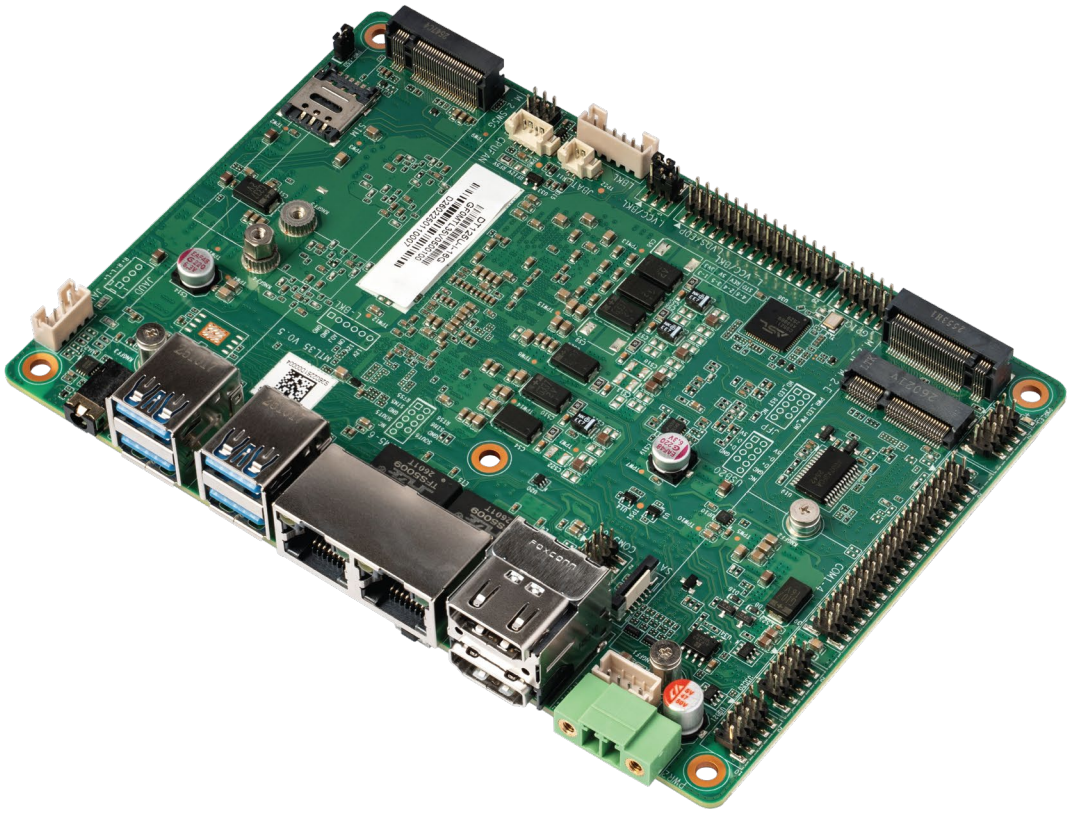
PRODUCT DATASHEET
HW Rev.: V0.5

MTL-35

Intel® Core™ Ultra Meteor Lake-U/Arrow Lake-U Series based Single Board Computer



Features

- CPU: Intel® Meteor Lake-U/Arrow Lake-U Series Processor
- Memory: Onboard LPDDR5, 8GB/16GB/32GB
- Display: Integrated Intel Graphics display via 2xHDMI2.0, eDP/LVDs
- Ethernet: 2 x Intel® i210, 10/100/1000Mbps
- Storage&Expansion: SATA3.0 FPC, M.2 Key B Slot for SATA/4G/5G, M.2 Key M Slot for NVMe, M.2 Key E Slot for Wi-Fi&BT
- Power: 9V-36V(2-Pin DC-IN Phoenix Connector)

intel prestige partner Builder

Maxtang®
MAXIMIZING YOUR COMPUTING PRODUCTIVITY

Introduction

The Maxtang MTL-35 is a compact 3.5” single board computer based on the latest Intel® Core™ Ultra 125U, 225U (Meteor Lake-U/Arrow Lake-U) processor, featuring a 12-core/14-thread architecture with integrated graphics and Intel® AI Boost NPU (up to 12 TOPS) for edge AI acceleration. With onboard LPDDR5 memory up to 32GB, dual Intel® i210 Gigabit Ethernet, and rich I/O including 3× USB 3.2 Gen2, 5× USB 2.0, and 6× COM ports (RS232, with COM1/2 configurable to RS422/RS485), the MTL-35 delivers strong computing performance and flexible connectivity for industrial and embedded applications.

