DATASHEET

MTN-AL50

Intel® Alder Lake/Raptor Lake Series Processor based Ultra-Compact Mini PC with Thunderbolt 4



Features

- CPU: 12th/13th Gen Intel® Alder Lake/Raptor Lake Processor
- Memory: Dual Channel DDR5 for Memory up to 64GB
- Display: Integrated Intel® Iris® Xe/UHD Graphics, HDMI+DP+Thunderbolt™ 4
- I/O Ports: 2xUSB-C(1*TBT4+1*USB3.2_10Gbps), 2xUSB3.2, 1xUSB2.0, 2xLAN(2.5GbE), Audio
- Storage&Expansion: 1xM.2_Key M Slot for 2280 NVMe SSD, 1xM.2_Key M Slot for 2280 NVMe/SATA SSD, 1xM.2_Key E Slot for 2230 WiFi and Bluetooth
- Power: 19V/20V DC-in

intel prestige partner Builder

Maxtang®

MAXIMIZING YOUR COMPUTING PRODUCTIVITY

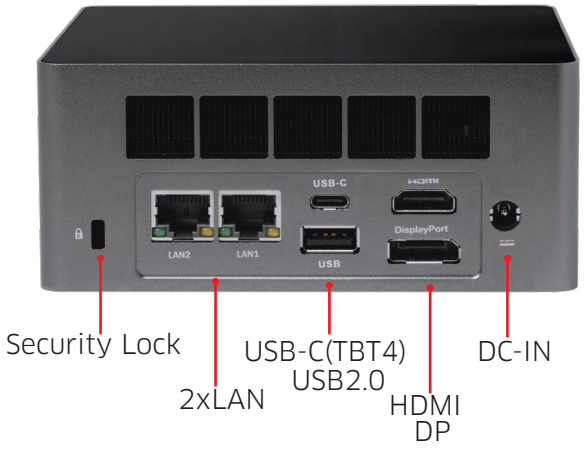
Introduction

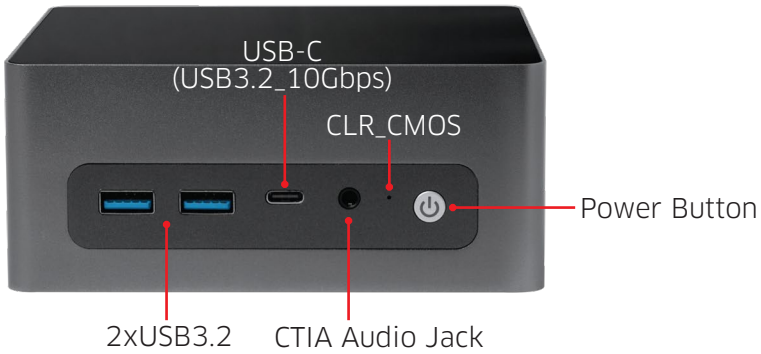
The MTN-AL50 Ultra-Compact Mini PC delivers desktop-class performance in a space-saving design, making it an ideal choice for modern workplaces and home environments. Powered by the latest Intel® Alder Lake and Raptor Lake processors, it offers outstanding multi-core performance, fast DDR5 memory support, and integrated Intel® graphics for smooth multitasking, 4K media playback, and responsive user experiences. Despite its small footprint, the MTN-AL50 delivers the power needed for everyday computing, content creation, and collaboration.

With its sleek design and versatile connectivity, the MTN-AL50 is perfectly suited for office productivity, digital signage, education, home entertainment, and small business deployments. Triple-display output, dual 2.5GbE networking, Thunderbolt™ 4, and high-speed storage expansion ensure flexibility for a wide range of use cases. Compact, reliable, and efficient, the MTN-AL50 is a powerful mini PC solution where space is limited but performance cannot be compromised.

