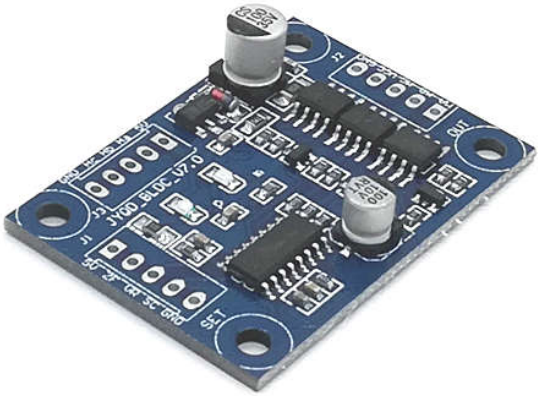
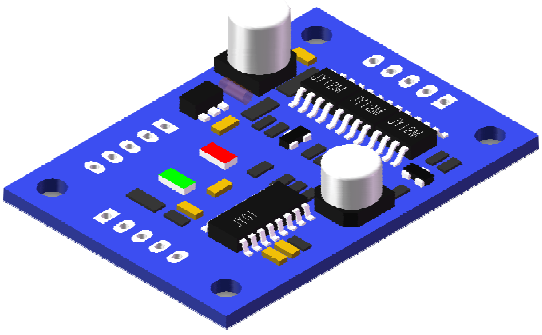
JYQD-V7.0 brushless DC motor driver board



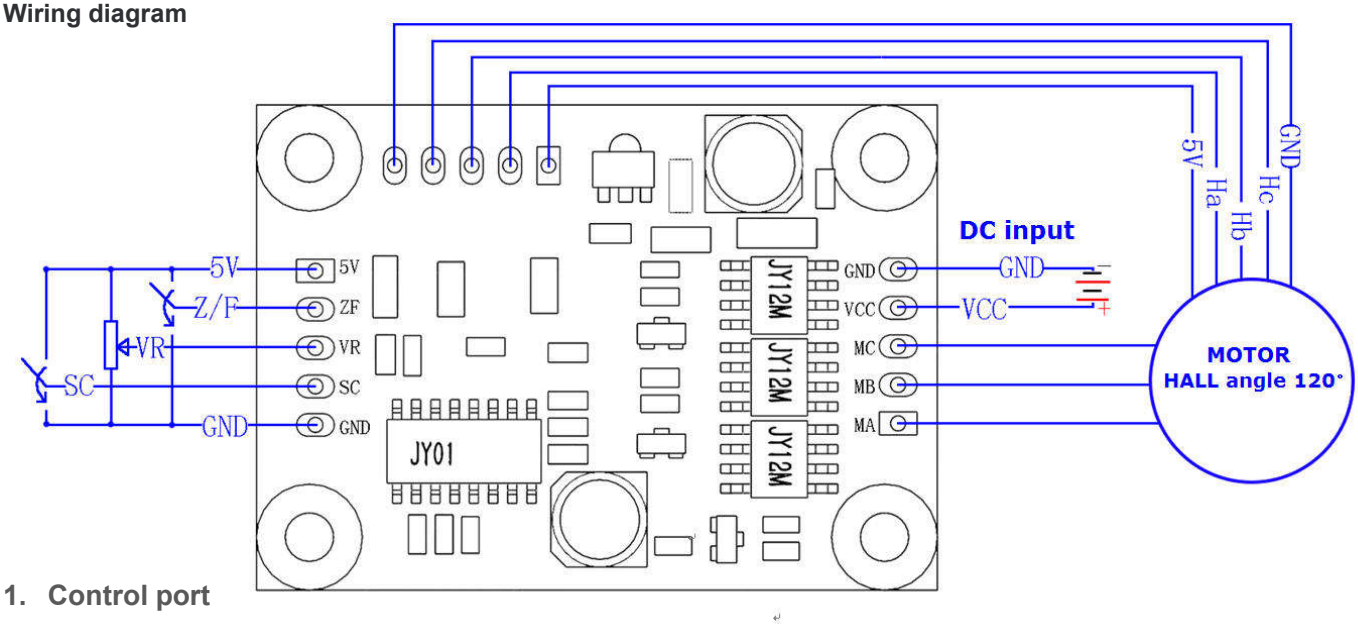
MODEL	OPERATING TEMPERATURE (℃)	OPERATING VOLTAGE (V)	MAX CURRENT (A)	CONTINUOUS OPERATING CURRENT (A)	PWM SPEED REGULATION (1-20KHZ)	ANALOG VOLTAGE SPEED REGULATION (V)	ERROR LED
JYQD-V7.0	-20—85℃	12V	3A	2A	Duty cycle 0-100%	0-5V	√
JYQD-V7.0	-20-85℃	24V	3A	2A	Duty cycle 0-100%	0-5V	√

Application guidelines

1. **Confirm that the voltage and power parameters of the motor not exceed the range as specified.**
2. **Applicable to hall brushless dc motor with Hall at 120°, not all manufacturers' Hall line sequence are corresponding, you can adjust the Hall line sequence or motor three-phase line sequence according to the actual situation, to achieve the best driving effect.**
3. **JYQD-V7.0 is driver board without housing and heatsink, it can drive the motor below 36 watt without any heatsink, but needs normal ventilation.**
4. **The 5V output port on the drive board is forbidden to connect external power equipment. It is only applicable to external potentiometer or switch for speed adjustment, commutation and enabling operation**



Wiring diagram



1. Control port

5V —Driver board internal output voltage, external potentiometer or switch for speed adjustment and reversing operation

Z/F —Rotating direction control ports. Connect "5V" high level or no connect is Forward direction, connect 0 V low level or connect to GND is reverse direction.

VR —Speed control port. Analog voltage linear speed regulation 0.1v -5V, The input resistance is 20K Ohm ,connect with GND when input PWM speed regulation, PWM frequency:1-20KHZ; Duty cycle 0-100%

SC—Enable port control. Connect 5V or no connect to allow operation, connect GND to forbid operation.

GND—Used for Drive board internal control

2. Power port

MA ----motor phase A

MB ---- motor phase B

MC---- motor phase C

GND----DC-

VCC----DC +

3:Hall sensor port

Ha--- Hall a

Hb---Hall b

Hc---Hall c

GND---GND

5V---5V output

4. Use shielded wires if the drivers board has more than 50 cm distance from the motor, otherwise it may lead to abnormal driving, affecting the normal use.

5. Control port distance: 2.54mm,Power port distance:2.54 mm

6. Pay attention to the insulation between the driver MOSFET and the heatsink or the installation plate.

Dimensional drawing