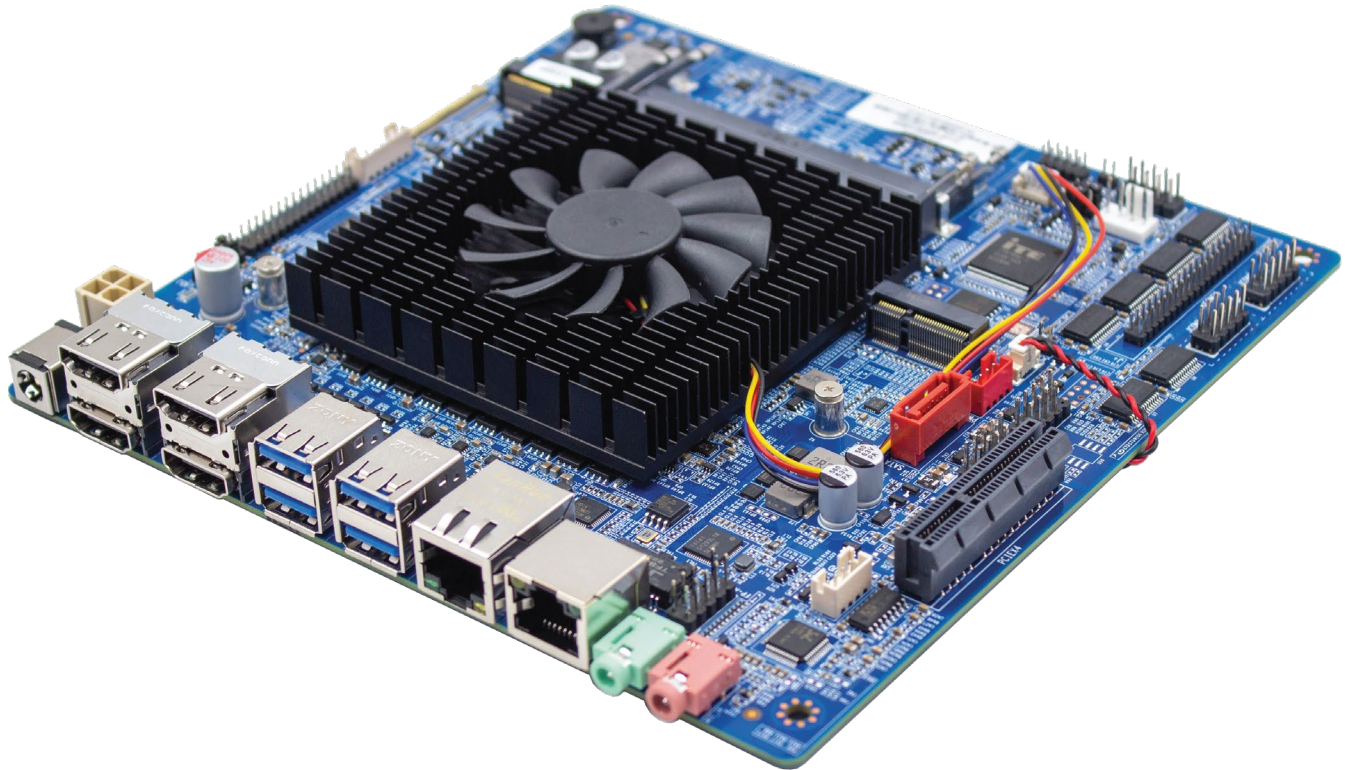


RL-10

Intel® Raptor Lake Series Processor based Mini ITX Motherboard



Features

- CPU: Intel® Raptor Lake Series Processor
- Memory: Dual channel SO-DIMM DDR4 up to 64GB
- GPU: Intel Iris® Xe Graphics eligible/UHD Graphics depends on CPU
- Ethernet Controller: Intel i225/i226 + Intel i219
- Storage: 1xM.2 for NVMe 2280 SSD, 1xSATA
- Expansion: M.2 for WiFi, PCIe 4X
- Power: 19V DC-in



