



Features

- 14th Generation Intel® Raptor Lake-S Refresh (35W/65W) Processors
- Two 262-pin DDR5 4800MHz SO-DIMM socket, supports up to 64GB Max. (non ECC only)
- 2 x Intel® i219LM, i226V Ethernet
- RealTek ALC897 Audio Codec
- 1 x HDMI 1.4b 4K@30Hz, 2 x DP++ 1.4a 4K@60Hz
- 3 x SATA III
- 4 x USB 3.2 Gen1 x 1, 4 x USB 2.0 Type-A
- 1 x PCIe x16 (Gen4), 1 x M.2 M-Key 2242/2280 NVMe (PCIe x4 + SATA III), 1 x M.2 E-Key 2230 with CNVi Support (PCIe x1 + USB 2.0)
- Onboard infineon SLB 9670VQ2.0 support TPM2.0
- 3 x Audio (Mic in and Line out for Rear IO, Mic in/Line out for Front IO)
- ATX power



Tower PC
208 x 430 x 381mm



Smart Fan
Control



ATX/ Mini-ITX/
Micro ATX



Nvidia the
latest Graphic
Card



PCIe x16
Slot

Specifications

System Information

Processor	Intel® Core™ i7-14700T / i5-14500T Processor (35W, Default) Intel® Core™ i7-14700 / i5-14500 Processor (65W, Project Base)
Platform Controller Hub	Intel® H610E Chipset
System Memory	2 x 262P SO-DIMM Socket (Capacity Max. Up to 64GB DDR5 4800)
SBC	Mini-ITX 170mmx170mm (MX610H)
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

M.2	1 x M.2 E-Key 2230 with CNVi Support (PCIe x1 + USB 2.0)
PCIe	1 x PCIe x16 (Gen 4)

Storage

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

Front I/O

Power Button	1 x Power Button
Audio	1 x Line-out, 1 x Mic-in
LED Indicator	1 x PWR LED 1 x Data Access LED

USB	2 x USB 3.2 Gen1x1
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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: 4 x SYS FAN
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Display

Graphic Chipset	Intel® Integrated UHD Graphic with Xe Architecture (CPU Dependent)
Resolution	1 x HDMI 1.4b 4K@30Hz 2 x Dual Mode DisplayPort (DP++) 1.4a 4K@60Hz

Audio

Audio Codec	Realtek ALC897 HD Audio Decoding Controller
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Ethernet

LAN Chipset	1 x Intel® i219LM Gigabit Ethernet PHY 1 x Intel® i225V 2.5 Gigabit Ethernet
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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

