

## Motor Control

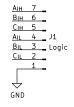
A MOSFET driver is used to drive the half-bridges for each phase of the motor based on control signals from the MCU.

N-channel MOSFETs are used on both sides of the bridge due to their lower "on" resistance. To drive the high-side FETs requires "bootstrapping" to get a gate voltage higher than the drain (VBAT) for optimal performance.

Although the MOSFETs are rated for >100A, the traces are not! Add solder to increase current capacity



Inputs to control the MOSFET drivers. Standard logic levels (3.3V or 5V) accepted.



## +BATT 5 Cout 4 Bout 2 Power GND

## **Power Connectors**

These connect directly to each power rail and phase output. Thus (other than GND) they will all be at BAT+ levels so the external circuit needs to consider this!

Control system agnostic driver board for my ESC project Designed to enable easier experimentation with other control systems Based on my V4/V5 ESCs

Designed for 10 to 20V input, current up to 100A

Title: General BLDC Driver Board			
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