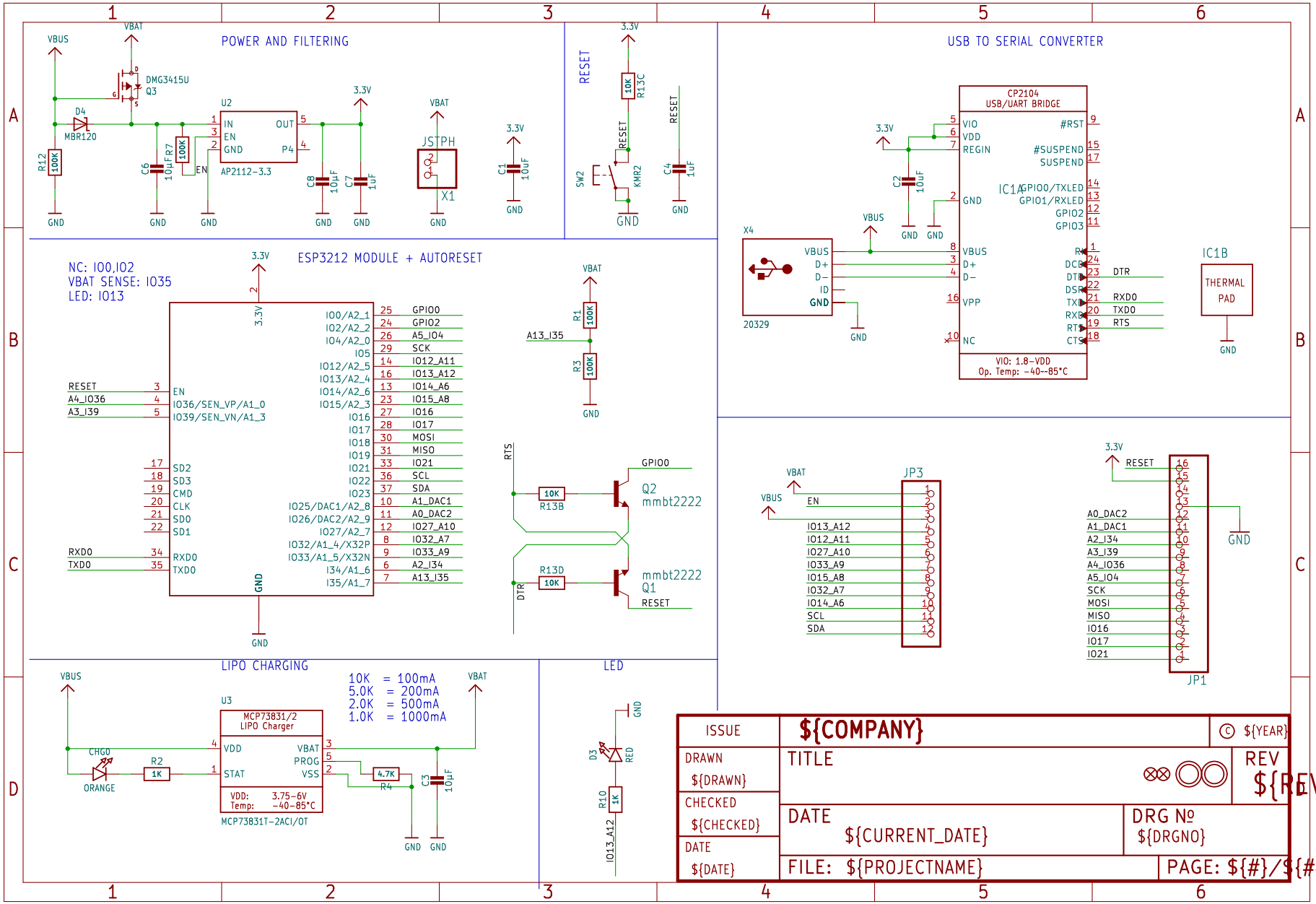
POWER AND FILTERING
VBUS
VBAT
DMG3415U
Q3
D4
MBR120
R12
100K
GND
U2
IN
EN
GND
OUT
P4
AP2112-3
C6
10µF
R7
100K
C8
10µF
C7
1uF
3.3V
JSTPH
X1
C1
10uF
RESET
R13C
10K
SW2
KMR2
C4
1uF
ESP3212 MODULE + AUTORESET
NC: IO0,IO2
VBAT SENSE: IO35
LED: IO13
EN
IO36/SEN_VP/A1_0
IO39/SEN_VN/A1_3
SD2
SD3
CMD
CLK
SD0
SD1
RXD0
TXD0
IO0/A2_1
IO2/A2_2
IO4/A2_0
IO5
IO12/A2_5
IO13/A2_4
IO14/A2_6
IO15/A2_3
IO16
IO17
IO18
IO19
IO21
IO22
IO23
IO25/DAC1/A2_8
IO26/DAC2/A2_9
IO27/A2_7
IO32/A1_4/X32P
IO33/A1_5/X32N
I34/A1_6
I35/A1_7
GPIO0
GPIO2
A5_IO4
SCK
IO12_A11
IO13_A12
IO14_A6
IO15_A8
IO16
IO17
MOSI
MISO
IO21
SCL
SDA
A1_DAC1
A0_DAC2
IO27_A10
IO32_A7
IO33_A9
A2_I34
A13_I35
A13_I35
R1
100K
R3
100K
RTS
DTR
R13B
10K
R13D
10K
Q2
mmbt2222
Q1
mmbt2222
USB TO SERIAL CONVERTER
CP2104
USB/UART BRIDGE
VIO
VDD
REGIN
GND
VBUS
D+
D-
VPP
NC
#RST
#SUSPEND
SUSPEND
GPIO0/TXLED
GPIO1/RXLED
GPIO2
GPIO3
DCD
DTR
DSR
TX
RX
RTS
CTS
VIO: 1.8-VDD
Op. Temp: -40~85°C
IC1A
X4
20329
ID
IC1B
THERMAL PAD
JP3
JP1
LIPO CHARGING
U3
MCP73831/2
LIPO Charger
VDD
STAT
VBAT
PROG
VSS
VDD: 3.75-6V
Temp: -40-85°C
MCP73831T-2ACI/OT
CHG0
ORANGE
R2
1K
4.7K
R4
C3
10µF
10K = 100mA
5.0K = 200mA
2.0K = 500mA
1.0K = 1000mA
LED
D3
RED
R10
1K
IO13_A12
ISSUE
${COMPANY}
© ${YEAR}
DRAWN
${DRAWN}
TITLE
REV
${REV}
CHECKED
${CHECKED}
DATE
${CURRENT_DATE}
DRG №
${DRGNO}
DATE
${DATE}
FILE: ${PROJECTNAME}
PAGE: ${#}/${##}