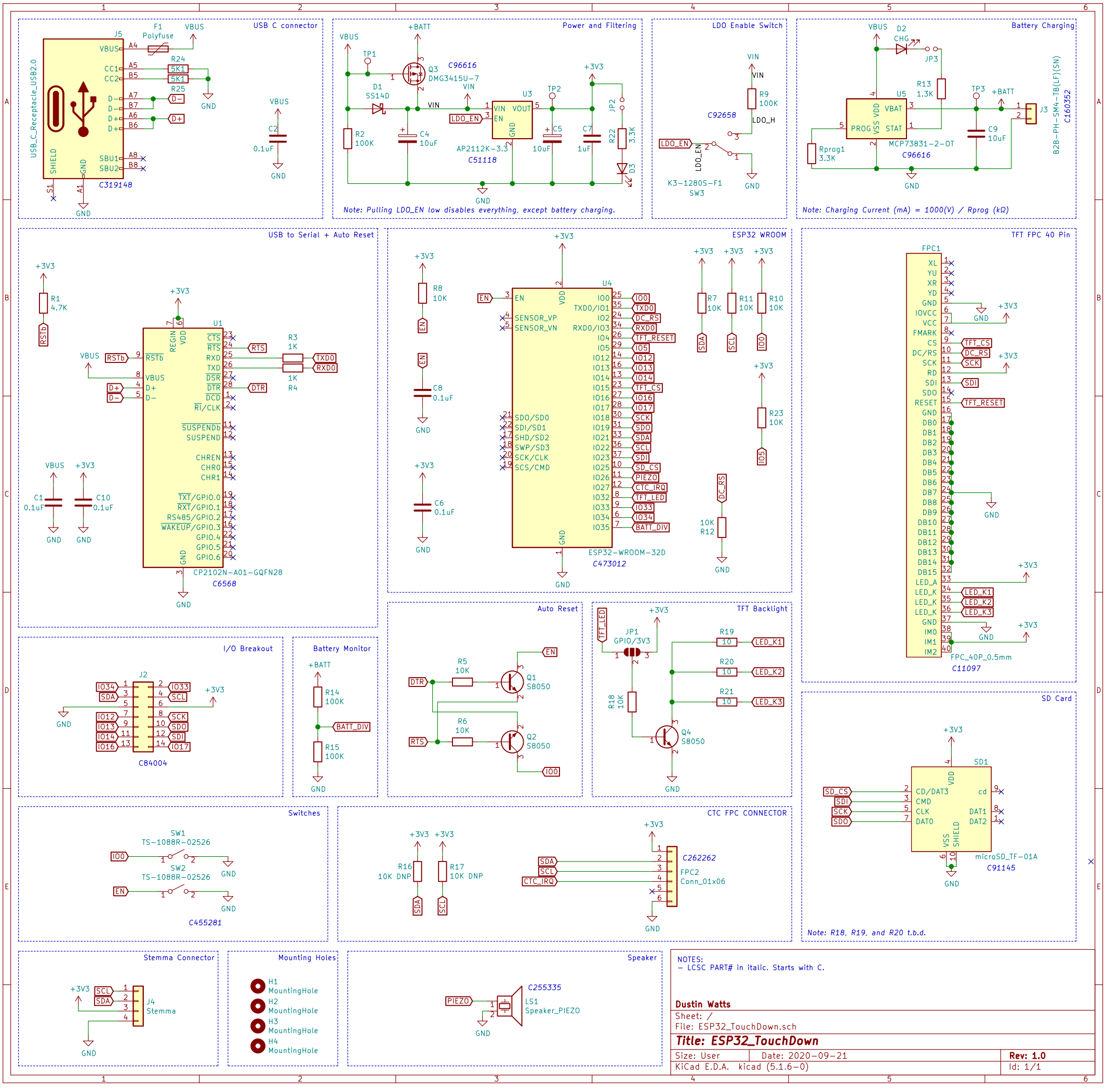
USB C connector
J5
USB_C_Receptacle_USB2.0
F1
Polyfuse
VBUS
R24
5K1
R25
D-
D+
GND
C319148
C2
0.1uF
Power and Filtering
+BATT
TP1
Q3
DMG3415U-7
C96616
D1
SS14D
R2
100K
C4
10uF
VIN
LDO_EN
U3
VIN VOUT
EN
GND
AP2112K-3.3
C51118
TP2
C5
10uF
C7
1uF
+3V3
JP2
R22
3.3K
D3
Note: Pulling LDO_EN low disables everything, except battery charging.
