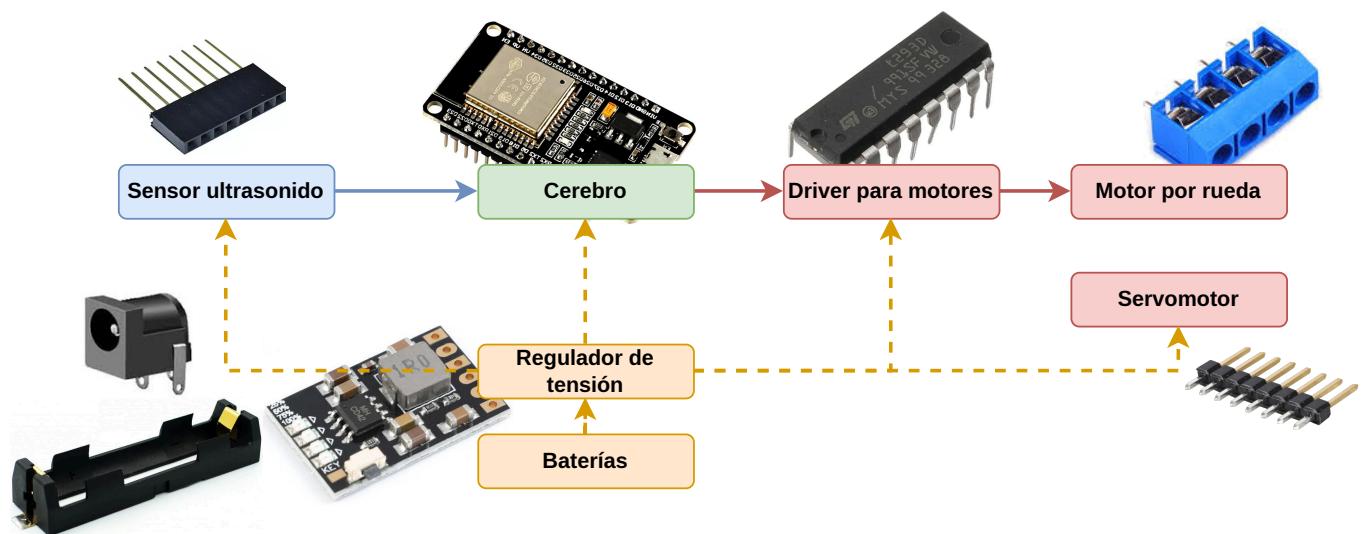
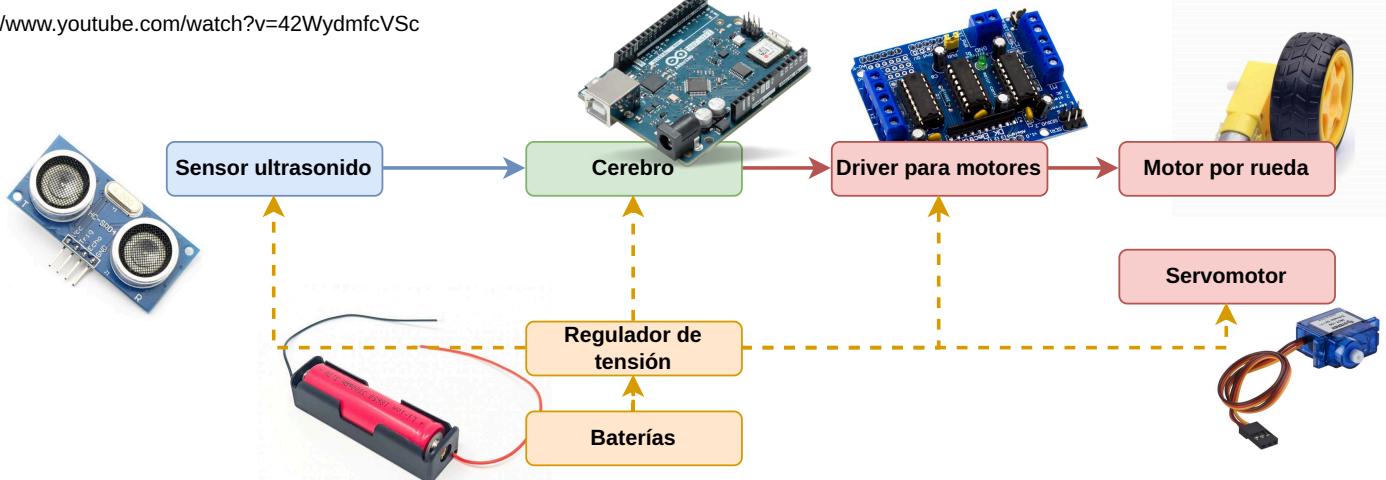
