

# ESP32-S2-MINI-1 Module (PCB Antenna)

DFR0814

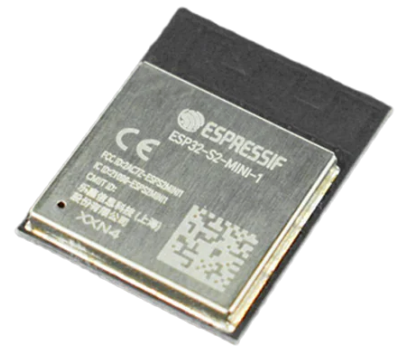
## Product Overview

11-30-2022

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## Description

DFRobot ESP32-S2-MINI-1 Module (PCB Antenna) is a generic WiFi®-MCU module with rich peripherals. This module is embedded with an ESP32-S2FH4 chip, an Xtensa® 32-bit LX7 CPU that operates up to 240MHz. The ESP32-S2FH4 chip consists of a low-power co-processor that can be used instead of the CPU to save power while performing tasks that do not require much computing power. The module features a PCB antenna, a 128KB ROM, 320KB SRAM, and 16KB SRAM in RTC. Typical applications include wearable electronics, smart homes, USB devices, mesh networks, smart agriculture, speech and image recognition, and OTT devices.



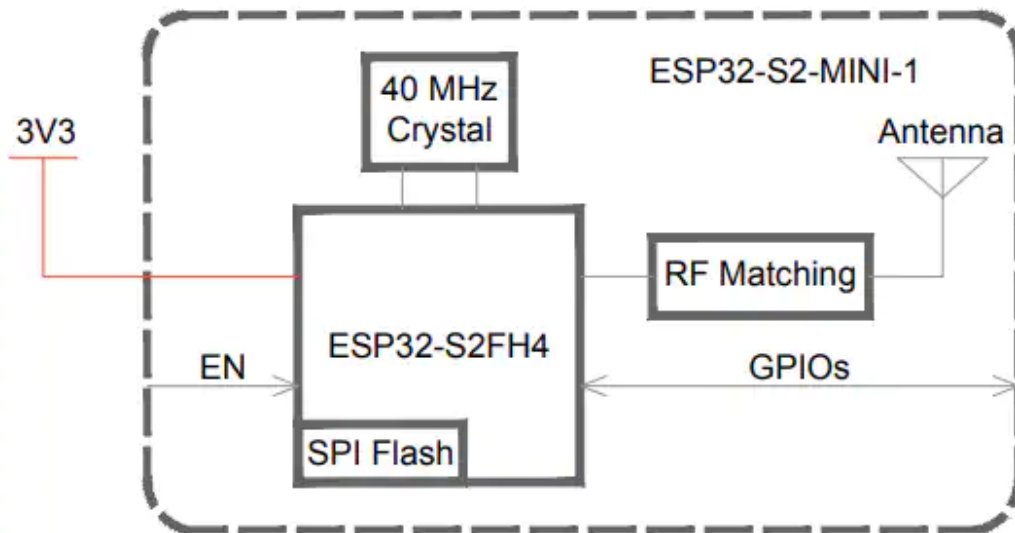
## Features

- ESP32-S2FH4 embedded and Xtensa single-core 32-bit LX7 microprocessor
- 802.11b/g/n standard
- 128KB ROM
- 320KB SRAM
- 16KB SRAM in RTC
- 4MB SPI flash
- 40MHz crystal oscillator
- 3V to 3.6V power supply range
- -40°C to 85°C operating temperature range

## Applications

- Over-The-Top (OTT) devices
- USB devices
- Speech and image recognition
- Mesh network
- Smart home control panels, smart agriculture, and smart building
- Industrial automation
- Audio applications
- Wearable electronics
- Smart POS machines

## Block Diagram



## Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-esp32-s2-mini-1-module/>