

# FP-610

## AMD® Ryzen™ Mobile/Embedded Series Processor based Mini ITX with 4 DisplayPorts



### Features

- CPU: AMD Ryzen™ Mobile/Embedded Series Processor
- Memory: Dual channel SO-DIMM DDR4 up to 64 GB
- Display: AMD Radeon™ Graphics, Up to 4 independent 4K displays
- Ethernet: 10/100/1000Mbps
- Storage: 1xSATA3.0, 2xM.2 for SSD
- Expansion: PCIe 4X, M.2 for WiFi
- Power: 19V DC input



## Introduction

The Maxtang FP610 mini-ITX embedded motherboard is based on the AMD Ryzen™ mobile and embedded series processor, built on the groundbreaking “Zen 2” x86 and “Zen 3” core architecture with innovative 7nm process technology and optimized high-performance Radeon™ graphics in an SoC design. The processor provides unprecedented performance levels, significant design enhancements, and incredible power efficiency for embedded solutions.

The board supports 2xSO-DIMM DDR4 up to 64GB, 4xDP1.4 for four 4K independent displays, 2xM.2 for storage, additional M.2 for Wi-Fi, and optional TPM for added security. Rich I/O interface includes 6xCOM, 8x USB, LPT, GPIO, Line-out, and Mic-in to cater to various applications. It is ideal for applications requiring a high-speed communication front-end mini-server and high-resolution display products like electronic gaming machines, medical imaging, interactive digital signage, thin clients, or PDS terminals.



