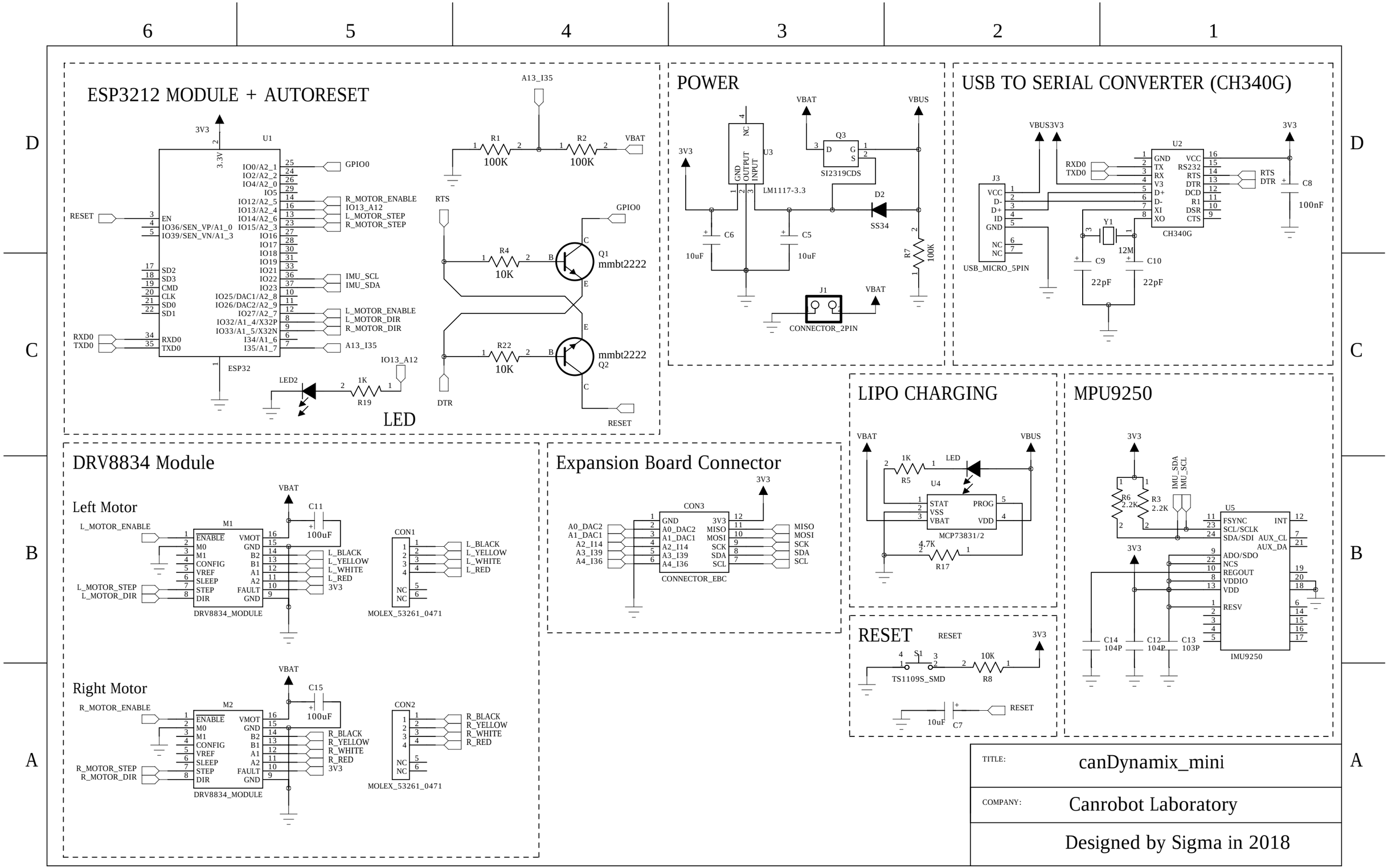
ESP3212 MODULE + AUTORESET
U1
3V3
3.3V
RESET
EN
IO36/SEN_VP/A1_0
IO39/SEN_VN/A1_3
SD2
SD3
CMD
CLK
SD0
SD1
RXD0
TXD0
ESP32
IO0/A2_1
IO2/A2_2
IO4/A2_0
IO5
IO12/A2_5
IO13/A2_4
IO14/A2_6
IO15/A2_3
IO16
IO17
IO18
IO19
IO21
IO22
IO23
IO25/DAC1/A2_8
IO26/DAC2/A2_9
IO27/A2_7
IO32/A1_4/X32P
IO33/A1_5/X32N
I34/A1_6
I35/A1_7
GPIO0
R_MOTOR_ENABLE
IO13_A12
L_MOTOR_STEP
R_MOTOR_STEP
IMU_SCL
IMU_SDA
L_MOTOR_ENABLE
L_MOTOR_DIR
R_MOTOR_DIR
A13_I35
IO13_A12
LED2
1K
R19
LED
A13_I35
R1
100K
R2
100K
VBAT
RTS
R4
10K
Q1
mmbt2222
GPIO0
R22
10K
Q2
mmbt2222
DTR
RESET
POWER
VBAT
VBUS
3V3
U3
GND
OUTPUT
INPUT
NC
LM1117-3.3
Q3
D
G
S
SI2319CDS
D2
SS34
C6
10uF
C5
10uF
R7
100K
J1
CONNECTOR_2PIN
USB TO SERIAL CONVERTER (CH340G)
VBUS3V3
3V3
U2
J3
VCC
D-
D+
ID
GND
NC
NC
USB_MICRO_5PIN
RXD0
TXD0
GND
TX
RX
V3
D+
D-
XI
XO
VCC
RS232
RTS
DTR
DCD
R1
DSR
CTS
CH340G
RTS
DTR
C8
100nF
Y1
12M
C9
22pF
C10
22pF
LIPO CHARGING
VBAT
VBUS
1K
R5
LED
U4
