

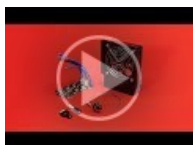
RageBridge v2 from Equal Zero Designs

PRODUCT ID: 3567

DISCONTINUED

[DESCRIPTION](#)

[TECHNICAL DETAILS](#)



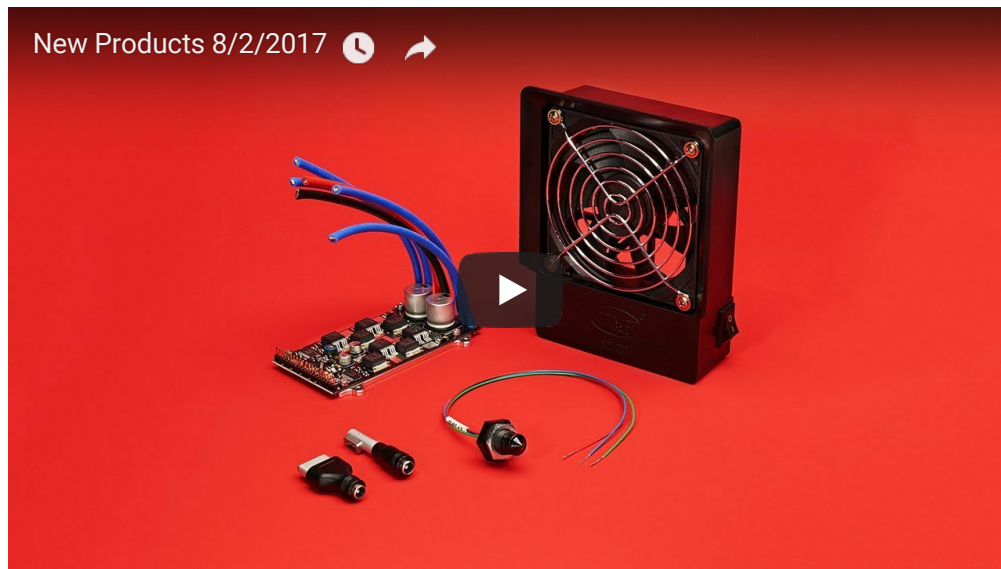
DESCRIPTION

RageBridge 2 from [Equals Zero Designs](#) is a no-frills and robust dual-channel DC motor controller for robotic and vehicular drivetrain applications. It can supply 40 amps per side continuously and up to 90A in bursts dependent on cooling conditions. An ultra-wide (8 to 40 volts) input range maximizes versatility and allows it to be used in many different systems. It can operate as two independent motor control channels, or be combined into a single-channel controller for driving larger motors. It can take analog, R/C radio, and TTL serial inputs. A large and fully isolated heat sink base allows you to attach it to a metal chassis for even better thermal performance. RageBridge 2 is truly a controller you will not “grow out of”!

RageBridge 2 is a dual H-bridge allowing control of up to two DC brush motors independently, integrated onto a single board. The switching topology of RageBridge 2 is known as “[synchronous rectification](#)”. In this method, the motor is always being alternately powered and then braked. While it may sound unnecessarily complicated, it significantly decreases heat dissipation in both motor and power MOSFETs because current is never just being burnt off as heat for a portion of the switching cycle. The result is a controller that can handle more power in a smaller package.

Additionally, the bidirectional current flow means the battery supply gets recharged when the motor is undergoing braking, with energy supplied from the kinetic energy of the moving drivetrain or actuator. This translates to an increase in run time of a few percent in most cases.

Don't miss out on this out-*Rage*-ously powerful gadget!



