FP535

AMD Ryzen™ Embedded R2000 Series Processor based Single Board Computer



Features

- CPU: AMD Ryzen[™] Embedded R2000 Series Processor
- Memory: Dual Channel SO-DIMM DDR4 up to 64GB
- GPU: AMD Radeon[™] Graphics, displays via 2xHDMI, eDP/LVDs
- Ethernet: 2xRTL8111H, 10/100/1000Mbps
- Storage: mSATA, M.2 Key B for SSD/4G/5G+SATA FPC Optional
- Expansion: M.2 Key E for WiFi & BT
- Power: 9V-35V DC-IN







Introduction

The FP535 is a compact 3.5" single board computer powered by the AMD Ryzen™ Embedded R2000 Series processor, delivering 4 cores and 4 threads with clock speeds up to 3.5 GHz. With integrated AMD Radeon™ Graphics, dual HDMI 2.0, and eDP/LVDS display support, it is designed to handle multi-display digital signage, industrial control, and edge computing applications with ease. Its AMI UEFI BIOS, robust hardware monitoring, and wide operating temperature range of -20°C to 60°C ensure stability and reliability in demanding environments.

Engineered for flexibility, the FP535 supports up to 64 GB DDR4 dual-channel memory and offers versatile expansion options including mSATA, M.2 (Key E for Wi-Fi/Bluetooth, Key B for SATA SSD/4G/5G), and a SIM slot for mobile connectivity. It also integrates rich I/O with 6 COM ports, 2 Gigabit Ethernet ports (RTL8111H), 2 USB 3.2, 5 USB 2.0, and TPM 2.0 security.

With its 9-35V DC-IN wide-range power input, rugged design, and OS compatibility with Windows 10/11 and Linux 64-bit, the FP535 is an ideal solution for industrial automation, IoT, and embedded computing applications.









H/W Monitor





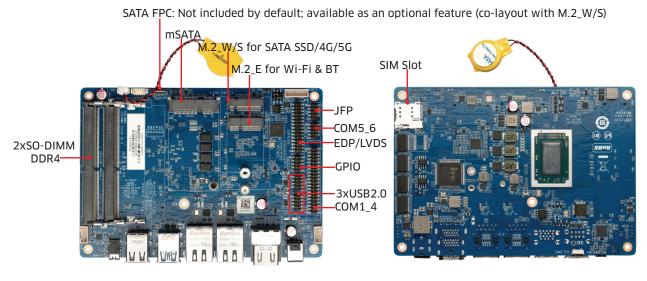


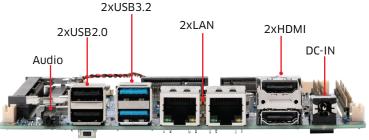


GPIO Brightness





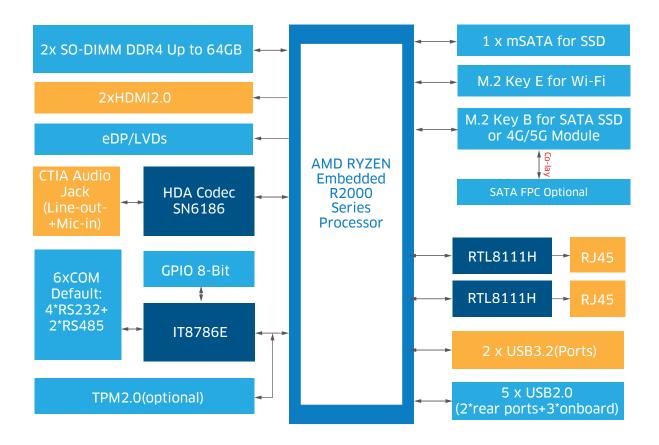




Technical Specifications

Processor	AMD Ryzen™ Embedded	R2312	R2314	R2514	
	Total Cores/Threads	2C/4T	4C/4T	4C/8T	
	Base Frequency	2.70GHz	2.10GHz	2.10GHz	
	Max Frequency	3.50GHz	3.50GHz	3.70GHz	
	Total L3 Cache	4MB	4MB	4MB	
	TDP	15W	5	5	
	GPU	AMD Radeon™ Graphics			
	BIOS	AMI UEFI BIOS			
Memory	Type	Dual Channel SO-DIMM DDR4			
	Max. Capacity	64GB			
Display	Graphics	Integrated Graphics depends on the CPU model, see GPUs			
	Display via	2 x HDMI2.0, 1 x eDP/LVDs			
Ethernet	Controller	2x RTL8111H			
Ethernet	Speed	10/100/1000Mpbs			
	Interface	2xRJ45			
	Wake on LAN	Yes			
Audio	Audio Codec	SenaryTech SN6186			
Addio	Interface	1xCTIA Audio Jack, Line_out+Mic_in in one, supports power amplifier			
Hardware Monitoring	interruce	CPU system temperature, on-board DC-in voltage, watchdog, auto power on			
Storage	mSATA	1 x mSATA for SSD			
Expansion	M.2 E	1 x M.2 Key E for 2230 Wi-Fi & BT Module			
Expunsion	M.2_W/S	1 x M.2 Key_B for 2242 SATA SSD/3042 4G/ 3052 5G			
	SATA3.0	1 x SATA3.0 FPC co-layout with M.2 Key B Slot,			
		Optional feature; Not included by default.			
	SIM	1 x SIM Slot			
I/O Interface	COM	6 x COM: default 4*RS232+2*RS485			
,, , , , , , , , , , , , , , , , , , , ,	USB3.2	2 x USB3.2(rear ports)			
	USB2.0	5 x USB2.0(2*rear ports+3*onboard)			
	GPIO	8-bit	<u> </u>	•	
	TPM2.0	optional			
Dimension	Size	146 mm x 102mm			
	Form Factor	3.5" SBC			
Power	Standard Port	9V-35V DC-IN			
	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		
- ·					

Functional Block Diagram



Order Information

Model Name	Description
DTR2312-I	DT AMD R2312 FP535 2DDR4 2LAN(RTL8111H) 4*RS232 2*RS485 2HDMI+LVDS
DTR2314-I	DT AMD R2314 FP535 2DDR4 2LAN(RTL8111H) 4*RS232 2*RS485 2HDMI+LVDS
DTR2514-I	DT AMD R2514 FP535 2DDR4 2LAN(RTL8111H) 4*RS232 2*RS485 2HDMI+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.

Copyright © 2025 Maxtang Technology Co. Ltd. All rights reserved. All data is for information purposes only and not guaranteed for legal purposes. Information has been carefully checked and is believed to be accurate however, no responsibility is assumed for inaccuracies. Maxtang and the Maxtang logo and all other trademarks or registered trademarks are the property of their respective owners and are recognized. The terms HDMI. HDMI High-Definition Multimedia interface, HDMI Trade dress, and HDMI Logos are trademarks or registered trademarks or HDMI Lorents & Administration, Inc.