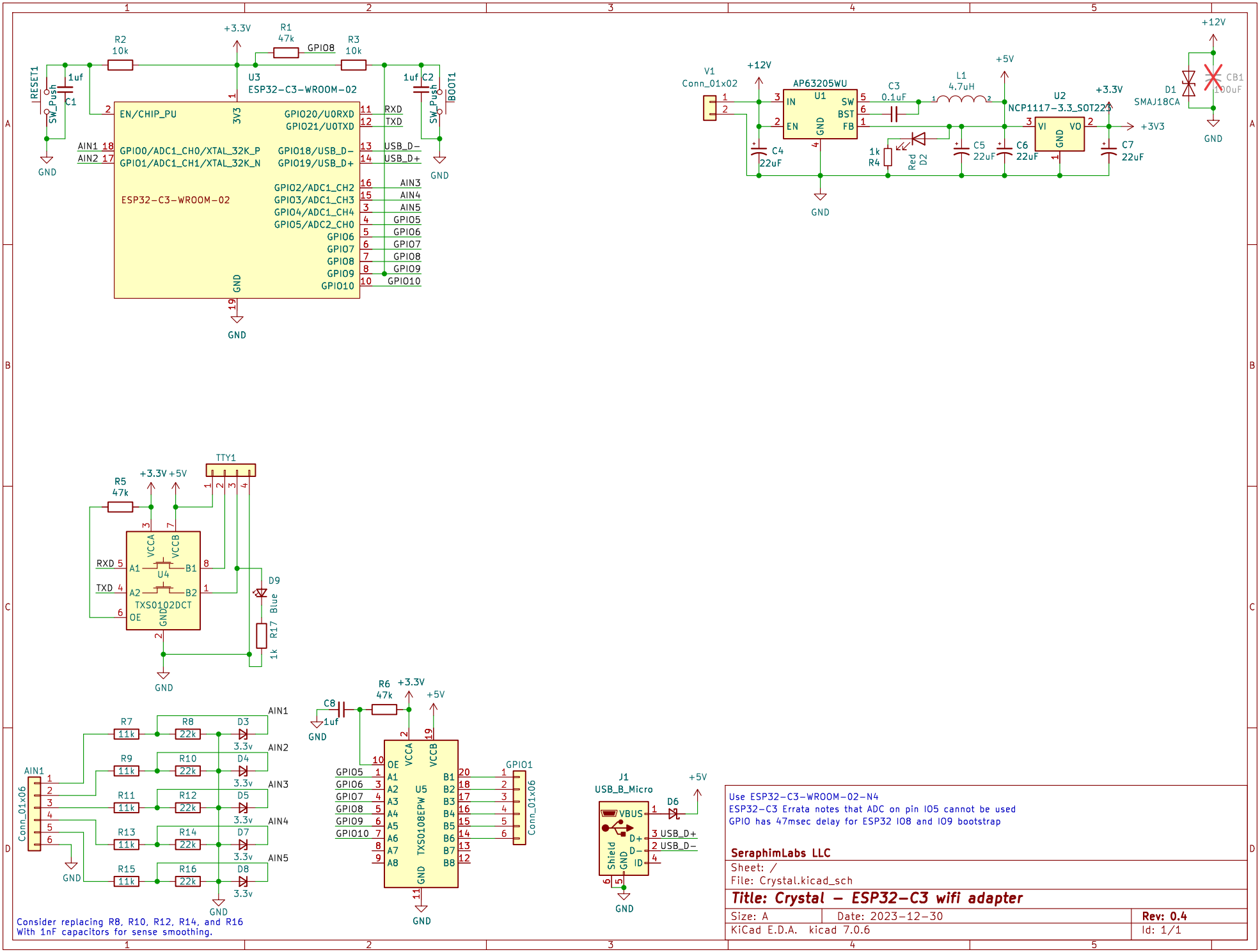
U3
ESP32-C3-WROOM-02
EN/CHIP_PU
3V3
GPIO20/U0RXD
GPIO21/U0TXD
GPIO0/ADC1_CH0/XTAL_32K_P
GPIO1/ADC1_CH1/XTAL_32K_N
GPIO18/USB_D-
GPIO19/USB_D+
GPIO2/ADC1_CH2
GPIO3/ADC1_CH3
GPIO4/ADC1_CH4
GPIO5/ADC2_CH0
GPIO6
GPIO7
GPIO8
GPIO9
GPIO10
GND
ESP32-C3-WROOM-02
RESET1
SW_Push
BOOT1
AIN1
AIN2
AIN3
AIN4
AIN5
RXD
TXD
USB_D-
USB_D+
+3.3V
R1 47k
R2 10k
R3 10k
C1 1uf
C2 1uf
V1 Conn_01x02
+12V
AP63205WU
U1
IN
EN
SW
BST
FB
C3 0.1uF
L1 4.7uH
+5V
U2 NCP1117-3.3_SOT223
VI
VO
+3V3
C4 22uF
C5 22uF
C6 22uF
C7 22uF
1k R4
Red D2
D1 SMAJ18CA
CB1 100uF
TTY1
R5 47k
VCCA
VCCB
U4
TXS0102DCT
OE
D9 Blue
R17 1k
R7 11k
R8 22k
R9 11k
R10 22k
R11 11k
R12 22k
R13 11k
R14 22k
R15 11k
R16 22k
D3
D4
D5
D7
D8
3.3v
Conn_01x06
C8 1uf
R6 47k
U5
TXS0108EPW
GPIO1
J1 USB_B_Micro
VBUS
D+
D-
ID
Shield
D6
USB_D+
USB_D-
Use ESP32-C3-WROOM-02-N4
ESP32-C3 Errata notes that ADC on pin IO5 cannot be used
GPIO has 47msec delay for ESP32 IO8 and IO9 bootstrap
SeraphimLabs LLC
Sheet: /
File: Crystal.kicad_sch
Title: Crystal – ESP32-C3 wifi adapter
Size: A
Date: 2023-12-30
Rev: 0.4
KiCad E.D.A. kicad 7.0.6
Id: 1/1
Consider replacing R8, R10, R12, R14, and R16
With 1nF capacitors for sense smoothing.