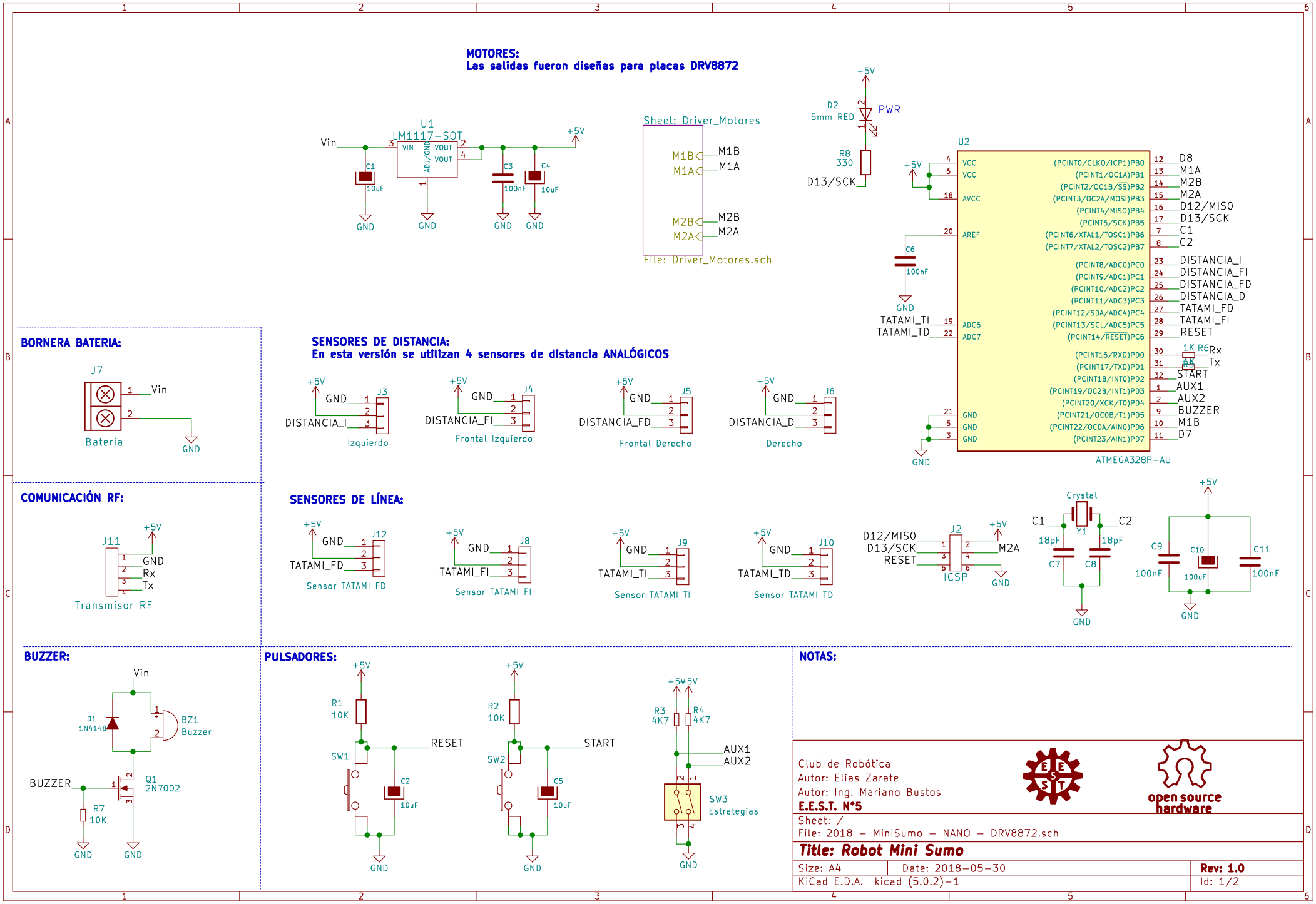
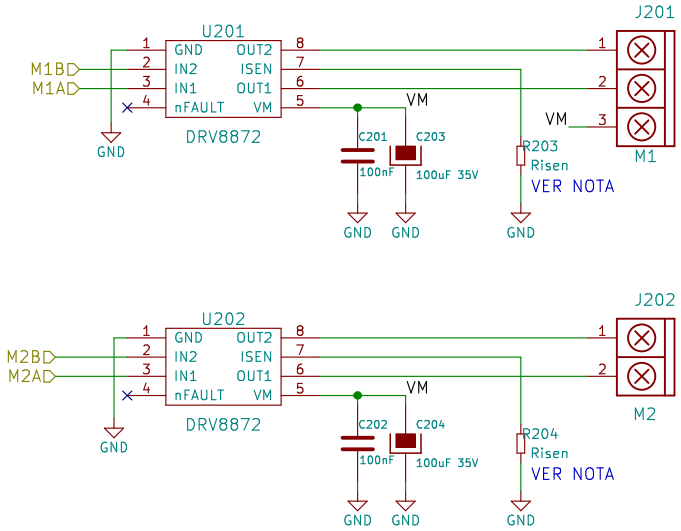

