

CPU: ESP32-S3 WROOM
4(8) ADC channels based on ADS1298

MIREA

Sheet: /

File: myocell_s3.kicad_sch

Title: MYOCELL_S3: EMG ADC board

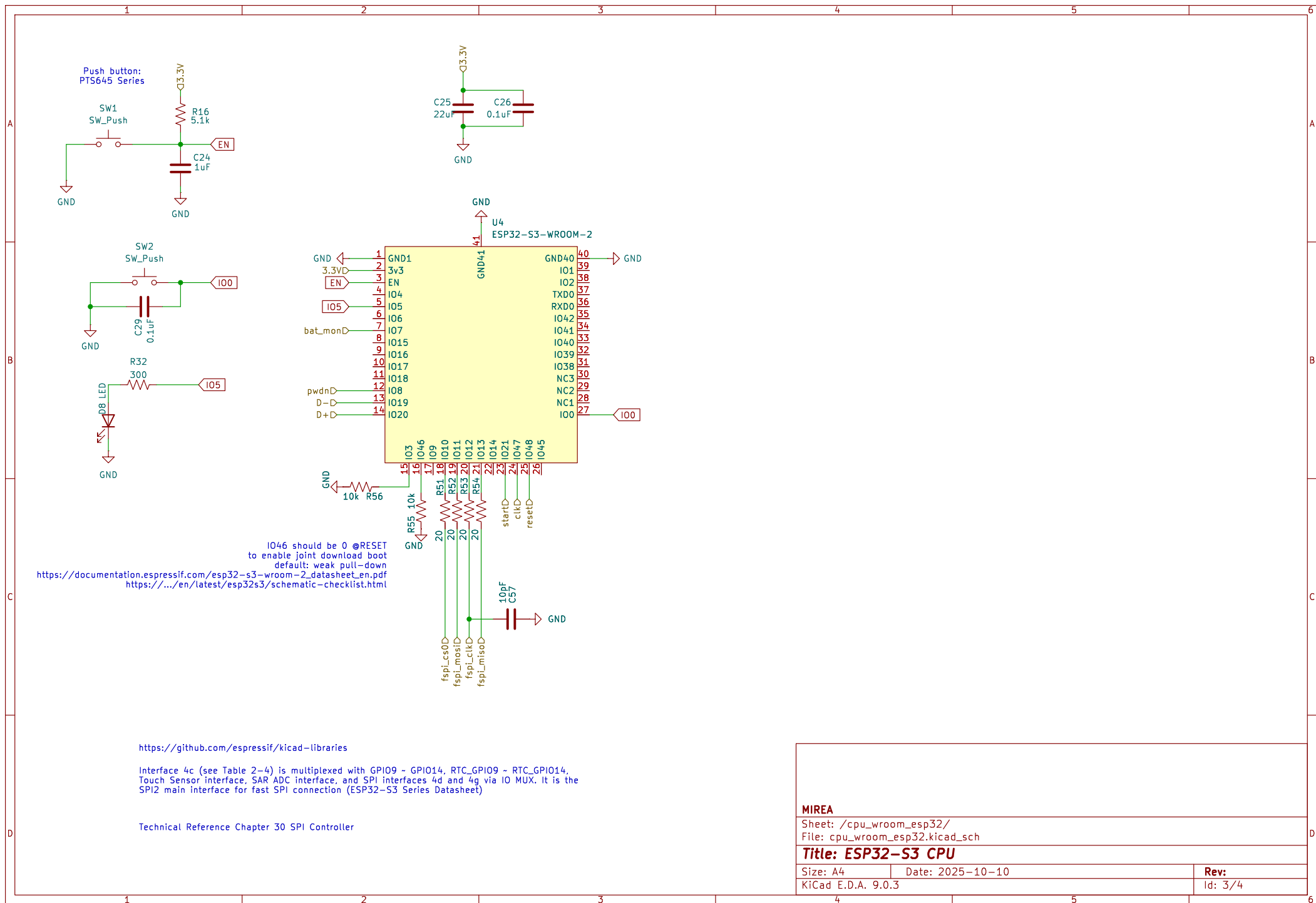
Size: A4

Date: 2025-12-24

Rev: Rev 01

KiCad E.D.A. 9.0.3

Id: 1/4



IO46 should be 0 @RESET
to enable joint download boot
default: weak pull-down
https://documentation.espressif.com/esp32-s3-wroom-2_datasheet_en.pdf
<https://.../en/latest/esp32s3/schematic-checklist.html>

<https://github.com/espressif/kicad-libraries>

Interface 4c (see Table 2-4) is multiplexed with GPIO9 ~ GPIO14, RTC_GPIO9 ~ RTC_GPIO14, Touch Sensor interface, SAR ADC interface, and SPI interfaces 4d and 4g via IO MUX. It is the SPI2 main interface for fast SPI connection (ESP32-S3 Series Datasheet)

Technical Reference Chapter 30 SPI Controller

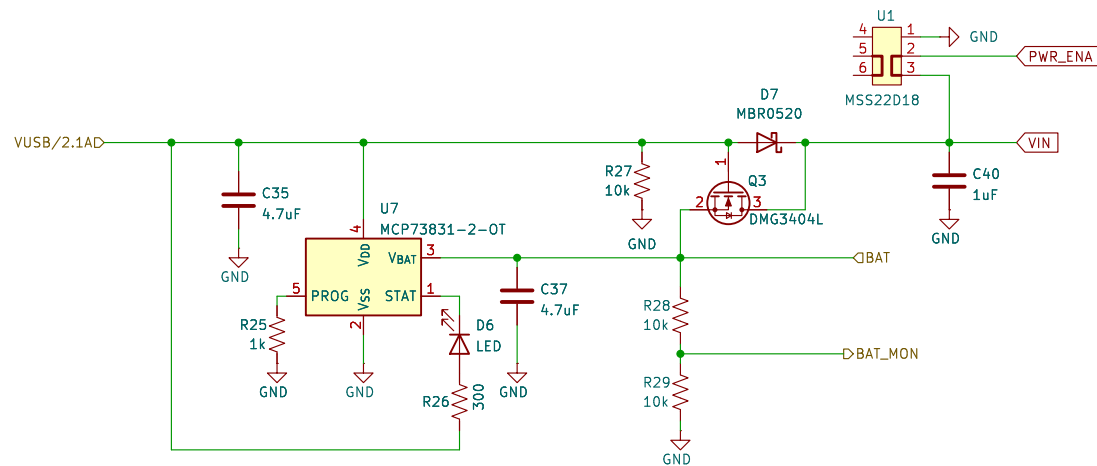
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File: cpu_wroom_esp32.kicad_sch

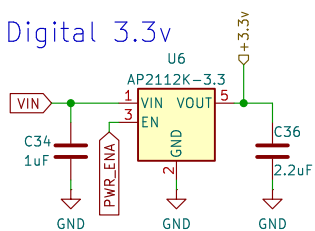
Title: ESP32-S3 CPU

Size: A4 Date: 2025-10-10
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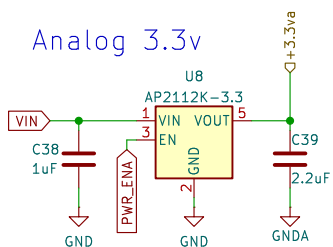
Rev:
Id: 3/4



Digital 3.3v



Analog 3.3v



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Sheet: /power_supply/

File: power_supply.kicad_sch

Title: Power supply

Size: A4

Date: 2024-10-17

Rev: 1

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Id: 5/4