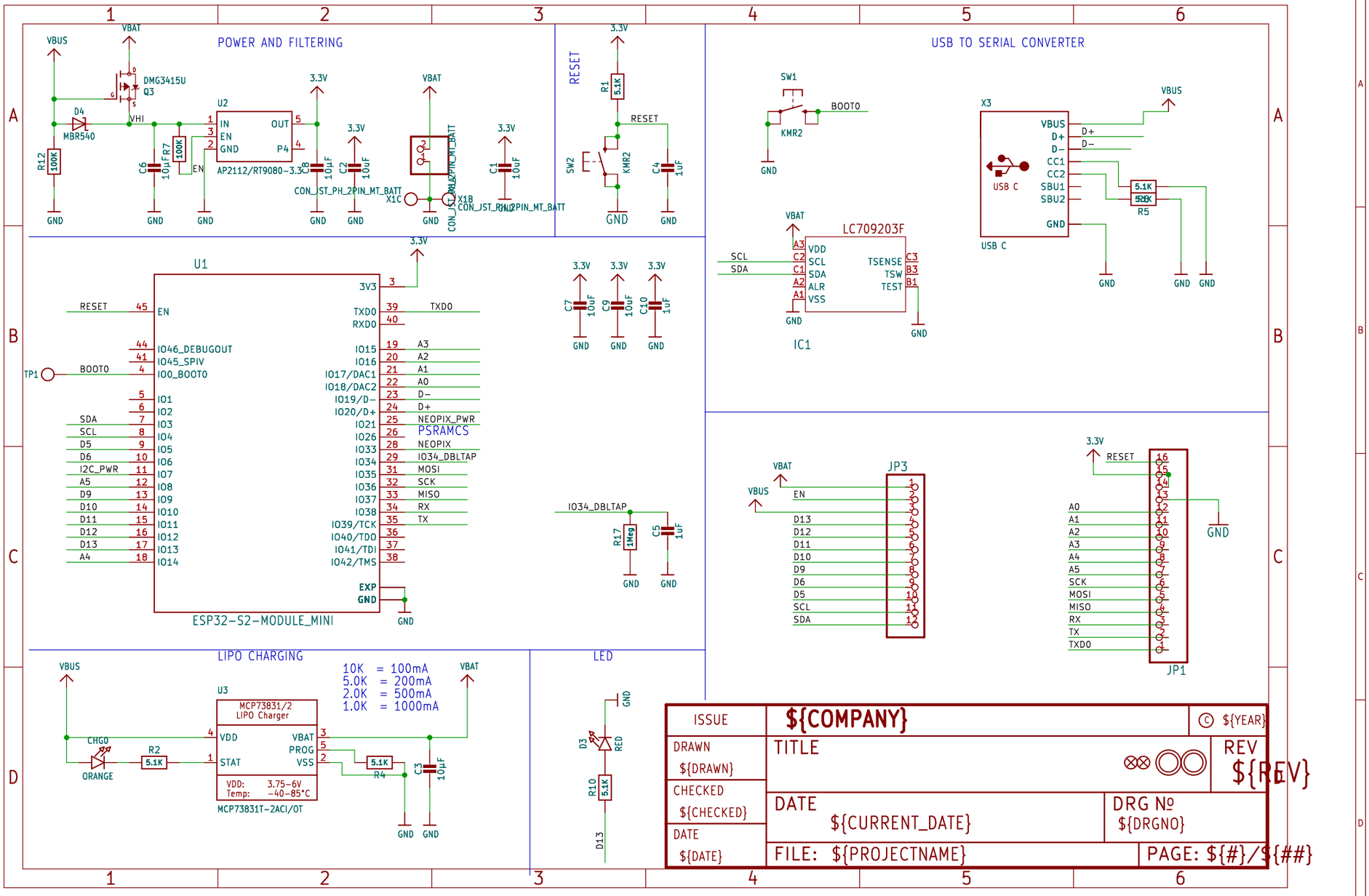
POWER AND FILTERING
VBUS
VBAT
DMG3415U
Q3
D4
MBR540
VHI
R12
100K
GND
C6
10µF
R7
100K
EN
U2
IN
EN
GND
OUT
P4
AP2112/RT9080-3.3
3.3V
C8
10µF
C2
10uF
CON_JST_PH_2PIN_MT_BATT
X1C
X1B
CON_JST_PH_2PIN_MT_BATT
C1
10uF
RESET
R1
5.1K
SW2
KMR2
C4
1uF
USB TO SERIAL CONVERTER
SW1
BOOT0
KMR2
X3
VBUS
D+
D-
CC1
CC2
SBU1
SBU2
USB C
5.1K
5.1K
R5
LC709203F
VDD
SCL
SDA
ALR
VSS
TSENSE
TSW
TEST
IC1
U1
ESP32-S2-MODULE_MINI
RESET
BOOT0
TP1
SDA
SCL
D5
D6
I2C_PWR
A5
D9
D10
D11
D12
D13
A4
EN
IO46_DEBUGOUT
IO45_SPIV
IO0_BOOT0
3V3
TXD0
RXD0
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
A3
A2
A1
A0
D-
D+
NEOPIX_PWR
PSRAMCS
NEOPIX
IO34_DBLTAP
MOSI
SCK
MISO
RX
TX
C7
10uF
C9
10uF
C10
1uF
IO34_DBLTAP
R17
1Meg
C5
1uF
JP3
EN
D13
D12
D11
D10
D9
D6
D5
SCL
SDA
JP1
A0
A1
A2
A3
A4
A5
SCK
MOSI
MISO
RX
TX
TXD0
LIPO CHARGING
10K = 100mA
5.0K = 200mA
2.0K = 500mA
1.0K = 1000mA
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
5.1K
R4
C3
10µF
LED
D3
RED
R10
5.1K
D13
${COMPANY}
© ${YEAR}
ISSUE
DRAWN
${DRAWN}
CHECKED
${CHECKED}
DATE
${DATE}
TITLE
REV
${REV}
DATE
${CURRENT_DATE}
DRG Nº
${DRGNO}
FILE: ${PROJECTNAME}
PAGE: ${#}/${##}
MT2
MT1
MT
VSENSOR
R3A
10K
R3B
10K
GND
SDA
SCL
NEOPIXEL
NEOPIX_PWR
WS2812B
VDD
NEOPIX
DI
GND
DO
VSENSOR
U4
BMEx80 Digital
Environ. Sensor
VDD
VDDIO
GND
SDO
CSB
SCK
SDI
VDD: 1.8-3.6V
Temp: -40~85°C
BME280
R3C
10K
C11
10uF
U5
OUT
P4
IN
EN
GND
AP2112/RT9080-3.3
VHI
I2C_PWR
R3D
10K
Sheet: /
File: working.kicad_sch
Title:
Size: User
Date:
Rev:
KiCad E.D.A. eeschema 7.0.6
Id: 1/1