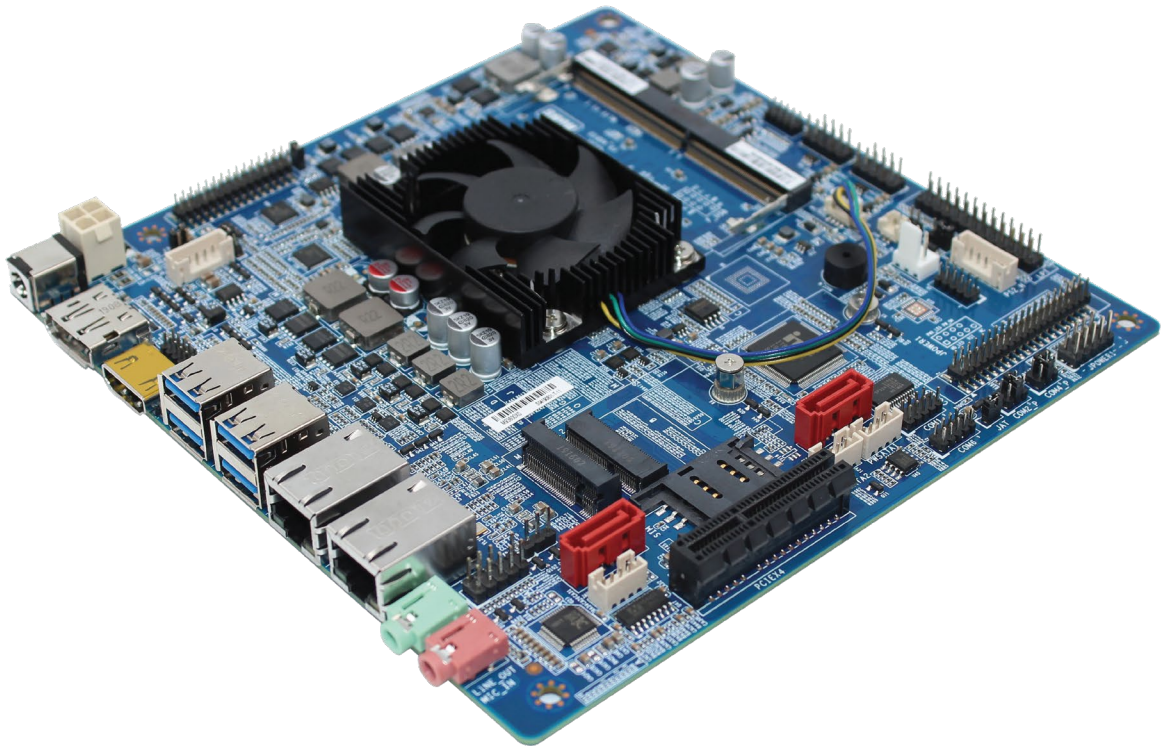


WL-10

Intel® Whiskey Lake/Comet Lake-U Processor based Mini ITX Motherboard



Features

- CPU: Intel® Whiskey Lake/Comet Lake-U Processor
- Memory: Dual channel SO-DIMM DDR4 up to 64GB
- GPU: Integrated Intel® UHD Graphics, display via HDMI+DP+eDP/LVDs
- Ethernet: Intel® i219(1.0GbE) + Intel® i210(1.0GbE)
- Storage: M.2 Key B for 2242/2280 SATA SSD, SATA3.0
- Expansion: M.2 Key E for WiFi & BT, PCIe x4 Slot
- Power: 12V DC-in/4Pin Power



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Introduction

The Maxtang WL-10 is a Mini-ITX motherboard powered by Intel® Whiskey Lake-U and Comet Lake-U processors, supporting Celeron® 4205U, Pentium® 5405U, Core™ i3, and Core™ i5 options with up to 4 cores / 8 threads at 15W TDP. It offers dual-channel DDR4 SO-DIMM up to 64GB and Intel® UHD Graphics with triple display support via HDMI, DP, and LVDS/eDP.

Key features include dual Intel® GbE LAN (i210 + i219), six COM ports (5x RS232 + 1x RS485), 3x USB 3.2, 5x USB 2.0, GPIO, and onboard TPM 2.0. Storage and expansion are flexible with 2x SATA3.0 (1x with Celeron®), M.2 Key B (SSD/4G), M.2 Key E (WiFi/BT), and PCIe x4 Gen 3. With Realtek ALC897 audio, watchdog, auto power-on, 12V DC-in, and -20°C ~ 60°C operating range, the WL-10 delivers reliable performance for industrial automation, embedded systems, and digital signage.



