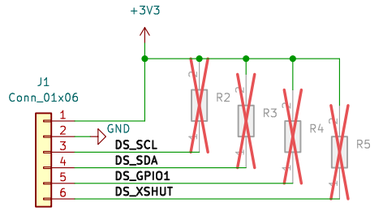
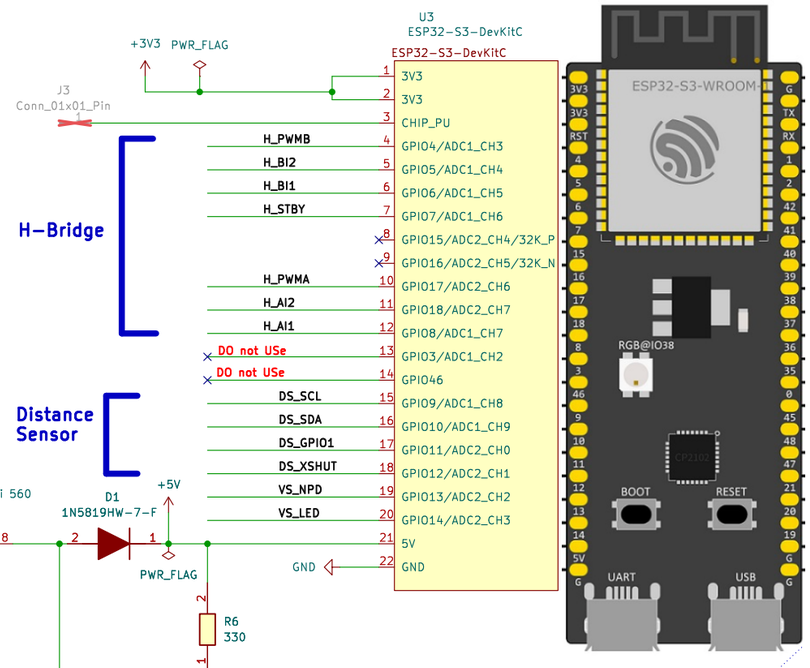
Distance Sensor

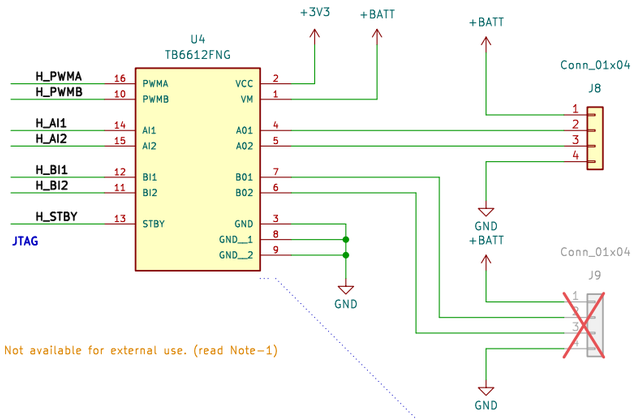


ESP32-S3 DevKit



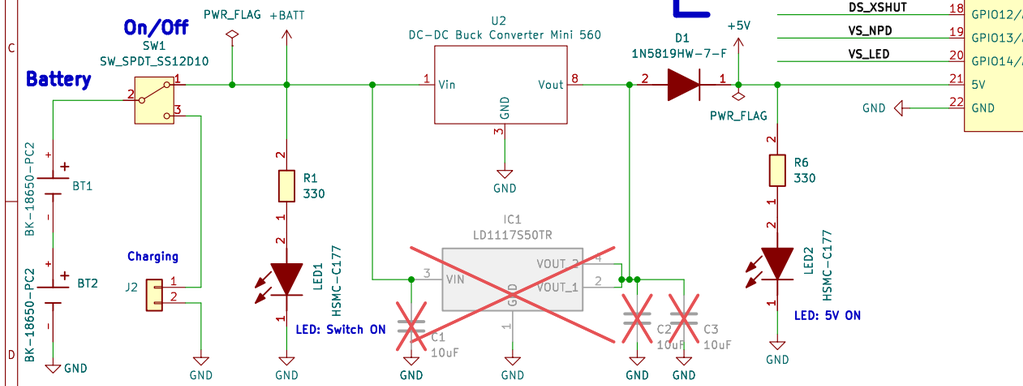
H-Bridge

Volver atras. Poner el footprint que tiene la linea. Para eso voy a usar female
Para asi poder conectar y desconectar facilmente

