



## ZeroBorg Triple Stack (9V Unsoldered)

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.  
This triple stack has three ZeroBorgs pre-programmed with different I2C addresses ready to control up to 12 motors! (9V Battery Clip NOT Soldered). Includes:

- 3 x ZeroBorg Motor Controllers
- 1 x 5V DC/DC regulator which powers the Raspberry Pi Zero (Pre-soldered)
- 1 x Infrared sensor allowing control from most TV remotes (Pre-soldered)
- 1 x 9V battery clip (PP3) for powering the Raspberry Pi Zero and the ZeroBorg (Not Soldered)\*
- Two female I2C headers to allow communications between the three boards (Pre-soldered)
- 1 x Secondary I2C header\* for daisy chaining to other boards such as our UltraBorg or ThunderBorg (Not Soldered)

\*Supplied with the 9V and daisy-chain header loose for mounting flat to a robot

### **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.