

MAB-T600

Expandable Medical Box PC
For Imaging Capture & Advanced AI Computing



Features

- High performance 12/13th generation Intel® Core™ i3/i5/i7/i9 processors supported
- Four PCIe (PCIe x16, PCIe x1 incl.) for GPU expansion and function customization
- HDMI/DP video ports for 3 independent high-resolution displays
- Low-noise & low-heat design with medical EMC & safety certification for reliability
- Rich USB ports & high-speed 2.5 GbE Ethernet
- 500W medical grade PSU supported



500W
Medical
PSU



Medical
Grade



IPX1 Grade
Protection



Expansion
Slot



HDMI+DP
4K@60Hz

Specifications

System Information

Processor	LGA 1700 Socket supports 12th Gen Alder Lake/ 13th Gen Raptor Lake Intel® Core™ i9/i7/i5/3, Pentium, Celeron Processor up to 16 Cores 24 Threads Hybrid
Platform Controller Hub	Intel® H610E PCH
System Memory	2 x DIMM slots support Dual Channel DDR5 memory speed up to 4800/5600MHz (CPU dependent) with UDIMM, up to 64GB
BIOS	Socket type 256Mb SPI BIOS
Watchdog Timer	H/W reset, 5~255 seconds/5~255 minutes
H/W Status Monitor	CPU temperature monitoring, voltages monitoring, CPU fan speed control
TPM	Support onboard TPM 2.0
SBC	RX610H

Expansion

M.2	1 x M.2 M-Key 2242/2280/22110 NVMe (PCIe x4 + SATA III) 1 x M.2 E-Key 2230 with CNVi support (PCIe x1 share with slot4 + USB 2.0)
PCIe	1 x Gen 5 PCIe x16 (x16 physical black)(slot 1) 1 x Gen 3 PCIe x1 (x4 physical open ended)(slot 2) 2 x Gen 3 PCIe x1 (x16 physical yellow)(slot 3 & 4)

Storage

Storage	2 x 2.5" SATAIII HDD/SSD drive (2 x 3.5" SATAIII HDD/SSD drive as option)
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Display

Graphic Chipset	Intel® Integrated UHD Graphic with Xe Architecture (CPU dependent)
Spec. & Resolution	DP 1.4a (Max. Resolution: 3840X2160@60Hz) HDMI 2.0b (Max. Resolution: 3840X2160@60Hz)
Multiple Display	Supports 3 independent display

Audio

Audio Codec	Realtek HD audio
Audio Amplifier	6W Per Channel Amplifier

Power Requirement

Power Supply Unit	500W medical 1U ATX power supply
Power Mode	AT/ATX mode (default: ATX mode)
Power Input	100-240V AC

Ethernet

LAN Chipset	LAN1: Intel® I219-V 1 GbE controller LAN2: Intel® I225-LM 2.5 GbE controller
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Software Support

OS	Win 10, Win 11, Linux
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Certification

Certification Information	ANSI AAMI ES60601-1:2005/A2: 2021 3.2. CAN/CSA-C22.2 NO. 6060101 :14/A2:22 3.2. IEC 60601-1:2005/A1:2012/A2:2020 3.2. IEC 60601-1-2:2014/A1: 2020 4.1. IEC 62368-1: 2018 3.0. IEC 60601-1-6 : 2010/A1: 2013/A2: 2020 3.2. EN 60601-1:2006+A2:2021. EN 60601-1-2: 2015+A1:2021. EN IEC 62368-1: 2020+A11:2020. BS EN 60601-1: 2006+A2: 2021. BS EN 60601-1-2: 2015+A1:2021. BS EN IEC 62368-1 :2020+A11:2020. 47CFR FCC part 15 subpart B. ICES-003 issue 7 Oct. 2020. ISO 14971 3rd edition, December 2019.
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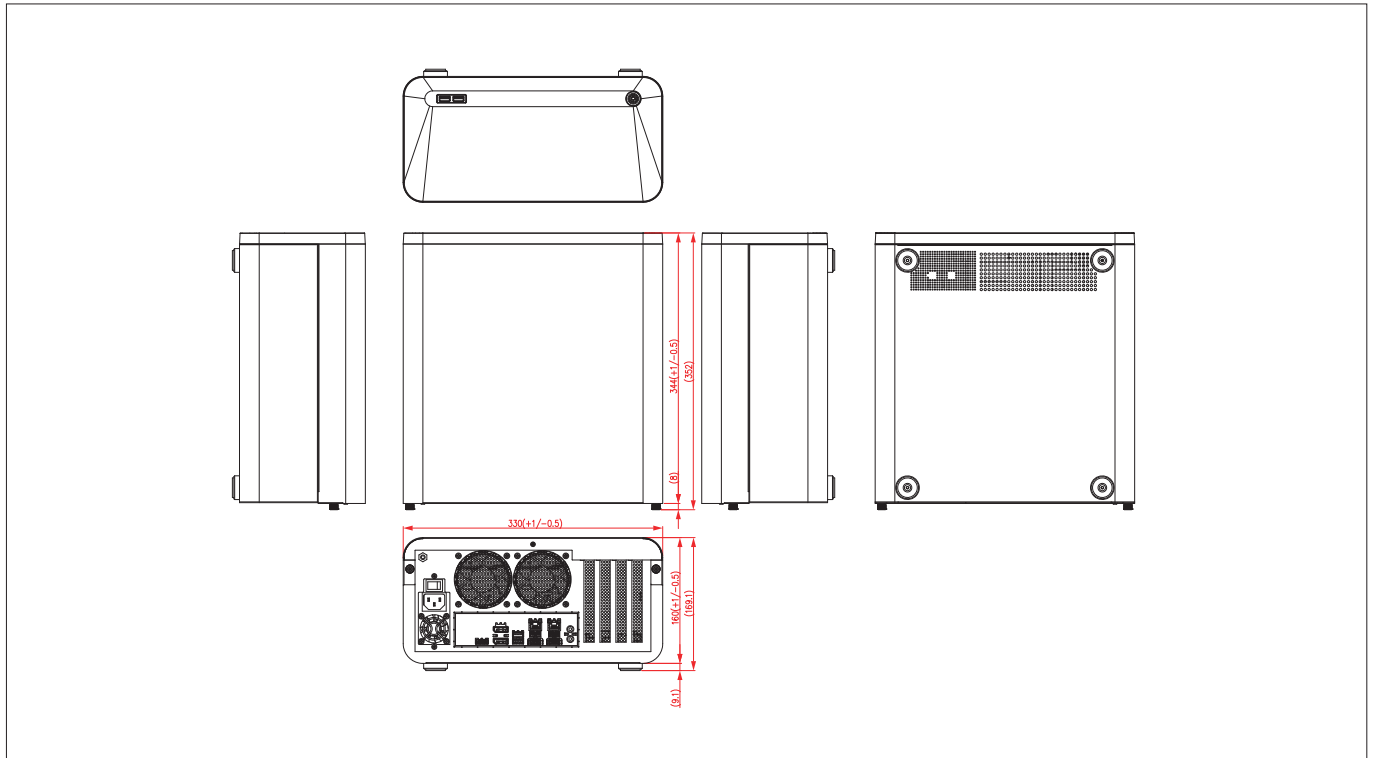
External I/O

