BMX-P550

Intel® 14th Gen Core™ i7 Processor (35W/65W) CPU Barebone system

Product Features

- 14th Generation Intel® Raptor Lake-S Refresh (35 W / 65 W) Processors
- 2 x Intel® i219LM, I226V Ethernet
- 1 x HDMI 1.4b 4K@30Hz, 2 x DP++ 1.4a 4K@60Hz
- 4 x USB 3.2 Gen1 x 1, 4 x USB 2.0 Type-A
- Onboard infineon SLB 9670VQ2.0 support TPM2.0
- 1 x PCIe x16 (Gen4)
- ATX power
- 2 x 262-pin DDR5 4800MHz SO-DIMM socket, supports up to 64GB Max. (non ECC only)
- RealTek ALC897 Audio Codec
- 3 x SATA III
- 1 x M.2 E-Key 2230 with CNVi Support (PCIe x1 + USB 2.0)
- 1 x M.2 M-Key 2242/2280 NVMe (PCIe x4 + SATA III)
- 2 x Audio Jacks (Mic in and Line out for Rear IO)

Specification

System Information	
Processor	Intel® Core™ i7-14700T Processor (35W, Default) Intel® Core™ i7-14700 Processor (65W, Project Base)
Platform Controller Hub	Intel® H610E Chipset
System Memory	2 x 262-pin SO-DIMM Socket Max. Up to 64GB DDR5 5600MT/s (non ECC only)
SBC	Mini-ITX 170mmx170mm (MX160H)
H/W Status Monitor	Monitoring CPU Temperature, Voltage with Auto Throttling Control
Watchdog Timer	H/W Reset, 1sec. ~ 65535sec and 1sec. or 1min./step
TPM	Onboard infineon SLB 9670VQ2.0 support TPM2.0
I/O Chipset	nuvoton NCT6126D
BIOS Information	AMI 256Mb UEFI BIOS
Expansion Card	A2000 Ada for opt.

Expansion	
M.2	1 x M.2 E-Key 2230 with CNVi Support (PCIe x1 + USB 2.0)
PCIe	1 x PCIex16 (Gen 4)
Expansion	2 x half-size PCIe slots, share with 1 x full-size slot. (supports length ⩽130mm expansion card)

Storage	
M.2	1 x M.2 M-Key 2242/2280 NVMe (PCIe x4 + SATA III)
Drive Bay	3 x Internal 2.5" Drive Bay

Front I/O

Power Button	1 x PWR
LED Indicator	1 x PWR LED 1 x HDD Data Access LED
USB	2 x USB 2.0

Rear I/O

USB	4 x USB 3.2 Gen1x1 2 x USB 2.0
HDMI	1 x HDMI 1.4b 4K@30Hz
LAN Port	1 x Intel® I219LM Gigabit Ethernet PHY 1 x Intel® i226V 2.5 Gigabit Ethernet
Audio	Mic-in, Line-out
DP	2 x Dual Mode DisplayPort (DP++) 1.4a 4K@60Hz
COM Port	2 x RS-232/422/485

Onboard I/O

CPU/System FAN	CPU FAN: 1 x 4P CPU FAN System FAN: 1 x SYS FAN

Display

Graphic Chipset	Intel® UHD Graphics 770 (Depends on CPU)
Resolution	HDMI 1.4b 4K@60Hz Dual Mode DisplayPort (DP++) 1.4a 4K@60Hz

Audio

Audio Codec	RealTek ALC897

Ethernet

LAN Chipset	1 x Intel® I219LM Gigabit Ethernet PHY 1 x Intel® i226V 2.5 Gigabit Ethernet

Power Requirement

ACPI	Single power ATX support S0, S3, S4, S5
Power Mode	AT/ATX (ATX is default setting)
Power Supply Unit	AC to ATX PSU
Voltage Input Spec.	+12V/+5V/5VSB/+3.3V/-12V (ATX power)
Voltage Input Connector	4P ATX connector
DC Output Spec.	ATX power, 300W PSU

Software Support

OS	Win10, Win11, Linux

Mechanical & Environmental

Operating Temp.	0°C ~ 40°C (32°F ~ 104°F) with 0.5m/s air flow
Storage Temp.	-30~70C° (-22°F ~ 158°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing

Dimension (W x L x H)	270 x 235 x 88mm
Vibration Test	With SSD : 1.5 Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 0.5hr/axis
Shock Test	With SSD : 10 G, IEC 60068-2-27, Half Sine, 11ms
Drop Test	Package drop test Reference ISTA 1G

Packing List

Items	1 x BMX-P550 1 x AC 300W PSU 1 x Screws kit (For M.2, SATA 2.5" cables)