IoT Solutions
Alliance
Industrial Solution
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MAXIMIZING YOUR COMPUTING PRODUCTIVITY

Introduction

Maxtang RL-10 is designed with the 13th Gen Intel Raptor Lake Series processor, up to 14 cores and 20 threads, provides an incremental set of crucial industrial features vital to the manufacturing and energy sector, along with a significant increase in instructions-per-cycle performance from the 12th Gen Core Mobile Processors. Based on a small form factor design great for IoT deployments that require high-performance, enhanced graphics density. Supports 2xSO-DIMM DDR4 up to 64GB, features 4xHDMI2.0, 6xCOM, 4xUSB3.2+4xUSB2.0, 2xLAN, 1xSATA, 2xM.2 connector, PCIe4X, GPIO and optional TPM2.0 for added security.

The RL-10 drives more values for IoT use cases with differentiated capabilities, offers an immersive experience by Intel Xe Graphics/UHD graphics (varies on CPU), and supports 4K independent displays through 4xHDMI+1xLVDS/eDP+1x eDP/DP/HDMI. The motherboard is suitable for surveillance, digital signage, electronic gaming machines, and thin clients.



H/W Monitor



Watchdog

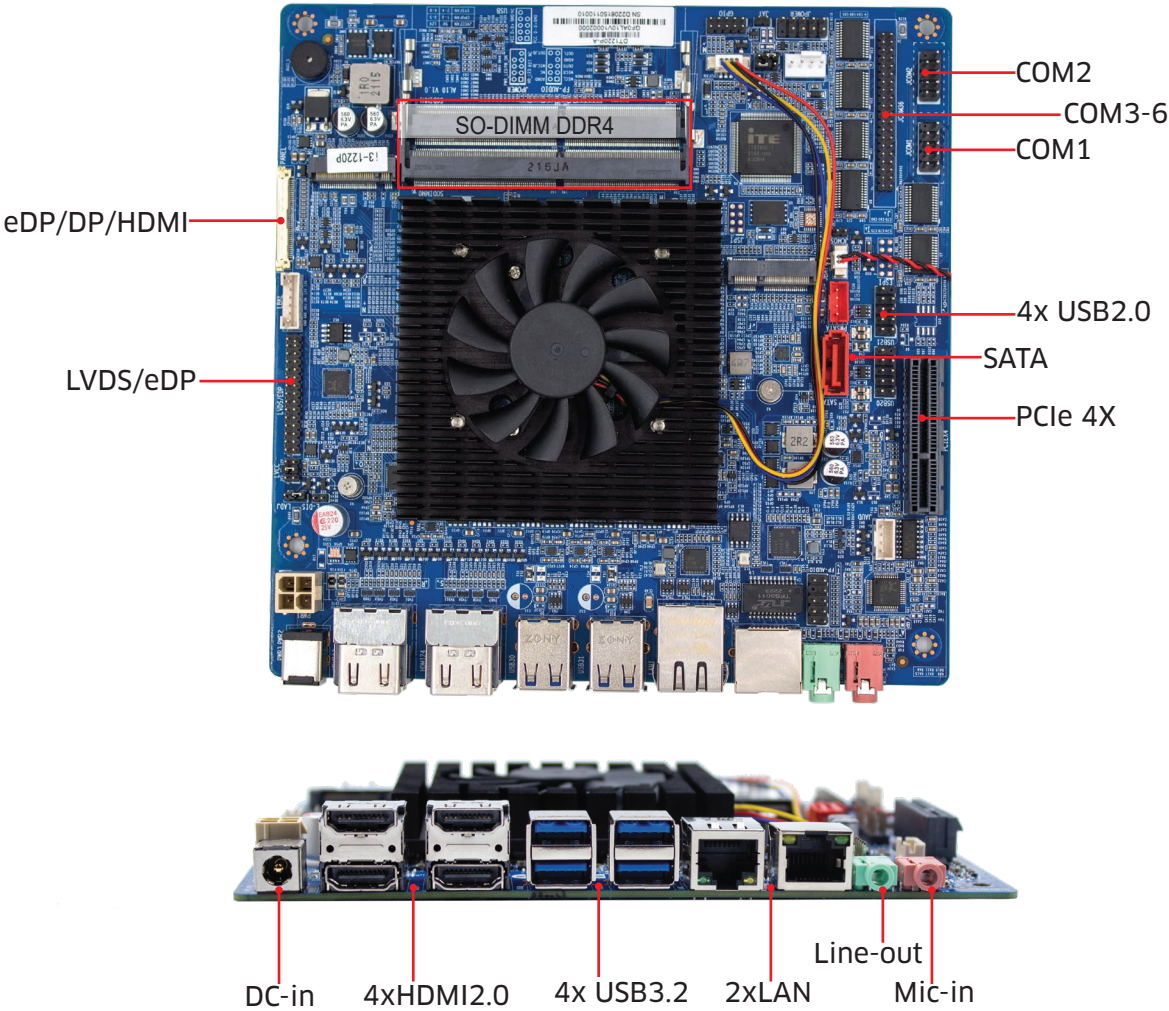


GPIO



Brightness

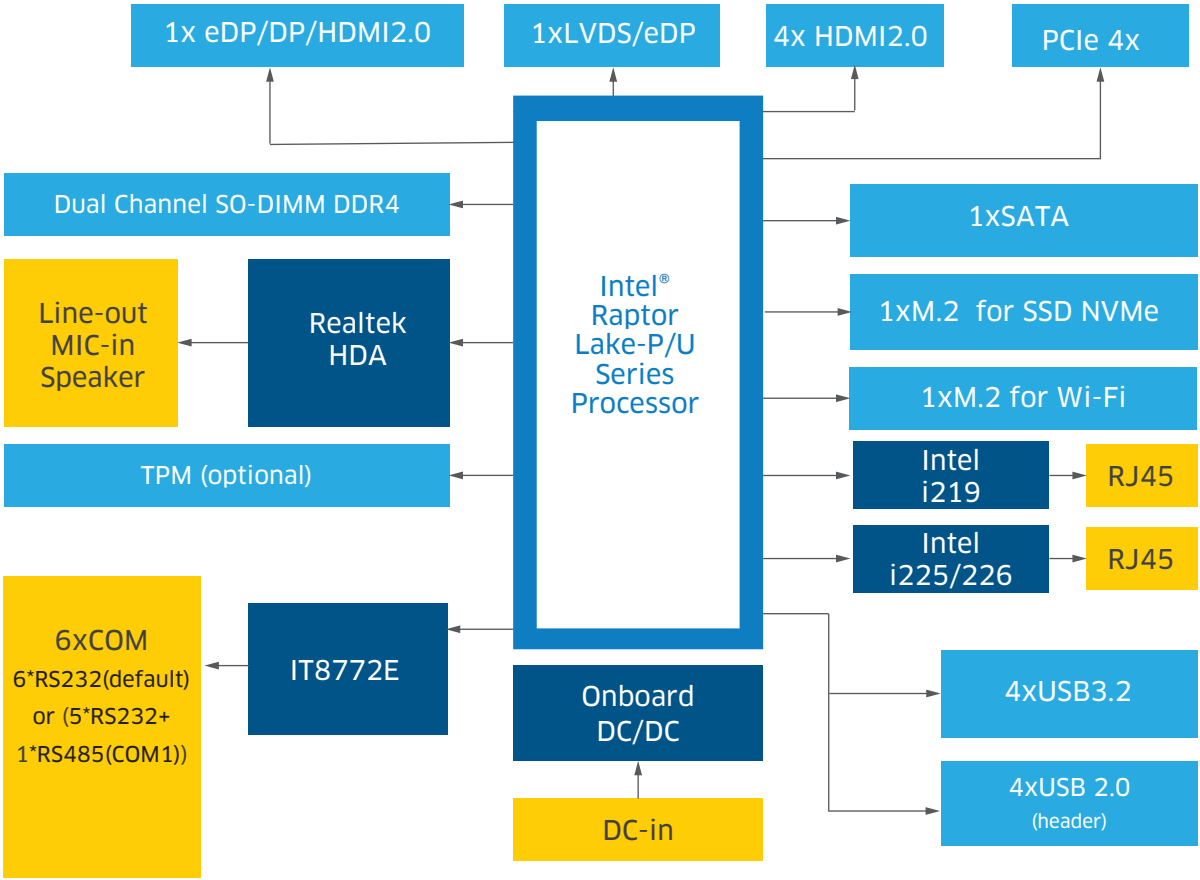
I/O Interfaces



Technical Specifications

Processor	Raptor Lake P Series	i7-1370P	i5-1340P	i3-1320PE
	Total Cores/Threads	14C/20T	12C/16T	8C/12T
	P-core Max Turbo Frequency	5.20 GHz	4.60 GHz	4.50 GHz
	E-core Max Turbo Frequency	3.90 GHz	3.40 GHz	3.30 GHz
	Cache	24 MB	12 MB	12 MB
	Processor base Power	28 W	28 W	28 W
Processor	Raptor Lake U Series	i7-1365U	i5-1334U	i3-1315U
	Total Cores/Threads	10C/12T	10C/12T	6C/8T
	P-core Max Turbo Frequency	5.20 GHz	4.60 GHz	4.50 GHz
	E-core Max Turbo Frequency	3.90 GHz	3.40 GHz	3.30 GHz
	Cache	12 MB	12 MB	10 MB
	Processor base Power	15 W	15 W	15 W
Memory	BIOS	AMI UEFI BIOS		
	Type	Dual Channel SO-DIMM DDR4		
	Max.Capacity	64GB		
Display	GPU	Intel® Iris® Xe Graphics eligible/UHD Graphics (varies on CPU)		
	Interface	4x HDMI2.0+1x LVDS/eDP+1x eDP/DP/HDMI2.0		
Ethernet	Multiple displays up to four screens only.			
	Controller	1x Intel® i225/226 Data Rate Per Port: 2.5GbE		
		1x Intel® i219 Data Rate Per Port: 1.0GbE		
	Interface	2xRJ45		
	Wake on LAN	Yes.		