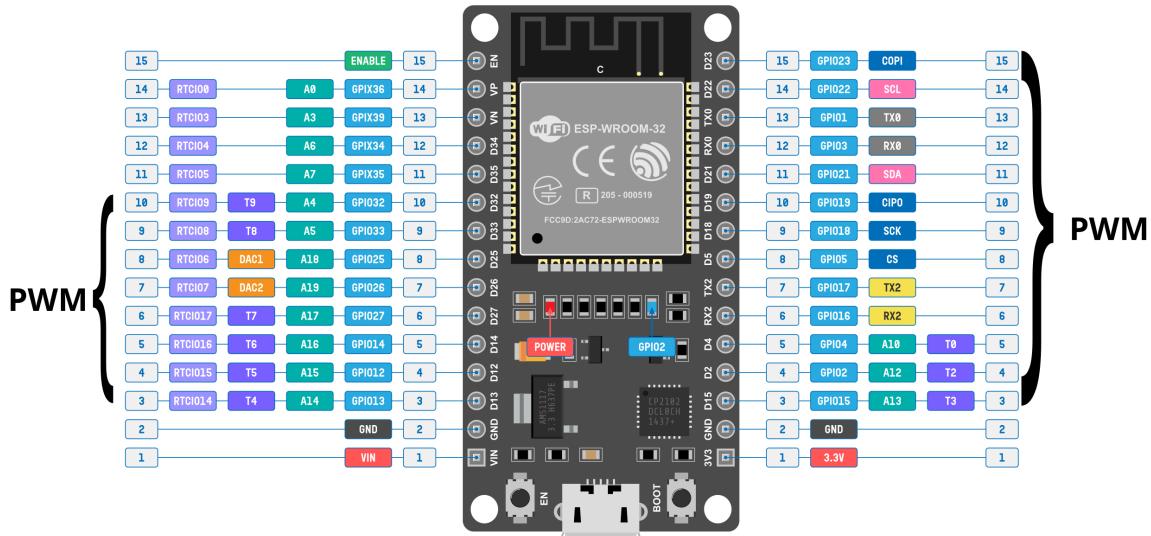


