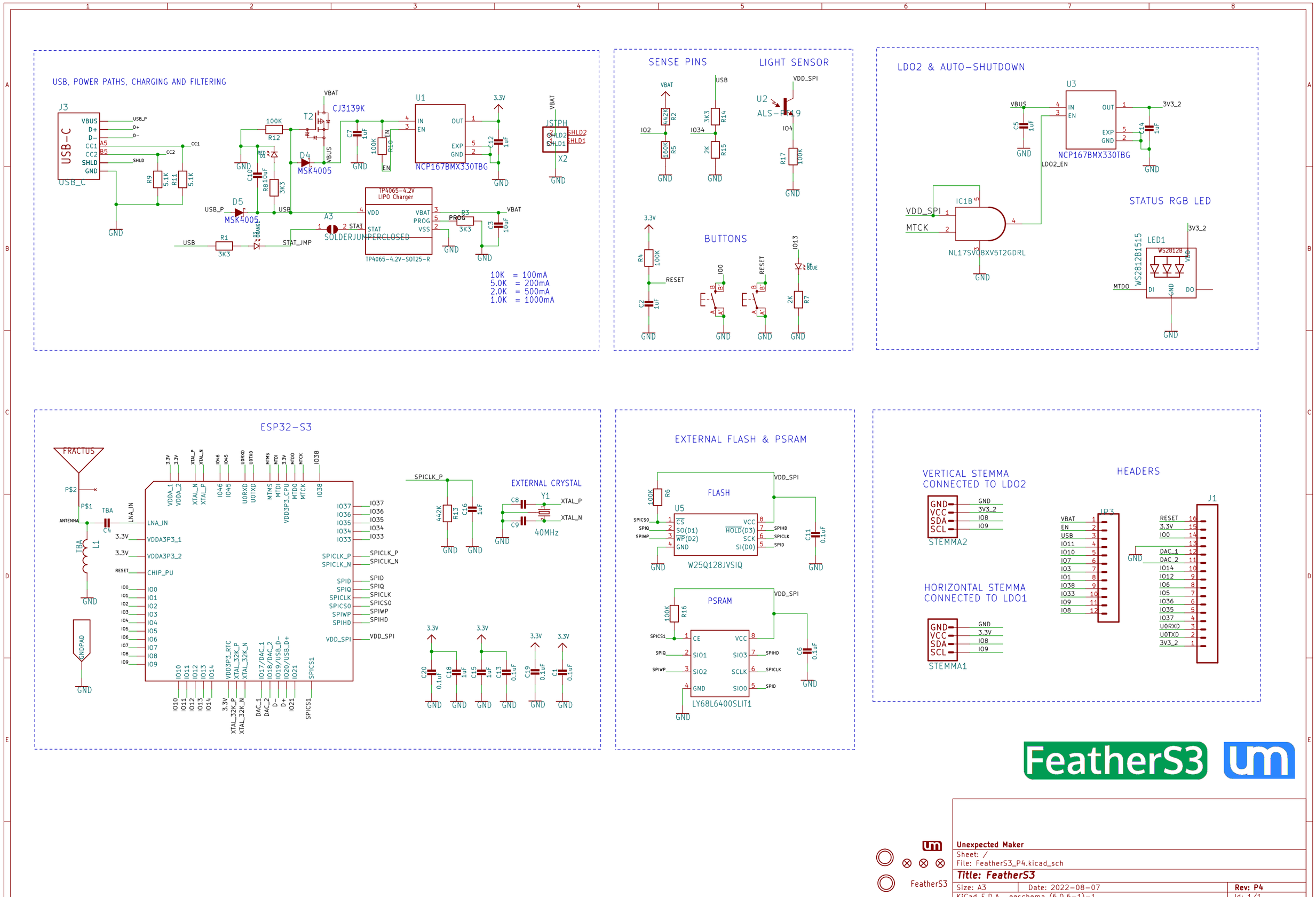
USB, POWER PATHS, CHARGING AND FILTERING
J3
USB-C
VBUS
D+
D-
CC1
CC2
SHLD
GND
USB_P
CC1
CC2
SHLD
R9 5.1K
R11 5.1K
VBAT
T2
CJ3139K
100K
R12
D4
MSK4005
VBUS
C7 1uF
100K
R10
EN
U1
IN
EN
OUT
EXP
GND
NCP167BMX330TBG
3.3V
C12 1uF
JSTPH
SHLD2
SHLD1
X2
D5
MSK4005
USB_P
USB
A3
SOLDERJUMPERCLOSED
STAT
TP4065-4.2V LIPO Charger
VDD
VBAT
PROG
VSS
TP4065-4.2V-SOT25-R
R3 3K3
C3 10uF
R1 3K3
STAT_JMP
10K = 100mA
5.0K = 200mA
2.0K = 500mA
1.0K = 1000mA
SENSE PINS
LIGHT SENSOR
VBAT
USB
VDD_SPI
U2
ALS-PT19
R2 442K
R5 160K
IO2
R14 3K3
R15 2K
IO34
IO4
R17 100K
3.3V
R4 100K
RESET
C2 1uF
BUTTONS
IO0
RESET
IO13
R7 2K
BLUE
LDO2 & AUTO-SHUTDOWN
U3
VBUS
C5 1uF
IN
EN
OUT
EXP
GND
3V3_2
C14 1uF
NCP167BMX330TBG
LDO2_EN
IC1B
VDD_SPI
MTCK
NL17SV08XV5T2GDRL
STATUS RGB LED
LED1
WS2812B1515
WS2812B
3V3_2
MTDO
DI
GND
DO
ESP32-S3
FRACTUS
P$2
P$1
ANTENNA
TBA
C4
LNA_IN
L1
GND
GNDPAD
VDDA_1
VDDA_2
XTAL_N
XTAL_P
IO46
IO45
U0RXD
U0TXD
MTMS
MTDI
VDD3P3_CPU
MTDO
MTCK
IO38
