

BMX-T550-B

Mini-ITX Desktop System
With Intel® Raptor Lake-S Platform



Features

- Intel® 13th Gen Core™ i9/i7/i5/i3 Processor (35W/65W)
- Intel® H610E PCH
- Intel® Iris® Xe/ UHD Graphics (CPU Dependent)
- 2 x Memory Socket (Capacity Max. Up to 64GB DDR5 4800)
- 3 x Display (HDMI 1.4b, 2 x DP 1.4a)
- 2 x Intel® Ethernet Controller (1GbE, 2.5GbE)
- 2 x Audio Jack (Mic-In, Line-Out)
- 2 x COM Port (2 x RS232/422/485)
- 3 x Expanslot Slot (M.2 Key-E, Key-M, PCIe x 16)
- 8 x USB Port (4 x USB 3.2, 4 x USB 2.0)
- Onboard dTPM 2.0 IC



Mini PC



Smart Fan Control



Vibration/ Shock



CE FCC Class B



PCIe16 Slot

Specifications

System Information

Processor	Intel® 13th Gen Core™ i9/i7/i5/i3 Processor 35W TDP Processor Intel® Core™ i9-13900TE Processor Intel® Core™ i7-13700TE Processor Intel® Core™ i5-13500TE Processor Intel® Core™ i3-13100TE Processor 65W TDP Processor Intel® Core™ i9-13900E Processor Intel® Core™ i7-13700E Processor Intel® Core™ i5-13500E Processor Intel® Core™ i3-13100E Processor
Platform Controller Hub	Intel® H610E Chipset
System Memory	2 x SODIMM sockets support Dual Channel DDR5 4800MHz up to 64GB
BIOS Information	AMI uEFI BIOS, 256Mb SPI Flash ROM
Watchdog Timer	1 Sec ~ 255 Sec Timer
TPM	dTPM 2.0
SBC	MX610H

Expansion

M.2	1 x M.2 Key-E 2230 CNVi (PCIe x 1, USB 2.0) 1 x M.2 Key-M 2242/2280 (PCIe x 4)
PCIe	1 x PCIe x 16 (Gen 4)

Storage

M.2	1 x M.2 Key-M 2242/2280 NVMe (PCIe x 4, SATA3)
2.5 Drive Bay	2 x Internal 2.5" Drive Bay (12.5mm)

Front I/O

USB	2 x USB 2.0
Power Button	1 x PWR BTN w/LED
Reset Button	1 x RST Hidden BTN
LED Indicator	1 x Data Access LED

Rear I/O

USB	2 x USB 2.0, 4 x USB 3.2 Gen1
COM Port	2 x RS-232/422/485
LAN Port	2 x RJ45
DP	2 x DP
Audio	1 x Line-Out, 1 x Mic-In
HDMI	1 x HDMI
AC/DC Input	1 x Vac Input

Left I/O

Antenna	1 x Smart Fan
---------	---------------

Display

Graphic Chipset	Intel® Integrated UHD Graphic with Xe Architecture (CPU Dependent) Intel® UHD Graphics 770 (i9/i7/i5) Intel® UHD Graphics 730 (i3)
Resolution	HDMI 1.4b: 3840x2160 @ 30Hz DP++ 1.4a: 4096x2304 @ 60Hz

Audio

Audio Codec	Realtek HD Audio
-------------	------------------

Ethernet

LAN Chipset	Intel® I219-LM GbE LAN PHY Intel® I225-V 2.5GbE LAN
-------------	--

Power Requirement

Power Supply Unit	220W Flex ATX Power Supply
Voltage Input Spec.	90 Vac ~ 264 Vac
ACPI	Single power ATX support S0, S3, S4, S5
Power Mode	AT/ATX Mode (Default: ATX mode)
Voltage Input Connector	IEC 320 (C14)

Software Support

OS	Win10, 11 Linux
----	--------------------

Certification

Certification Information	CE, FCC Class B, UKCA
---------------------------	-----------------------