# SMART CAR



<https://www.youtube.com/watch?v=42WydmfcVSc>





PHYSICAL PIN	POSITIVE SUPPLY	DAC OUTPUTS	SPI PINS
CONTROL PINS	GROUND SUPPLY	TOUCH INPUTS	UART PINS
GPIO PINS	ADC INPUTS	I2C PINS	EXCLUDED PINS

- GPIO pins 34, 35, 36 and 39 are input only.
- TX0 and RX0 (Serial0) are used for serial programming.
- TX2 and RX2 can be accessed as Serial2.
- Default SPI is SPI1. Both VSPI and HSPI pins can be set to any GPIO pins.
- All GPIO pins support PWM and interrupts.
- Built-in LED is connected to GPIO2.
- Some GPIO pins are used for interfacing flash memory and thus are not shown.



Rev. 0.1, 17-12-2022  
Design: Vishnu Mohanan  
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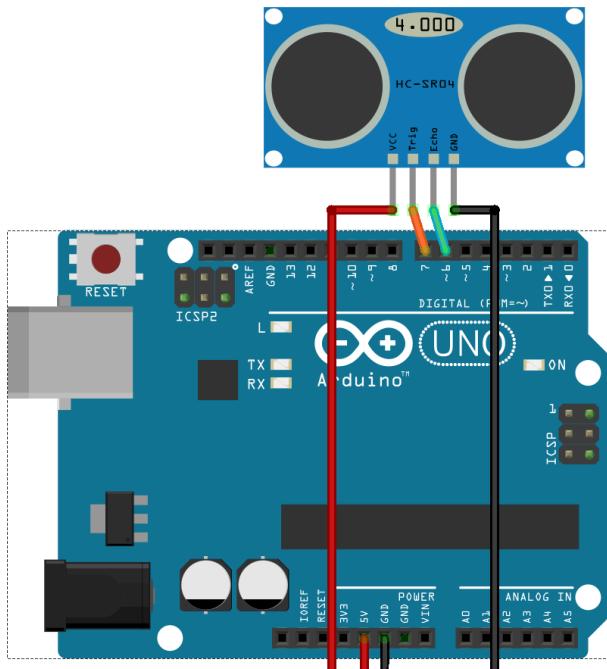
<https://www.snapeda.com/parts/ESP32-DEVKIT-V1/Do%20it/view-part/?ref=search&t=esp32%20devkit%20v1>

- snapeda
- smisioto
- grabcad
- componentsearchengine

## Datasheet hc-sr04

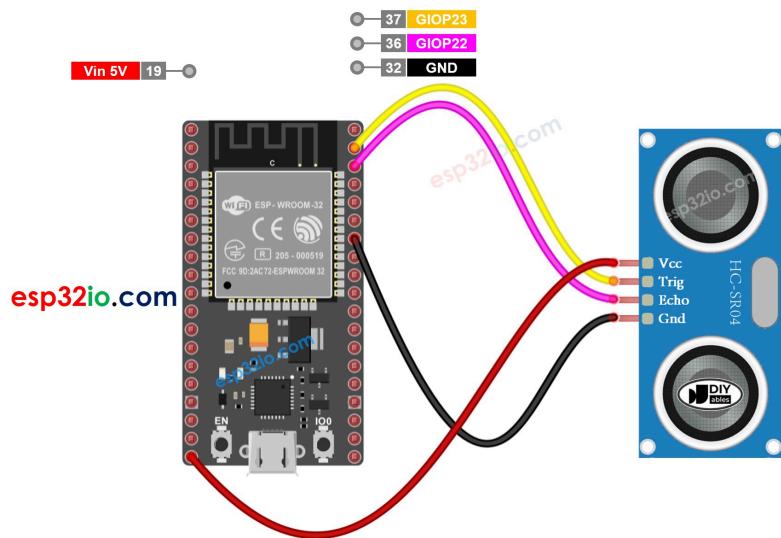
<https://cdn.sparkfun.com/datasheets/Sensors/Proximity/HCSR04.pdf>

