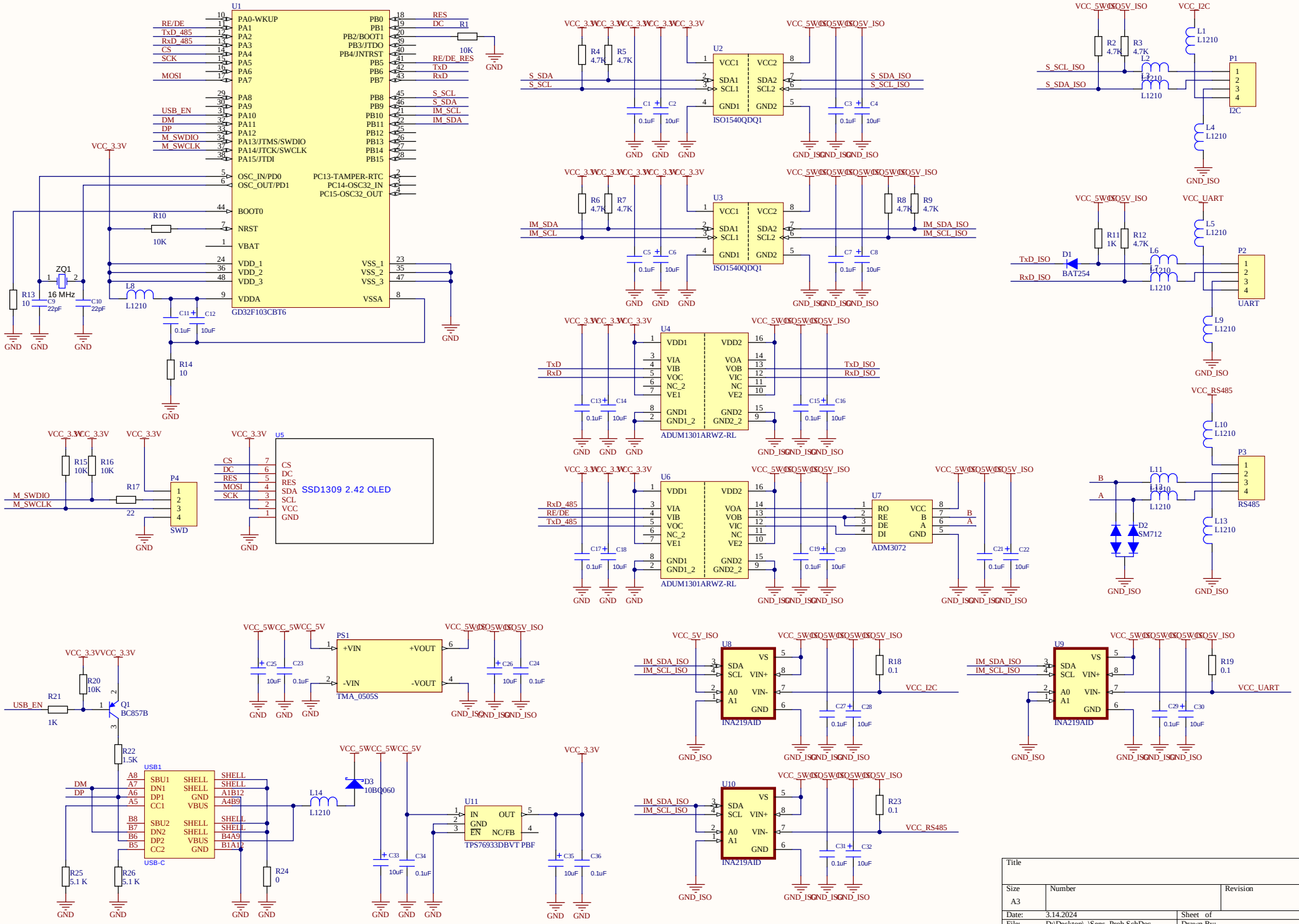
U1
GD32F103CBT6
PA0-WKUP
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PA8
PA9
PA10
PA11
PA12
PA13/JTMS/SWDIO
PA14/JTCK/SWCLK
PA15/JTDI
PB0
PB1
PB2/BOOT1
PB3/JTDO
PB4/JNTRST
PB5
PB6
PB7
PB8
PB9
PB10
PB11
PB12
PB13
PB14
PB15
OSC_IN/PD0
OSC_OUT/PD1
BOOT0
NRST
VBAT
VDD_1
VDD_2
VDD_3
VDDA
VSS_1
VSS_2
VSS_3
VSSA
PC13-TAMPER-RTC
PC14-OSC32_IN
PC15-OSC32_OUT
RE/DE
TxD_485
RxD_485
CS
SCK
MOSI
USB_EN
DM
DP
M_SWDIO
M_SWCLK
RES
DC
RE/DE_RES
TxD
RxD
S_SCL
S_SDA
IM_SCL
IM_SDA
R1
10K
R10
10K
ZQ1
16 MHz
R13
10
C9
22pF
C10
22pF
L8
L1210
C11
C12
0.1uF
10uF
R14
10
VCC_3.3V
GND
U2
ISO1540QDQ1
VCC1
VCC2
SDA1
SCL1
GND1
SDA2
SCL2
GND2
R4
4.7K
R5
4.7K
C1
C2
C3
C4
S_SDA_ISO
S_SCL_ISO
GND_ISO
U3
R6
4.7K
R7
4.7K
R8
4.7K
R9
4.7K
C5
C6
C7
C8
IM_SDA_ISO
IM_SCL_ISO
U4
ADUM1301ARWZ-RL
VDD1
VDD2
VIA
VIB
VOC
NC_2
VE1
VOA
VOB
VIC
NC
VE2
GND1
GND1_2
GND2
GND2_2
TxD
RxD
TxD_ISO
RxD_ISO
C13
C14
C15
C16
U6
ADUM1301ARWZ-RL
RxD_485
RE/DE
TxD_485
C17
C18
C19
C20
U7
ADM3072
RO
RE
DE
DI
VCC
B
A
GND
C21
C22
VCC_5V_ISO
VCC_I2C
R2
4.7K
R3
4.7K
L1
L1210
L2
L3
L4
P1
I2C
VCC_UART
R11
1K
R12
4.7K
L5
L6
L7
L9
D1
BAT254
P2
UART
VCC_RS485
L10
L11
L12
L13
P3
RS485
D2
SM712
P4
SWD
R15
10K
R16
10K
R17
22
U5
SSD1309 2.42 OLED
CS
DC
RES
SDA
SCL
VCC
GND
PS1
TMA_0505S
+VIN
-VIN
+VOUT
-VOUT
C23
C24
C25
C26
R20
10K
R21
1K
Q1
BC857B
R22
1.5K
USB1
USB-C
SBU1
DN1
DP1
CC1
SBU2
DN2
DP2
CC2
SHELL
VBUS
GND
A8
A7
A6
A5
B8
B7
B6
B5
A1B12
A4B9
B4A9
B1A12
R25
5.1 K
R26
5.1 K
R24
0
L14
L1210
D3
10BQ060
U11
TPS76933DBVT PBF
IN
OUT
EN
NC/FB
C33
C34
C35
C36
U8
U9
U10
INA219AID
SDA
SCL
A0
A1
VS
VIN+
VIN-
R18
0.1
R19
0.1
R23
0.1
C27
C28
C29
C30
C31
C32
Title
Size
A3
Number
Revision
Date:
3.14.2024
Sheet of
File:
D:\Desktop\..\Sens_Prob.SchDoc
Drawn By: