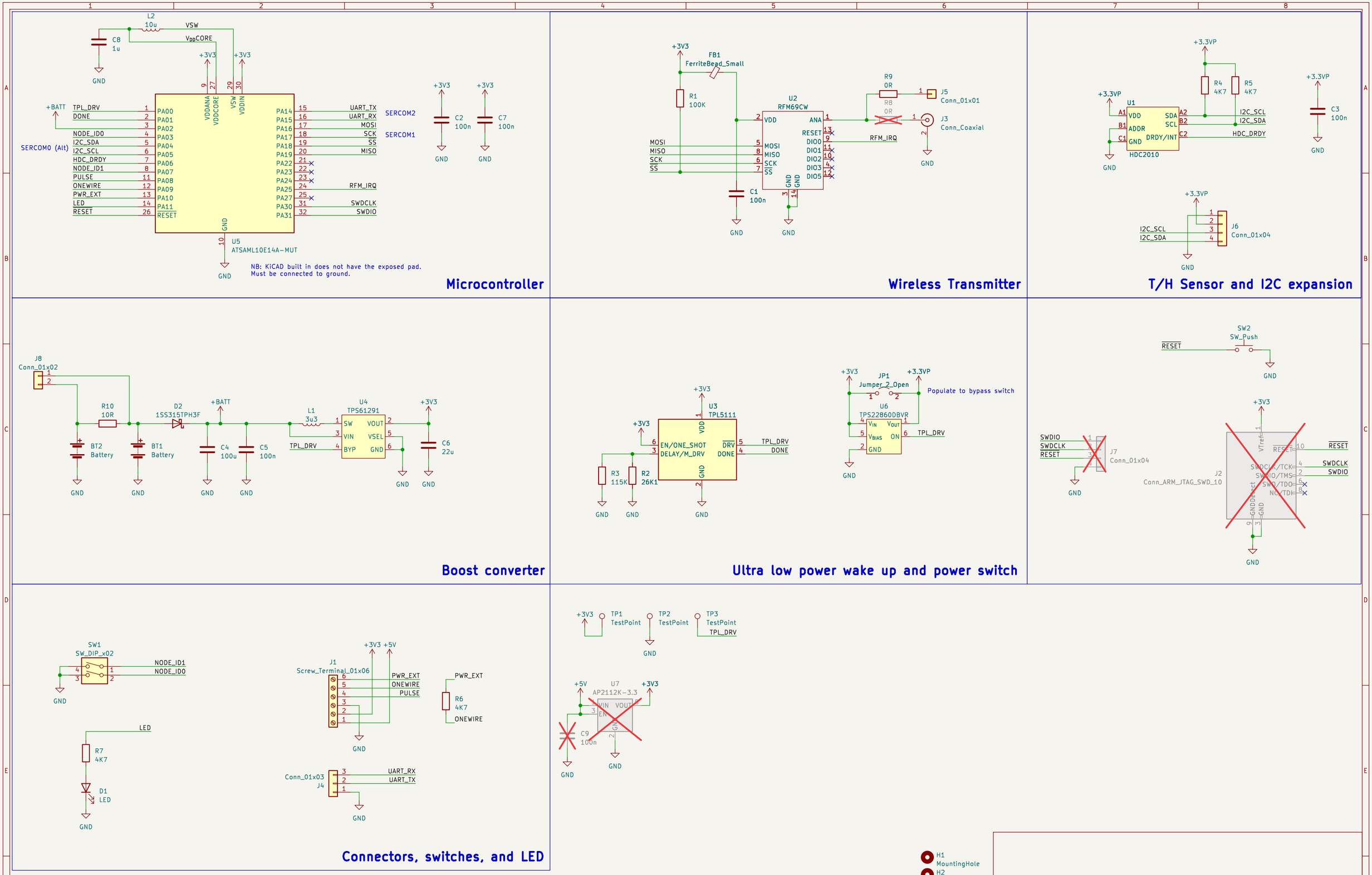
Microcontroller
L2
10u
VSW
VDDCORE
C8
1u
GND
+3V3
+BATT
TPL_DRV
DONE
NODE_ID0
I2C_SDA
I2C_SCL
HDC_DRDY
NODE_ID1
PULSE
ONEWIRE
PWR_EXT
LED
RESET
SERCOM0 (Alt)
PA00
PA01
PA02
PA03
PA04
PA05
PA06
PA07
PA08
PA09
PA10
PA11
RESET
VDDANA
VDDCORE
VSW
VDDIN
GND
PA14
PA15
PA16
PA17
PA18
PA19
PA22
PA23
PA24
PA25
PA27
PA30
PA31
UART_TX
UART_RX
MOSI
SCK
SS
MISO
RFM_IRQ
SWDCLK
SWDIO
SERCOM2
SERCOM1
C2
100n
C7
100n
U5
ATSAML10E14A-MUT
NB: KiCAD built in does not have the exposed pad.
Must be connected to ground.
Wireless Transmitter
FB1
FerriteBead_Small
R1
100K
C1
100n
U2
RFM69CW
VDD
MOSI
MISO
SCK
SS
ANA
RESET
DIO0
DIO1
DIO2
DIO3
DIO5
R9
0R
R8
0R
J5
Conn_01x01
J3
Conn_Coaxial
RFM_IRQ
T/H Sensor and I2C expansion
+3.3VP
U1
HDC2010
VDD
ADDR
GND
SDA
SCL
DRDY/INT
R4
4K7
R5
4K7
I2C_SCL
I2C_SDA
HDC_DRDY
C3
100n
J6
Conn_01x04
Boost converter
J8
Conn_01x02
R10
10R
D2
1SS315TPH3F
BT2
Battery
BT1
Battery
C4
100u
C5
100n
L1
3u3
U4
TPS61291
SW
VIN
BYP
VOUT
VSEL
GND
C6
22u
Ultra low power wake up and power switch
U3
TPL5111
EN/ONE_SHOT
DELAY/M_DRV
DRV
DONE
R3
115K
R2
26K1
JP1
Jumper_2_Open
Populate to bypass switch
U6
TPS22860DBVR
VIN
VBIAS
VOUT
ON
SW2
SW_Push
J7
Conn_01x04
SWDIO
SWDCLK
RESET
J2
Conn_ARM_JTAG_SWD_10
VTref
SWDCLK/TCK
SWDIO/TMS
SWO/TDO
NC/TDI
GNDDetect
Connectors, switches, and LED
SW1
SW_DIP_x02
NODE_ID1
NODE_ID0
LED
R7
4K7
D1
LED
J1
Screw_Terminal_01x06
PWR_EXT
ONEWIRE
PULSE
R6
4K7
Conn_01x03
J4
UART_RX
UART_TX
TP1
TestPoint
TP2
TestPoint
TP3
TestPoint
TPL_DRV
U7
AP2112K-3.3
VIN
EN
VOUT
C9
100n
+5V
H1
MountingHole
H2
MountingHole
H3
MountingHole
H4
MountingHole
OpenEnergyMonitor / Tilt Ltd
Sheet: /
File: emonTH.kicad_sch
Title: emonTH3
Size: A3
Date: 2024-11-22
Rev: 0.1-dev
KiCad E.D.A. kicad-cli 7.0.2-0
Id: 1/1