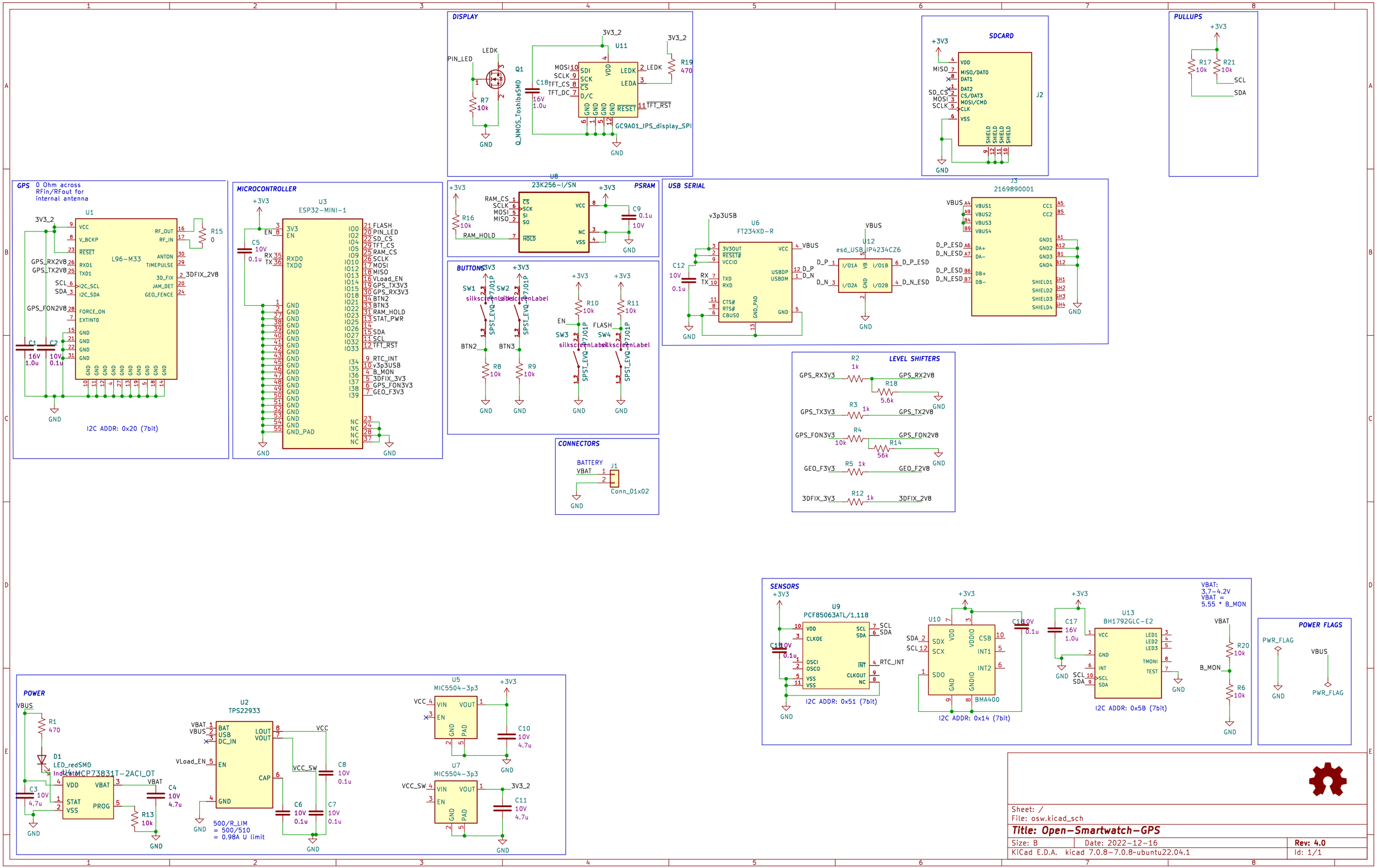
DISPLAY
U11
GC9A01_IPS_display_SPI
Q1
Q_NMOS_ToshibaSMD
R7 10k
R19 470
C18 16V 1.0u
SDCARD
J2
PULLUPS
R17 10k
R21 10k
GPS
0 Ohm across RFin/RFout for internal antenna
U1
L96-M33
R15 0
C1 16V 1.0u
C2 10V 0.1u
I2C ADDR: 0x20 (7bit)
MICROCONTROLLER
U3
ESP32-MINI-1
C5 10V 0.1u
U8
23K256-I/SN
PSRAM
R16 10k
C9 0.1u 10V
BUTTONS
SW1
SW2
SW3
SW4
SPST_EVQ7J01P
R8 10k
R9 10k
R10 10k
R11 10k
CONNECTORS
BATTERY
J1
Conn_01x02
USB SERIAL
U6
FT234XD-R
U12
esd_USB_IP4234CZ6
J3
2169890001
C12 10V 0.1u
LEVEL SHIFTERS
R2 1k
R18 5.6k
R3 1k
R4 10k
R14 56k
R5 1k
R12 1k
SENSORS
U9
PCF85063ATL/1,118
I2C ADDR: 0x51 (7bit)
U10
BMA400
I2C ADDR: 0x14 (7bit)
U13
BH1792GLC-E2
I2C ADDR: 0x5B (7bit)
VBAT: 3.7-4.2V
VBAT = 5.55 * B_MON
R20 10k
R6 10k
POWER FLAGS
PWR_FLAG
POWER
R1 470
D1 LED_redSMD
U4 MCP73831T-2ACI_OT
C3 10V 4.7u
C4 10V 4.7u
R13 10k
U2
TPS22933
C6 10V 0.1u
C7 10V 0.1u
C8 10V 0.1u
500/R_LIM = 500/510 = 0.98A U limit
U5
MIC5504-3p3
C10 10V 4.7u
U7
MIC5504-3p3
C11 10V 4.7u
Sheet: /
File: osw.kicad_sch
Title: Open-Smartwatch-GPS
Size: B
Date: 2022-12-16
Rev: 4.0
KiCad E.D.A. kicad 7.0.8-7.0.8~ubuntu22.04.1
Id: 1/1