2nd PCB

**Input:**

The PCB is directly connected to a 14V battery.

The current first runs through a current sensor, that outputs an analog signal that is send to the main PCB.

**Outputs:**

The terminal “J4” is connected to a DC motor with a 1A operating current. And is controlled with PWM signal.

Terminal “J5” is connected to a L motor driver module that powers and controls two DC motors.

A linear voltage regulator steps down the voltage from 14V to 5V, that is then send to the main PCB through terminal “J6”. The main PCB will draw around 200 mA, so we plan to put a heat sink on the regulator.

We use a trace width that allows for 6A. To account for the stall torque of the motors, which we calculate to be around 5A