Software Support

OS	Win10, Win11, Linux
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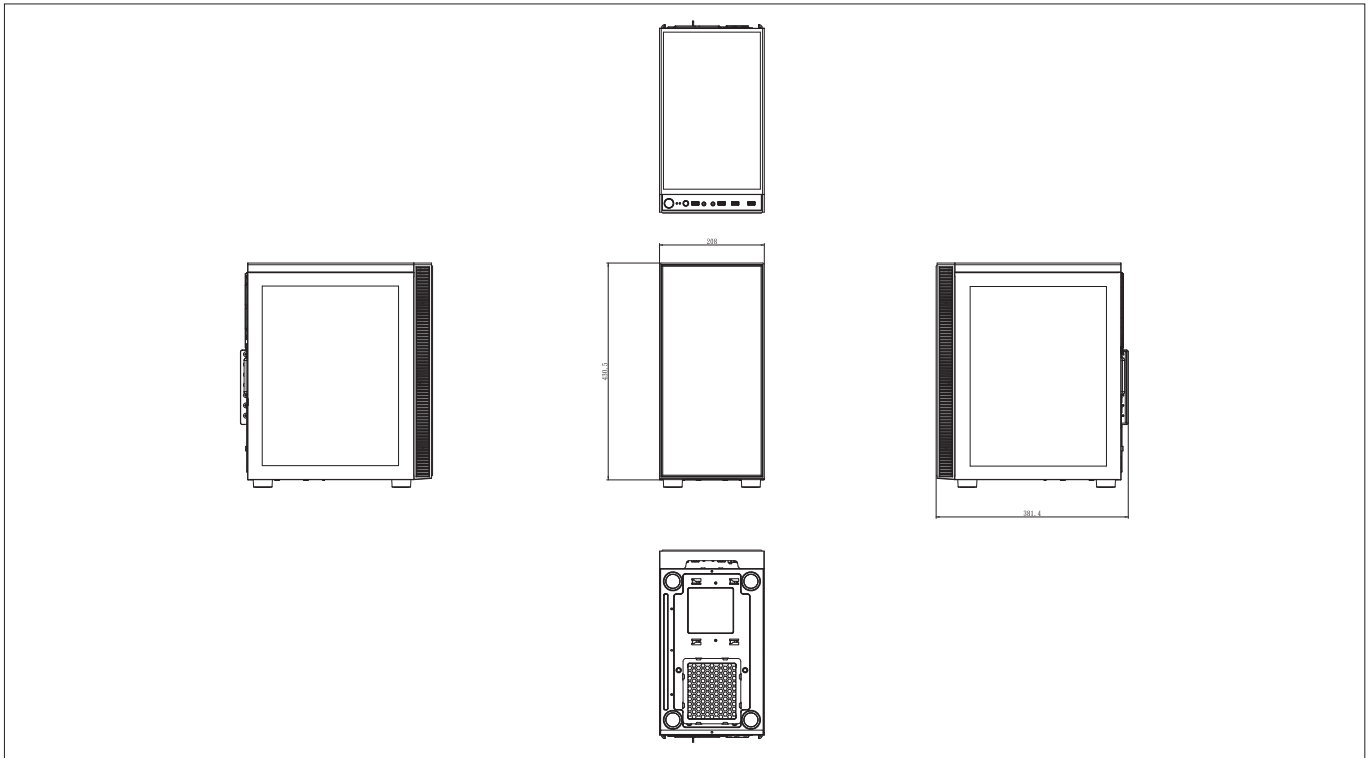
Mechanical & Environmental

Operating Temp.	0°C ~ 40°C (32°F ~ 104°F) with 0.5m/s air flow
Storage Temp.	-30 ~ 70°C (-22°F ~ 158°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Dimension (W x L x H)	208 x 445 x 370 mm

Chassis Spec

MB Form Factor	Supports ATX, Micro ATX, Mini-ITX
Expansion Slot	7 x Expansion slots (Full-height)
Storage Slot	2 x 3.5" HDD 2 x 2.5" SSD

Mechanical Drawing



Ordering Information

P/N	Processor	Chipset	Memory	Storage	Adapter/PSU	Mounting Kit	Temp.
BMX-P850-A0-1R	Intel® 14th Gen Core™ i7/i5/i3 Processor (35W/65W)	H610E	(Optional)	(Optional)	500W PSU	NA	0°C ~ 40°C

Packing List

Item	Quantity
Intel® 14th Gen Core™ i7/i5/i3 Processor (35W/65W) Desktop Chassis and Barebone system	1
HDD shockproof Rubbers	4
Screw Kits for Peripheral	1

Optional Items

Item	P/N
Power Supply ATX 850W 150x140x86mm	ACC-PSU-850N-01R
Power Cord 3P(F)-3P(M) 183cm, USA type	E1702031833R
Power Cord SL-6+SL-3 183cm ,EU type	E1702031000R
Power Cord 3P(F)-3P(M) 183cm, Japan w/PSE type	E1702031834R
Power Cord QP-026+SL-3 183cm, UK type	E170P060380R
Power Cord 3P(F)-3P(M) 183cm, Australia type	E1702031831R
Power Cord 3P(F)-3P(M) 183cm, Australia type	E1702031831R

I/O Overview

