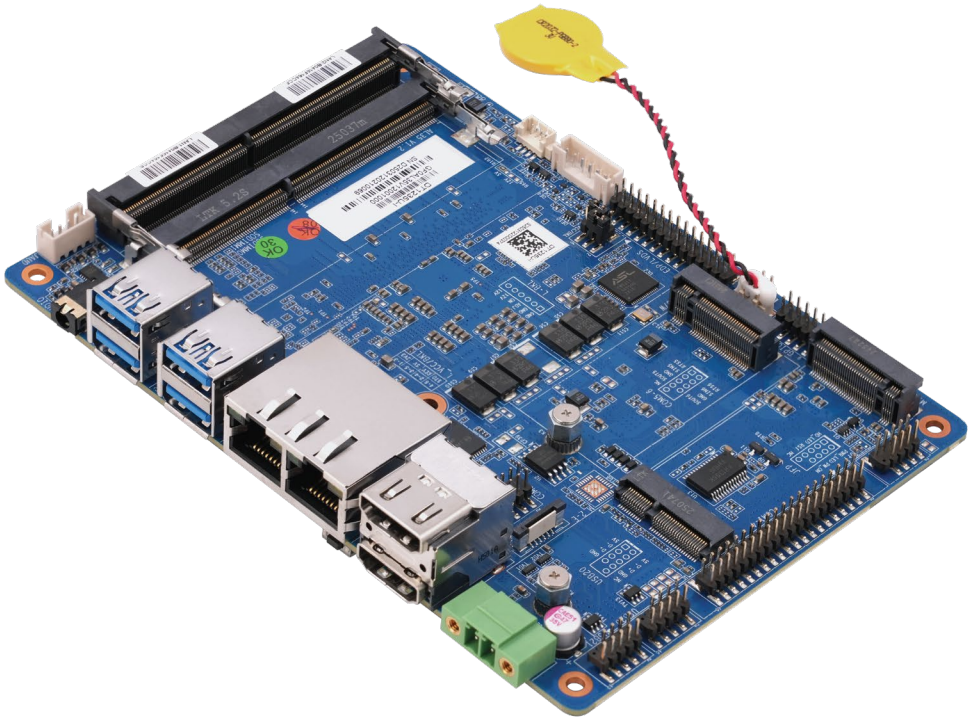
PRODUCT DATASHEET
HW Rev.: V1.2

AL-35

Intel® Alder Lake/Raptor Lake U Series Processor based Single Board Computer



Features

- CPU: Intel® Alder Lake/Raptor Lake U Series Processor
- Memory: Dual Channel SO-DIMM DDR4 up to 64GB
- Display: Integrated Intel Graphics display via 2xHDMI2.0, eDP/LVDs
- Ethernet: Intel® i219(1.0GbE)+Intel® i210(1.0GbE)
- Storage: SATA FPC, M.2 Key B Slot for SATA/4G, M.2 Key M Slot for NVMe
- Expansion: M.2 Key E Slot for Wi-Fi&BT
- Power: 12V-35V(2-Pin DC-IN Phoenix Connector)

intel prestige partner Builder

Maxtang®
MAXIMIZING YOUR COMPUTING PRODUCTIVITY

Introduction

The Maxtang AL-35 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 AL35V1.0 provides a comprehensive input/output interface, including 6x COM, 4x USB3.2, 4xUSB2.0, GPIO, 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.

