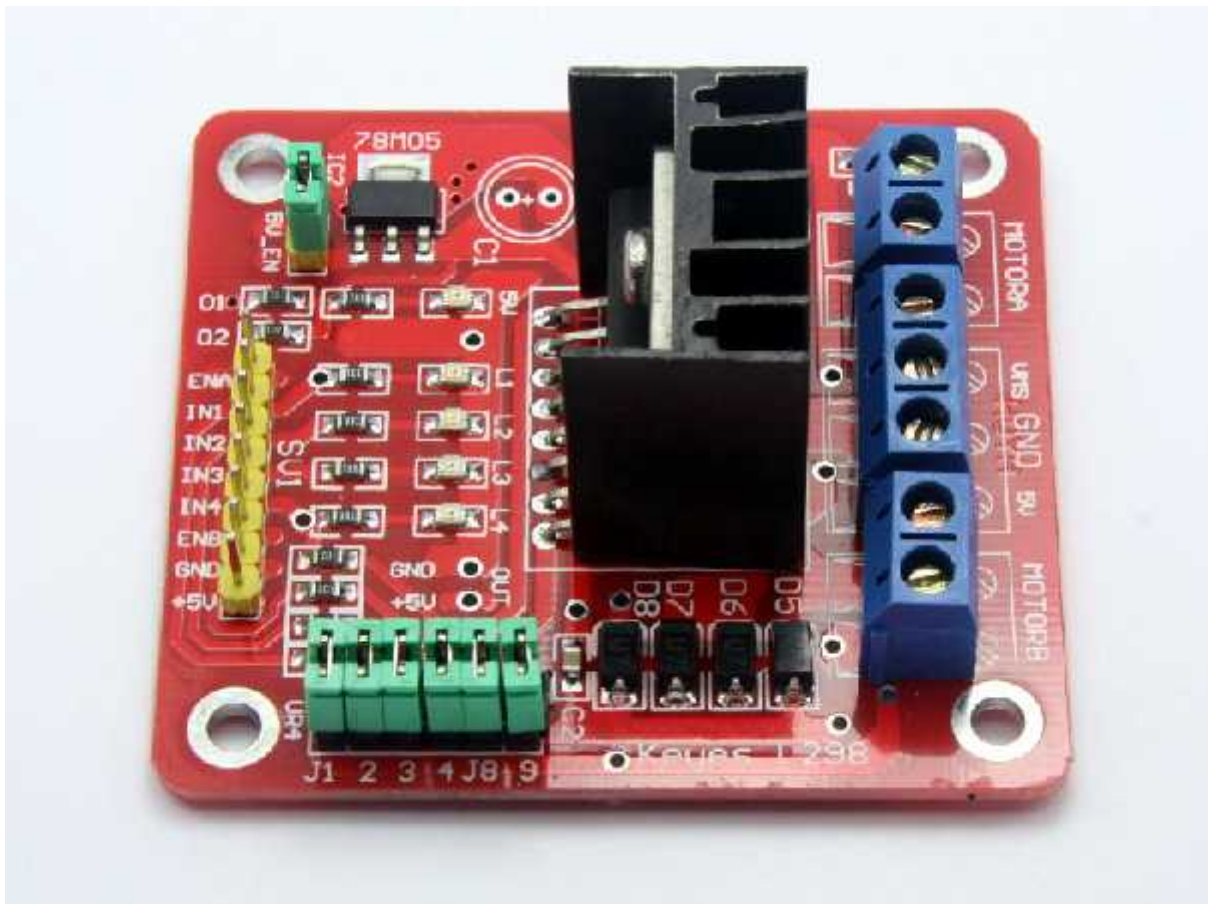
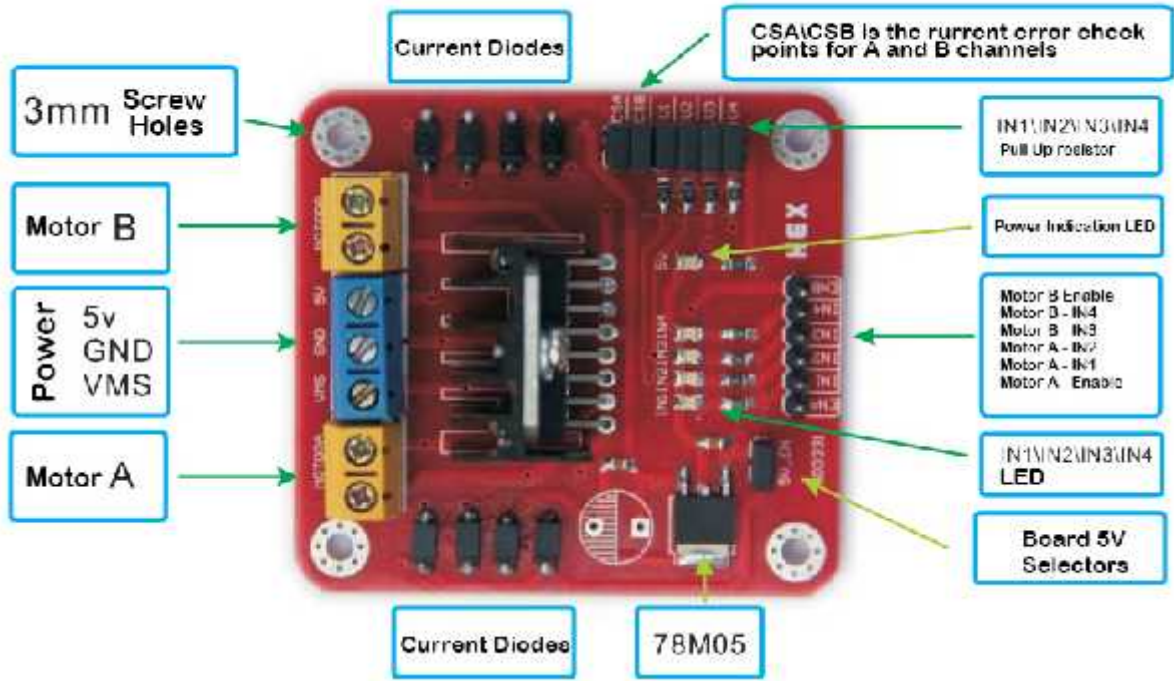
