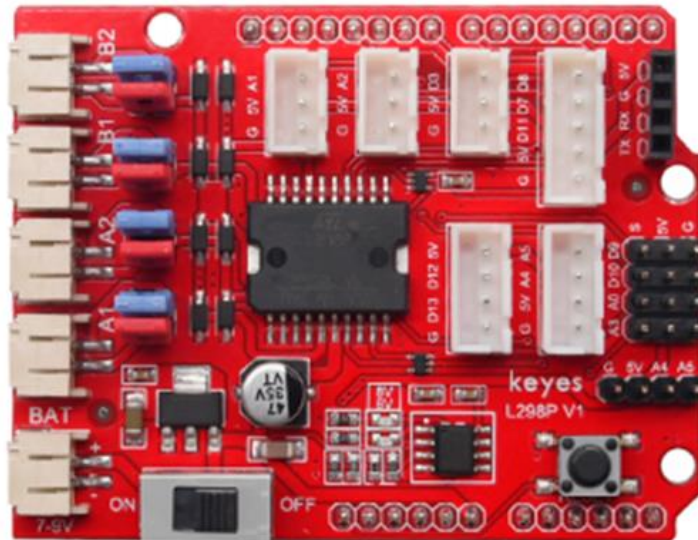


MOTOR DRIVE SHIELD  
BASED ON  
L298P



## 1. Description

There are many ways to drive motors, like driving motor via L298P chip. L298P is a specialized driving chip for high power motor rolled out by ST Company. It can drive DC motor, 2 phase and 4 phase stepper. Equally, its driving current is up to 2A and its output ends adopt eight schottky diodes for protecting. Therefore, we design this shield with stack design that can be inserted into UNO R3 board directly, greatly reducing the technical difficulties on operation and driving motor.

The external power supplies power for driving expansion board and UNO R3 board when driving shield is stacked on UNO R3, BAT is plugged in and DIP switch is dialed to ON end.

The PH2.0-2P anti-inverse port prevents from the circuit damage and wrong motor direction due to wiring power inversely.

At the same time, the driving expansion board comes with a 2.54mm female header interface, which is also a serial communication interface, compatible with commonly used Bluetooth module line sequences on the market, such as HC-06 module and HM-10 module.

To interfaced other sensors and modules easily, driver board comes with 3pcs XH-2.54mm 3P, 2 pcs XH-2.54mm 4P and one XH-2.54mm 5P anti-inverse ports. Moreover, expansion board extends 2 digital ports, 2 analog interfaces and 1 I2C communication port with a pitch of 2.54mm pins. And a reset button facilitates reset processing any time.

The shield can be connected directly four DC motors via jumper caps connection. A1 and A2, B1 and B2 are in parallel connection. Eight jumper caps decide the rotation direction of 4 motors, for instance, the horizontal connection of two jumper caps on A1 motor is changed into vertical connection, that leads the inverse rotation direction

## 2. Technical Parameter

Input voltage: DC 7-9V

Working current of logic part: <36mA

Operating current of the driving part: <2A

Maximum power dissipation: 25W (T=75°C) Control signal input level: high level 2.3V<Vin<5V, low level -0.3V<Vin<1.5V

Working temperature: -25+130°C

Size: 69\*53\*26mm

Weight: 25.2g