DATASHEET

MTN-AL50

Intel® Alder Lake-P Series Processor based Ultra-Compact Mini PC with Dual Displays

Features

- CPU: 12th Gen Intel® Alder Lake-P Series Processor
- Memory: Dual Channel DDR5 for Memory up to 64GB
- Display: Intel® Integrated Graphics, Dual Displays via HDMI2.0
- I/O Ports: 2xUSB3.2, 2xUSB2.0, 2xLAN(2.5GbE), 2xHDMI2.0, USB-C, Audio
- Expansion: M.2 for WiFi and Bluetooth
- Storage: SATA3.0, M.2_2280 SSD NVMe
- Power: 19V/20 DC-in

intel® IoT Solutions Alliance
Industrial Solution Builders Specialist

Maxtang®
MAXIMIZING YOUR COMPUTING PRODUCTIVITY

Introduction

The Maxtang MTN-AL50 is a compact mini PC based on the 12th Gen Intel Alder Lake-P Series processors, which provides excellent performance with greater space-saving. Supports dual-channel SO-DIMM DDR5 up to 64GB, dual display via Intel Iris Xe Graphics through 2xHDMI2.0. Features two 10/100/1000/2500 Mbps ethernet controllers, SATA3.0 and M.2 for storage, M.2 Key E for WiFi, and Bluetooth. A rich I/O interface includes 2xUSB3.2, 2xUSB2.0, 2xLAN, 1xUSB-C, Mic-in and Line-out in one with standard 19V/20V DC-in caters to most markets' requirements.

The MTN-AL50 is an ideal solution for various applications. It retains the robust design of all Maxtang product lines at a new cost-effective price point. The powerful features provide the user with an outstanding visual experience and increase productivity with solid performance. Our goal is to provide the best products with high quality and cost advantages.