Linux
ubuntu
Windows
H/W Monitor
Watchdog
HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

I/O Interfaces



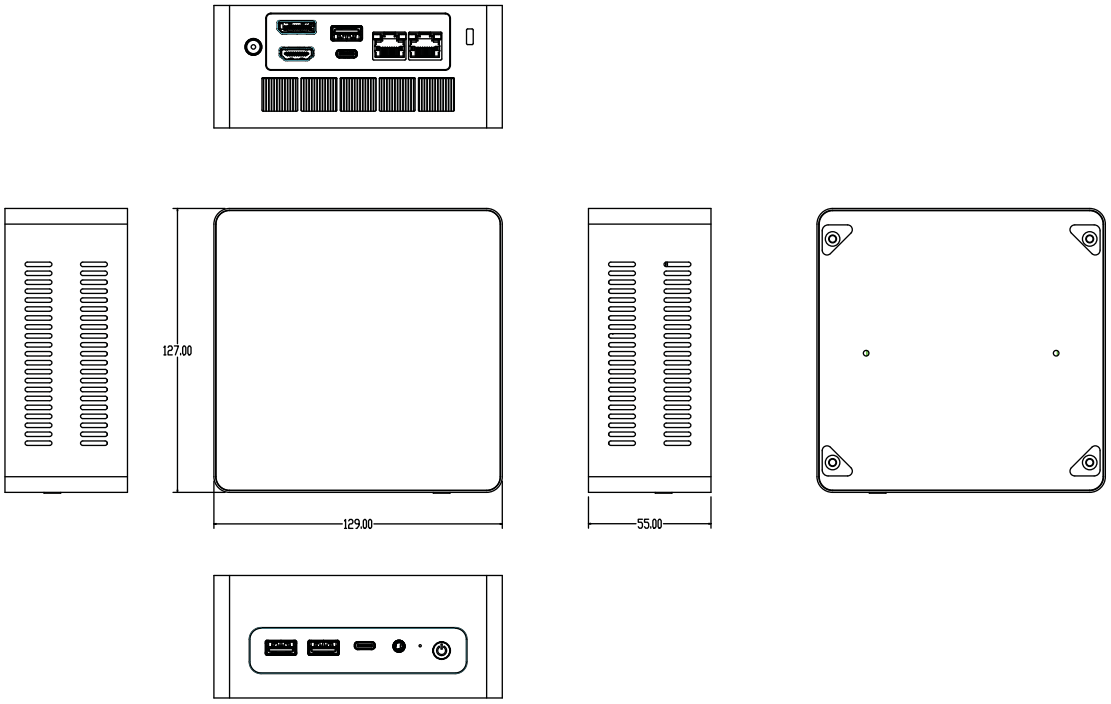


Technical Specifications

Processor	**Alder Lake/Raptor Lake**	**Core i5-1240P**	**Core i5-12450H**	**Core i7-13620H**
	Total Cores/Threads	12C/16T	8C/12T	10C/16T
	P-core Max Frequency	4.4 GHz	4.4 GHz	4.9 GHz
	E-core Max Frequency	3.3 GHz	3.3 GHz	3.6 GHz
	Cache	12 MB	12 MB	24 MB
	Processor Base Power	28 W	45 W	45 W
GPU	Integrated Intel Graphics	Iris® Xe	UHD	UHD
	BIOS	AMI UEFI BIOS		
Memory	Type	Dual Channel SO-DIMM DDR5		
	Max. Capacity	64GB(1240P,12450H)/96GB(13620H)		
Display	GPU	Integrated Intel® Graphics.		
	Interface	1 x DP2.1, 1 x HDMI2.1, 1 x TBT4		
Ethernet	Controller	2 x Intel® i226		
	Max Speed	10/100/1000/2500Mbps		
	Interface	2 x RJ45		
Audio	Audio Codec	SenaryTech SN6186		
	Interface	1 x CTIA 2in1 Audio Jack, supports Line-out+Mic-in		
Storage	M.2_N1	1 x M.2 Key M Slot for 2280 NVMe SSD		
	M.2_N/S	1 x M.2 Key M Slot for 2280 NVMe/SATA SSD		
Expansion	M.2_E	1 x M.2 Key E Slot for 2230 Wi-Fi&Bluetooth Module		
Other I/O	USB3.2	2 x USB3.2		
	USB2.0	1 x USB2.0		
	USB-C	2 x USB-C(Front:1*USB 3.2_10Gbps.Rear:1*TBT4 full-funcationed.)		
	TPM	Optional		
Dimension	Size	127 mm x 129 mm x 55mm (L x W x H)		
	Weight	N.W. Barebone: 0.685KG		
Power	Standard Port	19V/20V DC-in		
Temperature	Operating Temp.	0°C to 50°C		
	Storage Temp.	-20°C to 70°C		
Cooling		Active		
Operating System		Windows10/11 64bit, Linux 64bit.		

*All specifications and photos are subject to change without notice.

Dimension



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