USB	2 x USB 2.0 (front I/O) 2 x USB 2.0 type A 4 x USB 3.2 type A
LAN	1 x 2.5 GbE, 1 x 1 GbE by RJ45
Audio	Line-out, Mic-in
Display	1 x HDMI 2 x DP++

Mechanical & Environmental

Operating Temp.	0°C ~ 40°C (32°F ~ 104°F)
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)	330 x 344 x 160 mm
Weight	7kg
Vibration Test	Operating with SSD : 0.5 Grms, IEC 60068-2-64, 5 ~ 500Hz, 0.5hr/axis
Shock Test	With SSD : 10 Grms, IEC 60068-2-29, half sine, 11ms
Drop Test	One corner, three edges, six faces ISTA 2A, IEC-60068-2-32
IP Rating	IPX1 grade protection
Color	White
Construction	Metal + plastic

Mechanical Drawing



Ordering Information

P/N	Processor	Memory	Storage	COM	USB	LAN	Power Input	Working Temp.
MAB-T600-A1-1R	LGA 1700 Socket supports 12th Gen Alder Lake/ 13th Gen Raptor Lake Intel® Core™ i 9/7/5/3, Pentium, Celeron Processor up to 16 Cores 24 Threads Hybrid	2 x DIMM slots support Dual Channel DDR5 memory speed up to 4800MHz/5600MHz with UDIMM, up to 64GB	2 x 2.5" SATAIII HDD/SSD drive (2 x 3.5" SATAIII HDD/SSD drive as option)	0	2 x USB 2.0 (front I/O) 2 x USB 2.0 type A 4 x USB 3.2 type A	2	ATX	0°C~ 40°C

Packing List

Item	Quantity
MAB-T600 System	1
Screw-Bind M3x8mm	8
Screw-Flat 32x8mm	8
Rubber for shockproof	8

Optional Items

Item	P/N
NVIDIA RTX A1000 GPU (8GB)	RCC-GPU-RTXADA-04R
NVIDIA RTX 2000 ADA GPU (16GB)	RCC-GPU-RTXADA-03R
NVIDIA RTX 4000 SFF ADA (20GB)	RCC-GPU-RTXADA-02R
NVIDIA RTX 4000 ADA (20GB)	BCC-GPU-TX4000-02R
Yuan SC710N2-L HDMI 2.0 Capture Card (4K), 2 x HDMI	RCC-CAP-PCIE-01R
Yuan SC400N4 HDMI Capture Card (1080P), 4 x HDMI	RCC-CAP-PCIE-02R
Yuan SC400N2-L HDMI Capture Card (1080P), 2 x HDMI	RCC-CAP-PCIE-04R
Yuan SC410N4 HDMI 2.0 Capture Card (4K), 4 x HDMI	RCC-CAP-PCIE-05R
Intel 82574 LAN Card, UPMOST D82574-1RJ	RCC-LAN-PCIE-01R
Intel I350AM2 LAN Card, UPMOST SI350AM2-2RJ (A)	RCC-LAN-PCIE-02R
Intel I210AT PoE Card, UPMOST DI210-1RJ-POE	RCC-POE-PCIE-01R
Intel Wi-Fi 6E AX210 with kits & bracket	RCC-WIFI-M2BT-01R
WiFi set ENL-5400PCI	RCC-WIFI-PCIE-01R
EU Power Cord	E1702031000R
US Power Cord	E1702031833R
JP Power Cord	E1702031834R
UK Power Cord	E170P060380R
AU Power Cord	E1702031831R
CN Power Cord	E170P060391R

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I/O Overview

