## **AL-35**

# Intel® Alder Lake/Raptor Lake U Series Processor based 3.5" Disk Size Motherboard



#### **Features**

- CPU: Intel® Alder Lake/Raptor Lake U Series Processor
- Memory: Dual Channel SO-DIMM DDR4 up to 64GB
- Display: Integrated Graphics display via 2xHDMI, eDP/LVDs
- Ethernet: 1xIntel i219(1.0G)+ 1xIntel i210(1.0G)
- Storage: SATA, M.2\_2242 for SATA/4G, M.2\_2280 for NVMe
- Expansion: M.2 for Wi-Fi
- Power: 9V-35V(2-Pin DC-IN Phoenix Connector)





#### Introduction

The Maxtang SBC-AL35 is a powerful and energy-efficient embedded motherboard designed for industrial applications. It is equipped with Intel® Alder Lake/Raptor Lake U series processor and supports up to 64GB of dual-channel SO-DIMM DDR4 memory, providing enhanced performance and productivity. The board also offers a range of display options, including HDMI, eDP, and LVDS, and features two Intel Ethernet controllers, two M.2, and SATA for storage, making it a versatile solution for a variety of applications.

Moreover, the SBC-AL35 provides a comprehensive input/output interface, including 6x COM, 4x USB3.2, 4xUSB2.0, 8xGPIO, and an audio port, making it easy to connect to a wide range of peripherals. The board is designed for stability and reliability and is built with a robust design to withstand harsh industrial environments. As a member of the Intel IoT Solutions Alliance, Maxtang is committed to delivering high-quality products at a competitive price to meet the needs of its customers.











H/W Monitor

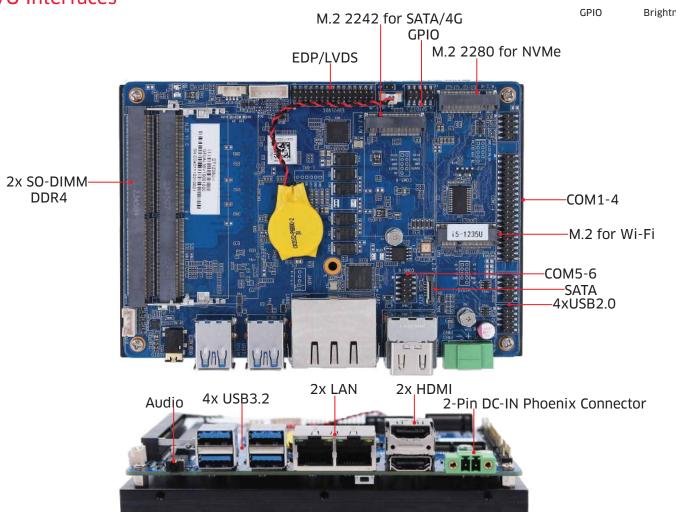
Watchdog





**Brightness** 



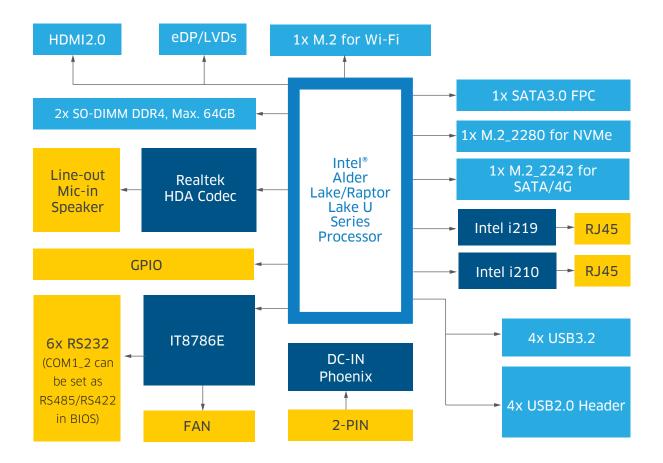


### **Technical Specifications**

Processor	Intel® Core™ CPU		i7-1255U	i5-1235U	i3-1215U	
	Total Cores/Threads		10C/12T	10C/12T	6C/8T	
	P-core Max Turbo Frequency		4.70GHz	4.40GHz	4.40GHz	
	E-core Max Turbo Freq	uency	3.50GHz	3.30GHz	3.30GHz	
	Intel® Smart Cache		12MB	12MB	10MB	
	BIOS	AMIL	AMI UEFI BIOS			
Memory	Type	Dual	Dual Channel SO-DIMM DDR4			
	Max. Capacity	64GB	64GB			
Display	GPU	Integr	Integrated Graphics based on CPU. Intel® Iris® Xe or UHD Graphics			
	Display via	2xHD	2xHDMI2.0 + 1x eDP/LVDs			
Ethernet	Controller	Intel	Intel i219 Data Rate per Port: 1.0G			
		Intel	Intel i210 Data Rate per Port: 1.0G			
	Interface	2xRJ	2xRJ45			
	Wake on LAN	Yes	Yes			
Audio	Audio Codec	Realte	Realtek HD			
	Interface	1xCTI	1xCTIA 2-in-1 Audio Jack, supports Line-out + Mic-in and power amplifier			
Hardware		CPU system temperature, on-board DC-in voltage, watchdog, auto power on				
Storage	M.2	1x M.	1x M.2_2242 for SATA SSD/4G			
		1x M.	1x M.2_2280 for NVMe SSD			
	SATA3.0	1x SA	TA3.0 FPC Interfac	e		
Expansion	M.2	1x M.	1x M.2 for Wi-Fi, Supports PCIE&CNVi			
Other I/O	COM	6*RS2	6*RS232. The COM1_2 can be set as RS485/RS422 in BIOS.			
		The C	The COM5,COM6 are 2-wire serial communication			
	USB3.2	4	4			
	USB2.0	4*hea	4*header			
	GPIO	8	8			
	SIM	Optio	Optional			
Dimension	Size	146 r	146 mm x 102mm			
	Board Type	3.5" [	3.5" Disk Size SBC			
Power	Standard Port	12V-3	12V-35V, 2-Pin DC-IN Phoenix Connector			
	Peripheral Input	For F	For Fan and SATA			
	LED Indicator	Powe	Power Indicator			
Temperature	Operating Temp.	-20°C	-20°C to 50°C			
	Storage Temp.	-40°C	to 70°C			
Operating System		Win1	0/11 64bit, Linux 6	54bit		

<sup>\*</sup> All specifications and photos are subject to change without notice.

#### Functional Block Diagram



#### **Order Information**

Model Name	Description
DT1235U-I	DT Intel Core-i5 1235U AL35V1.0 2DDR4 2LAN 6*RS232 2HDMI+LVDS

<sup>\*</sup>For customized options, please consult regional sales. And please confirm the model name and description before purchasing. \*The model name and description might vary due to inventory changes.



