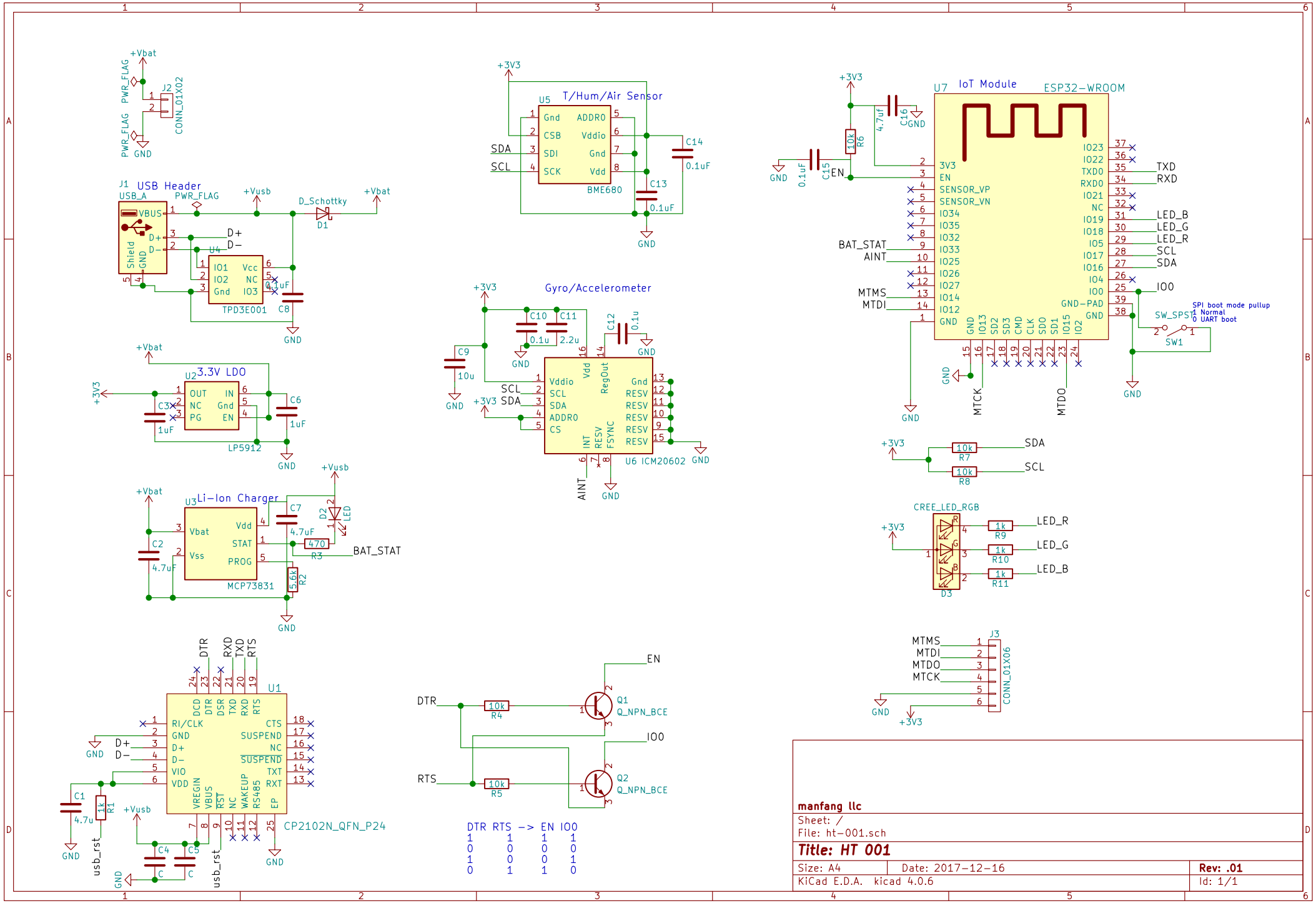
J1 USB Header
USB_A
PWR_FLAG
+Vusb
D_Schottky
D1
+Vbat
D+
D−
U4
TPD3E001
C8
0.1uF
GND
J2
CONN_01X02
U5 T/Hum/Air Sensor
BME680
SDA
SCL
C13
0.1uF
C14
0.1uF
U7 IoT Module
ESP32−WROOM
3V3
EN
SENSOR_VP
SENSOR_VN
IO34
IO35
IO32
IO33
IO25
IO26
IO27
IO14
IO12
GND
IO23
IO22
TXD0
RXD0
IO21
NC
IO19
IO18
IO5
IO17
IO16
IO4
IO0
GND−PAD
BAT_STAT
AINT
MTMS
MTDI
TXD
RXD
LED_B
LED_G
LED_R
SCL
SDA
IO0
MTCK
MTDO
C15
0.1uF
R6
10k
C16
4.7uf
SW_SPST
SW1
SPI boot mode pullup
1 Normal
0 UART boot
U2 3.3V LDO
LP5912
OUT
NC
PG
IN
Gnd
EN
C3
1uF
C6
1uF
U3 Li−Ion Charger
MCP73831
Vbat
Vss
Vdd
STAT
PROG
C2
4.7uF
C7
4.7uF
D2
LED
R3
470
BAT_STAT
R2
5.6k
U6 ICM20602
Gyro/Accelerometer
Vddio
SCL
SDA
ADDR0
CS
Vdd
RegOut
Gnd
RESV
INT
FSYNC
C9
10u
C10
0.1u
C11
2.2u
C12
0.1u
R7
10k
R8
10k
CREE_LED_RGB
D3
R9
1k
R10
1k
R11
1k
J3
CONN_01X06
U1
CP2102N_QFN_P24
DCD
DTR
DSR
TXD
RXD
RTS
RI/CLK
GND
D+
D−
VIO
VDD
CTS
SUSPEND
NC
SUSPEND
TXT
RXT
VREGIN
VBUS
RST
NC
WAKEUP
RS485
EP
C1
4.7u
R1
1k
usb_rst
C4
C5
Q1
Q_NPN_BCE
Q2
Q_NPN_BCE
R4
10k
R5
10k
DTR RTS −> EN IO0
1 1 1 1
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0 1 1 0
manfang llc
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Title: HT 001
Size: A4
Date: 2017−12−16
Rev: .01
KiCad E.D.A. kicad 4.0.6
Id: 1/1