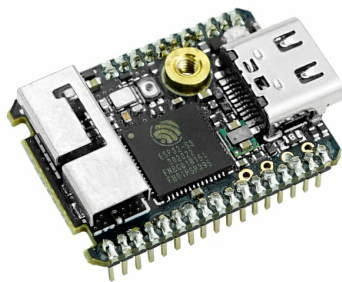
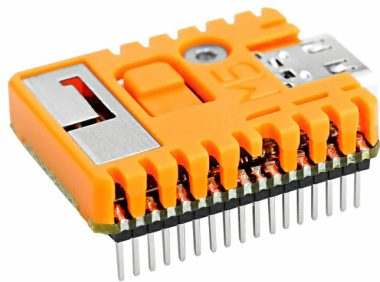


Stamp-S3 PIN1.27

SKU:S007-PIN127



Description

Stamp-S3 PIN1.27 is a highly integrated embedded main-control core module. It adopts Espressif's **ESP32-S3FN8** SoC with **8 MB SPI flash** and features a high-performance Xtensa 32-bit LX7 dual-core processor running at up to 240 MHz. The module integrates a **high-efficiency 5 V-to-3.3 V power circuit**, an **RGB status indicator LED**, and a **programmable button**. A total of **23 GPIOs of the ESP32-S3** are broken out to **1.27 mm-pitch pin headers**. Thanks to its compact size, powerful performance, rich IO resources, and low-power design, the module is well-suited for **embedded main-control IoT applications**.

Tutorial



Arduino IDE

This tutorial explains how to program and control the Stamp-S3 device with the Arduino IDE



UiFlow2

This tutorial explains how to control the Stamp-S3 device using the UiFlow2 graphical programming platform

Features

- ESP32-S3FN8 (2.4 GHz Wi-Fi)
- Integrated programmable RGB LED and button
- 1.27 mm-pitch pin headers
- Supports UIFlow graphical programming
- Development Platform
 - UiFlow2
 - Arduino IDE
 - ESP-IDF
 - PlatformIO

Includes

- 1 x Stamp-S3 PIN1.27
- 1 x Silkscreen Sticker

Applications

- Smart Home
- Wearable Devices
- Medical Devices

Specifications

Specification	Parameter
SoC	ESP32-S3FN8 @ Xtensa® 32-bit LX7 dual-core processor, clock frequency 240MHz
Flash	8MB
Wi-Fi	2.4 GHz Wi-Fi
DC-DC	MUN3CAD01-SC
Input Voltage	5V
Human-Machine Interaction	Programmable Physical Button x 1, Programmable RGB LED (WS2812B-2020) x 1
Antenna Type	2.4G 3D Antenna
Module Resource Interface	Touch Sensor, SD/SDIO/MMC Host Controller, SPI, SDIO/SPI Slave Controller, EMAC, Motor PWM, LED PWM, UART, I2C, I2S, GPIO, Pulse Counter
IO Interface x23	G0/G1/G2/G3/G4/G5/G6/G7/G8/G9/G10/G11/G12/G13/G14/G15/G39/G40/G41/G42/G43/G44/G46
Pin Header Pitch	1.27mm
LCD Interface Pitch	0.5mm@12pin or 8pin
Operating Temperature	0 ~ 40°C
Product Size	26 x 18 x 4.6mm
Package Size	74 x 48 x 13mm
Product Weight	2.9g
Gross Weight	5.6g

