



Zio 4 DC Motor Controller (Qwiic, 2.5 to 13.5V, 1.2A Continuous, 3.2A Peak)

SKU: 101897

Description:

Drive two motors at up to 1.2A of constant current with the Zio Bidirectional 4-Channel DC Motor Controller. Dual H-bridges will allow you to also brake and stop in addition to controlling the direction and speed of the motors. Two input signals (IN1 and IN2) can be used to control the motors with the following functions: CW, CCW, short-brake, and stop. You can independently control the two bidirectional DC motors at once. The PWM input allows you to spin the wheels in either direction and at whatever speed you like.

This board also comes equipped with Qwiic connectors so you can quickly and easily daisy-chain to other modules in the Qwiic ecosystem.

Specification

- Recommended motor voltage is 2.7 5.5V with a max of 15V (For fullcurrent operation at higher voltages, add an appropriate heatsink to prevent triggering the thermal shutdown circuit and to keep the magic smoke inside those precious H-bridges)
- Output current continuous: 1A per channel
- Max. PWM Frequency: 100kHz
- Built-in Power Saving System
- Built-in Thermal Shutdown Circuit and Low Voltage Detecting Circuit
- IC: PCA9685
- I2C address: 0x40-0x7F (default: 0x40)
- Weight: 12.9g (0.45oz)
- Dimension: 54.2x27mm

Links:

- <u>PCA9685PW_datasheet.pdf</u>
- <u>TB6612FNG_datasheet.pdf</u>
- <u>Adafruit PWM Servo Driver Library</u>
- Demo Code (Solder the pull-up jumpers)
- Learn more about ZIO
- Learn more about Qwiic
- Eagle files

More Product Picture:





