

MAB-T600-B1

Medical Box PC With GPU Expansion
For Heavy-Loading AI Edge Computing



Features

- High performance 12/13th generation Intel® Core™ i3/i5/i7/i9 processors supported
- Four PCIe slots (PCIe x16/ PCIe x4 incl.) for expansions of GPU, capture, and peripheral cards
- 4 x DP++ for simultaneous 4 displays in high resolution
- RAID 0, 1, 5, 10 support for different data backup requirements of critical clinical data
- 500W medical grade PSU
- Up to 9 USB ports (USB 3.2 Gen 2 & type C incl.) & high-speed 2.5 GbE Ethernet
- Low-noise & low-heat design with medical EMC & safety certification for reliability



500W
Medical
PSU



Medical
Grade



Expansion
Slot



4-Display
DP++/
4k@60Hz



Data Backup
& Access
Security

Specifications

System Information

Processor	LGA 1700 socket supports 12th Gen Alder Lake/ 13th Gen Raptor Lake Intel® Core™ i9/i7/i5/3, Pentium®, Celeron® processors up to 16 Cores 24 Threads Hybrid
Platform Controller Hub	Intel® R680E PCH
System Memory	4 x DIMM slots support Dual Channel DDR5 memory speed up to 4400MHz with UDIMM, up to 128GB, with ECC support
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
RAID	Support 0, 1, 5, 10
TPM	Support onboard TPM 2.0
iAMT	Intel® Active management technology 16
SBC	RX680R

Expansion

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

Storage

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

Display

Graphic Chipset	Intel® Integrated UHD Graphic with Xe Architecture (CPU dependent)
Spec. & Resolution	4x Dual Mode DP 1.4a (Max. Resolution: 3840X2160@60Hz)
Multiple Display	Supports 4 independent display

Audio

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

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® I225-LM/I226-LM 2.5 GbE Controller LAN2: Intel® I225-LM/I226-LM 2.5 GbE Controller
-------------	--

Software Support

OS	Win 10, Win 11, Linux
----	-----------------------

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.
---------------------------	--

External I/O

USB	2 x USB 2.0 (front I/O) 6 x USB 3.2 Gen 2x1 ports 1 x USB 3.2 Gen 2x2 type-C
LAN	2 x 2.5 GbE by RJ45
Audio	Line-out, Mic-in
Display	4 x DP++

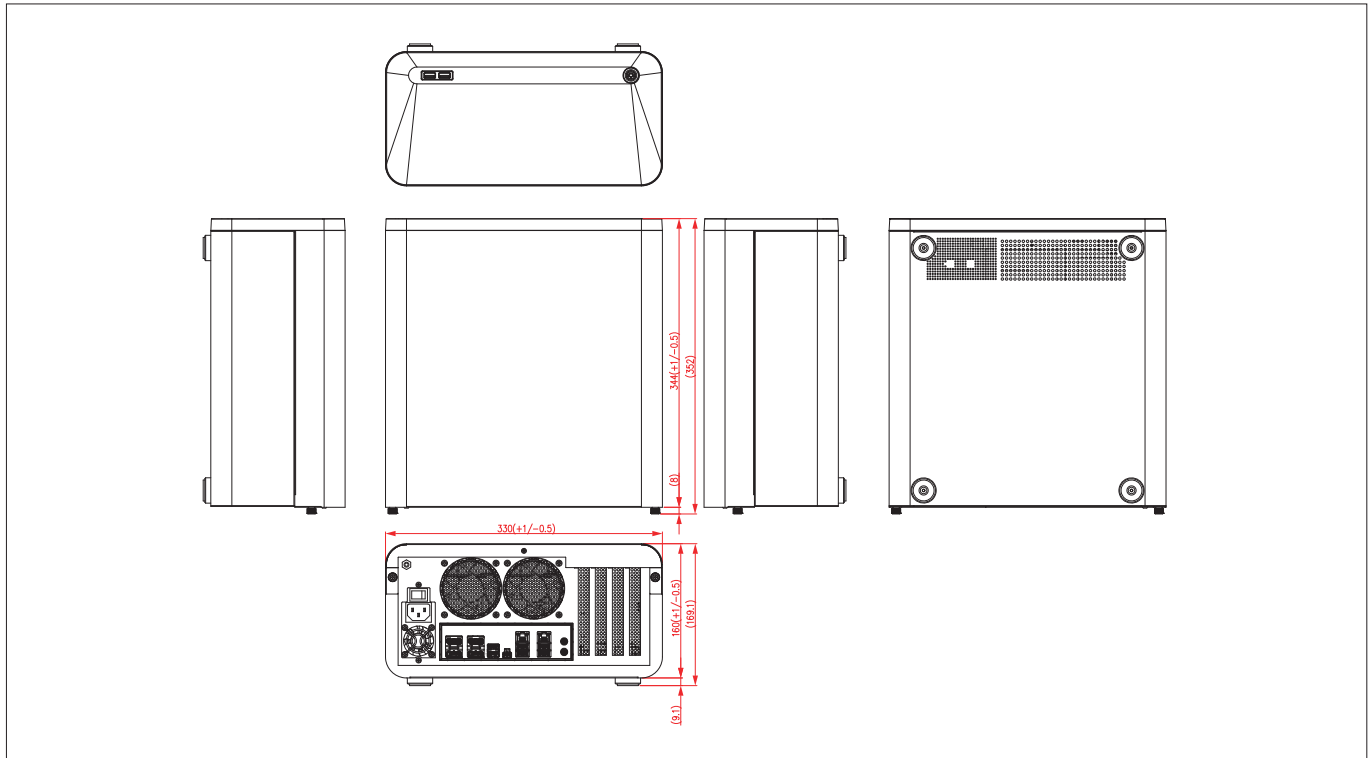
Mechanical & Environmental

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	7 kg
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

MAB-T600-B1

Medical Box PC With GPU Expansion
For Heavy-Loading AI Edge Computing

Mechanical Drawing



Ordering Information

P/N	Processor	Memory	Storage	COM	USB	LAN	Power Input	Working Temp.
MAB-T600-B1-1R	LGA 1700 socket supports 12th Gen Alder Lake/ 13th Gen Raptor Lake Intel® Core™ i 9/7/5/3, Pentium®, Celeron® processors up to 16 Cores 24 Threads Hybrid	4 x DIMM up to 128GB Max Dual Channel DDR5 5600 MHz with ECC Support	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) 6 x USB 3.2 Gen 2x1 ports 1 x USB 3.2 Gen 2x2 type-C	2	ATX	0°C~ 40°C

Packing List

Item	Quantity
MAB-T600-B1 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 I210AT 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

MAB-T600-B1

Medical Box PC With GPU Expansion
For Heavy-Loading AI Edge Computing

I/O Overview