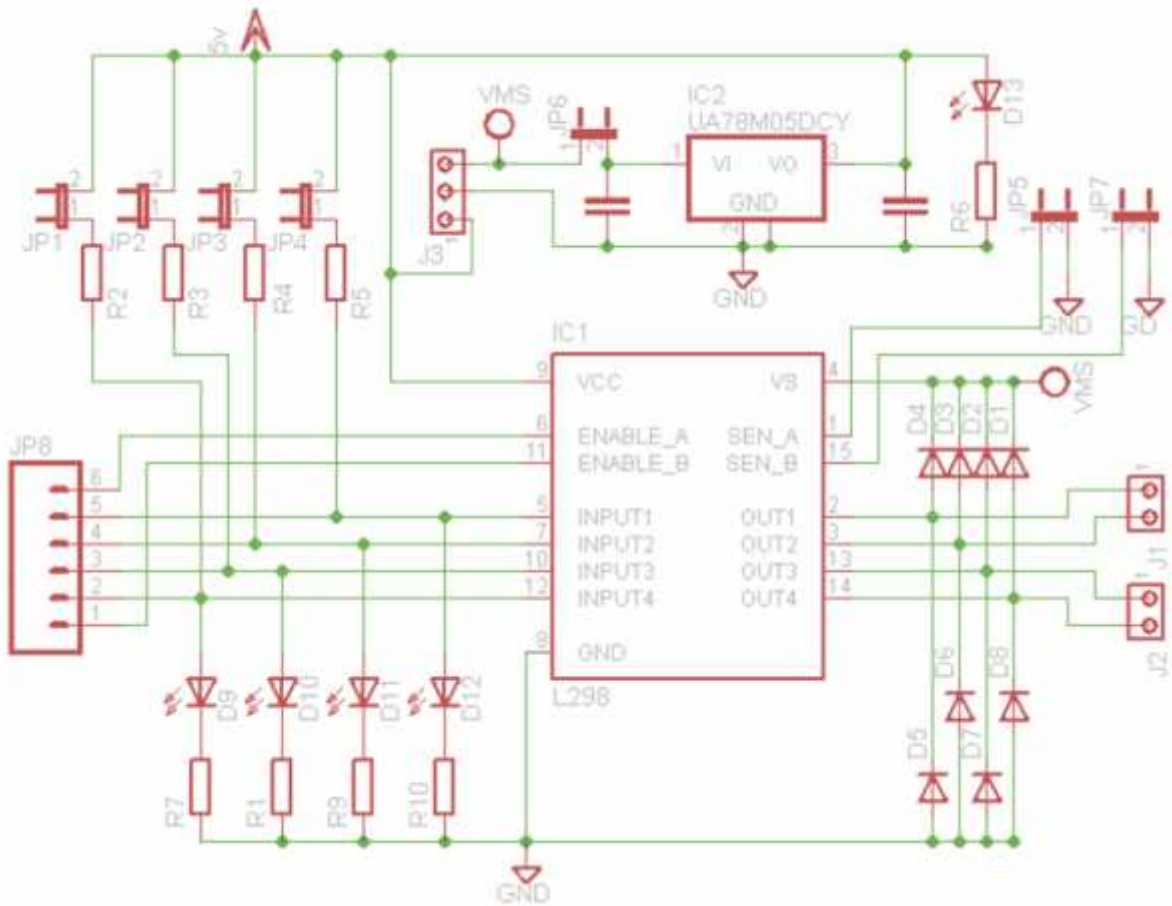


