

# SparkFun

## Motor Driver 1A Dual TB6612FNG

sku: ROB-09457



**Description:** The TB6612FNG motor driver can control up to two DC motors at a constant current of 1.2A (3.2A peak). Two input signals (IN1 and IN2) can be used to control the motor in one of four function modes - CW, CCW, short-brake, and stop. The two motor outputs (A and B) can be separately controlled, the speed of each motor is controlled via a PWM input signal with a frequency up to 100kHz. The STBY pin should be pulled high to take the motor out of standby mode.

Logic supply voltage (VCC) can be in the range of 2.7-5.5VDC, while the motor supply (VM) is limited to a maximum voltage of 15VDC. The output current is rated up to 1.2A per channel (or up to 3.2A for a short, single pulse).

Board comes with all components installed as shown. Decoupling capacitors are included on both supply lines. All pins of the TB6612FNG are broken out to two 0.1" pitch headers; the pins are arranged such that input pins are on one side and output pins are on the other.

### Features:

- Power supply voltage: VM=15V max, VCC=2.7-5.5V
- Output current: Iout=1.2A(average) / 3.2A (peak)
- Standby control to save power
- CW/CCW/short brake/stop motor control modes
- Built-in thermal shutdown circuit and low voltage detecting circuit
- All pins of the TB6612FNG broken out to 0.1" spaced pins
- Filtering capacitors on both supply lines

**Dimensions:** 0.8x0.8"

**Documents:**

- [Schematic](#)
- [Eagle Files](#)
- [TB6612FNG Datasheet](#)