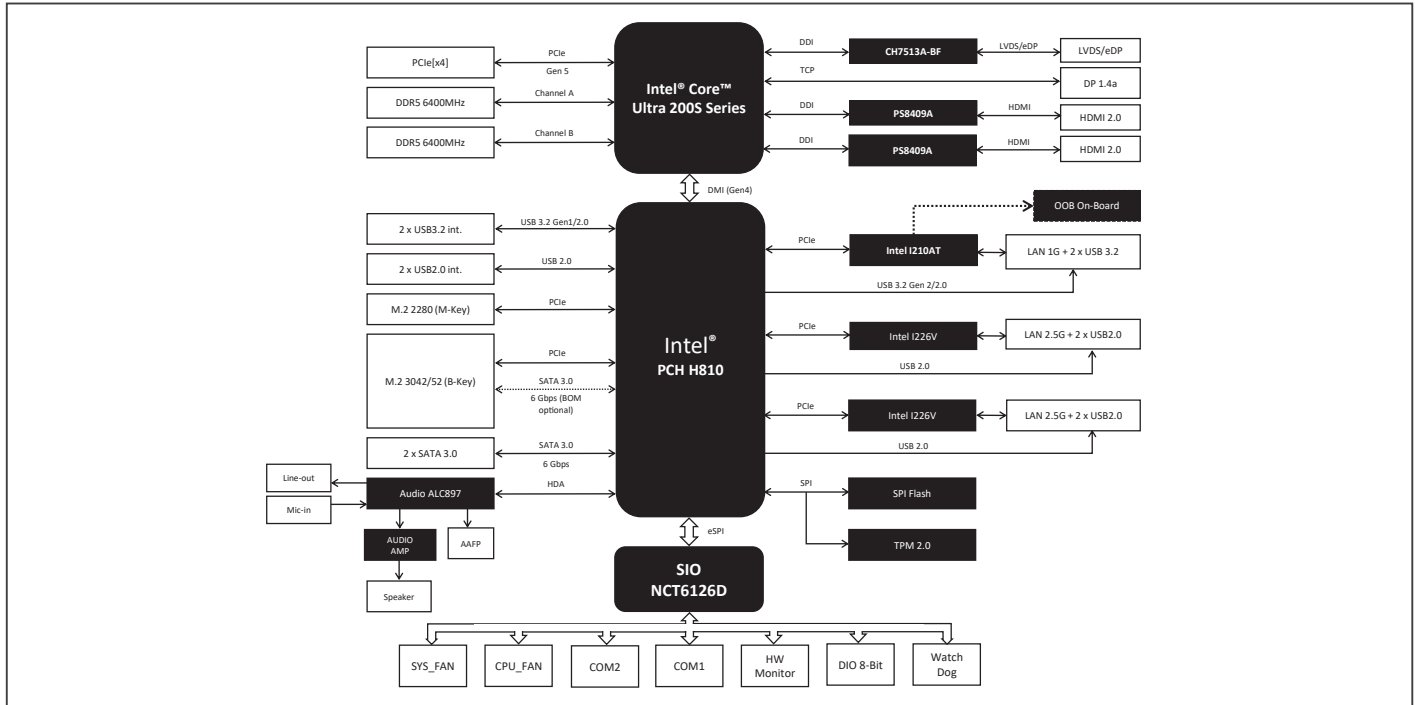
Rear Panel I/O Ports	
USB	USB 3.2 Gen 2 x 2, USB 2.0 x 4
Display I/O	HDMI 2.0 x 2, DP 1.4 x 1
Audio I/O	Line-out x 1 + Mic-in x 1
LAN I/O	RJ-45 LAN x 3
Serial Port	—
PS/2 Port	—
Others	19V ~ 24V Phoenix Connector
Internal I/O Connectors	
Storage	SATA 6Gb/s x 2 with SATA Power Connector x 2 (1A) M.2 2280 M-Key x 1 (PCIe [x4]/NVMe Gen 3)
USB	USB 3.2 Gen 1 x 1 (via 2 x 10-pin header) USB 2.0 x 1 (via 2 x 5-pin header)
Display I/O	40-pin LVDS/eDP Connector x 1 with Inverter (Default LVDS)
Audio I/O	HD Audio using AAFP x 1, Speaker header x 1
Serial Port	RS-232/422/485 x 2 (supports 5V/12V/RI option) + RS-232 x 2
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	Phoenix Connector x 1
Others	Clear CMOS Jumper x 1 Front Panel Connector x 1 Chassis Intrusion x 1 Buzzer Onboard x 1 ATX/AT Mode Select x 1 ME Disable x 1 eDP/LVDS Tcon IC Voltage Select x 1 eDP/LVDS Panel Backlight Voltage Select x 1 SATA Power x 2 LVDS Inverter x 1 (5V/3.3V) SIM Socket x 1
OS	
OS Support	Windows 10/11 64 bit; Linux Ubuntu 22.04