LDO Enable Switch
R9
100K
C92658
LDO_H
K3-1280S-F1
SW3
Battery Charging
D2
CHG
JP3
R13
1.3K
U5
VBAT
PROG
STAT
VDD
VSS
MCP73831-2-OT
C96616
TP3
C9
10uF
J3
B2B-PH-SM4-TB(LF)(SN)
C160352
Rprog1
3.3K
Note: Charging Current (mA) = 1000(V) / Rprog (kΩ)
USB to Serial + Auto Reset
R1
4.7K
RSTb
U1
REGIN
VDD
CTS
RTS
RXD
TXD
DSR
DTR
DCD
RI/CLK
SUSPENDb
SUSPEND
CHREN
CHR0
CHR1
TXT/GPIO.0
RXT/GPIO.1
RS485/GPIO.2
WAKEUP/GPIO.3
GPIO.4
GPIO.5
GPIO.6
R3
1K
R4
1K
C1
0.1uF
C10
0.1uF
CP2102N-A01-GQFN28
C6568
ESP32 WROOM
R8
10K
C8
0.1uF
C6
0.1uF
U4
EN
VDD
SENSOR_VP
SENSOR_VN
SDO/SD0
SDI/SD1
SHD/SD2
SWP/SD3
SCK/CLK
SCS/CMD
IO0
TXD0/IO1
IO2
RXD0/IO3
IO4
IO5
IO12
IO13
IO14
IO15
IO16
IO17
IO18
IO19
IO21
IO22
IO23
IO25
IO26
IO27
IO32
IO33
IO34
IO35
DC_RS
TFT_RESET
TFT_CS
SCK
SDO
SDA
SCL
SDI
SD_CS
PIEZO
CTC_IRQ
TFT_LED
BATT_DIV
R7
10K
R11
10K
R10
10K
R23
10K
R12
10K
ESP32-WROOM-32D
C473012
TFT FPC 40 Pin
FPC1
XL
YU
XR
YD
GND
IOVCC
VCC
FMARK
CS
DC/RS
SCK
RD
SDI
SDO
RESET
DB0
DB1
DB2
DB3
DB4
DB5
DB6
DB7
DB8
DB9
DB10
DB11
DB12
DB13
DB14
DB15
LED_A
LED_K
IM0
IM1
IM2
LED_K1
LED_K2
LED_K3
FPC_40P_0.5mm
C11097
I/O Breakout
J2
IO34
SDA
IO33
SCL
IO12
IO13
IO14
IO16
SCK
SDO
SDI
IO17
C84004
Battery Monitor
R14
100K
R15
100K
Auto Reset
R5
10K
R6
10K
Q1
S8050
Q2
S8050
TFT Backlight
TFT_LED
JP1
GPIO/3V3
R18
10K
R19
10
R20
10
R21
10
Q4
S8050
SD Card
SD1
CD/DAT3
CMD
CLK
DAT0
cd
DAT1
DAT2
VDD
VSS
SHIELD
microSD_TF-01A
C91145
Note: R18, R19, and R20 t.b.d.
Switches
SW1
TS-1088R-02526
SW2
TS-1088R-02526
C455281
CTC FPC CONNECTOR
R16
10K DNP
R17
10K DNP
FPC2
Conn_01x06
C262262
Stemma Connector
J4
Stemma
Mounting Holes
H1
MountingHole
H2
MountingHole
H3
MountingHole
H4
MountingHole
Speaker
C255335
LS1
Speaker_PIEZO
NOTES:
- LCSC PART# in italic. Starts with C.
Dustin Watts
Sheet: /
File: ESP32_TouchDown.sch
Title: ESP32_TouchDown
Size: User
Date: 2020-09-21
Rev: 1.0
KiCad E.D.A. kicad (5.1.6-0)
Id: 1/1