



SB-122-RPLU

Industrial Fanless BOX PC w/ Intel® 13th Raptor Lake U Series Processor



Features

- 13th Generation Intel® Core i5 / i3 Processors (Raptor Lake)
- 1 x DDR5 5200MHz SO-DIMM Slot, up to 48GB
- Support 1 x GbE & 1 x GbE PHY
- Support DP++/HDMI video output
- Support M.2 2242 (SATA) & 2280 (NVMe)
- Small size (Palm-size), convenient to install
- Support Over-voltage & Reversed Power Insertion Protection



HDMI



Over-voltage
Protection



USB 3.0



-20~50°C



Wide Voltage
Range



Reversed
Power Insertion
Protection

System

CPU	Intel® 13th Core™ i5/ i3 Processors (Raptor Lake U series)
Memory	1 x 262-pin DDR5 SO-DIMM socket, supporting 5200MHz SDRAM up to 48GB
Chipset	Integrated in CPU
Graphics	Integrated Intel® UHD Graphics
LAN Chipset	1 x Intel® I210-AT GbE 1 x Intel® I219-LM GbE PHY
Watchdog Timer	1~255 levels reset
TPM	Nuvoton NPCT760AABYX TPM 2.0 chip

Storage

Device	1 x M.2 B Key 2242 Slot (SATA signal) 1 x M.2 M Key 2280 Slot (NVMe, PCIe x4 signals) *CTOS is available
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Audio

Type	1 x Audio (Line-out & Mic-in) (Chipset ALC888S)
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Power System

Power Input	DC 12~24V 2-pin Phoenix connector
LED	1 x Power LED

OS

Windows 10/11, Ubuntu 22.04

Qualification

Certification	CE, FCC
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External I/O

Serial Ports	2x RS-232/422/485(default RS-232) with Auto flow control
USB Ports	4 x USB3.0
LAN	2 x RJ45
Video ports	1 x HDMI (Max Resolution: 4096x2304@60Hz) 1 x DP++ (Max Resolution: 4096x2304@60Hz)

Internal I/O

Expansion slot	1 x M.2 E Key (PCIe / USB signal) 1 x M.2 B Key 2242/3042/3052 slot (PCIe / SATA / USB signal supported) 1 x M.2 M Key 2280 Slot (NVMe, PCIe x4 signals) [Note: M.2 2242 SATA, M.2 3042/3052 share one card slot, only one of the cards can be inserted] 1 x 8bit Programmable GPIO pin header
SIM card	1 x Micro SIM card Socket for 4G/5G module