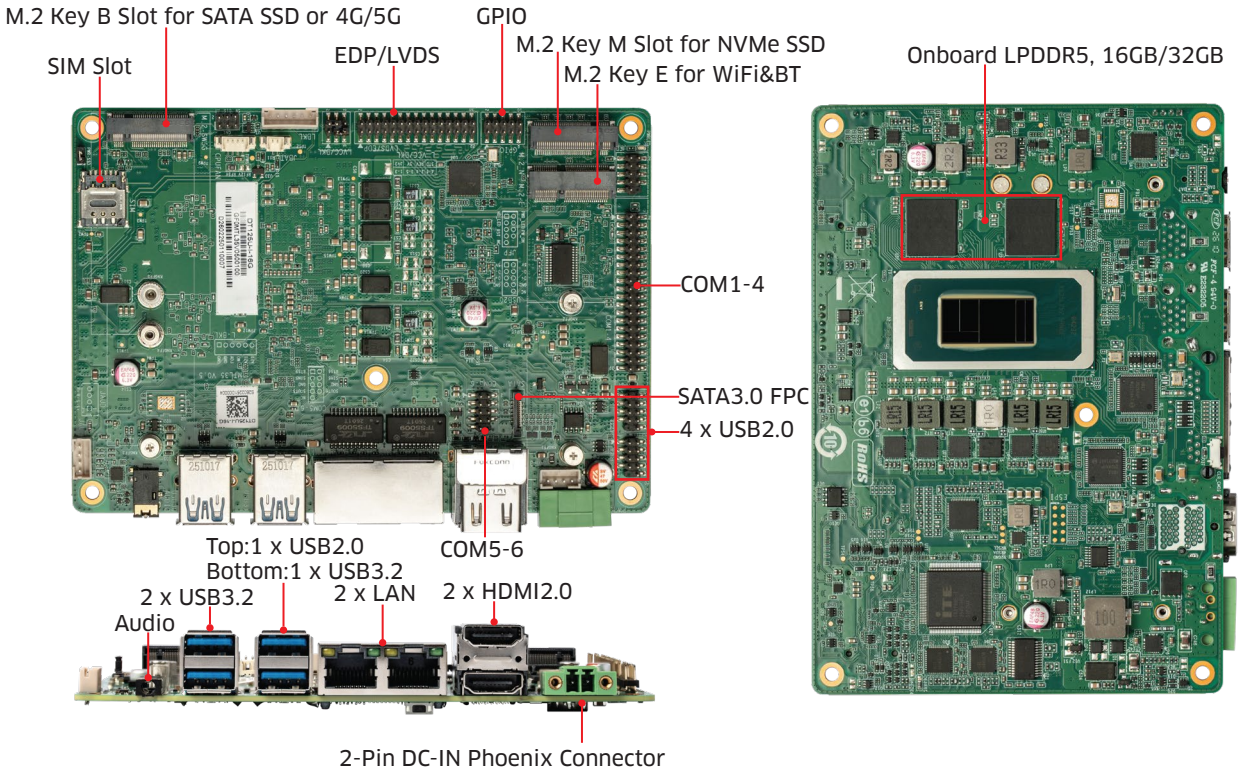
The board supports triple display output via 2× HDMI 2.0 and 1× eDP/LVDS, enabling multi-display configurations for HMI, panel PC, and smart display systems. Expansion options include M.2 Key M (NVMe SSD), M.2 Key B (SATA SSD/4G/5G), and M.2 Key E (Wi-Fi/BT), along with an optional SIM slot for wireless communication. Designed for reliability, the MTL-35 features wide voltage input (9–36V DC), system monitoring functions, and an operating temperature range of -20°C to 60°C, making it suitable for continuous operation in demanding industrial environments.

