



## **ZeroBorg Complete - Quad Motor Controller**

The ZeroBorg is our add on board for controlling motors using the Raspberry Pi Zero. It's small size means it fits neatly below a Raspberry Pi Zero and opens up endless possibilities for tiny robot designs. The ZeroBorg can control up to 4 motors independently and is stackable via I2C, so you can keep adding ZeroBorgs (and our other compatible I2C boards) to control additional motors!

ZeroBorg is fully customisable, so you can match your ZeroBorg to your project you're making! The following optional add-ons are compatible with the ZeroBorg:

- A 5V DC/DC regulator to power the Pi as well as the motors,
- · An infrared sensor to control the motors via an infrared remote control,
- A 9V battery clip to power the Pi and the motors.

The ZeroBorg "Complete" includes all of the above optional add-ons (5V Regulator, IR Sensor & Battery Clip) fully soldered and ready to go! We also provide the bare ZeroBorg Board only for advanced users looking for a fully customisable option!

## **ZeroBorg Specifications**

Each ZeroBorg has:

- 4 full H-Bridges
- Capability of driving 4 motors or 2 stepper motors
- 2A peak or 1.5A RMS per bridge
- An on board fast blow fuse at 5A
- Designed to run off a 9V power source Max range 2.7V to 10.8V (To power the RPi Zero 7V minimum)
- 2 analogue inputs, which are great for sensors
- I2C communication, allowing daisy chaining to other boards
- Fully soldered and ready to use.

This complete model is a fully populated ZeroBorg and has the following additional features:

- DCDC regulator which powers the Raspberry Pi Zero
- Infrared sensor allowing control from most TV remotes
- 9V battery clip (PP3) for powering the Raspberry Pi Zero and the ZeroBorg
- Supplied with the 9V and daisy-chain header soldered ready to use (unsoldered option also available)
- Secondary I2C header for daisy chaining to other boards such as our UltraBorg or ThunderBorg
  Please note this product is a single ZeroBorg only, not a pair.