	AMT	Yes. Intel®Active Management Technology. Only for selected models, varies on CPU.		
Audio	TXT	Yes. Intel®Trusted Execution Technology. Only for selected models, varies on CPU.		
	Audio Codec	Realtek HD		
	Interface	1xLine-out, 1xMic-in, supports audio header and amplifier header		
Hardware	CPU system temperature, onboard voltage, watchdog, and auto power on			
Storage	M.2	1xM.2 for NVMe 2280 SSD		
	SATA	1		
Expansion	M.2	1x M.2 for WiFi, support Intel® Integrated Connectivity (CNVi)		
	PCIe4X	1		
I/O Interface	LAN	2		
	COM	6xCOM: 6*RS232(default) or 5*RS232+1*RS485(COM1)		
	USB3.2	4		
	USB2.0	4*header		
	GPIO	8		
	Audio	1xLine-out, 1xMic-in		
	TPM2.0	Onboard, optional		
	Dimension	Size	170mmx170mm	
Power	Board Type	Mini-ITX		
	Standard Port	19V DC-in		
	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



Order Information

Model Name	Description
DT1370P-A	DT MINI-ITX Intel Core i7-1370P RL10 2LAN 6*RS232 4HDMI+LVDS
DT1334U-A	DT MINI-ITX Intel Core i5-1334U RL10 2LAN 6*RS232 4HDMI+LVDS
DT1365U-A	DT MINI-ITX Intel Core i7-1365U RL10 2LAN 6*RS232 4HDMI+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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