Linux™

ubuntu Linux

Windows

H/W Monitor

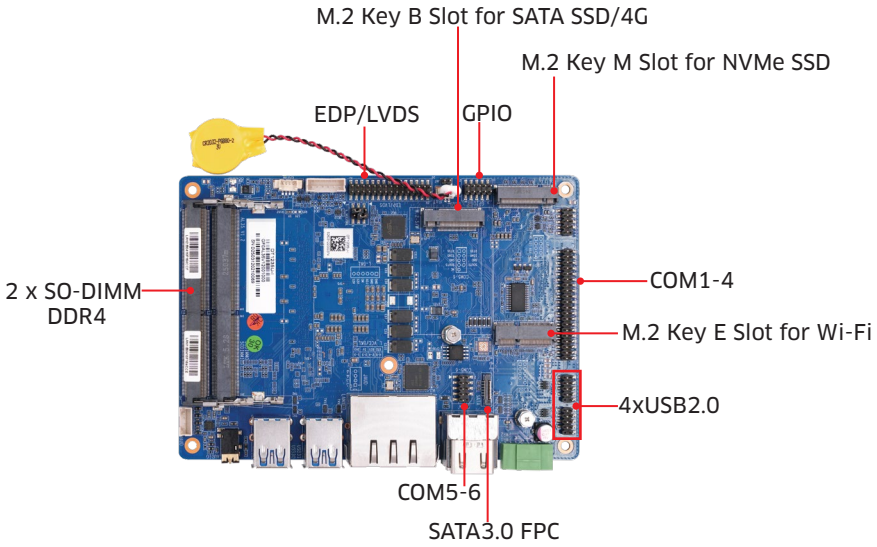
Watchdog

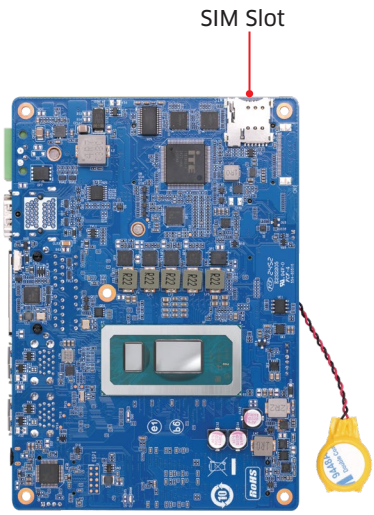
GPIO

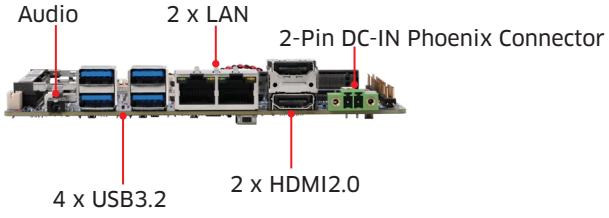
Brightness

HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE

I/O Interfaces





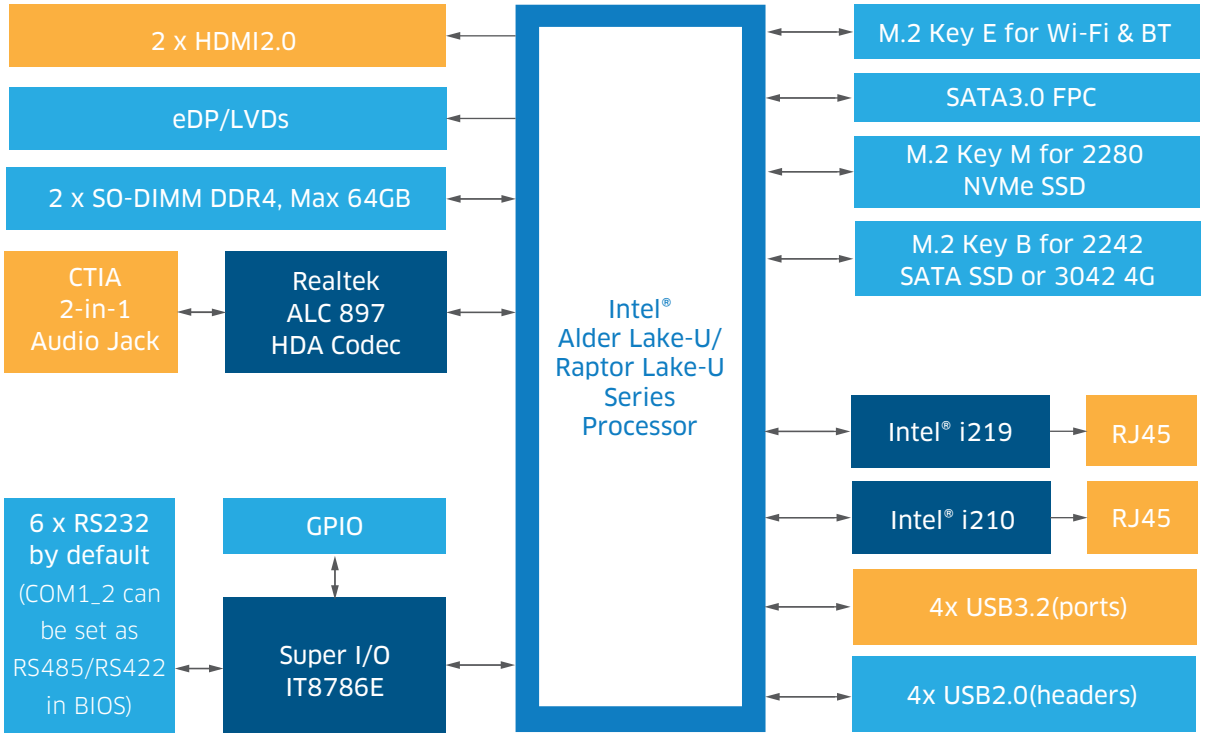


Technical Specifications

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 Frequency	3.50GHz	3.30GHz	3.30GHz
	Intel® Smart Cache	12MB	12MB	10MB
	BIOS	AMI UEFI BIOS		
Memory	Type	Dual Channel SO-DIMM DDR4-3200MHz		
	Max. Capacity	Up to 64GB		
Display	GPU	Integrated Intel® Iris® Xe/UHD Graphics.		
	Interface	2 x HDMI2.0+1 x eDP/LVDs		
Ethernet	Controller	1 x Intel® i219, Data Rate per Port: 1.0GbE		
		1 x Intel® i210, Data Rate per Port: 1.0GbE		
	Interface	2 x RJ45		
	Wake on LAN	Yes		
Audio	Audio Codec	Realtek ALC897 High-definition Audio Codec		
	Interface	1 x CTIA 2-in-1 Audio Jack, supports Line-out + Mic-in and power amplifier		
Hardware Monitoring		CPU system temperature, on-board DC-in voltage, watchdog, auto power on		
Storage	M.2_S/W	1 x M.2 Key B Slot for 2242 SATA SSD/3042 4G Module		