Mechanical

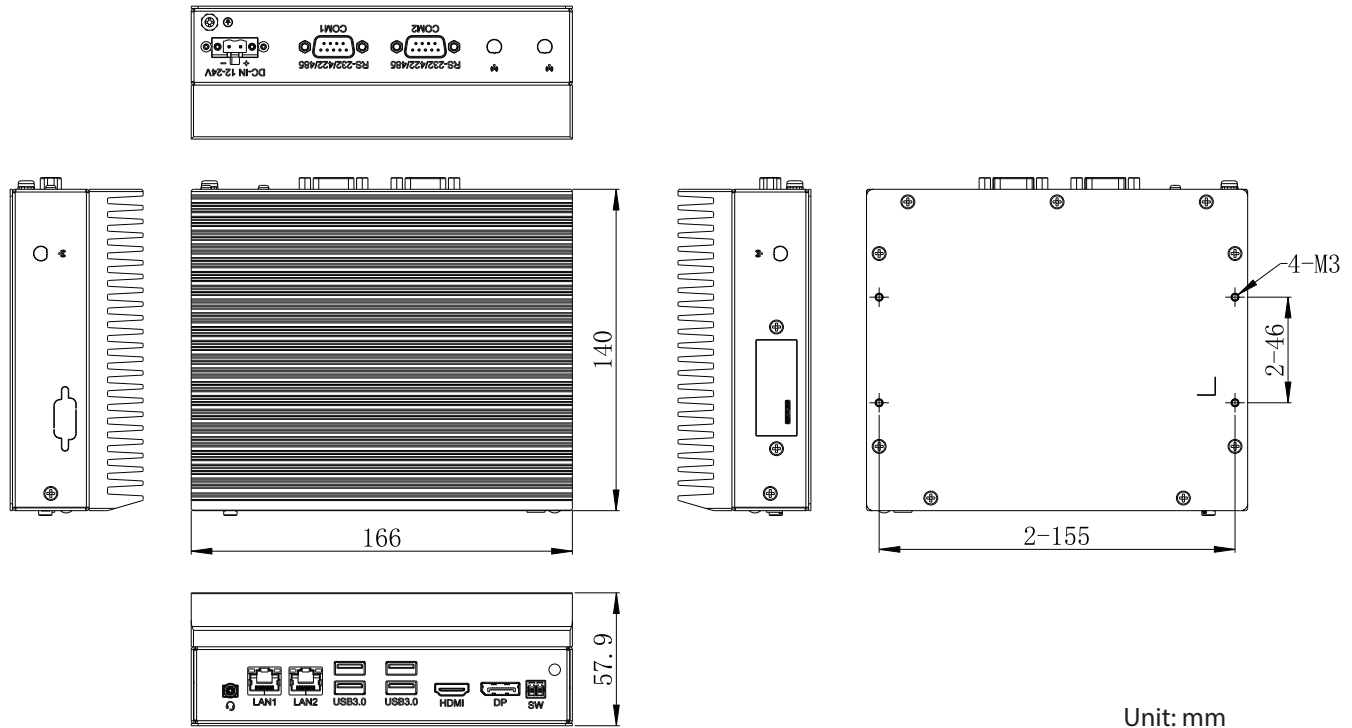
Construction	Aluminum alloy
Mounting	Wall-mount
Dimension	166 x 140 x 57.9 mm
Weight	2.5kg

Environmental

Operating Temp.	-20 ~ 50°C (32 ~ 122°F), ambient w/ air flow(WT RAM & SSD)
Storage Temp.	-40 ~ 85°C (-40 ~ 185°F)
Operating Humidity	5% ~ 95% @ 40°C (non-condensing)
Vibration	5~500Hz, 2Grms operation
Shock	Operation: 10G@11ms Non-operation: 30G@11ms

*CTOS means Configure-To-Order Service

Dimension



Unit: mm

Packing List

SB-122-xxxxxx	1pc BOX PC
Thermal PAD	1pc for Memory
2-pin terminal block	1pc 5mm for Power-input, 1pc 3.5mm for Remote ON/OFF SW
Wall-mount bracket	2pcs
Screw Package	1pc

Ordering Information

SB-122-11315U	Barebone Fanless System with Core i3-1315U
SB-122-11335U	Barebone Fanless System with Core i5-1335U
SB-122-C3100U	Barebone Fanless System with Core 3-100U
SB-122-C5120U	Barebone Fanless System with Core 5-120U
8bit GPIO Cable	200mm, DB9M*1 TO HSG1*10P(1.25)
PAC-120W-FSP-SPA-US R1.0	AC/DC Adapter Kit (w/ UKCA), 19V, 120W, 2 WIRE w/ US POWER CORD
PAC-120W-FSP-SPA-EU R1.0	AC/DC Adapter Kit (w/ UKCA), 19V, 120W, 2 WIRE w/ EU POWER CORD
PAC-120W-FSP-SPA-UK R1.0	AC/DC Adapter Kit (w/ UKCA), 19V, 120W, 2 WIRE w/ UK POWER CORD
PAC-120W-FSP-SPA-IN R1.0	AC/DC Adapter Kit (w/ UKCA), 19V, 120W, 2 WIRE w/ IN POWER CORD
PAC-120W-FSP-SPA-JP R1.0	AC/DC Adapter Kit (w/ UKCA), 19V, 120W, 2 WIRE w/ JP POWER CORD

