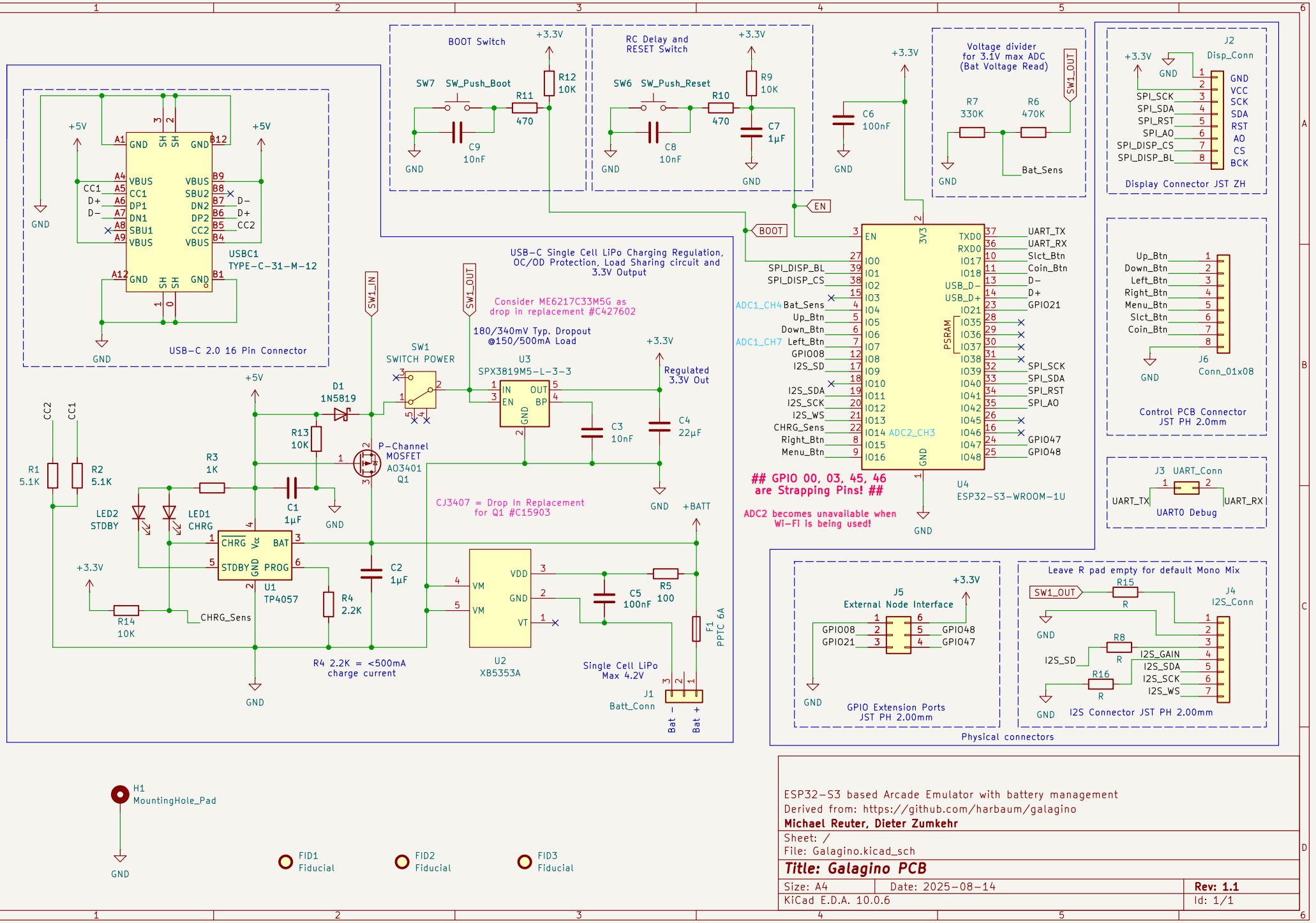

BOOT Switch
SW7 SW_Push_Boot
R12 10K
R11 470
C9 10nF
RC Delay and RESET Switch
SW6 SW_Push_Reset
R10 470
R9 10K
C7 1µF
C8 10nF
C6 100nF
Voltage divider for 3.1V max ADC (Bat Voltage Read)
R7 330K
R6 470K
SW1_OUT
Bat_Sens
J2 Disp_Conn
GND VCC SCK SDA RST AO CS BCK
SPI_SCK SPI_SDA SPI_RST SPI_AO SPI_DISP_CS SPI_DISP_BL
Display Connector JST ZH
USB-C 2.0 16 Pin Connector
USBC1 TYPE-C-31-M-12
USB-C Single Cell LiPo Charging Regulation, OC/OD Protection, Load Sharing circuit and 3.3V Output
Consider ME6217C33M5G as drop in replacement #C427602
180/340mV Typ. Dropout @150/500mA Load
SW1 SWITCH POWER
U3 SPX3819M5-L-3-3
Regulated 3.3V Out
D1 1N5819
R13 10K
P-Channel MOSFET AO3401 Q1
R1 5.1K
R2 5.1K
R3 1K
C1 1µF
C3 10nF
C4 22µF
LED2 STDBY
LED1 CHRG
U1 TP4057
R14 10K
R4 2.2K
R4 2.2K = <500mA charge current
C2 1µF
CJ3407 = Drop In Replacement for Q1 #C15903
U2 XB5353A
R5 100
C5 100nF
F1 PPTC 6A
J1 Batt_Conn
Single Cell LiPo Max 4.2V
Bat - Bat +
U4 ESP32-S3-WROOM-1U
GPIO 00, 03, 45, 46 are Strapping Pins!
ADC2 becomes unavailable when Wi-Fi is being used!
J6 Conn_01x08
Up_Btn Down_Btn Left_Btn Right_Btn Menu_Btn Slct_Btn Coin_Btn
Control PCB Connector JST PH 2.0mm
J3 UART_Conn
UART_TX UART_RX
UART0 Debug
J5 External Node Interface
GPIO008 GPIO021 GPIO048 GPIO047
GPIO Extension Ports JST PH 2.00mm
Leave R pad empty for default Mono Mix
J4 I2S_Conn
I2S_GAIN I2S_SDA I2S_SCK I2S_WS I2S_SD
I2S Connector JST PH 2.00mm
Physical connectors
H1 MountingHole_Pad
FID1 Fiducial
FID2 Fiducial
FID3 Fiducial
ESP32-S3 based Arcade Emulator with battery management
Derived from: https://github.com/harbaum/galagino
Michael Reuter, Dieter Zumkehr
Sheet: /
File: Galagino.kicad_sch
Title: Galagino PCB
Size: A4
Date: 2025-08-14
Rev: 1.1
KiCad E.D.A. 10.0.6
Id: 1/1