Learn

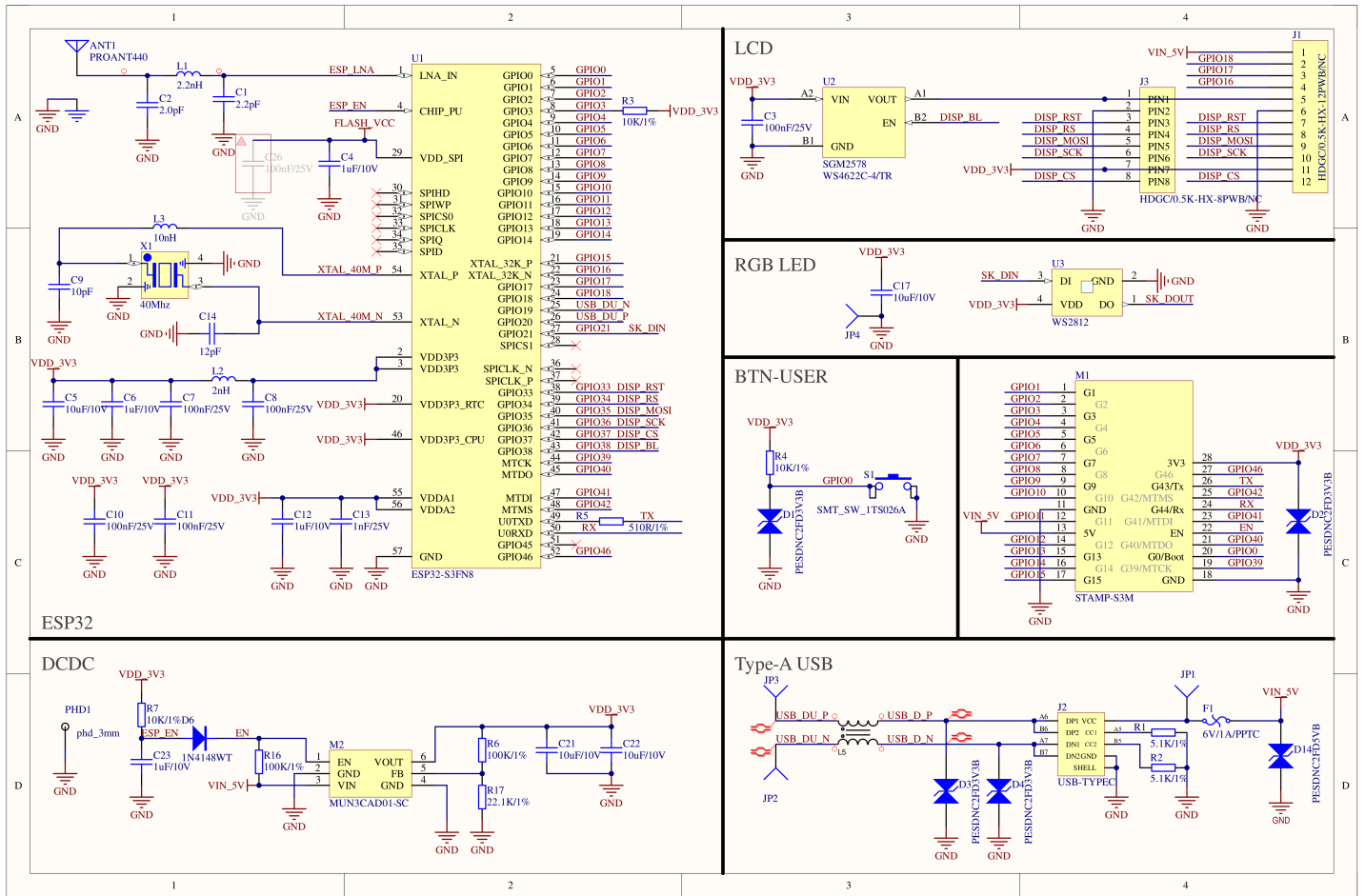
Enter Download Mode

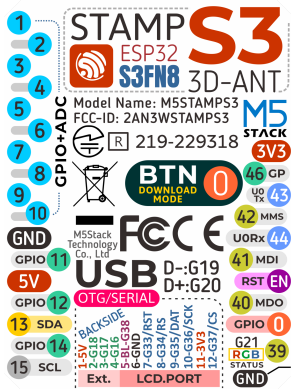
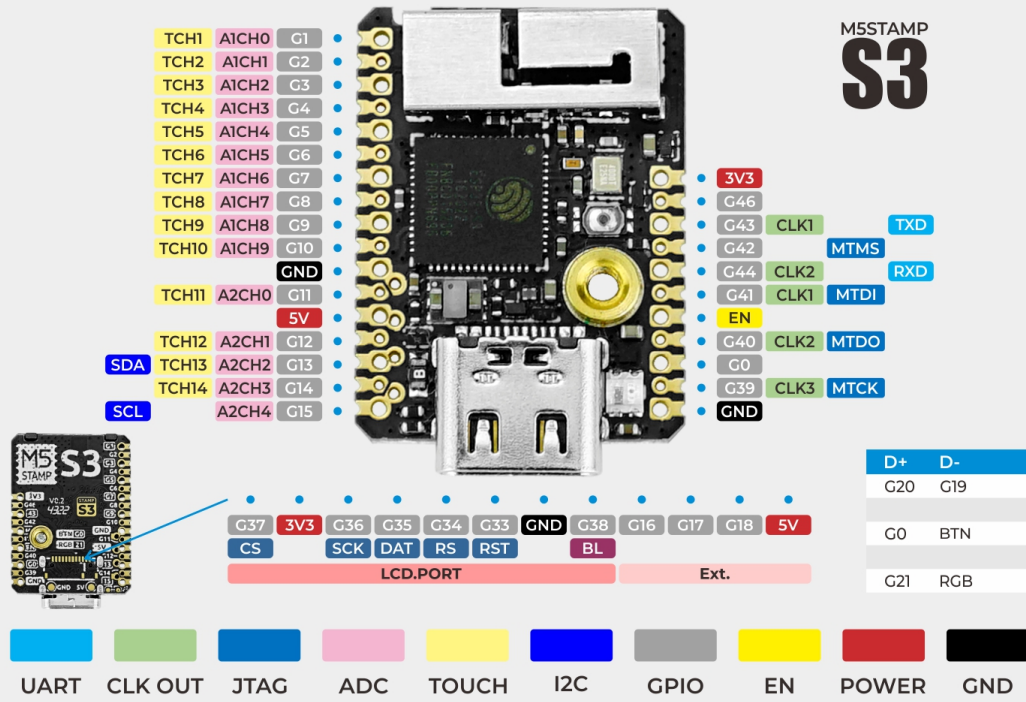
To enter download mode, press and hold the G0 button on the Stamp-S3 before powering on, then release it after power is applied.