3.3V
VDDA3P3_1
VDDA3P3_2
RESET
CHIP_PU
IO0
IO1
IO2
IO3
IO4
IO5
IO6
IO7
IO8
IO9
IO37
IO36
IO35
IO34
IO33
SPICLK_P
SPICLK_N
SPID
SPIQ
SPICLK
SPICS0
SPIWP
SPIHD
VDD_SPI
IO10
IO11
IO12
IO13
IO14
VDD3P3_RTC
XTAL_32K_P
XTAL_32K_N
IO17/DAC_1
IO18/DAC_2
IO19/USB_D-
IO20/USB_D+
IO21
SPICS1
DAC_1
DAC_2
D-
D+
EXTERNAL CRYSTAL
Y1
C8
C9
40MHz
R13 442K
C16 1uF
C20 0.1uF
C18 1uF
C15 1uF
C13 0.1uF
C19 0.1uF
C1 0.1uF
EXTERNAL FLASH & PSRAM
FLASH
U5
R6 100K
CS
SO(D1)
WP(D2)
GND
VCC
HOLD(D3)
SCK
SI(D0)
W25Q128JVSIQ
C11 0.1uF
PSRAM
R16 100K
CE
SIO1
SIO2
GND
VCC
SIO3
SCLK
SIO0
LY68L6400SLIT1
C6 0.1uF
VERTICAL STEMMA
CONNECTED TO LDO2
GND
VCC
SDA
SCL
STEMMA2
HORIZONTAL STEMMA
CONNECTED TO LDO1
STEMMA1
HEADERS
J1
VBAT
EN
USB
IO11
IO10
IO7
IO3
IO1
IO38
IO33
IO9
IO8
RESET
3.3V
IO0
DAC_1
DAC_2
IO14
IO12
IO6
IO5
IO36
IO35
IO37
U0RXD
U0TXD
3V3_2
FeatherS3
Unexpected Maker
Sheet: /
File: FeatherS3_P4.kicad_sch
Title: FeatherS3
Size: A3
Date: 2022-08-07
Rev: P4
KiCad E.D.A. eeschema (6.0.6-1)-1
Id: 1/1