H/W Monitor



Watchdog



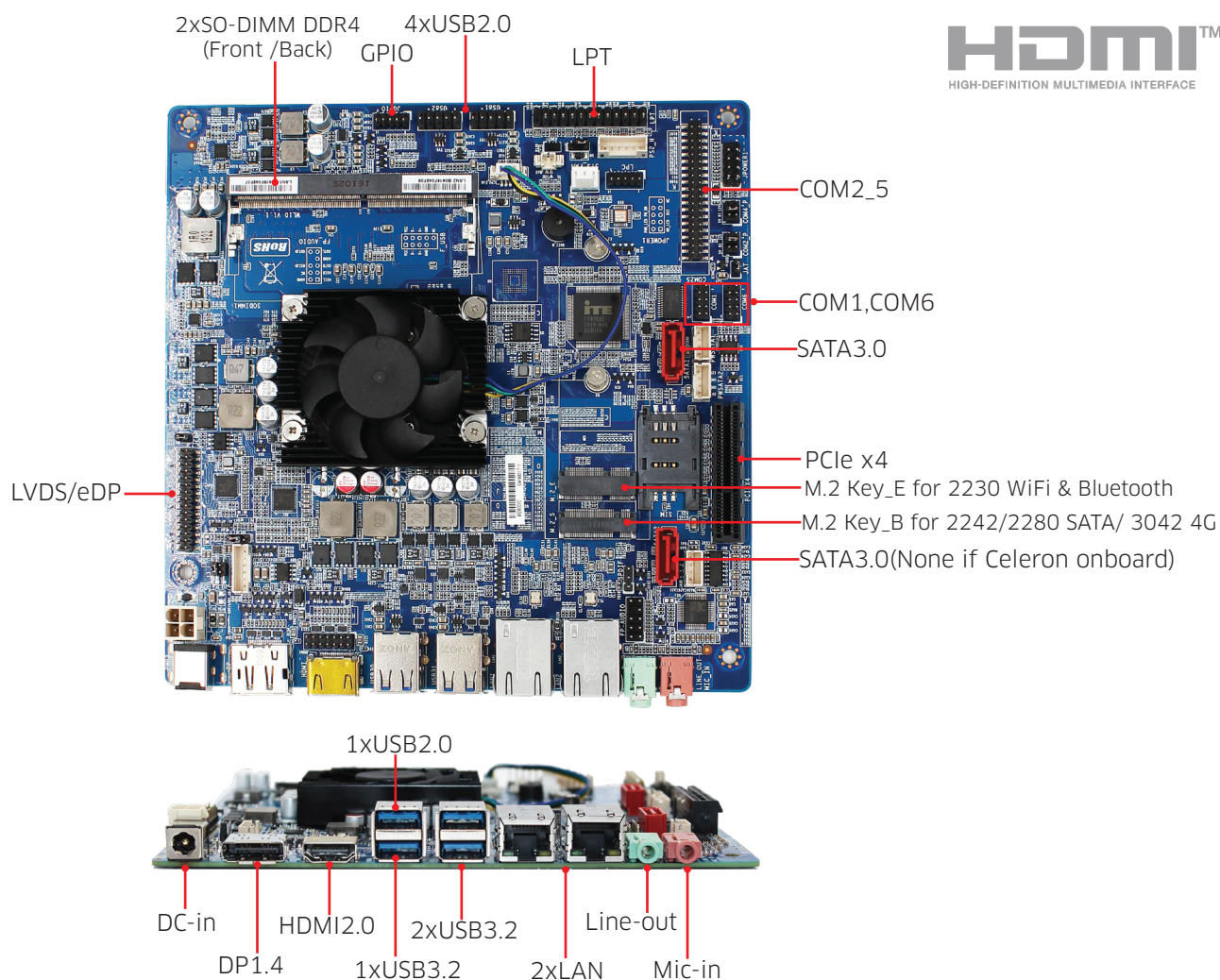
GPIO



Brightness



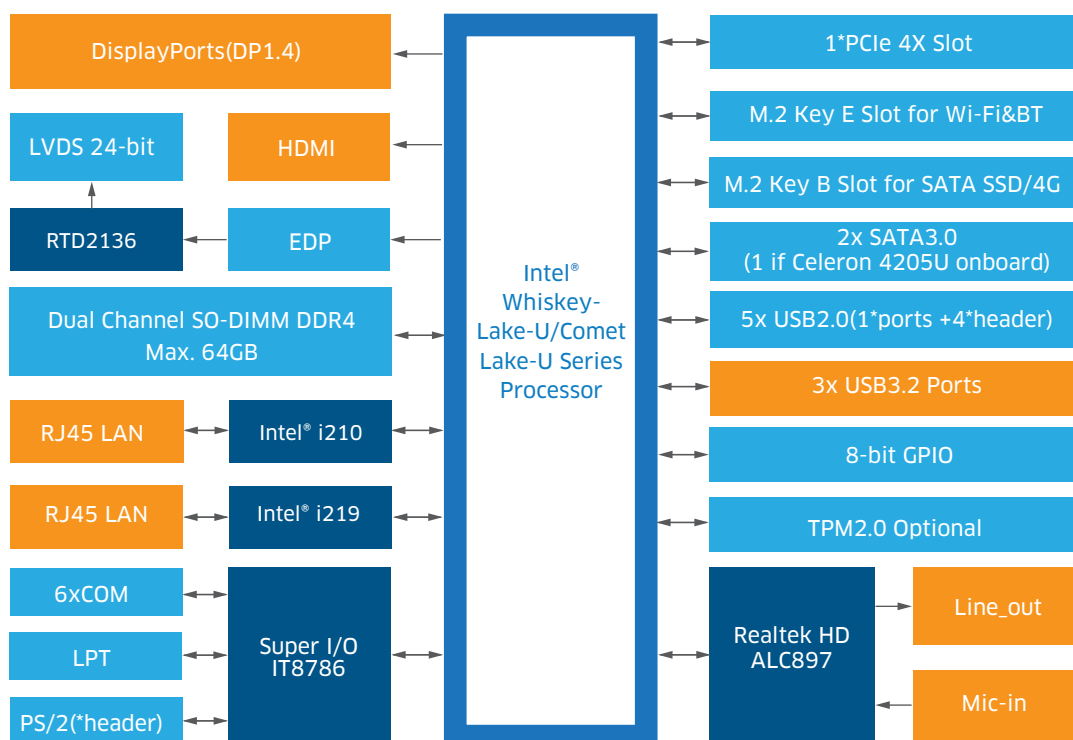
I/O Interfaces



Technical Specifications

Processor	Whiskey Lake U Series	i3-8145U	Celeron 4205U	Pentium 5405U
	Total Cores/Threads	2C/4T	2C/2T	2C/4T
	Max Turbo Frequency	3.90GHz	/ GHz	3.90GHz
	Base Frequency	2.10GHz	1.80GHz	2.10GHz
	Cache	4MB	2MB	4MB
	TDP	15W	15W	15W
Processor	Comet Lake U Series	i5-10210U	i3-10110U	
	Total Cores/Threads	4C/8T	2C/4T	
	Max Turbo Frequency	4.20GHz	4.10GHz	
	Base Frequency	1.60GHz	2.10GHz	
	Cache	6MB	4MB	
	TDP	15W	15W	
Memory	BIOS	AMI UEFI BIOS		
	Type	Dual Channel SO-DIMM DDR4		
	Max.Capacity	64GB		
Display	GPU	Integrated Intel® UHD Graphics for 8th/10th Generation Intel® Processors		
	Interface	1xHDMI+1xDP+1x LVDS/eDP		
Ethernet	Controller	1 x Intel i210, Data Rate Per Port: 1.0GbE		
		1 x Intel i219, Data Rate Per Port: 1.0GbE		
	Interface	2 x RJ45		
	Wake on LAN	Yes		
Audio	Audio Codec	Realtek HD ALC897		
	Interface	1 x Line-out, 1xMic-in, supports audio header and amplifier header		
Hardware Monitoring		CPU system temperature, onboard voltage, watchdog, auto power on		
Storage	M.2_S	1 x M.2 Key B for 2242/2280 SATA SSD or 3042 4G Module		