Sensor ultrasonido arduino  
schematic



Sensor ultrasonido arduino  
schematic fritzing

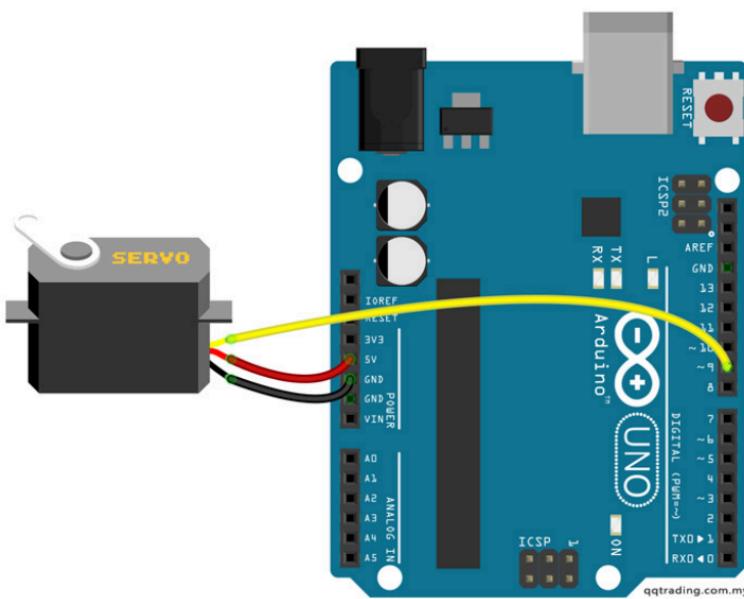
Sensor ultrasonido esp32  
schematic fritzing



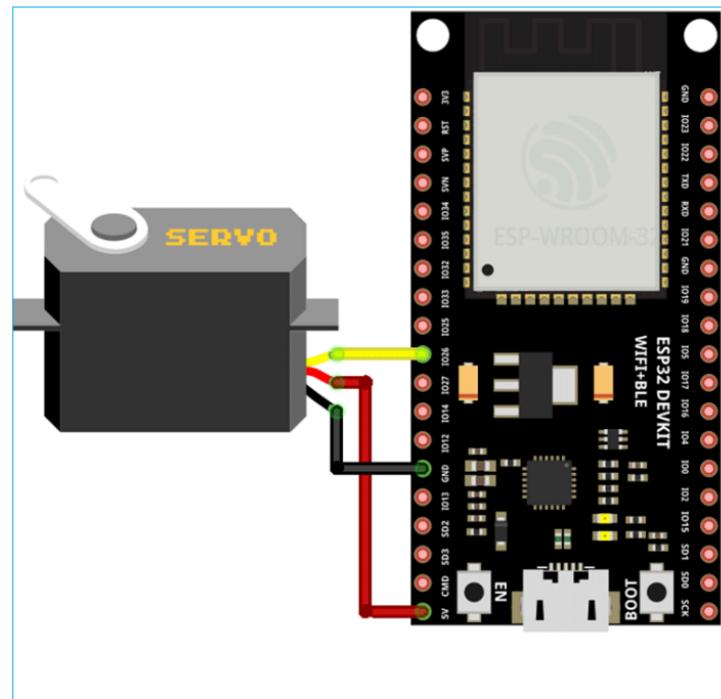
## Datasheet

[http://www.ee.ic.ac.uk/pcheung/teaching/DE1\\_EE/stores/sg90\\_datasheet.pdf](http://www.ee.ic.ac.uk/pcheung/teaching/DE1_EE/stores/sg90_datasheet.pdf)