HOBBY COMPONENTS

L298N Stepper Motor Driver Controller Board (HCARDU0013)







Four 3mm screw holes can be locked in position when needed



Red and yellow terminals are for the left and right motors



Four SMD LEDs to indicate the directions of the motor



Four pull-up resistors, you can short connect to pull-up for low driving capability MCU. Not necessary for high driving capability MCUs like AVR



VMS connects to 5V-35V power as the power supply of the motors

When $7V < VMS < 18V$, you can use jumper, the logic power are supplied by board, +5V no need to connect, otherwise, remove jumper +5V connect to 5V DC positive to supply board logical power.

EA I1 I2 EB I3 I4 I6 terminals are used to control motor
EA and EB are enable, controlling motor speed by PWM, working at high TTL.

| Input | | Function |
|-------|-------------|------------------|
| EA=H | I1=H, I2=L | Motor A Forward |
| | I1=L, I2=H | Motor A backward |
| | I1=I2 | Motor A stop |
| EA=L | I1=X, I2=I2 | Motor A stop |

PS:
Control motor B is the same as Motor A
H: high TTL
L: low TTL
X: no matter of high or low TTL



CSA: motor A current detecting pin, you can serial connect resistor here to check current, or connect to GND by jumper that doesn't check current
CSB: motor B current detecting pin, you can serial connect resistor here to check current, or connect to GND by jumper that doesn't check current

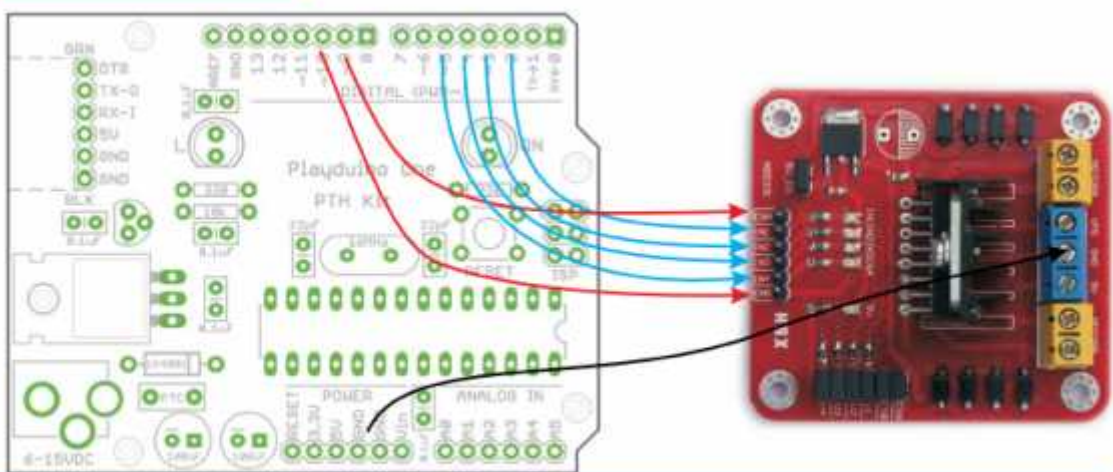


Power indication, when 5V supplied, LED power up



5V-EN: jumper selected, board 78M05 work, supply 5V power output for logic.
Jumper removed, need external 5V power for logic

Connect to Arduino



The red wirings are used to control DC motors by PWM, if not used or using stepper motor this can be removed