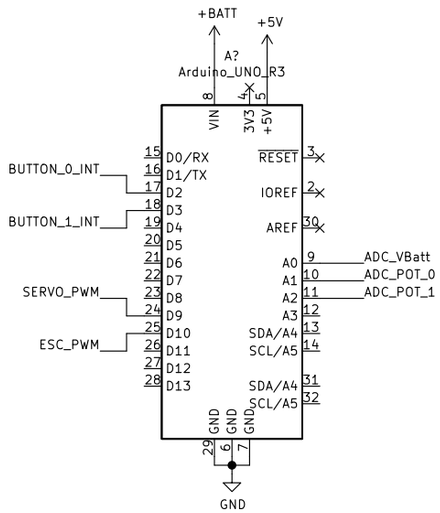
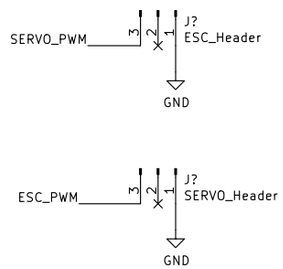
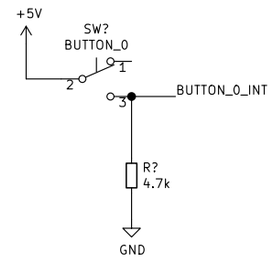
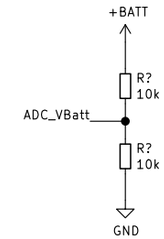




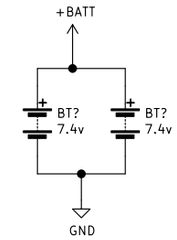
BUTTON_1, aka the reverse button, sends a signal to our MCU telling it that we should change our direction to reverse. The resistor here is a 10k pulldown resistor.



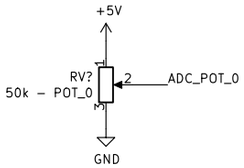
This voltage divider allows us to monitor the batteries voltage while it's running our electronics. Our VRef is a 5V reference, which means the maximum voltage our ADC (Analog to Digital Converter) can read is 5V. Our batteries nominal voltage is around 7.4 volts, so we must take the voltage down a bit so we can read it correctly.



Batteries must both be fully charged before connecting in parallel.

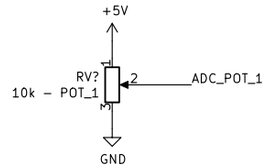


POT_0 -- 50k potentiometer used to modulate our PWM (Pulse Width Modulation) signal for our forward speed.



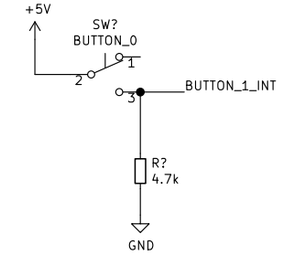
Pin 1 is +5V, and Pin 3 is GND. Pin 2 is our output voltage. The voltage our potentiometer outputs will be proportionate to how fast we want our motor to go forward.
VLow = 0V
VHigh = 5V

POT_1 -- 10k potentiometer used to modulate our PWM (Pulse Width Modulation) signal for our reverse speed.



Pin 1 is +5V, and Pin 3 is GND. Pin 2 is our output voltage. The voltage our potentiometer outputs will be proportionate to how fast we want our motor to go forward.
VLow = 0V
VHigh = 5V

BUTTON_0, aka the forward button, sends a signal to our MCU telling it that we should change our direction to forward. The resistor here is a 10k pulldown resistor.



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Sheet: /
File: ARC-DemoSch.sch

Title: ARC Demo Schematic

Size: USLegal	Date: 2020-10-01	**Rev:**
KiCad E.D.A. kicad 5.1.6		Id: 1/1