Servomotor sg90 arduino  
schematic fritzing



Servomotor sg90 esp32  
schematic fritzing



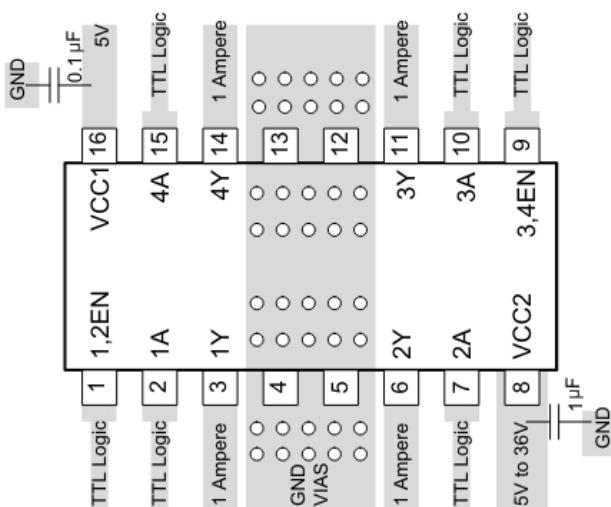
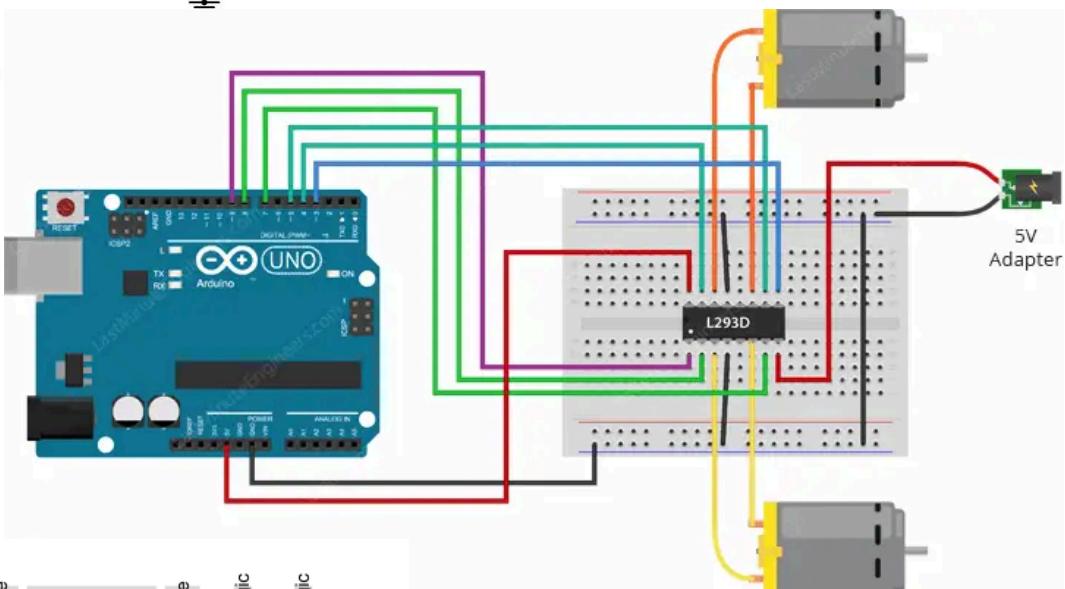
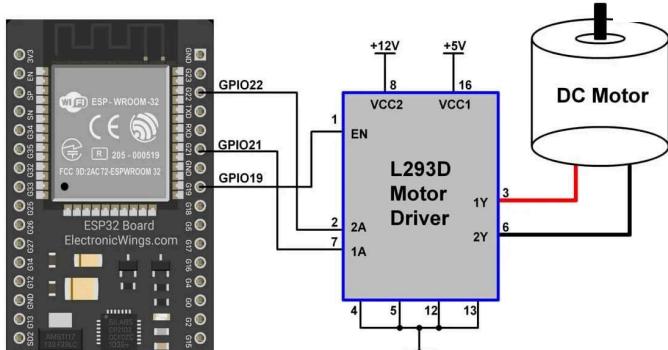
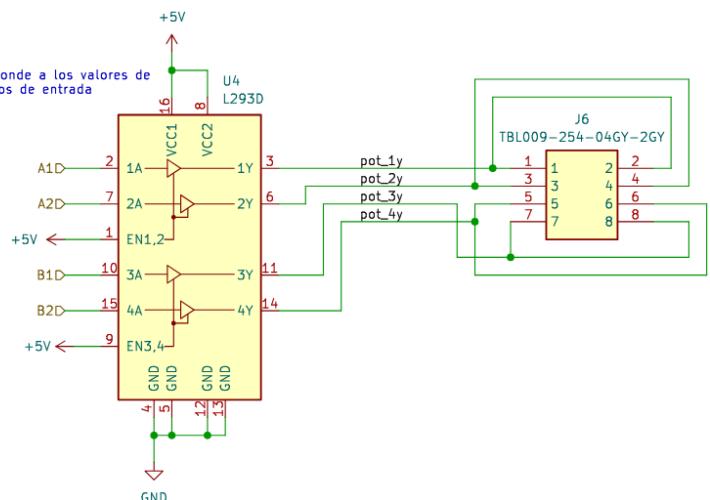
## Datasheet

