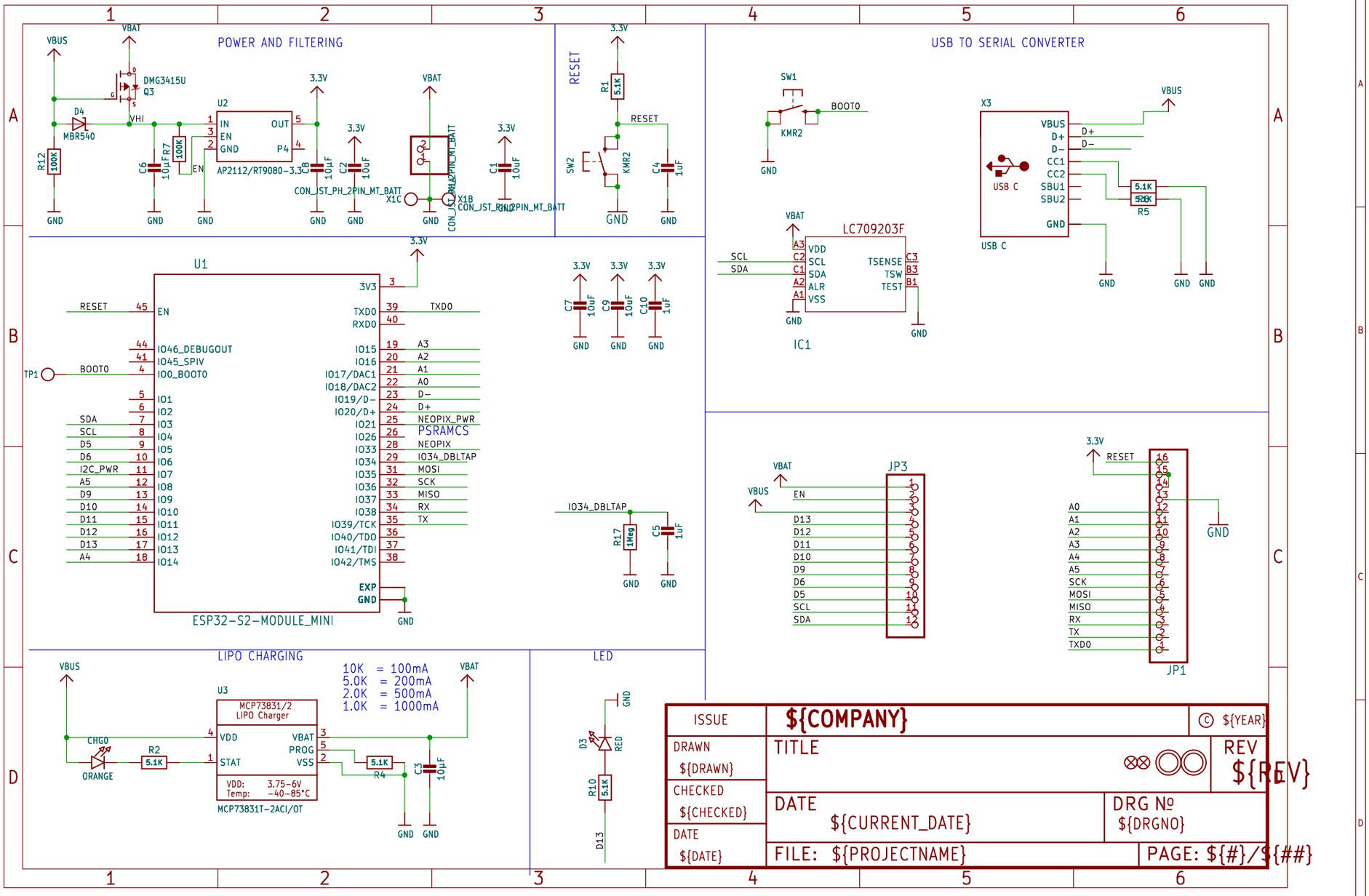
POWER AND FILTERING
VBUS
VBAT
DMG3415U
Q3
D4
MBR540
VHI
R12
100K
C6
10µF
R7
100K
EN
U2
IN
EN
GND
OUT
P4
AP2112/RT9080-3.3
3.3V
C8
10µF
C2
10uF
C1
10uF
CON_JST_PH_2PIN_MT_BATT
X1C
X1B
CON_JST_PH_2PIN_MT_BATT
GND
RESET
R1
5.1K
SW2
KMR2
C4
1uF
USB TO SERIAL CONVERTER
SW1
BOOT0
KMR2
X3
VBUS
D+
D-
CC1
CC2
SBU1
SBU2
USB C
5.1K
5.1K
R5
LC709203F
VDD
SCL
SDA
ALR
VSS
TSENSE
TSW
TEST
IC1
U1
ESP32-S2-MODULE_MINI
3V3
EN
TXD0
RXD0
IO46_DEBUGOUT
IO45_SPIV
IO0_BOOT0
TP1
IO15
IO16
IO17/DAC1
IO18/DAC2
IO19/D-
IO20/D+
IO21
IO26
IO33
IO34
IO35
IO36
IO37
IO38
IO39/TCK
IO40/TDO
IO41/TDI
IO42/TMS
EXP
GND
PSRAMCS
NEOPIX
IO34_DBLTAP
MOSI
SCK
MISO
RX
TX
NEOPIX_PWR
C7
10uF
C9
10uF
C10
1uF
R17
1Meg
C5
1uF
JP3
JP1
LIPO CHARGING
U3
MCP73831/2
LIPO Charger
VDD
STAT
VBAT
PROG
VSS
VDD: 3.75-6V
Temp: -40-85°C
MCP73831T-2ACI/OT
CHG0
ORANGE
R2
5.1K
R4
5.1K
C3
10µF
10K = 100mA
5.0K = 200mA
2.0K = 500mA
1.0K = 1000mA
LED
D3
RED
R10
5.1K
D13
ISSUE
${COMPANY}
© ${YEAR}
DRAWN
${DRAWN}
TITLE
REV
${REV}
CHECKED
${CHECKED}
DATE
${CURRENT_DATE}
DRG Nº
${DRGNO}
DATE
${DATE}
FILE: ${PROJECTNAME}
PAGE: ${#}/${##}
MT2
MT1
MT
VSENSOR
R3A
10K
R3B
10K
SDA
SCL
NEOPIXEL
WS2812B
VDD
NEOPIX
DI
DO
U4
BME280
BME280 Digital
Environ. Sensor
VDDIO
SDO
CSB
SCK
SDI
VDD: 1.8-3.6V
Temp: -40~85°C
R3C
10K
C11
10uF
U5
AP2112/RT9080-3.3
OUT
IN
EN
P4
R3D
10K
Sheet: /
File: working.kicad_sch
Title:
Size: User
Date:
Rev:
KiCad E.D.A. eeschema 7.0.6
Id: 1/1