

# T0-RL50

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: 1xTBT4, 1xUSB-C(USB3.2), 2xUSB3.2, 1xUSB2.0, 1xLAN(2.5GbE), Audio
- Storage: 1xM.2\_2280 Slot for NVMe SSD, 1xM.2\_2280 Slot for SATA/NVMe SSD
- Expansion: 1xM.2 Slot for Wi-Fi and Bluetooth
- Power: 19V/20V DC-in



IoT Solutions  
Alliance  
Industrial Solution  
Builders Specialist

## Introduction

The Maxtang T0-RL50 is an ultra-compact mini PC equipped with Intel Alder Lake/Raptor Lake series processors for powerful performance while great for space saving. It supports dual-channel SO-DIMM DDR5 memory up to 64GB and offers multiple display capabilities through Integrated Intel® Iris® Xe Graphics eligible/UHD Graphics using HDMI2.0, DP1.4, and Thunderbolt 4 interfaces. This mini pc features a 10/100/1000/2500 Mbps ethernet controller, 2xM.2 slots for storage, and an additional M.2 for Wi-Fi & Bluetooth. Other I/O interfaces include 2xUSB3.2, 1x USB2.0, 1x LAN(2.5GbE), 1x USB-C(USB3.2), and a 2 in 1 CTIA Audio Jack.

It has excellent compatibility in addition to its powerful features. The Maxtang Ultra Compact Mini PC provides an immersive visual experience, increased productivity, stability, and reliability, making it perfect for multitasking, creating, playing, working, educating, and entertaining. It is ideal for various applications, including gaming entertainment, working studios, office use, education, and home theaters. Its diminutive size takes up minimal desk space and makes it ideal for applications where traditional boards and systems are unsuitable.



H/W Monitor



Watchdog



Wi-Fi



Bluetooth

## I/O Interfaces



2x USB3.2  
Audio Power Button  
CLR\_CMOS  
USB-C(USB3.2\_10Gb)



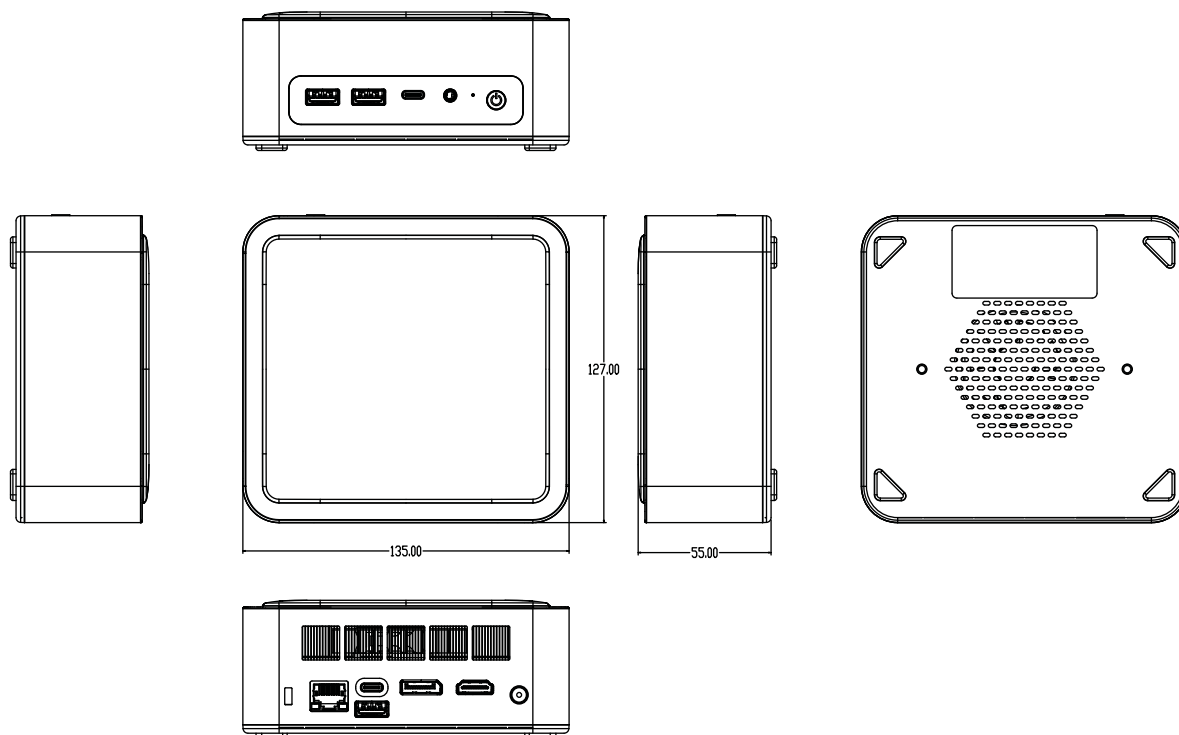
Security Lock  
LAN  
Thunderbolt™ 4  
USB2.0  
DP  
HDMI  
DC-IN

## 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
	BIOS	AMI UEFI BIOS		
Memory	Type	Dual Channel SO-DIMM DDR5		
	Max Capacity	64GB		
Display	GPU	Integrated Intel® Iris® Xe Graphics eligible (CPU: i5-1240P)		
		Integrated Intel® UHD Graphics (CPU: i5-12450H, i7-13620H)		
		Display Interfaces 1x HDMI2.0		
		1x DP1.4		
		1x Thunderbolt™ 4		
Ethernet	Speed	10/100/1000/2500Mbps		
	Controller	Intel i226		
	Interface	1x RJ-45		
Audio	Audio Codec	Realtek HD ALC897		
	Interface	1x CTIA 2in1 Audio Jack. Supports Line-out+Mic-in		
Hardware		CPU temperature, System temperature, Onboard voltage, Watchdog		
Storage	M.2_N/S	1x M.2_2280 Slot for SATA/NVMe(PCIe3.0) SSD		
	M.2_N1	1x M.2_2280 Slot for NVMe(PCIe4.0) SSD		
Expansion	M.2_E	1x M.2_2230 Slot for Wi-Fi, Support CNVi		
Other I/O	USB2.0	1		
	USB3.2	2		
	USB-C	1x USB-C. Support USB 3.2_10Gb ONLY		
	TBT4(Thunderbolt™4)	1x Thunderbolt™ 4		
	TPM	Optional		
Dimension	Size	135 mm x 127 mm x 55 mm (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		Supports Windows 10/11 64bit, Linux 64bit		

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

## Dimension



## Color Options



Space Gray



Pearl White