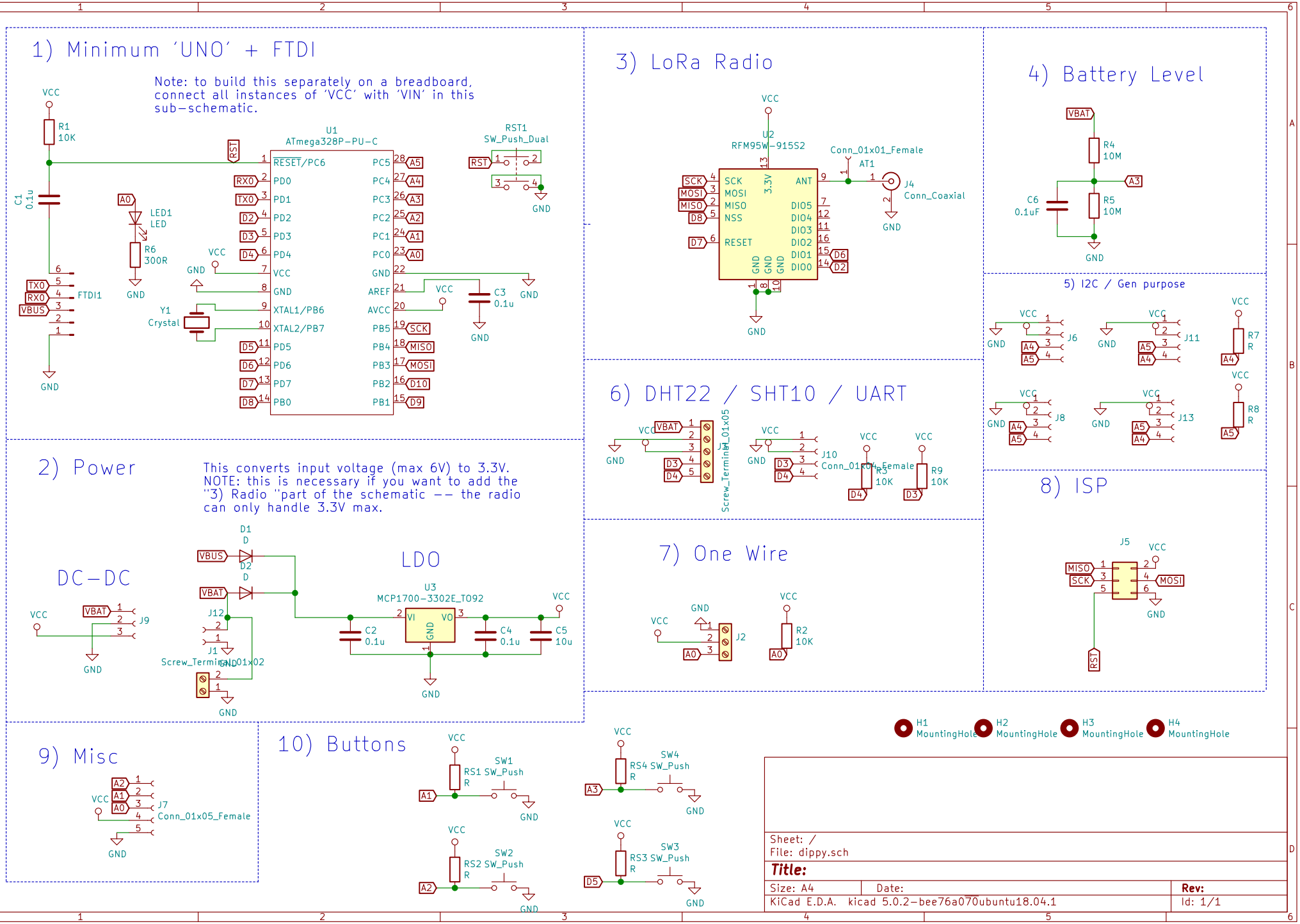
1) Minimum 'UNO' + FTDI
Note: to build this separately on a breadboard, connect all instances of 'VCC' with 'VIN' in this sub-schematic.
U1
ATmega328P-PU-C
RESET/PC6
PD0
PD1
PD2
PD3
PD4
VCC
GND
XTAL1/PB6
XTAL2/PB7
PD5
PD6
PD7
PB0
PC5
PC4
PC3
PC2
PC1
PC0
GND
AREF
AVCC
PB5
PB4
PB3
PB2
PB1
R1
10K
C1
0.1u
LED1
LED
R6
300R
Y1
Crystal
C3
0.1u
RST1
SW_Push_Dual
FTDI1
2) Power
This converts input voltage (max 6V) to 3.3V.
NOTE: this is necessary if you want to add the "3) Radio "part of the schematic -- the radio can only handle 3.3V max.
DC-DC
LDO
D1
D2
J9
J12
J1
Screw_Terminal_01x02
U3
MCP1700-3302E_TO92
C2
0.1u
C4
0.1u
C5
10u
3) LoRa Radio
U2
RFM95W-915S2
SCK
MOSI
MISO
NSS
RESET
3.3V
ANT
DIO5
DIO4
DIO3
DIO2
DIO1
DIO0
Conn_01x01_Female
AT1
J4
Conn_Coaxial
4) Battery Level
VBAT
R4
10M
R5
10M
C6
0.1uF
5) I2C / Gen purpose
J6
J11
J8
J13
R7
R
R8
R
6) DHT22 / SHT10 / UART
J3
Screw_Terminal_01x05
J10
Conn_01x04_Female
R3
10K
R9
10K
7) One Wire
J2
R2
10K
8) ISP
J5
MISO
SCK
MOSI
RST
9) Misc
J7
Conn_01x05_Female
10) Buttons
SW1
RS1 SW_Push
R
SW2
RS2 SW_Push
R
SW3
RS3 SW_Push
R
SW4
RS4 SW_Push
R
H1
MountingHole
H2
MountingHole
H3
MountingHole
H4
MountingHole
Sheet: /
File: dippy.sch
Title:
Size: A4
Date:
Rev:
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