	M.2_N	1 x M.2 Key M Slot for 2280 NVMe SSD		
	SATA	1 x SATA3.0 FPC Interface		
Expansion	M.2_E	1 x M.2 Key E Slot for 2230 Wi-Fi and Bluetooth, Supports PCIE& CNVi		
	SIM Slot	1 x SIM Slot Optional		
Other I/O	COM	6 x RS232. COM1-2 configurable as RS422/RS485 via BIOS		
		COM5-6: RS232 (TX/RX/GND only, no flow control)		
	USB3.2	4 x USB3.2 Gen2 10Gbps, rear ports		
	USB2.0	4 x USB2.0, onboard header		
	GPIO	8-bit		
Dimension	Size	146 mm x 102mm		
	Form Factor	3.5” SBC		
Power	Standard Port	12V-35V; 2-Pin DC-IN Phoenix Connector		
	Peripheral Input	For Fan and SATA		
	LED Indicator	Power Indicator		
Temperature	Operating Temp.	-20°C to 60°C		
	Storage Temp.	-40°C to 80°C		
Operating System		Win10/11 64bit, Linux 64bit		

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

Block Diagram



Order Information

Model Name	Description
DT1235U-I	DT Intel Core i5-1235U AL35V12 2DDR4 2LAN 2DDI+LVDS 4*RS232+2*RS232/RS485/RS422
DT1215U-I	DT Intel Core i3-1215U AL35V12 2DDR4 2LAN 2DDI+LVDS 4*RS232+2*RS232/RS485/RS422

*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.

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