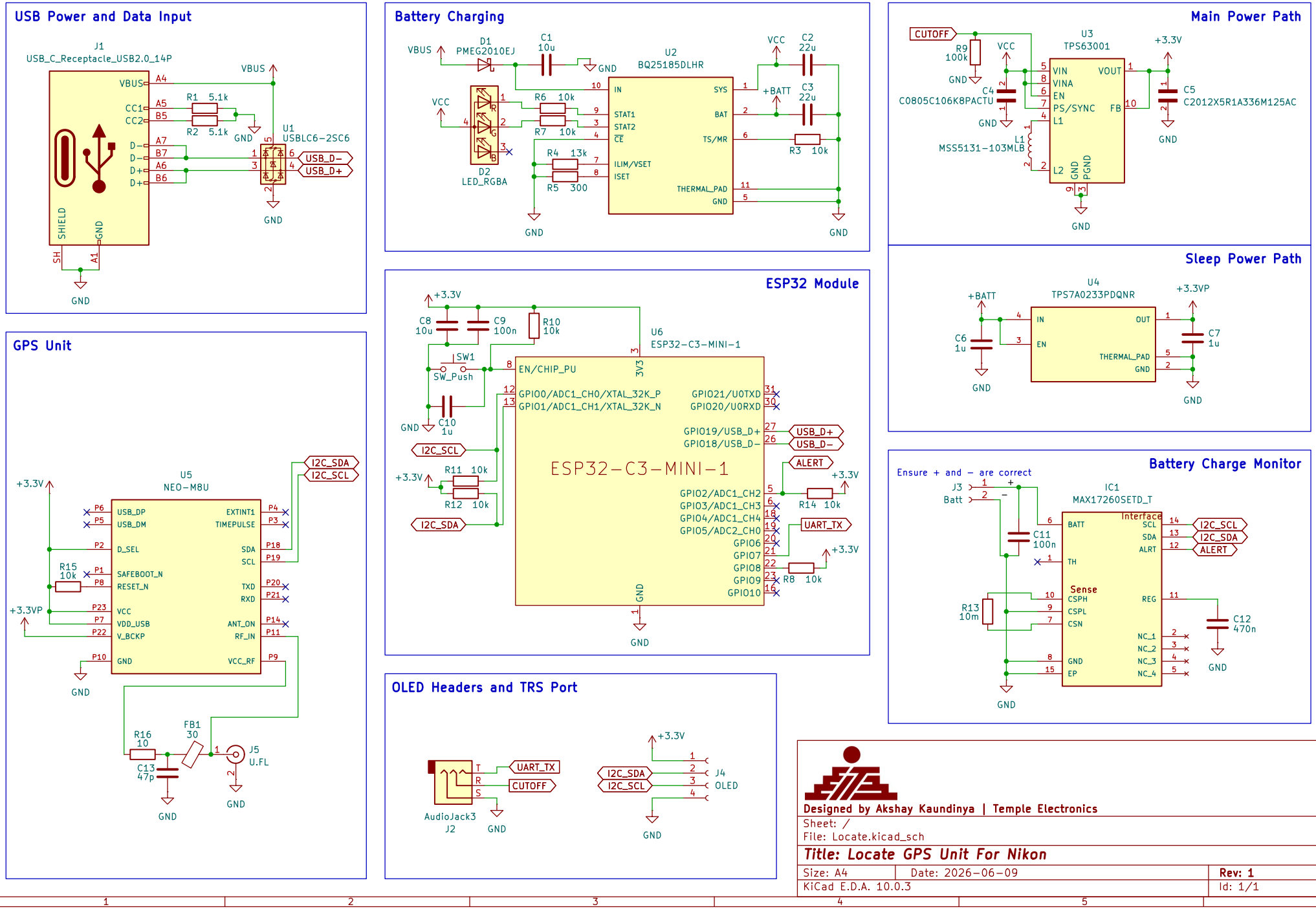

USB Power and Data Input
J1
USB_C_Receptacle_USB2.0_14P
VBUS
CC1
CC2
D-
D+
SHIELD
GND
R1 5.1k
R2 5.1k
U1
USBLC6-2SC6
USB_D-
USB_D+
Battery Charging
D1
PMEG2010EJ
C1
10u
U2
BQ25185DLHR
VCC
C2
22u
+BATT
C3
22u
R6 10k
R7 10k
R4 13k
R5 300
R3 10k
D2
LED_RGBA
IN
SYS
BAT
TS/MR
STAT1
STAT2
CE
ILIM/VSET
ISET
THERMAL_PAD
Main Power Path
CUTOFF
R9
100k
U3
TPS63001
C4
C0805C106K8PACTU
C5
C2012X5R1A336M125AC
L1
MSS5131-103MLB
VIN
VINA
EN
PS/SYNC
L1
L2
VOUT
FB
GND
PGND
Sleep Power Path
U4
TPS7A0233PDQNR
+BATT
+3.3VP
C6
1u
C7
1u
IN
OUT
EN
THERMAL_PAD
GND
ESP32 Module
+3.3V
C8
10u
C9
100n
R10
10k
U6
ESP32-C3-MINI-1
SW1
SW_Push
C10
1u
EN/CHIP_PU
3V3
GPIO0/ADC1_CH0/XTAL_32K_P
GPIO1/ADC1_CH1/XTAL_32K_N
GPIO21/U0TXD
GPIO20/U0RXD
GPIO19/USB_D+
GPIO18/USB_D-
I2C_SCL
I2C_SDA
R11 10k
R12 10k
ALERT
R14 10k
UART_TX
R8 10k
GPIO2/ADC1_CH2
GPIO3/ADC1_CH3
GPIO4/ADC1_CH4
GPIO5/ADC2_CH0
GPIO6
GPIO7
GPIO8
GPIO9
GPIO10
ESP32-C3-MINI-1
Battery Charge Monitor
Ensure + and - are correct
J3
Batt
IC1
MAX17260SETD_T
C11
100n
R13
10m
C12
470n
BATT
TH
Sense
CSPH
CSPL
CSN
REG
SCL
SDA
ALERT
NC_1
NC_2
NC_3
NC_4
EP
Interface
GPS Unit
U5
NEO-M8U
R15
10k
R16
10
FB1
30
C13
47p
J5
U.FL
USB_DP
USB_DM
D_SEL
SAFEBOOT_N
RESET_N
VCC
VDD_USB
V_BCKP
EXTINT1
TIMEPULSE
TXD
RXD
ANT_ON
RF_IN
VCC_RF
OLED Headers and TRS Port
AudioJack3
J2
J4
OLED
Designed by Akshay Kaundinya | Temple Electronics
Sheet: /
File: Locate.kicad_sch
Title: Locate GPS Unit For Nikon
Size: A4
Date: 2026-06-09
Rev: 1
KiCad E.D.A. 10.0.3
Id: 1/1