



BIW88-AHS/ BIQ87-AHS

Intel® W880/ Q870 Chipset

Key Features

- Support LGA1851 Intel® Core Ultra 200 Processor Series
- Support triple display: HDMI®/ DP+ / VGA
- DDR5-5600MHZ U-DIMM, max 192GB, ECC support for W880 Chipset
- Quad Intel 2.5G LAN
- 3 x USB2.0, 8 x USB3.2 Gen2, 2 x USB3.2 Gen1
- 16 bit GPIO, 6 x COM port
- 1 x M.2 E key 2230 for WiFi/BT module
- 2 x M.2 M key 2242/ 2280 for NVMe storage
- 2 x PCIe5.0x16 slot, 4 x PCIe4.0x4 slot, 1 x PCIe4.0x1 slot
- 4 x SATA3
- TPM2.0 onboard

Specifications

CPU/ Chipset	CPU : LGA1851, support Intel® Core Ultra 200 Processor Chipset : W880 / Q870
Graphic	Intel® Integrated Graphics, support triple display - 1 x HDMI® 2.0 connectors (4096x2160@60Hz) - 1 x DP++1.4 connector (4096x2160 @60Hz) - 1 x VGA connector (1920x1200 @60Hz)
Main Memory	4 x 288-pin DDR5 5600Mhz UDIMM up to 192GB. (W880 support ECC function)
Expansion Slot	- 2 x M.2 M Key 2242/2280 support PCIe5.0 x4 /PCIe4.0 x4 for NVMe storage - 1 x M.2 E Key 2230 support PCIe4.0 x1 + USB2.0, support WIFI/BT module - 2 x PCIe5.0 x16 (x16+NA or x8+x8) - W880 - 4 x PCIe4.0 x4 Slot (1xPCIe4.0 x4 share with M.2 Key M) - Q870 - 3 x PCIe4.0 x4 Slot (1xPCIe4.0 x4 share with M.2 Key M) - 1 x PCIe4.0 x1
LAN	Quad Intel® LAN - 3 x 2.5G by I226-V - 1 x 2.5G by I226-LM , support Intel vPro
Sound Codec	- Audio Codec: ALC897
Back Panel I/O	- 1 x COM Port , support RS-232/422/485 - 1 x VGA connector - 1 x DP connector - 1 x HDMI® connector - 4 x RJ45 connector, support 2.5G - 8 x USB3.2 Gen2 Type A connector - 3 x Audio jacks, support Line-in/Line-out/Mic-in
On Board Connectors & Headers	Expansion slots: - 4 x 288-pin DDR5 sockets - 1 x M.2 key M type, support PCIe5.0 x4 SSD - 1 x M.2 key M type, support PCIe4.0 x4 SSD(share w/ PCIe4.0 x4) - 2 x PCIe5.0 x16 (x16+NA or x8+x8) - W880 - 4 x PCIe4.0 x4 Slot (1xPCIe4.0 x4 share with M.2 M Key) - Q870 - 3 x PCIe4.0 x4 Slot (1xPCIe4.0 x4 share with M.2 M Key) - 1 x PCIe4.0 x1 SATA: - 4 x SATA3 7pin connector Audio: - 1 x 2*5 pin header for MIC-in, Line-out USB: - 2 x USB2.0 by 1 x 2*5 pin header - 1 x USB2.0 Type A - 2 x USB3.2 Gen1 by 1x 2*10 pin header Power: - 1 x 2*4 pin CPU power connector - 1 x 2*12 pin ATX power connector Serial Port: - 1 x 2*5 pin RS232/422/485 box header - 4 x 2*5 pin RS232 box header - 6 x 2*3 pin COM power select header (RI/5V/12V, default is RI) Others: - 1 x 2*13 Parallel port pin-header (Multi-function with DIO) - 1 x 1*3 DIO voltage select header (5V/3.3V, default 3.3V) - 1 x 2*2 DIO/Printer function select header - 1 x 1*5pin SMBus header - 2 x 1*4pin-header for CPU/SYS Fan (PWM Fan) - 2 x 1*3pin-header for SYS Fan - 1 x 2*5 pin front panel header - 1 x 1*3 pin clear CMOS header - 1 x 1*3 pin AT/ATX mode select header (default is ATX) - TPM2.0 onboard
Board Size	ATX, 305mm x 244 mm x 1.6mm
Operation Temperature	0°C ~ 60°C Humidity : 5% ~ 90%
Storage Temperature	-10°C ~ 75°C Humidity : 5% ~ 90%

ESD/ EMI	- Contact with 4Kv, Air with 8Kv - EMI class A
OS support	- Windows 11 - Linux Ubuntu 24.04