STAT
VSS
VBAT
PROG
VDD
MCP73831/2
4.7K
R17
MPU9250
3V3
R6
2.2K
R3
2.2K
IMU_SDA
IMU_SCL
U5
FSYNC
SCL/SCLK
SDA/SDI
INT
AUX_CL
AUX_DA
ADO/SDO
NCS
REGOUT
VDDIO
VDD
RESV
C14
104P
C12
104P
C13
103P
IMU9250
DRV8834 Module
Left Motor
VBAT
C11
100uF
M1
L_MOTOR_ENABLE
ENABLE
M0
M1
CONFIG
VREF
SLEEP
STEP
DIR
VMOT
GND
B2
B1
A1
A2
FAULT
GND
L_MOTOR_STEP
L_MOTOR_DIR
DRV8834_MODULE
L_BLACK
L_YELLOW
L_WHITE
L_RED
3V3
CON1
NC
NC
MOLEX_53261_0471
Right Motor
VBAT
C15
100uF
M2
R_MOTOR_ENABLE
ENABLE
M0
M1
CONFIG
VREF
SLEEP
STEP
DIR
VMOT
GND
B2
B1
A1
A2
FAULT
GND
R_MOTOR_STEP
R_MOTOR_DIR
DRV8834_MODULE
R_BLACK
R_YELLOW
R_WHITE
R_RED
3V3
CON2
NC
NC
MOLEX_53261_0471
Expansion Board Connector
3V3
CON3
GND
A0_DAC2
A1_DAC1
A2_I14
A3_I39
A4_I36
3V3
MISO
MOSI
SCK
SDA
SCL
A0_DAC2
A1_DAC1
A2_I14
A3_I39
A4_I36
CONNECTOR_EBC
MISO
MOSI
SCK
SDA
SCL
RESET
RESET
3V3
S1
TS1109S_SMD
10K
R8
10uF
C7
RESET
TITLE:
canDynamix_mini
COMPANY:
Canrobot Laboratory
Designed by Sigma in 2018