Monolith-2012A

12th Gen Intel® Alder Lake Core·
i3-1215U / i5-1235U / i7-1255U processor



Features

- 12th Gen Intel® Alder Lake Core™ i3/i5/i7 processor
- 2 x DDR5 4800MHz SODIMM, MAX 64GB
- 1 x 2.5 SATA HDD, 1*M.2 2280, NVMe or SATA SSD
- 1 x M2.0 (2230, Wifi+BT)，1 x M2.0 (3042/3052，4G/5G)
- Two independent displays：2x HDMI
- 4 x Intel® GbE (Support Wake-on-LAN and PXE)
- 4 x COM (2x RS232/RS422/RS485),ESD and Surge Protection
- Supports TPM2.0 security encryption and vPro technology
- Wide Operating Temperature -30°C to 70°C
- 9V to 36VDC Wide Range Power Input，Supporting OVP / OCP / RPP

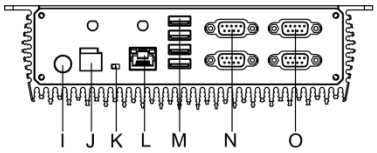
Specifications

System			
CPU	12th Gen Intel® Core™ i3-1215U	12th Gen Intel® Core™ i5-1235U	12th Gen Intel® Core™ i7-1255U
L2 Cache	10MB	12MB	12MB
TDP	15W	15W	15W
Graphics	Intel® UHD Graphics	Intel® Iris® Xe Graphics	Intel® Iris® Xe Graphics
System Chipset	Integrated with Intel® SoC		
Memory	DDR5 4800 MHz, Dual Channel SODIMM x 2, up to 64GB		
Harddisk	1 x M.2 120G SSD (250G / 500G / 2TB SSD) / 1 x 2.5" SATA		
Network	Intel® 226-V / I219-LM GbE LAN		
Audio	Realtek ALC897 Audio controller		
TPM	TPM 2.0		
Watchdog Timer	Software Programmable Supports 1~255 sec. System Reset		
Operation System	Windows 10 / 11， Linux, Ubuntu		
I / O			
VIDEO	2 x HD-MI		
Ethernet	3 x 2.5GbE / 1x 1GbE		
USB	4 x USB 2.0 / 4 x USB 3.2 Gen2		
COM	2 x RS-232 / 2 x RS-232 / 422 / 485 (Adjustable through BIOS)		
Audio	1x Audio_out & Mic_in		
Expansion			
M.2	1*M.2 (Key-E, 2230, PCIe+USB, Wifi+BT)		
	1*M.2 (Key-B, 3042/3052, PCIe/ USB 3.0+USB2.0, 4G/5G)		
	1*M.2 (Key-M, 2280, NVMe/ SATA, SSD)		
SIM Socket	1x SIM Socket		
Power			
Power Adapter	1 x Optional AC/DC 12V/5A , 60W		
Power Mode	Support AT, ATX Mode		
Power Input	2-pin Terminal Block Connector with Power Input 9~36VDC		
Power Protection	OVP (Over Voltage Protection) | OCP (Over Current Protection) | RPP (Reverse Polarity Protection)		
Power Consumption	≦45W		

We reserve the right to change specifications and product descriptions at any time without prior notice.

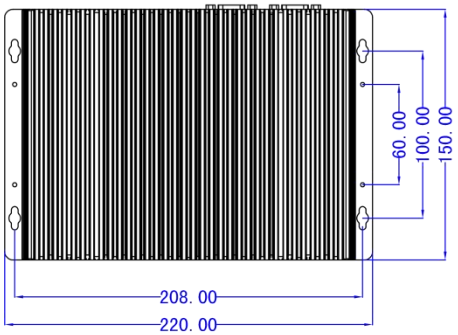
Physical	
Material	Aluminum Alloy Shell
Color	Grey / Silver / Black (optional)
Mounting	208 x 100 mm / 208 x 60 mm
Product Dimension	220 x 150 x 62 mm
Packing Size	360 x 180 x 320 mm
Weight (Net)	1.7 KG
Environment	
Operating Temperature	-30~70°C (-22~158°F)
Storage Temperature	-40~85°C (-40~185°F)
Relative Humidity	10% to 95% (non-condensing)
Vibration Protection	1.5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis
EMC	CE, FCC，Class A，ROHS

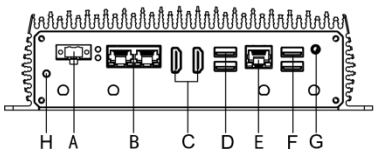
Dimension & I/O



I/O Definition：

I:Power Button J:Extension Switch
K:AT/ATX L:LAN
M:4xUSB2.0 N:COM3/COM4
O:COM1/COM2





I/O Definition：

A:DC 9V-36V B:2xLAN
C:H-DMI D:2xUSB3.0
E:LAN F:2xUSB3.0
G:Audio H:GND

Ordering info

Available models	Description
Monolith-20123A	Embedded Fanless Industrial Computer 12th Gen Intel® Alder Lake Core™ i3-1215U 1.2GHz Processor
Monolith-20125A	Embedded Fanless Industrial Computer 12th Gen Intel® Alder Lake Core™ i5-1235U 1.3GHz Processor
Monolith-20127A	Embedded Fanless Industrial Computer 12th Gen Intel® Alder Lake Core™ i7-1255U 1.7GHz Processor

Packing list

1 x Standard product
1 x 60W PSU (Power Supply)
1 x CD-ROM