

Item no.: 345867 5329 - Robotics Board for Raspberry Pi Pico





Product Description

Kitronik Robotics Board for Raspberry Pi Pico

The compact Robotics Board enables the Raspberry Pi Pico (connected via pin header) to drive 4 motors (or 2 stepper motors) and 8 servos. Coupled with 27 other I/O expansion points, and power and ground connections, this means the Pico can very easily become the core of a whole variety of robotics projects.

The Robotics Board features 2 dual H-bridge motor driver ICs (capable of driving 2 standard motors or 1 stepper motor each) and 8 servo outputs (capable of driving standard and continuous rotation servos), all controlled from the Pico using the I2C protocol on GP8 and GP9 via a 16-channel driver IC. The I/O breakout provides connections to all the unused pins on the Pico. The 27 available I/O pins allow other input devices, for example, sensors, or output devices, such as ZIP LEDs, to be added to the board.

Power is provided via either a terminal block or servo-style connector, the supply is then controlled by an on/off power switch to the board. There is a green LED to indicate when the board is turned on. The board then produces a regulated 3.3 V supply which is fed into the 3 V and GND connections to power the connected Pico, removing the need to power the Pico separately. The 3 V and GND pins are also broken out on the additional header, which means external devices can also be powered.

- Operating voltage (supply via terminal blocks or servo power connector): 3.0 10.8 V (recommended: 6.0 10.8 V)
 Regulated voltage supply (for Pico): +3.3 V
 Max. 3V3 current output (on expansion pads): 100 mA
 Servo and motor voltage: Operating voltage
 Max. input current (all servos and motors): 10 A
 Serve utput conservices output (one service output o

- Servo output connections: 8 (provides operating voltage to servos)
 Motor output connections: 4 [2 stepper motors] (1.5 A max. current draw per motor)
 External connections: All spare Pico I/O pins, 3V3 (P36) and GND

Specifications

Scan this QR code to view the product All details, up-to-date prices and availability