	SATA	2 x SATA3.0(Only 1 if celeron onboard)		
		Note!!! The Celeron 4205U does not support SATA_2.		
Expansion	M.2_E	1 x M.2 Key E for 2230 WiFi and Bluetooth		
	PCIe x4	1*PCIe x4 Gen 3 Slot		
Other I/O	COM	6 x COM: 5*RS232 +1*RS485		
	USB3.2	3 x USB3.2(ports)		
	USB2.0	5 x USB2.0(1*port+4*headers)		
	GPIO	8-bit		
	LPT	1		
	PS/2	1(header)		
	TPM2.0	Onboard, optional		
Dimension	Size	170mm x 170mm		
	Form Factor	Mini-ITX		
Power	Standard Port	12V DC-in/4-PIN Power		
	Peripheral Input	For Fan and SATA		
	Operating Temp.	-20°C ~60°C		
	Storage Temp.	-40°C ~80°C		
Operating System		Win10/11 64 bit, Linux 64 bit		

Functional Block Diagram



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Order Information

Model Name	Description
DT4205-A	DT MINI-ITX Intel Celeron 4205U WL10 2LAN 5*RS232 1*RS485 DP+HDMI+LVDS
DT5405-A	DT MINI-ITX Intel Pentium 5405U WL10 2LAN 5*RS232 1*RS485 DP+HDMI+LVDS
DT8145-A	DT MINI-ITX Intel Core i3-8145U WL10 2LAN 5*RS232 1*RS485 DP+HDMI+LVDS
DT10110-A	DT MINI-ITX Intel Core i3-10110U WL10 2LAN 5*RS232 1*RS485 DP+HDMI+LVDS
DT10210-A	DT MINI-ITX Intel Core i5-10210U WL10 2LAN 5*RS232 1*RS485 DP+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.