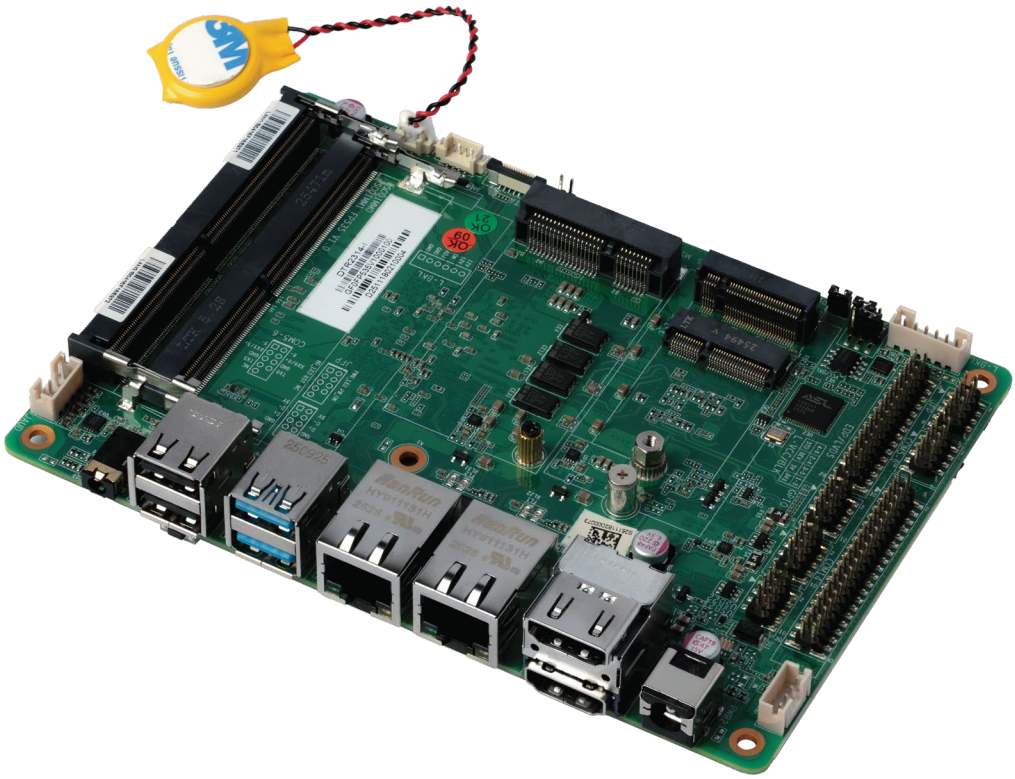
PRODUCT DATASHEET
HW Rev.: V1.0

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 2 x HDMI, eDP/LVDs
- Ethernet: 2 x RTL8111H, 10/100/1000Mbps
- Storage: mSATA, M.2 Key B for 4G/5G/SATA SSD, SATA FPC
- Expansion: M.2 Key E for WiFi & BT
- Power: 9-35V DC-IN

AMD
together we advance_

AMD RYZEN Embedded | AMD RADEON GRAPHICS

Maxtang®
MAXIMIZING YOUR COMPUTING PRODUCTIVITY

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.