MOTORES:
Las salidas fueron diseñas para placas DRV8872
U1
LM1117-SOT
Vin
VIN
VOUT
VOUT
ADJ/GND
C1
10uF
C3
100nF
C4
10uF
+5V
GND
Sheet: Driver_Motores
M1B
M1A
M2B
M2A
File: Driver_Motores.sch
D2
5mm RED
PWR
R8
330
D13/SCK
U2
VCC
VCC
AVCC
AREF
ADC6
ADC7
GND
GND
GND
C6
100nF
TATAMI_TI
TATAMI_TD
(PCINT0/CLKO/ICP1)PB0
(PCINT1/OC1A)PB1
(PCINT2/OC1B/SS)PB2
(PCINT3/OC2A/MOSI)PB3
(PCINT4/MISO)PB4
(PCINT5/SCK)PB5
(PCINT6/XTAL1/TOSC1)PB6
(PCINT7/XTAL2/TOSC2)PB7
(PCINT8/ADC0)PC0
(PCINT9/ADC1)PC1
(PCINT10/ADC2)PC2
(PCINT11/ADC3)PC3
(PCINT12/SDA/ADC4)PC4
(PCINT13/SCL/ADC5)PC5
(PCINT14/RESET)PC6
(PCINT16/RXD)PD0
(PCINT17/TXD)PD1
(PCINT18/INT0)PD2
(PCINT19/OC2B/INT1)PD3
(PCINT20/XCK/T0)PD4
(PCINT21/OC0B/T1)PD5
(PCINT22/OC0A/AIN0)PD6
(PCINT23/AIN1)PD7
D8
M1A
M2B
M2A
D12/MISO
D13/SCK
C1
C2
DISTANCIA_I
DISTANCIA_FI
DISTANCIA_FD
DISTANCIA_D
TATAMI_FD
TATAMI_FI
RESET
R6
1K
Rx
Tx
START
AUX1
AUX2
BUZZER
M1B
D7
ATMEGA328P-AU
BORNERA BATERIA:
J7
Vin
Bateria
GND
SENSORES DE DISTANCIA:
En esta versión se utilizan 4 sensores de distancia ANALÓGICOS
J3
DISTANCIA_I
Izquierdo
J4
DISTANCIA_FI
Frontal Izquierdo
J5
DISTANCIA_FD
Frontal Derecho
J6
DISTANCIA_D
Derecho
COMUNICACIÓN RF:
J11
GND
Rx
Tx
Transmisor RF
SENSORES DE LÍNEA:
J12
TATAMI_FD
Sensor TATAMI FD
J8
TATAMI_FI
Sensor TATAMI FI
J9
TATAMI_TI
Sensor TATAMI TI
J10
TATAMI_TD
Sensor TATAMI TD
J2
D12/MISO
D13/SCK
RESET
ICSP
M2A
Crystal
Y1
C1
C2
18pF
18pF
C7
C8
C9
100nF
C10
100uF
C11
100nF
BUZZER:
Vin
D1
1N4148
BZ1
Buzzer
BUZZER
Q1
2N7002
R7
10K
PULSADORES:
R1
10K
SW1
RESET
C2
10uF
R2
10K
SW2
START
C5
10uF
R3
4K7
R4
4K7
AUX1
AUX2
SW3
Estrategias
NOTAS:
Club de Robótica
Autor: Elias Zarate
Autor: Ing. Mariano Bustos
E.E.S.T. N°5
open source hardware
Sheet: /
File: 2018 - MiniSumo - NANO - DRV8872.sch
Title: Robot Mini Sumo
Size: A4
Date: 2018-05-30
Rev: 1.0
KiCad E.D.A. kicad (5.0.2)-1
Id: 1/2



$$I_{TRIP}\ (A) = \frac{V_{TRIP}\ (V)}{R_{ISEN}\ (\Omega)} = \frac{0.35\ (V)}{R_{ISEN}\ (\Omega)}$$

For example, if R_{ISEN} = 0.16 Ω, the DRV8872 will limit motor current to 2.2 A

LOGO201

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CLUB DE ROBÓTICA
E.E.S.T. N°5

Sheet: /Driver_Motores/
File: Driver_Motores.sch

Title: DRV8872 Dual Driver

Size: A4	Date: 2018-04-15	**Rev: 0.1**
KiCad E.D.A. kicad (5.0.2)-1		Id: 2/2