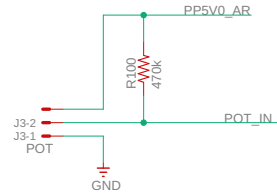
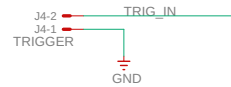


MCU

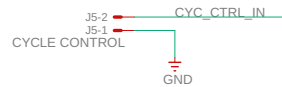
POTENTIOMETER



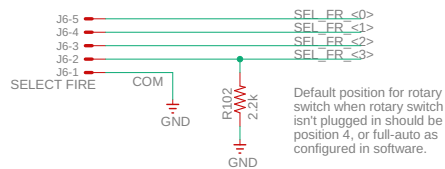
TRIGGER



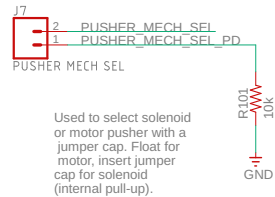
CYCLE CONTROL SWITCH



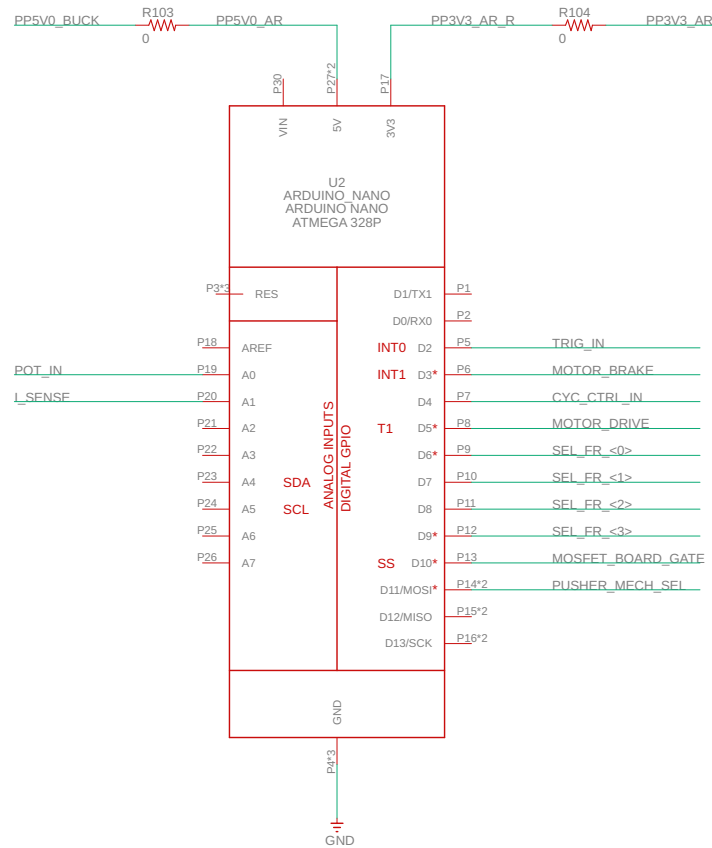
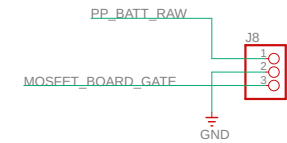
SELECT-FIRE SWITCH



PUSHER MECH SEL

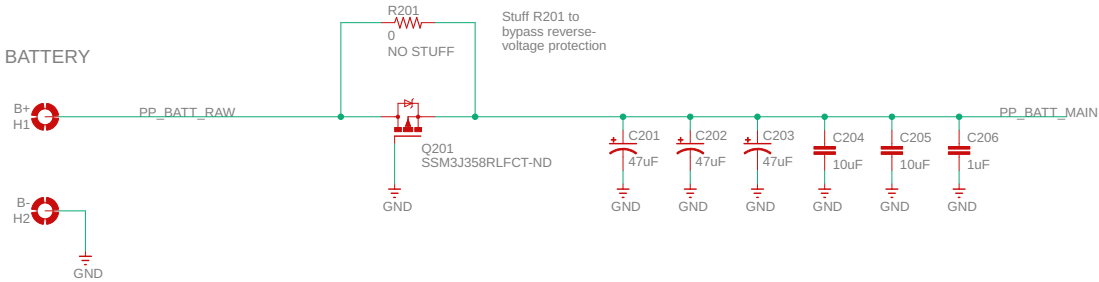


EXPANDABLE HEADERS FOR MOSFET ECOSYSTEM

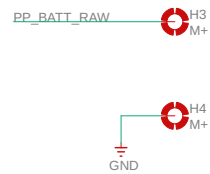


POWER

BATTERY



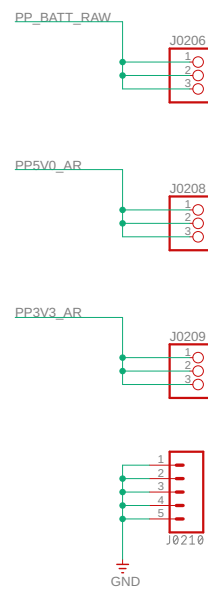
FLYWHEELS



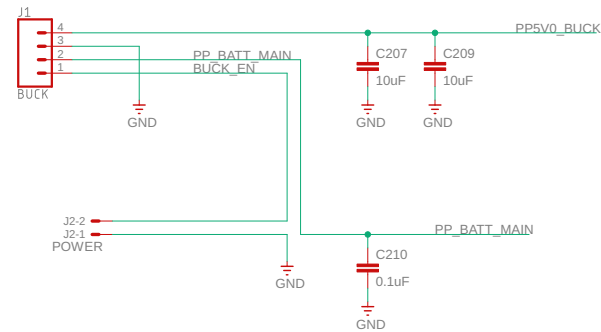
MOUNT HOLES



POWER RAIL BREAKOUTS



BUCK CONVERTER



PUSHER DRIVE

The schematic diagram illustrates the electrical circuit for a Pusher Drive. It features a 74LVC1G07 inverter (U1) which is powered by PP5V0_AR through a 0.1uF capacitor (C301). The inverter's input (IN) is connected to the MOTOR_BRAKE signal via a 100 ohm resistor (R301) and to ground (GND) via a 2.2k resistor (R302). The output (OUT) of the inverter is connected to the HI_SIDE_GATE_R signal via a 2.2k resistor (R303), which then connects to the HI_SIDE_GATE signal via a 100 ohm resistor (R304). The HI_SIDE_GATE signal drives the gate of MOSFET Q301 (SSM3J358RLFCT-ND). The source of Q301 is connected to GND, and its drain is connected to the PP_BATT_RAW power rail. The PP_BATT_RAW rail is also connected to the M+ terminal of the motor (H308, HC301). The motor's M- terminal is connected to the PUSHER_NEG signal. The PUSHER_NEG signal is also connected to the gate of MOSFET Q302 (PSMN1R5-30YLC). The source of Q302 is connected to GND, and its drain is connected to the LOW_SIDE_GATE signal via a 100 ohm resistor (R305). The LOW_SIDE_GATE signal is connected to the MOTOR_DRIVE signal via a 2.2k resistor (R306). A sense resistor (R307, 0.01 ohms, 2W) is connected between the LOW_SIDE_GATE signal and the I_SENSE signal. The I_SENSE signal is connected to GND via a 0.1uF capacitor (C302). A diode (D301) is connected in parallel with the motor, with its anode connected to the M+ terminal and its cathode connected to the M- terminal.

Select Fire Rapidstrike	
8/15/2019 21:05	
Sheet: 3/3	

Sheet: 3/3	
------------	--