

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

MIREA

Sheet: /

File: myocell_s3.kicad_sch

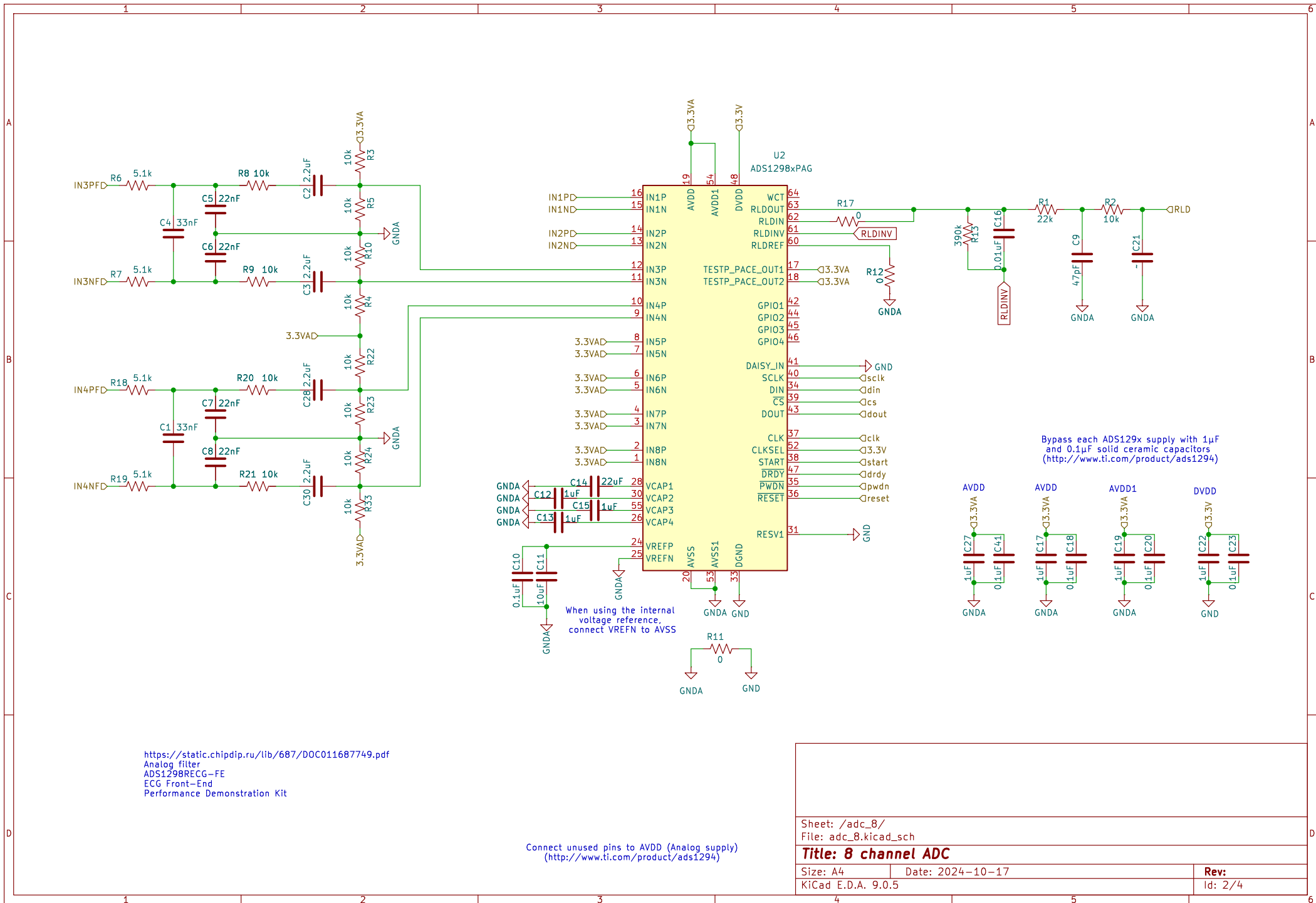
Title: MYOCELL_S3: EMG ADC board

Size: A4 Date: 2025-12-24

KiCad E.D.A. 9.0.5

Rev: Rev 01

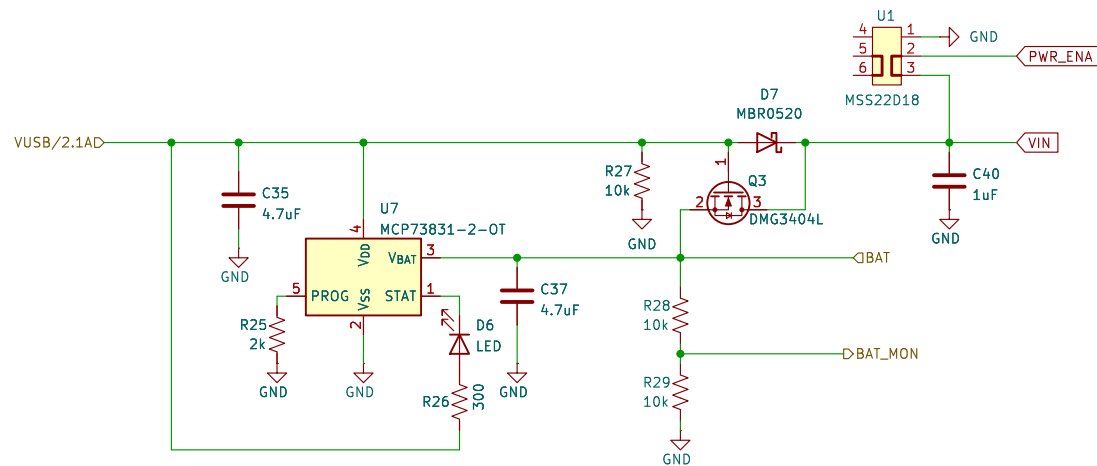
Id: 1/4





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)

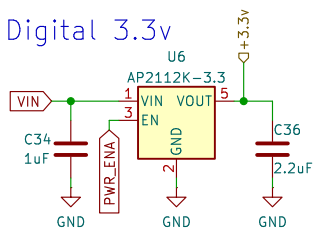
Rev:
Id: 3/4



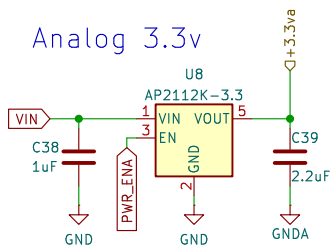
Fast charge current regulation can be scaled by placing a programming resistor (RPROG) from the PROG input to VSS. The program resistor and the charge current are calculated using the following equation (MCP73831/2: <https://static.chipdip.ru/lib/283/DOC012283193.pdf>)

$$I_{REG} = 1000V / R_{PROG}$$

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

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Rev: 1

Id: 5/4