H/W Monitor



Watchdog

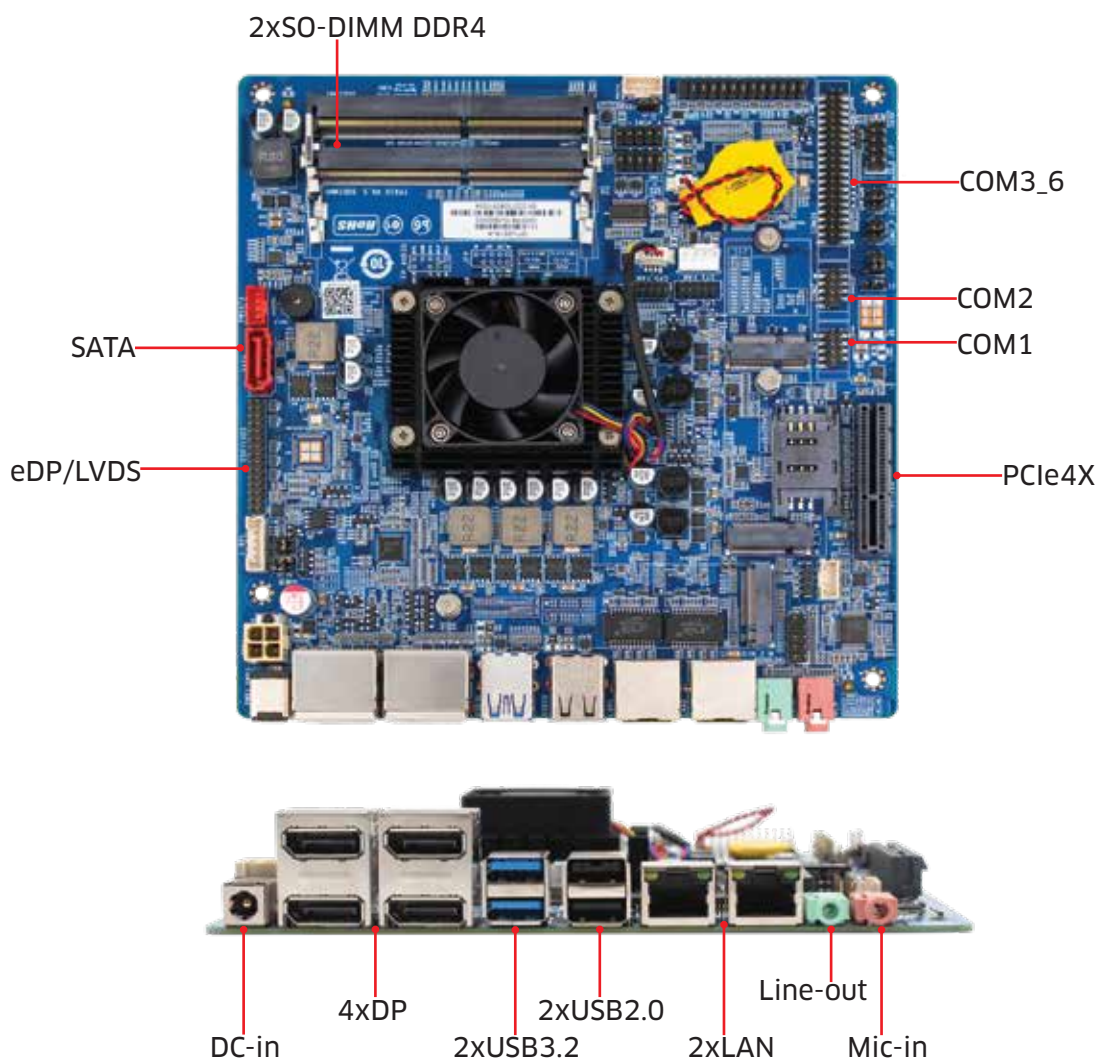


GPIO



Brightness

## I/O Interfaces

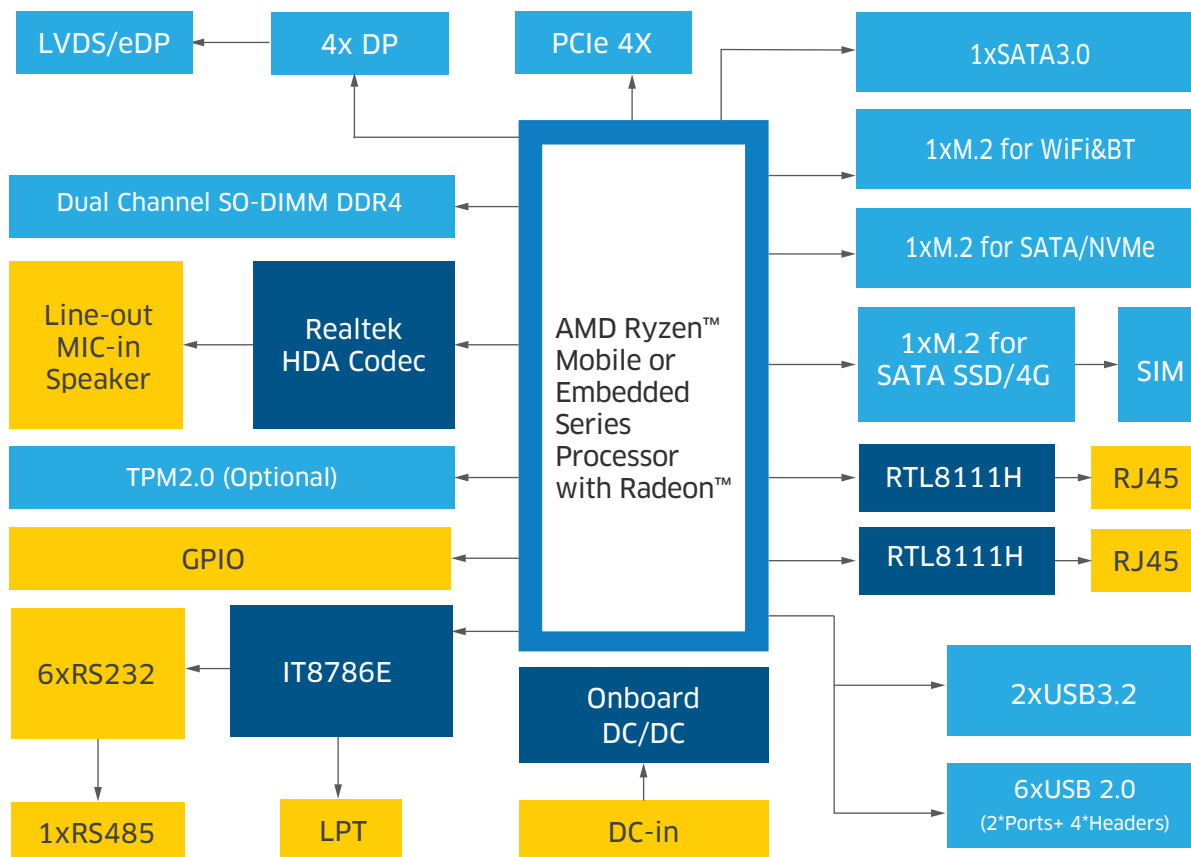


## Technical Specifications

Processor	CPU	V2516	5600H	5800H	
	Cores/Threads	6C/12T	6C/12T	8C/16T	
	Max Boost Frequency	3.95 GHz	4.2 GHz	4.4 GHz	
	Base Frequency	2.1 GHz	3.3 GHz	3.2 GHz	
	L2 / L3 Cache	2MB/8MB	3MB/16MB	4MB/16MB	
	BIOS	AMI SPI BIOS			
Memory	Type	Dual Channel SO-DIMM DDR4			
	Max. Capacity	64GB			
Display	GPU	AMD Radeon™ Graphics			
	Display via	Up to 4 x DP1.4 (DP1/LVDS/eDP Optional)			
	Max Resolution	Resolution up to 4096x2160 for single display			
Ethernet	Speed	10/100/1000 Mbps			
	Controller	RTL8111H			
	Interface	2xRJ 45			
Audio	Audio codec	Realtek HD (1xLine-out, 1xMic-in)			
	Interface	Line-out, Mic-in, support audio header, amplifier header			
Hardware	CPU system temperature, onboard voltage, watchdog				
Wireless connectivity	M.2	1xM.2_E for Wi-Fi and Bluetooth			
Storage	M.2	1xM.2_S/W for 2280/2242 SATA SSD or 4G Module			
		1xM.2_N/S for 2280 NVMe/SATA SSD			
	SATA3.0	1			
Expansion	PCIe 4X	1			
I/O Interface	LAN	2			
	COM	6×RS232 (COM2 can be set as RS485 by jumper)			
	USB3.2	2			
	USB2.0	6 (2*Port + 4*header)			
	Audio	1 x Line-out + 1 x Mic-in			
	GPIO	8 (one group)			
	LPT	1			
	TPM2.0	Onboard, Optional			
	Dimension	Board Type	Mini ITX		
		Size	170 mm x 170 mm		
Power	Standard Port	19V DC-in			
	Peripheral Input	For Fan and SATA			
Temperature	Operating Temp.	-20°C ~60°C			
	Storage Temp.	-20°C ~80°C			
Operating System	Windows 10/11 64bit, Linux 64bit				

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

## Functional Block Diagram



## Order Information

Model Name	Description
DTV2516-A	DT AMD V2516 FP610 2LAN 4DP 6COM
DTV2516-L	DT AMD V2516 FP610 2LAN 3DP+LVDS 6COM
DTV2516-E	DT AMD V2516 FP610 2LAN 3DP+EDP 6COM
DT5600H-A	DT AMD 5600H FP610 2LAN 4DP 6COM
DT5800H-A	DT AMD 5800H FP610 2LAN 4DP 6COM

\*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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