

L298N V3 / 4-DC motor driver

L298N V3 / 4-DC motor driver



Product description:

L298N, an integrated circuit dedicated in driving, belongs to H bridge integrated circuit. Difference between L293D is its increase in output current and power. It's output current is 2A, 4A at highest. The highest working voltage is 50V. It can drive inductive load, such as high power DC motor, stepping motor, gear motor, servo motor, solenoid valve, etc. Specially, its input port can be connected directly MCU, thus being easily controlled by MCU. When driving DC machine, it can directly control the step motor, and realize turning the motor forwardly and reversedly. To realize this function, you only need to change the logic level at the input.

This module has features of small volume, convenient in control. Using this module will enable you to control your motor freely. It can also meet the need of high-power step-motor projects.

This module can control two-phase, three-phase, four-phase motor. Support two-way DC motor drive control, 4-phase stepper motor control.

Product features:

1. integrated 2 pieces of L298N chips, can drive four DC motors (can control turning direction, can use PWM for speed regulation) or two stepper motors.
2. Integrated LM2596 DC-DC voltage stabilizing chip (output 5V, can supply power for MCU, servo, sensor, router, battery up to 2A)
3. In addition to the above mentioned 2 L298N chip, integrated another ULN2003 to drive another stepper motor, or 4 DC motor (power on and off, can't control turning direction).

Shenzhen Rui Chi Electronics Co., Ltd.,

For example, in extinguishing fire robot, it can control the extinguishing fan, no need for plus circuit.

4. Integrated servo interface, lead out signal output, very convenient to connect to MCU.
5. Integrated USB port, can be directly plugged into the router to supply power.
6. Support W703N, WIFI car router modification without damage, insert USB, use pin to lead out RXD TXD, very convenient to communicate with its UCM.
7. 5V DC output lead (terminal, pin lead out), convenient supply power to device needing 5V outer power.

Instructions: this L298N driver module, uses the original brand new L298N chip from ST company, adopt SMT high stability process, high quality aluminum electrolytic capacitor to stable the circuit. It can directly drive 3-30V DC motor, and provides a 5V output interface (input minimum 6V), can provide power for a 5V SCM circuit system (low ripple coefficient), support 3.V MCU ARM control, easy to control the speed and direction of DC motor, can also control two-phase stepper motor, 5 line 4-phase stepper motor. It is essential for smart car device.

Product parameters:

1. driver chip: L298N dual-H bridge DC motor driver chip
2. driving part of terminal power supply scope: +5V ~ + 30V. If needing power inside the board, scope of power supply V_s : + 6V ~ + 30V
3. peak current of the driving part I_o : 2A
4. logical part working current range: 0 ~ 36 mA
5. signal input control voltage range (IN1 IN2 IN3 IN4):
Low level: $-0.3V \leq V_{in} \leq 1.5V$
High level: $2.3V \leq V_{in} \leq V_{ss}$
6. signal input voltage range (ENA ENB) :
low level: $-0.3 \leq V_{in} \leq 1.5V$ (control signal is invalid)
high level: $2.3V \leq V_{in} \leq V_{ss}$ (control signal valid)
7. Maximum power consumption: 20 w (temperature T = 75 °C)
8. Storage temperature: -25 °C ~ + 130 °C
9. Drive plate size: 55 mm * 45 mm 33 mm (including fixed Cu column and cooling fin height)
10. Other extensions: direction control indicator light, electrical interfaces on logical part.

RUI CHI