Linux™

ubuntu Linux

Windows

H/W Monitor

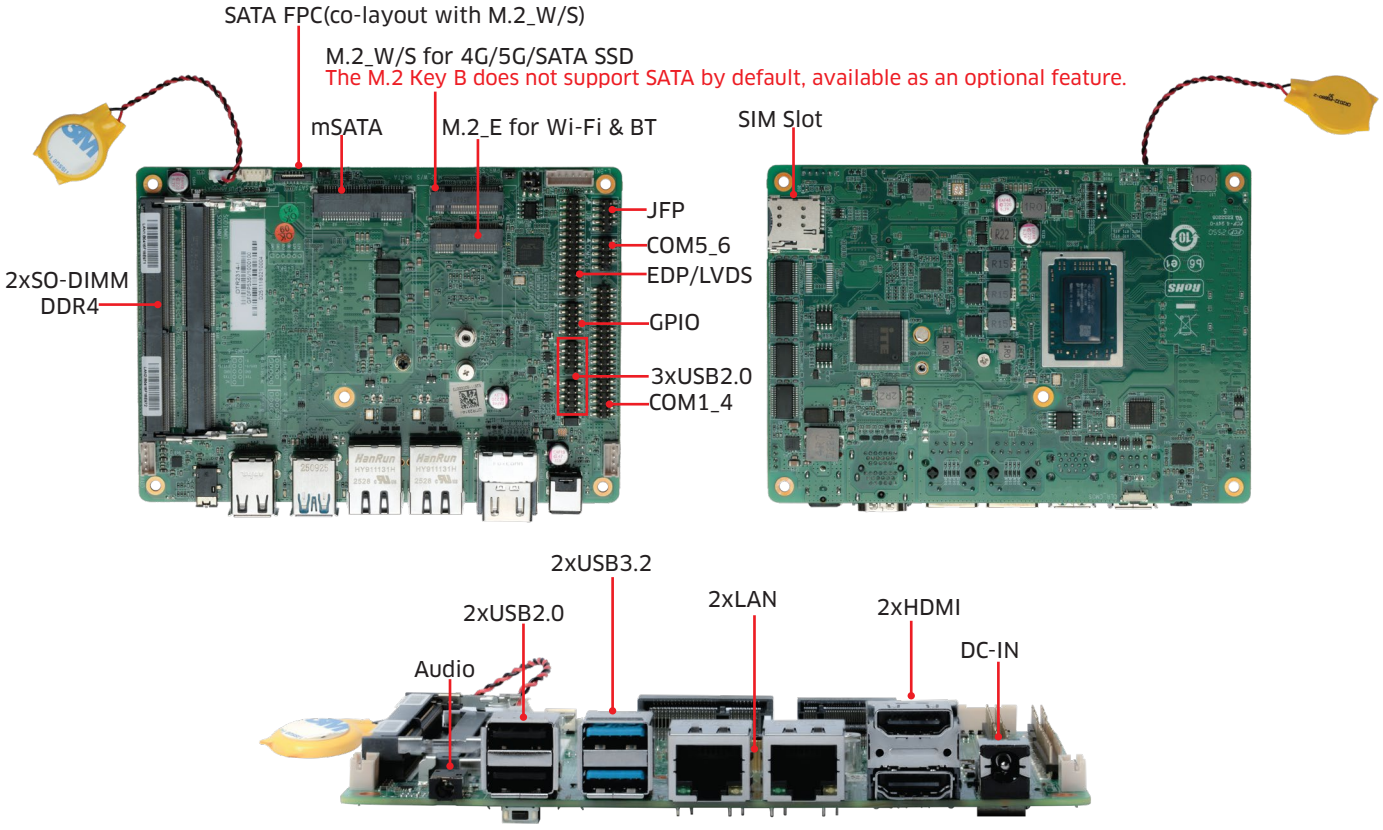
Watchdog

GPIO

Brightness

HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE

I/O Interfaces

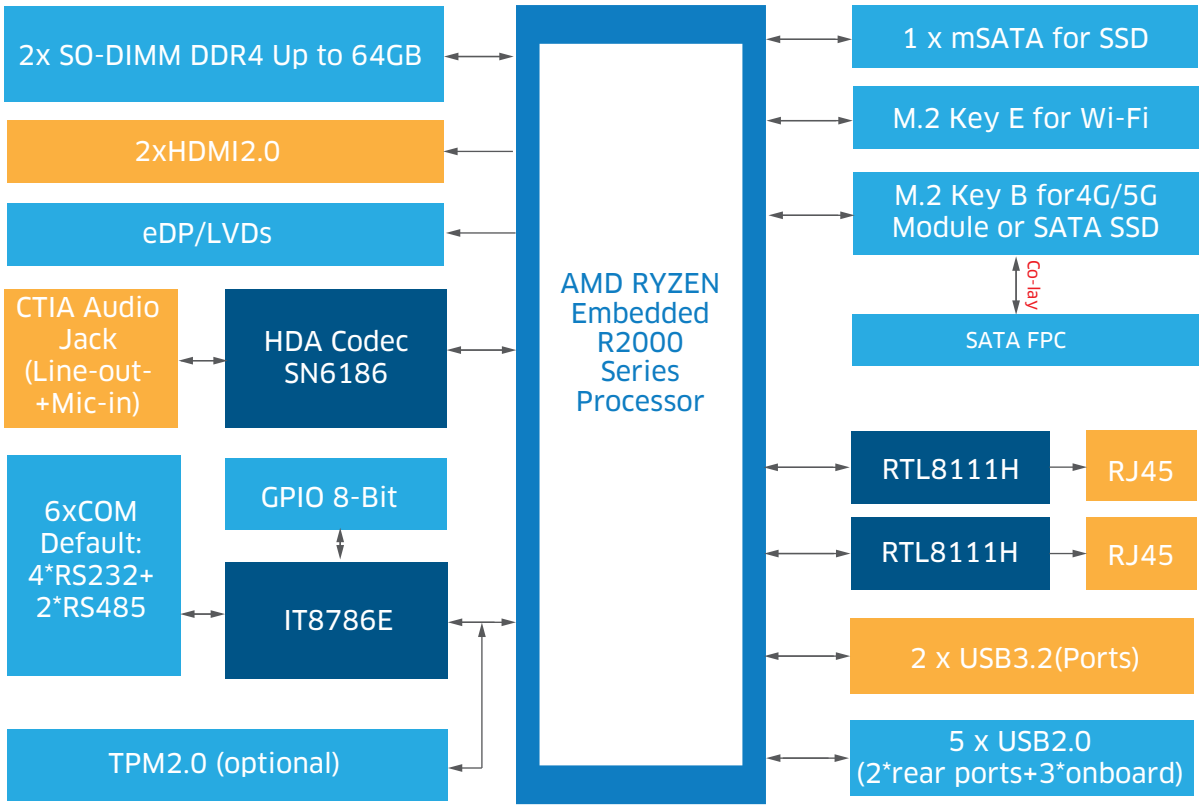


Technical Specifications

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		
	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		
	Interfaces	2 x HDMI2.0, 1 x eDP/LVDs		
Ethernet	Controller	2 x RTL8111H		
	Speed	10/100/1000Mpbs		
	Interface	2 x RJ45		
	Wake on LAN	Yes		
Audio	Audio Codec	SenaryTech SN6186		
	Interface	1 x CTIA Audio Jack, Line_out+Mic_in in one, supports power amplifier		
Hardware Monitoring		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		
	M.2_W/S	1 x M.2 Key_B for 3042 4G/ 3052 5G Module or 2242 SATA SSD		
		(The M.2 Key B for SATA SSD is optional and not included by default.)		
	SATA3.0	1 x SATA3.0 FPC co-layout with M.2 Key B Slot,		
	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 headers)		
	GPIO	8-bit		
	TPM2.0	optional		
Dimension	Size	146 mm x 102mm		
	Form Factor	3.5” SBC		
Power	Standard Port	9-35V 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		

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

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.

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