Packing List

- MIX-H810WV1
- I/O Shield
- SATA Cable
- SATA Power Cable

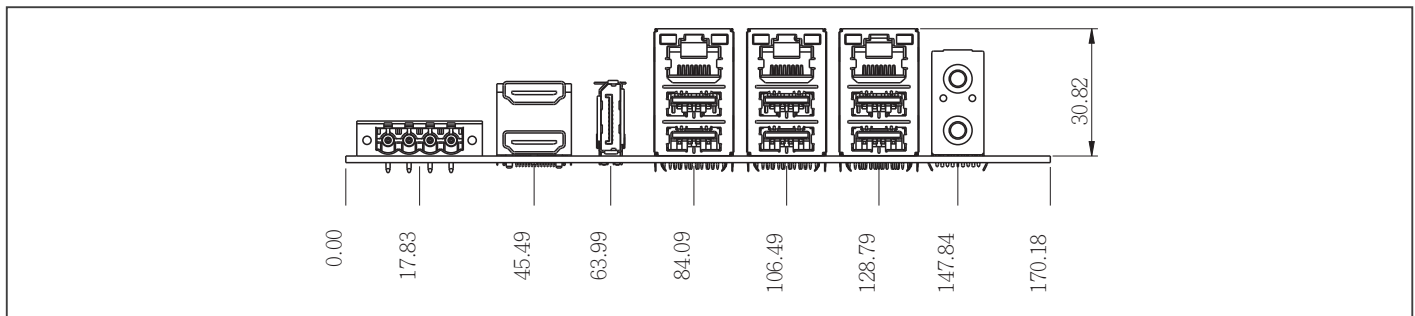


Block Diagram



Dimension

Unit: mm



Ordering Information

Part number	CPU	RAM	Fan/Fanless	Display	LVDS/eDP	Storage	LAN	USB	RS-232/422/485	RS-232	Expansion Slot	Power	TPM	Temp.	Note
MIX-H810WV1-A10-2L	Intel® Core™ Ultra 200S Series	SODIMM/CSODIMM x 2	Fan	HDMI 2.0 x 2, DP 1.4 x 1	LVDS/eDP x 1	SATA 6.0Gb/s x 2, M.2-1A M key x 1	i226V x 2	USB 3.2 x 4, USB 2.0 x 6	RS-232 x 2	RS-232/422/485 x 2	PCIe[x4] x 1, B-key x 1	DC-in 19V~24V	TPM2.0	0°C ~60°C	—
MIX-H810WV1-A10-3LO	Intel® Core™ Ultra 200S Series	SODIMM/CSODIMM x 2	Fan	HDMI 2.0 x 2, DP 1.4 x 1	LVDS/eDP x 1	SATA 6.0Gb/s x 2, M.2-1A M key x 1	i226V x 2 + i210AT x 1	USB 3.2 x 4, USB 2.0 x 6	RS-232 x 2	RS-232/422/485 x 2	PCIe[x4] x 1, B-key x 1	DC-in 19V~24V	TPM2.0	0°C ~60°C	OOB
MIX-H810WV1-A11-2L	Intel® Core™ Ultra 200S Series	SODIMM/CSODIMM x 2	Fan	HDMI 2.0 x 2, DP 1.4 x 1	LVDS/eDP x 1	SATA 6.0Gb/s x 2, M.2-1A M key x 1	i226V x 2	USB 3.2 x 4, USB 2.0 x 6	RS-232 x 2	RS-232/422/485 x 2	PCIe[x4] x 1, E-key x 1	DC-in 19V~24V	TPM2.0	0°C ~60°C	—

Optional Accessories

- TBD