



SB-244-MTLU

Industrial Fanless BOX PC w/ Intel® Core Ultra Meteor Lake U Series Processor



Features

- Intel® Core Ultra 7 / 5 Processors (Meteor Lake U series)
- 1 x DDR5 5600MHz SO-DIMM Slot, supporting up to 48GB
- Support 1 x GbE PHY interface & 3 x GbE LAN ports
- Support DP 1.4a/HDMI 2.1 TMDS video output
- Support M.2 M key slot 2242 (SATA) / 2280 (NVMe)
- Slim form factor design for space-constrained installations
- Support Intel® vPro Essentials, RAID 0/1
- Support Over-voltage & Reversed Power Insertion Protection
- Delivers up to 22 TOPS (INT8) of AI performance



HDMI



Over-voltage
Protection



USB 3.2



-20~60°C



Wide Voltage
Range



Reversed
Power Insertion
Protection

System

CPU	Intel® Core Ultra 7 / 5 Processors (Meteor Lake-U series)
Memory	1 x 262-pin DDR5 SO-DIMM socket, SDRAM up to 48GB
Chipset	Integrated in CPU
Graphics	Integrated Intel® Graphics
LAN Chipset	1 x Intel® I219-LM GbE PHY (LAN1) 3 x Intel® I210-AT GbE (LAN2/3/4)
Watchdog Timer	1~255 levels reset
TPM	Nuvoton NPCT760AABYX TPM 2.0 chip

Storage

Device	1 x M.2 M Key 2242 Slot (SATA signal) 1 x M.2 M Key 2280 Slot (PCIe x4 signals, NVMe) 1 x 2.5" SATA3.0 drive bay [Note: Support RAID 0/1 via M.2 2242 & 2.5" drive bay] *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 10~36V (2-pin Phoenix connector)
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OS

Windows 10, Windows 11, Ubuntu 24.04

Qualification

Certification	CE, FCC
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External I/O

Serial Ports	4 x RS-232/422/485(default RS-232) with Auto flow control
USB Ports	2 x USB3.2 Gen2 4 x USB2.0
LAN	4 x RJ45
Video ports	1 x HDMI 2.1 TMDS (up to 4096x2304 @60Hz) 1 x DP1.4a (up to 7680x4320 @60Hz)
Power Button	1 x Power button w/LED
Remote On/Off	1 x SW

Internal I/O

Expansion slot	1 x Full-size Mini-PCIe slot (PCIe/USB signal) 1 x M.2 E Key 2230 slot (PCIe/USB signal) 1 x M.2 M Key 2242 slot (SATA signals) 1 x M.2 M Key 2280 slot (PCIe x4 signals, NVMe) 2 x RS-232 by 3-wire pin header (via optional Cable kit) 1 x 8bit Programmable GPIO pin header (via optional Cable kit) 1 x Nano SIM card slot (for Telecom Mini-PCIe module)
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Mechanical

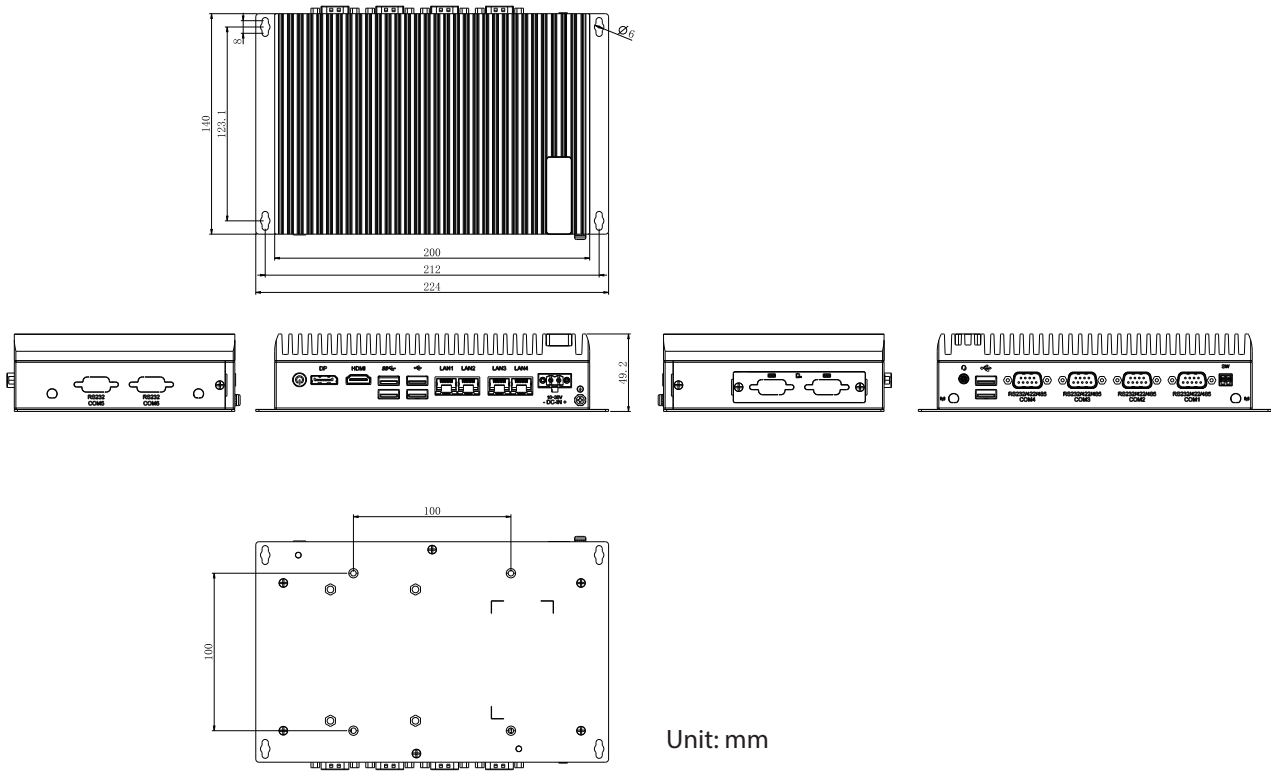
Construction	Aluminum alloy
Mounting	Desk-mount, Wall-mount, DIN-Rail(optional) VESA-mount (75x75mm, 100x100mm optional)
Dimension	200 x 140 x 49.2 mm
Weight	1.8kg

Environmental

Operating Temp.	-20 ~ 60°C (-4 ~ 140°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



Packing List

SB-244-Ux1X5U	1pc BOX PC
Thermal PAD	1pc for Memory, 2pcs for M.2 2280
2-pin terminal block	1pc 5mm for Power-input, 1pc 3.5mm for Remote ON/OFF SW
22-pin SATA & Power cable	1pc 150mm
Screw Package	1pc

Ordering Information

SB-244-U7155U	Barebone Fanless System with Core Ultra 7-155U
SB-244-U5125U	Barebone Fanless System with Core Ultra 5-125U
8bit GPIO Cable	250mm, DB9M x 1 TO HSG1 x 10P(1.25)
RS232 Y Cable	250mm, DB9M x 2 TO HSG2 x 3P(2.0), RS232, W/O BRACKET, W/SCREW
SB-244-MTLU-VESA-MOUNT	VESA Mount Bracket w/ Screw, 233 x 130 x 10.5 mm
SPA BOX PC DIN RAIL KIT	DIN Rail Bracket w/ Screw, 35mm W25, N/A, 25 x 47.8
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

Note: To use DIN-Rail mount must combine SB-244-MTLU-VESA-MOUNT + SPA BOX PC DIN RAIL KIT