Linux
ubuntu
Windows

H/W Monitor
Watchdog
GPIO
Brightness

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

I/O Interfaces

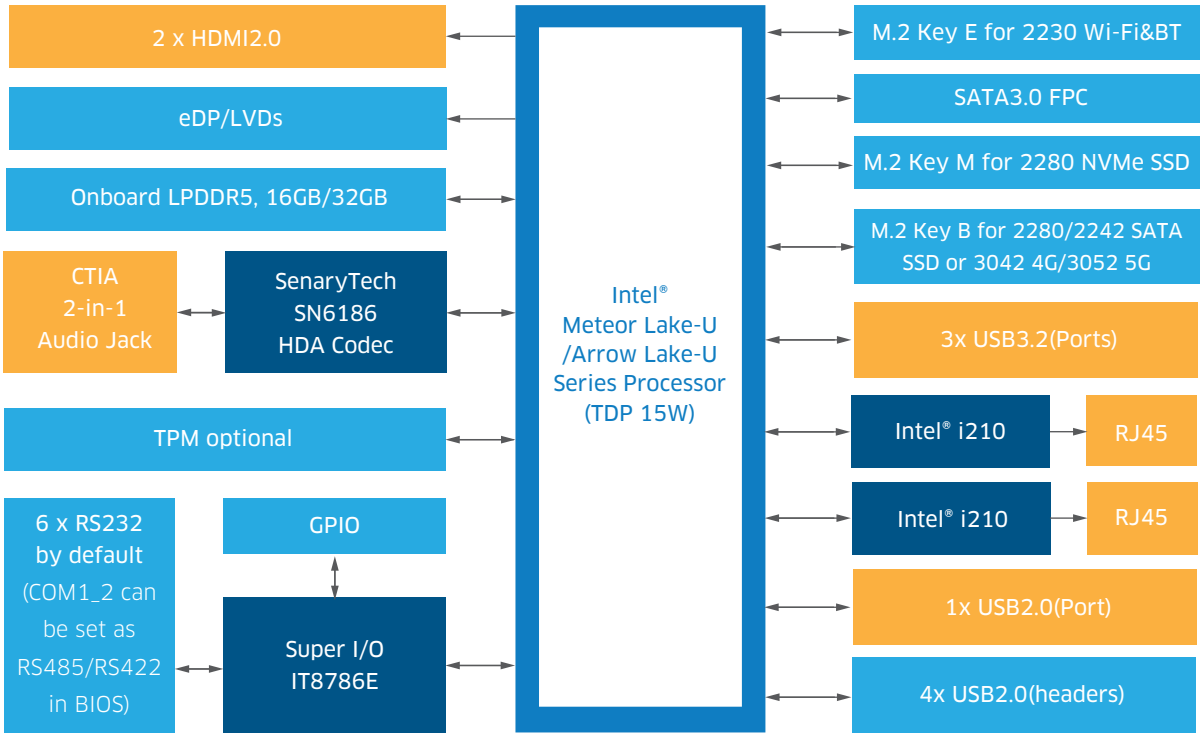


Technical Specifications

Processor	Intel® Core™ Ultra	125U	225U
	Total Cores/Threads	12C/14T	12C/14T
	P-core Max Turbo Frequency	4.3GHz	4.8GHz
	E-core Max Turbo Frequency	3.6GHz	3.8GHz
	Intel® Smart Cache	12MB	12MB
NPU	Intel® AI Boost	YES	YES
	NPU Peak TOPS	11TOPS	12TOPS
	BIOS	AMI UEFI BIOS	
Memory	Type	Onboard LPDDR5	
	Capacity	8GB/16GB/32GB	
Display	GPU	Integrated Intel® Graphics	
	Interface	2 x HDMI2.0, 1 x eDP/LVDs	
Ethernet	Controller	2 x Intel® i210	
	Max Speed	10/100/1000Mbps	
	Interface	2 x RJ45	
	Wake on LAN	Yes	
Audio	Audio Codec	SenaryTech SN6186 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_SW5G	1 x M.2 Key B Slot for 2242/2280 SATA SSD or 3042 4G/3052 5G 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&BT Module, supports PCIE& CNVi	
	SIM Slot	1 x SIM Slot Optional	
Other I/O	COM	6 x RS232 by default. COM1-2 configurable as RS422/RS485 via BIOS	
		COM5-6: RS232 (TX/RX/GND only, no flow control)	
	USB3.2	3 x USB3.2 Gen2 10Gbps	
	USB2.0	5 x USB2.0, 1*shared in rear USB Type-A connector+4*onboard header	
	GPIO	8-bit	
	TPM	Optional	
Dimension	Size	146 mm x 102mm	
	Form Factor	3.5” SBC	
Power	Standard Port	9V-36V; 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
DT125U-I-8G	DT 3.5INCH Intel Core Ultra 5 125U MTL35 LPDDR5_8G 2LAN 4*RS232+2*RS232/RS485 2*HDMI+LVDS
DT125U-I-16G	DT 3.5INCH Intel Core Ultra 5 125U MTL35 LPDDR5_16G 2LAN 4*RS232+2*RS232/RS485 2*HDMI+LVDS
DT225U-I-32G	DT 3.5INCH Intel Core Ultra 5 225U MTL35 LPDDR5_32G 2LAN 4*RS232+2*RS232/RS485 2*HDMI+LVDS

*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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