Note

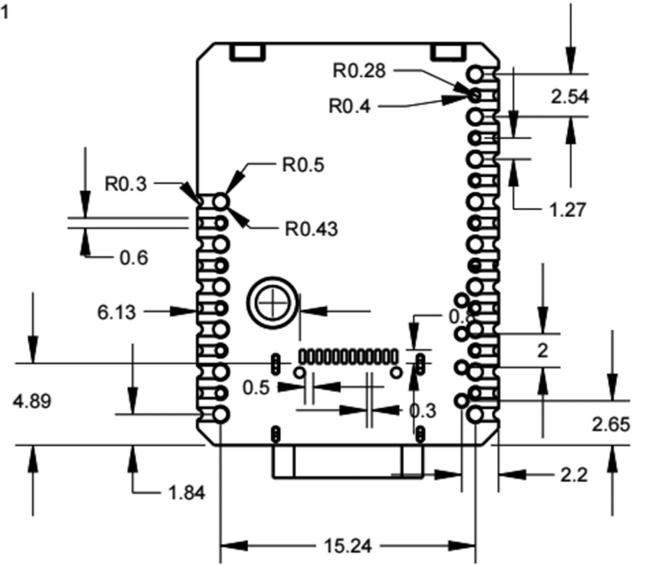
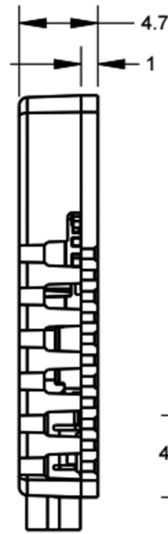
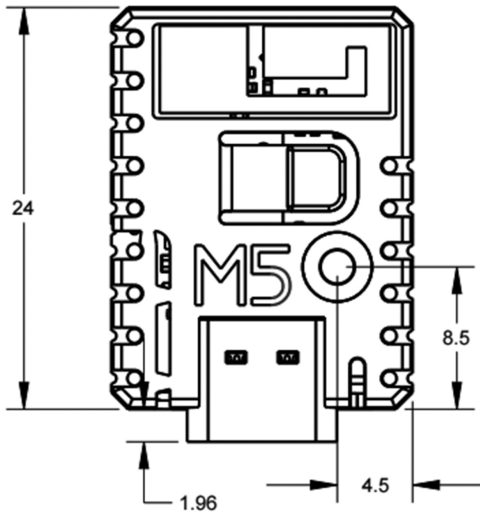
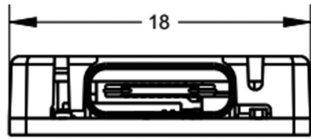
GPIO46 is pulled down by default.

Schematics





Model Size



UNIT : mm

PCB

- [Stamp-S3 PIN1.27 KiCad Footprint Library](#)

Structure

- [Stamp-S3 KiCad 3D](#)

Datasheets

- [ESP32-S3](#)
- [MUN3CAD01-SC](#)

Softwares

Arduino

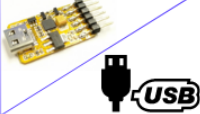
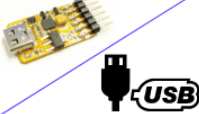
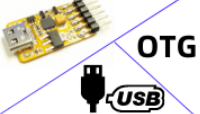
- [Stamp-S3 PIN1.27 Arduino Quick Start](#)
- [Stamp-S3 PIN1.27 Arduino Example](#)

UiFlow2

Product Comparison

M5STAMP

Comparison chart

COMPARISON	STAMP PICO	STAMP C3U	STAMP C3	STAMP S3
PICTURE				
Number of IO ports	12	14	13	23
FLASH	4M	4M	4M	8M
Serial IC	/	USB CDC	CH9102F	USB CDC
Download method				
Pin spacing	2.54mm	2.54mm	2.54mm	2.54mm/ 1.27mm
LCD interface	✗	✗	✗	✓
CPU frequency	240MHz	160 MHz	160 MHz	240MHz
Size	24 × 18 × 4.6mm	34 × 20 × 4.6mm	34 × 20 × 4.6mm	26 × 18 × 4.6mm

To compare information on the Stamp series products, you can visit the [Product Selection Table](#), check the target products, and get the comparison results. The selection table covers key information such as core parameters and functional features, and supports comparison of multiple products simultaneously.