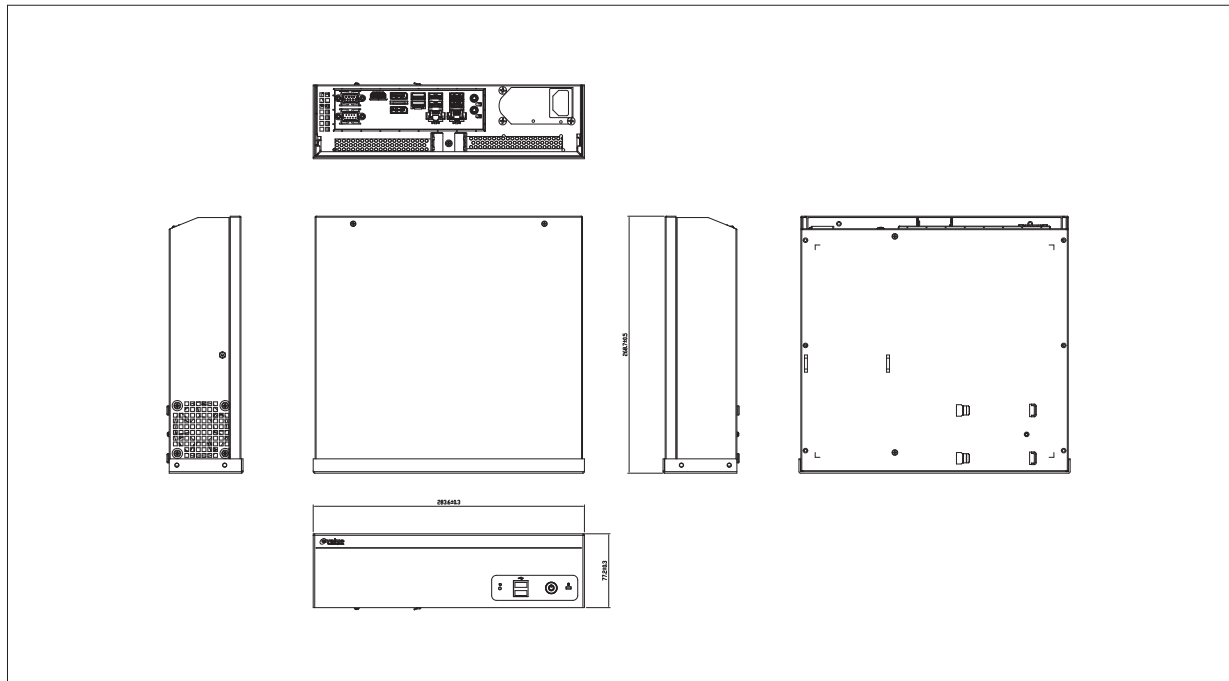
Mechanical & Environmental

Operating Temp.	0°C ~ 40°C (32°F ~ 104°F) with 0.5m/s air flow
Storage Temp.	-30°C ~ 70°C (-22°F ~ 158°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Dimension (W x L x H)	280 mm x 265 mm x 75 mm
Weight	4.7 Kg
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
Mounting Kit	Robber foots for horizontal

BMX-T550-B

Mini-ITX Desktop System
With Intel® Raptor Lake-S Platform

Mechanical Drawing



Ordering Information

P/N	Processor	Chipset	Memory	Storage	Adapter/PSU	Mounting Kit	Temp.
BMX-T550-B1-1R	LGA 1700 Socket Type (Optional Items)	H610E	UP to 64G DDR5 (Optional Items)	(Optional Items)	ATX 220W	Robber foots for horizontal	0°C ~ 40°C

Note: CPU/Memory/Storage and Operating System bundled on request. Please contact your sales representative for more information.

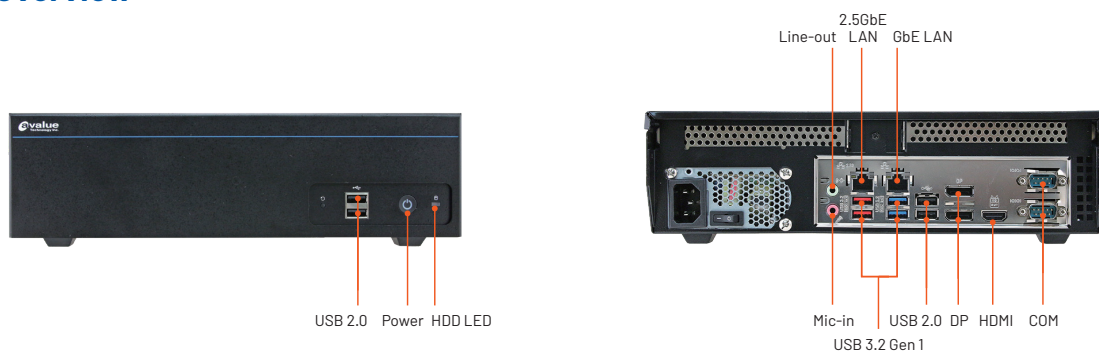
Packing List

Item	Quantity
BMX-T550 STD IMB Desktop System	1
Screws kit for M.2, HDD	1

Optional Items

Item	P/N
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

I/O Overview



Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

US

sales@assured-systems.com

Sales: +1 347 719 4508

Support: +1 347 719 4508

1309 Coffeen Ave
Ste 1200
Sheridan
WY 82801
USA

EMEA

sales@assured-systems.com

Sales: +44 (0)1785 879 050

Support: +44 (0)1785 879 050

Unit A5 Douglas Park
Stone Business Park
Stone
ST15 0YJ
United Kingdom

VAT Number: 120 9546 28

Business Registration Number: 07699660