Linux™

ubuntu Linux

Windows

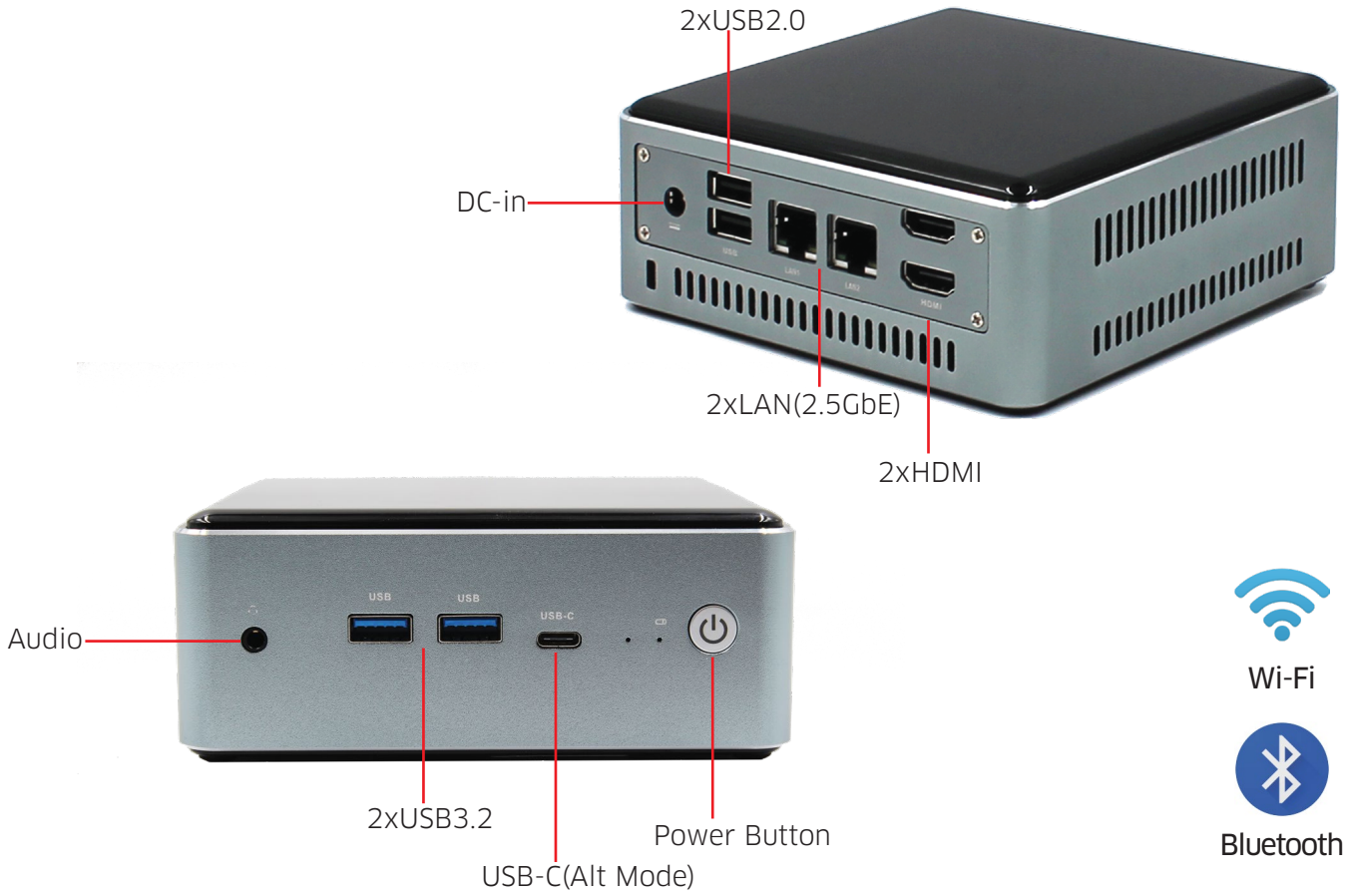
H/W Monitor

Watchdog

GPIO

Brightness

I/O Interfaces



Wi-Fi

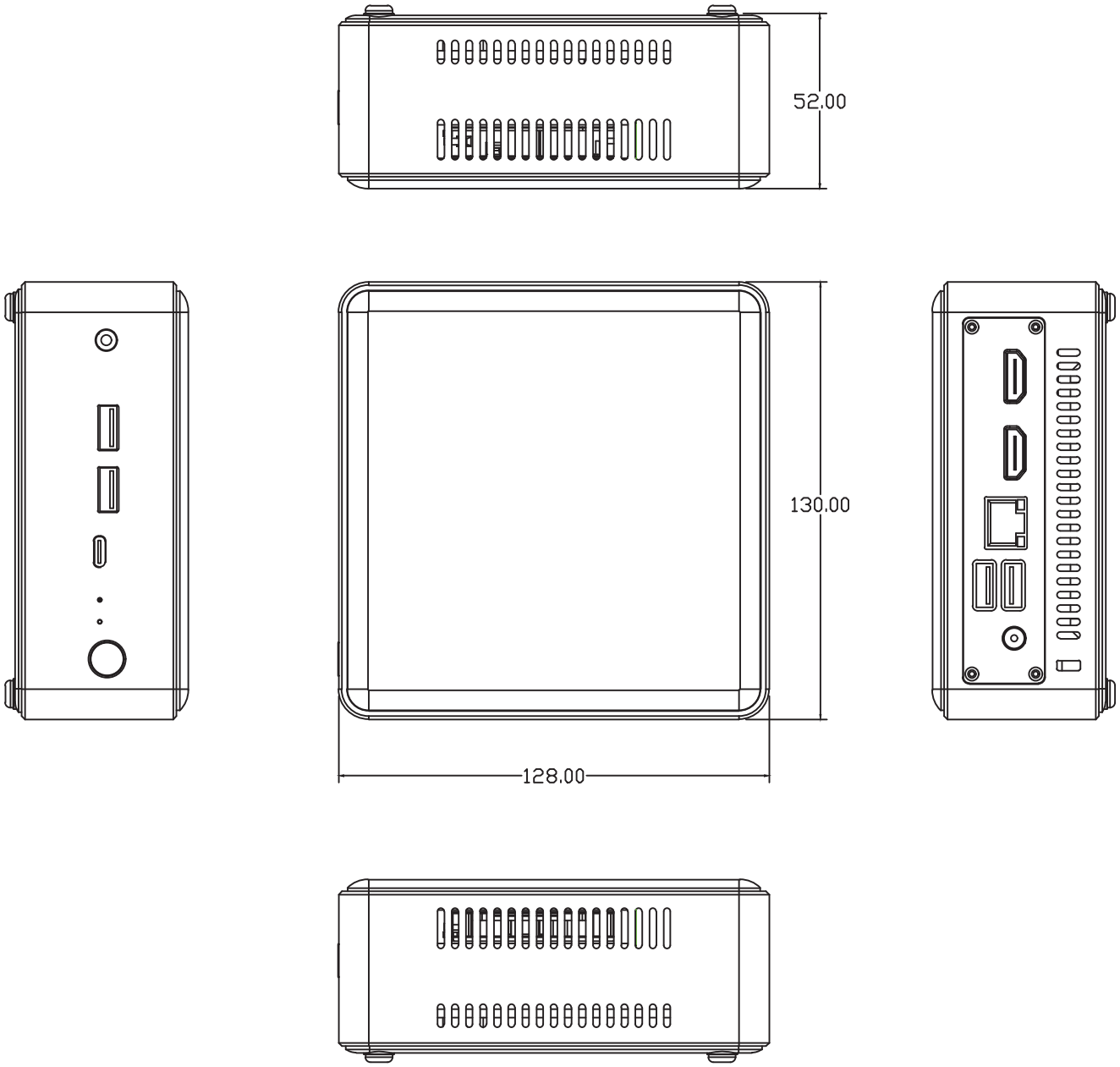
Bluetooth

Technical Specifications

Processor	**Alder Lake P Series**	i7-1260P	i5-1240P
	Total Cores/Threads	12C/16T	12C/16T
	# of Performance-cores	4	4
	# of Efficient-cores	8	8
	P-core Max Turbo Frequency	4.70 GHz	4.40 GHz
	E-core Max Turbo Frequency	3.40 GHz	3.30 GHz
	Cache	18 MB	12 MB
	Processor base Power	28 W	28 W
Memory	Type	Dual Channel SO-DIMM DDR5	
	Max Capacity	64GB	
Display	GPU	Intel Integrated Graphics (Iris Xe/UHD Graphics depends on CPU)	
	Display Port	2x HDMI 2.0	
Ethernet	Speed	10/100/1000/2500 Mbps	
	Controller	RTL8125	
	Interface	2xRJ-45	
Audio	Audio Codec	Realtek HD	
	Interface	Line-out, Mic-in, Audio header, Amplifier header	
Hardware		CPU temperature, system temperature, onboard voltage, watchdog	
Storage	M.2	1xM.2 for NVMe 2280 SSD, PCIe4.0 4X Signal	
	SATA3.0	1	
Expansion	M.2	1xM.2 for WiFi and Bluetooth, Supports CNVi	
I/O Interface	HDMI2.0	2	
	USB2.0	2	
	USB3.2	2	
	LAN	2	
	Audio	1	
	Line-out	1xCTIA Audio Jack (Line-out+Mic-in)	
	USB-C	1xUSB-C Full-functioned	
		Support USB 3.2 Gen 2 upstream/DisplayPort 1.4 Alt Mode (power up to 90W)	
Dimension	Size	128 mm x 130 mm x 52mm (L x W x H)	
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		Win10/11 64bit, Linux 64bit	

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

Dimension



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