TECHNICAL DETAILS

- **Voltage Input Range:** 12 to 30v nominal (8 – 40v absolute limits)
- **Continuous Current:** 40A True Continuous, per side (50+A with fan cooling)
- **Maximum Current:** Up to 90A Constant-Current Mode Limited, per side; 75A for 30 seconds per side, rated
- **Switching Frequency:** 15.6kHz
- **Braking:** Synchronous rectification with regenerative braking
- **Logic Power:** 5V @ 150mA
- **Inputs:** 3 channels – R/C mode; 2 channels & Arming/Reversing switch – Analog mode; 1 TTL Serial UART
- **Dimensions:** 4.15" x 2" x 0.8"
- **Mounting Hole Dimensions:** 3" x 2.25"
- **Weight:** 4oz (with 6" wire pigtails)
- **Heat Management:** Aluminum heat spreader plate

Documentation:

- [User Manual](#)
- [3D models for CAD](#) (Available in .IGS and .X_T Parasolid)
- [Installation Drawing](#)

Source files for this product are available under the [CC-BY-SA](#) unless specifically outlined within the source file:

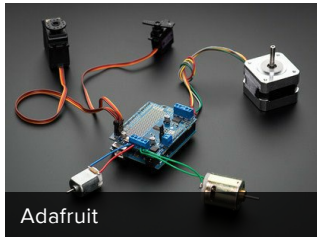
Downloaded from [Arrow.com](#)

- [Firmware v1.1](#) (2/20/2016)

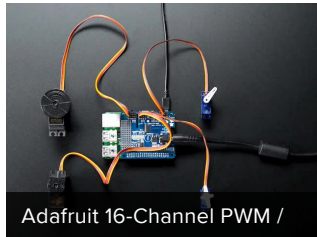
- [Schematic and Board Design Files](#)

For tech support please [contact e0designs](#).

MAY WE ALSO SUGGEST...



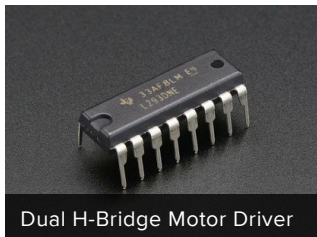
Adafruit



Adafruit 16-Channel PWM /



RasPi Robot Board v3 by



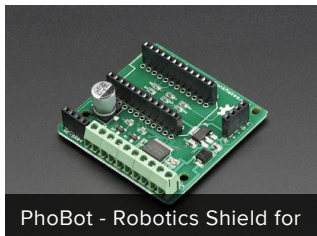
Dual H-Bridge Motor Driver



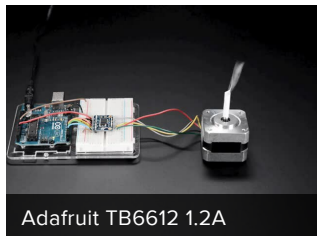
DC Motor in Micro Servo



Adafruit DRV2605L Haptic



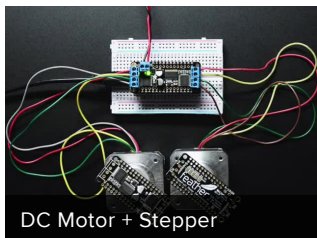
PhoBot - Robotics Shield for



Adafruit TB6612 1.2A



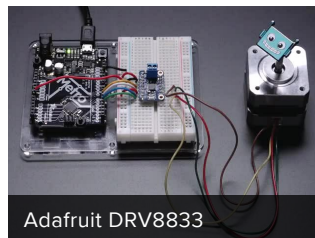
Adafruit DRV8871 DC Motor



DC Motor + Stepper



Motor party add-on pack for



Adafruit DRV8833

[CONTACT](#)

[SUPPORT](#)

[DISTRIBUTORS](#)

[EDUCATORS](#)

[JOBS](#)

[FAQ](#)

[SHIPPING & RETURNS](#)

[TERMS OF SERVICE](#)

[PRIVACY & LEGAL](#)

[ABOUT US](#)

ENGINEERED IN NYC Adafruit ®

*"To be successful, you have to have
your heart in your business and
your business in your heart" -*
Thomas J. Watson



4.6 ★★★★★
Google
Customer Reviews