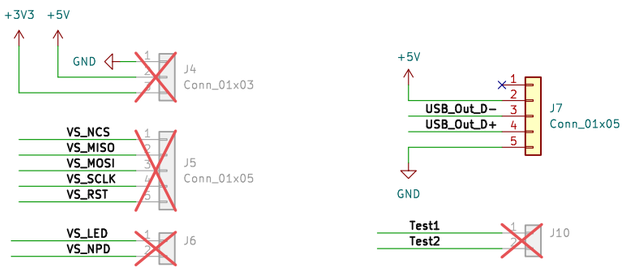


DC Motor

Power



Velocity sensor



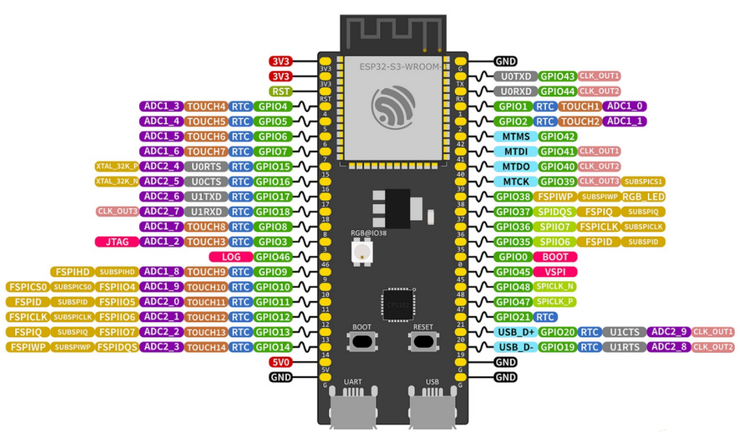
Motor Driver

Board Overview
Schematic SparkFun PCB
Datasheet Chip TB6612FNG
https://www.sparkfun.com/products/14451

Control Function

Input				Output		
IN1	IN2	PWM	STBY	OUT1	OUT2	Mode
H	H	H/L	H	L	L	Short brake
L	H	H	H	L	H	CCW
		L	H	L	L	Short brake
H	L	H	H	H	L	CW
		L	H	L	L	Short brake
L	L	H	H	OFF (High impedance)		Stop
H/L	H/L	H/L	L	OFF (High impedance)		Standby

Pin Layout



Datasheet ESP32-S3 Series Chip
Technical Reference Manual
Pin Layout
Schematic

- PWM Capable Pin
- GPIOX GPIO Input and Output
- JTAG/USB JTAG for Debugging and USB
- ADCX_CH Analog-to-Digital Converter
- TOUCHX Touch Sensor Input Channel
- OTHER Other Related Functions
- SERIAL Serial for Debug/Programming
- STRAP Strapping Pin Functions
- RTC RTC Power Domain (VDD3P3_RTC)
- GND Ground
- PWD Power Rails (3V3 and 5V)
- MISC Miscellaneous/SPI functions
- CLK_OUTX Clock Output

Unused Output Pins Floating
Unused Input Pins Grounded
Unused PWM Pull to Vcc

Mechanical

H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole

Note-1
For boards with Octal SPI flash/PSRAM memory embedded ESP32-S3-WROOM-1/1U modules, and boards with ESP32-S3-WROOM-2 modules, the pins GPIO35, GPIO36 and GPIO37 are used for the internal communication between ESP32-S3 and SPI flash/PSRAM memory, thus not available for external use.

Sheet: /
File: PL_Toon.kicad_sch

Title: PL-Toon (ESP32-S3 version)

Size: A3	Date: 2024-02-19	Rev:
KiCad E.D.A. 8.0.8		Id: 1/1