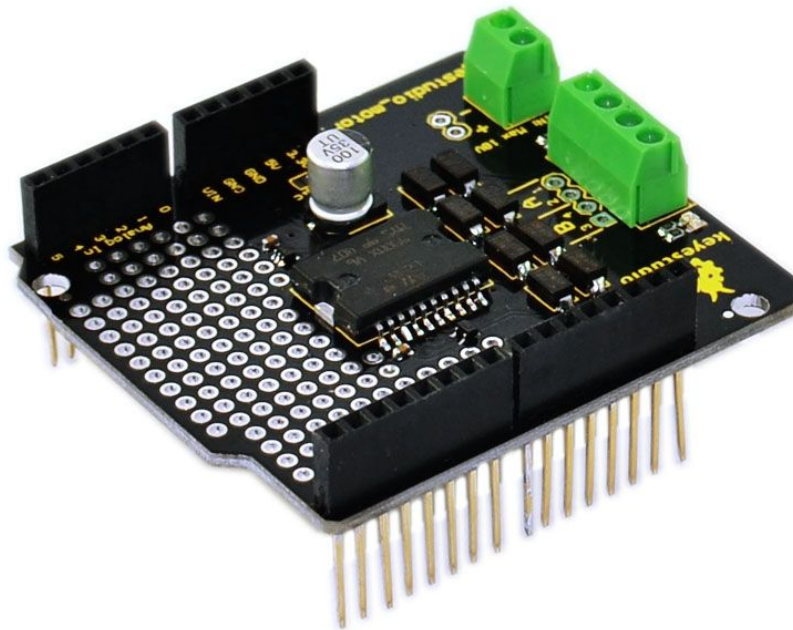


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Shield L298P 2A high current dual DC motor driver module



Introduction

L298P Shield DC motor driver adopts the L298P driver chip which is exclusively made for large-power motor. It can drive 2 DC motors directly with a drive current reaching 2A. The motor output is equipped with eight high-speed schottky diode as protection. This driver carries neat circuit layout and bonded components, in addition, the multi-layer design enables it to be plugged to Arduino directly.

L298P Shield DC motor driver carries PWM mode. The motor can be powered via Arduino VIN input or terminal input on the driver, which are switchable by jumper.

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Specification

1. Logic part input voltage : VD: 5V
2. Driving part input voltage VS: VIN input 6.5 ~ 12V, PWRIN input 4.8 ~ 24V
3. Logic part working current Iss: $\leq 36\text{mA}$
4. Driving part working current Io: $\leq 2\text{A}$
5. Maximum dissipation power: 25W (T=75°C)
6. Control signal input level:
High level: $2.3\text{V} \leq \text{Vin} \leq 5\text{V}$
Low level: $-0.3\text{V} \leq \text{Vin} \leq 1.5\text{V}$
7. Working temperature: $-25^\circ\text{C} \sim +130^\circ\text{C}$
8. Driver form: Dual power H bridge driving

According to wiring method above, we can control the transferring, reversing, stopping of two DC motor (M1 and M2), as well as the speed regulation of PWM.

Sample Code

```
int E1 = 5;
int M1 = 4;
int E2 = 6;
int M2 = 7;

void setup()
{
    pinMode(M1, OUTPUT);
    pinMode(M2, OUTPUT);
}

void loop()
{
    int value;
    for(value = 0 ; value <= 255; value+=5)
    {
        digitalWrite(M1,HIGH);
        digitalWrite(M2, HIGH);
        analogWrite(E1, value);    //PWM speed regulation
        analogWrite(E2, value);    //PWM speed regulation
        delay(30);
    }
}
```