<https://www.ti.com/lit/ds/symlink/l293.pdf>

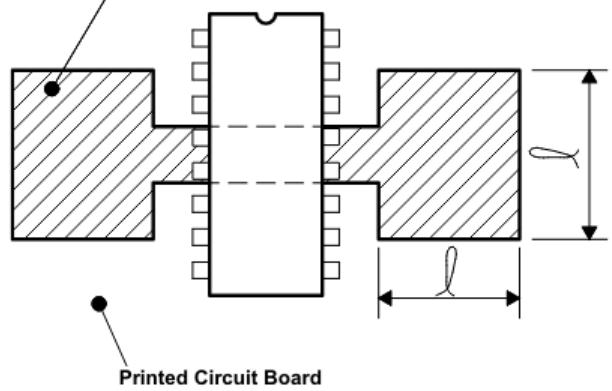
L293d arduino schematic  
fritzing

L293d esp32 schematic  
fritzing

VCC1 corresponde a los valores de tensión lógicos de entrada del circuito



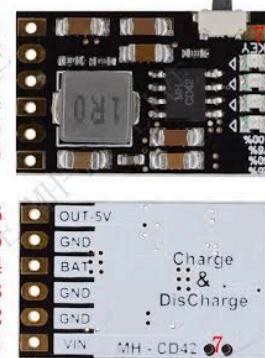
Copper Area 35- $\mu$ m Thickness



mh cd42 arduino

Pin description:

- 1 VIN : Charging port is input+ (DC 4.5V-5.5V (recommended DC 5V))
- 2 GND : Charging port is input-
- 3 GND : Lithium battery-
- 4 BAT : Lithium battery+
- 5 GND : Output negative output-
- 6 VOUT: Output positive output+
- 7 KEY: Output enable trigger port (low pulse trigger)



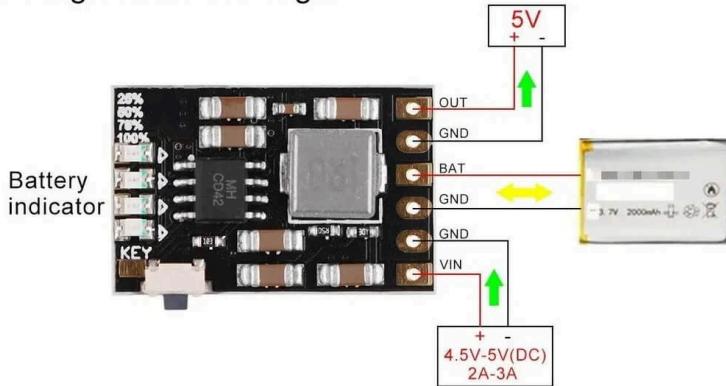
1. In the discharge mode (the charging mode KEY function is invalid), the KEY port is triggered once, Turn on the output; continuously trigger the KEY port 2 times to turn off the output.

2. The first time the load is connected, the output is automatically turned on. If the load is less than 50mA, The output is turned off after 30 seconds; if the load is greater than 50mA, the output is continuously turned on.

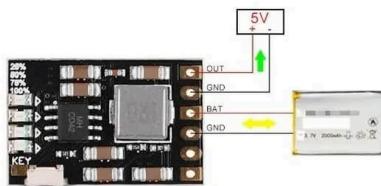
3. It is allowed to discharge while charging (note: this is the output voltage >4.7V<5V)

mh cd42 esp32

## 1. Charge and discharge



## 2. DisCharging



## 3. Charging

