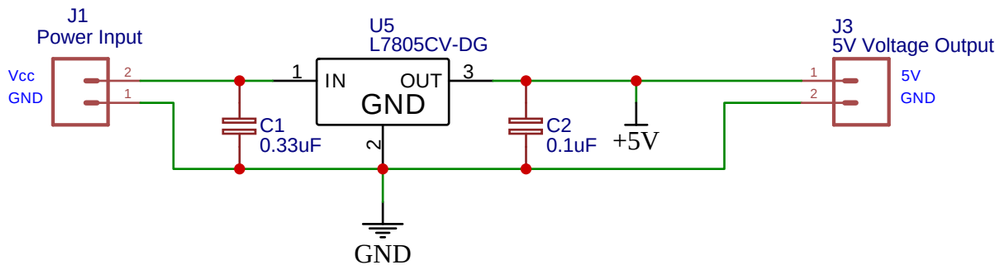
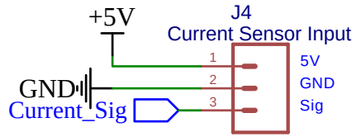
Power Supply:

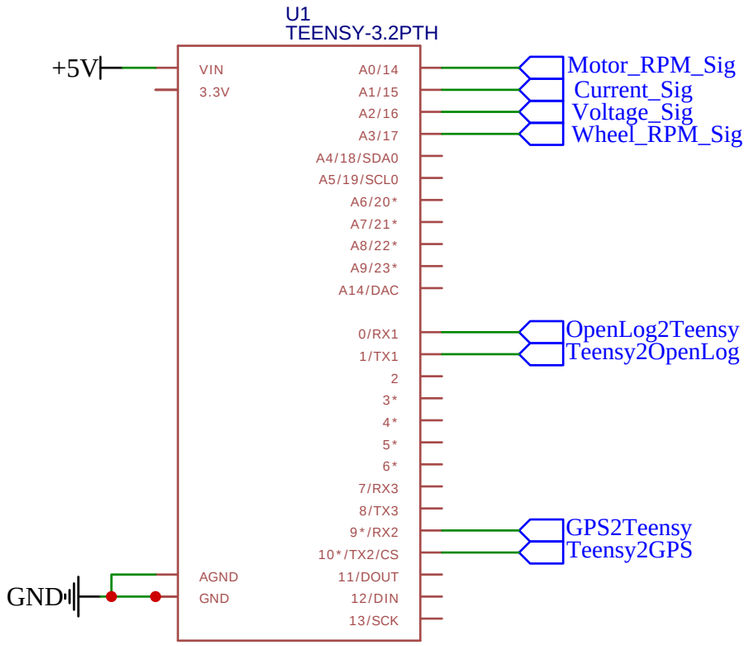


Current sensor measurement:

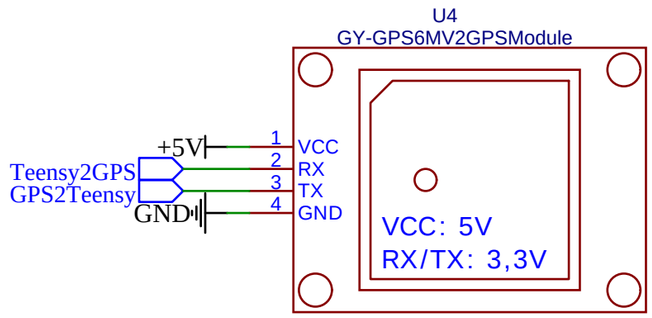
- In case the motor doesn´t supply power to hall sensor, use the auxiliary 5V output from power supply section.



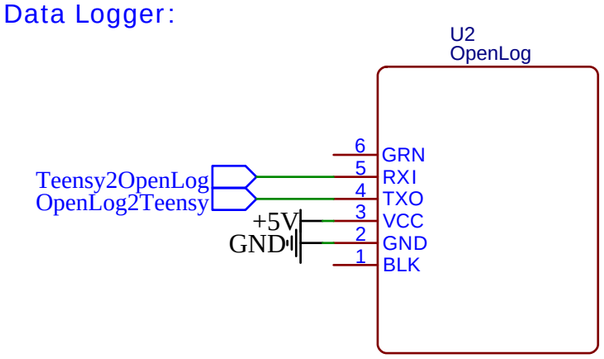
Microcontroller unit:



GPS Module:

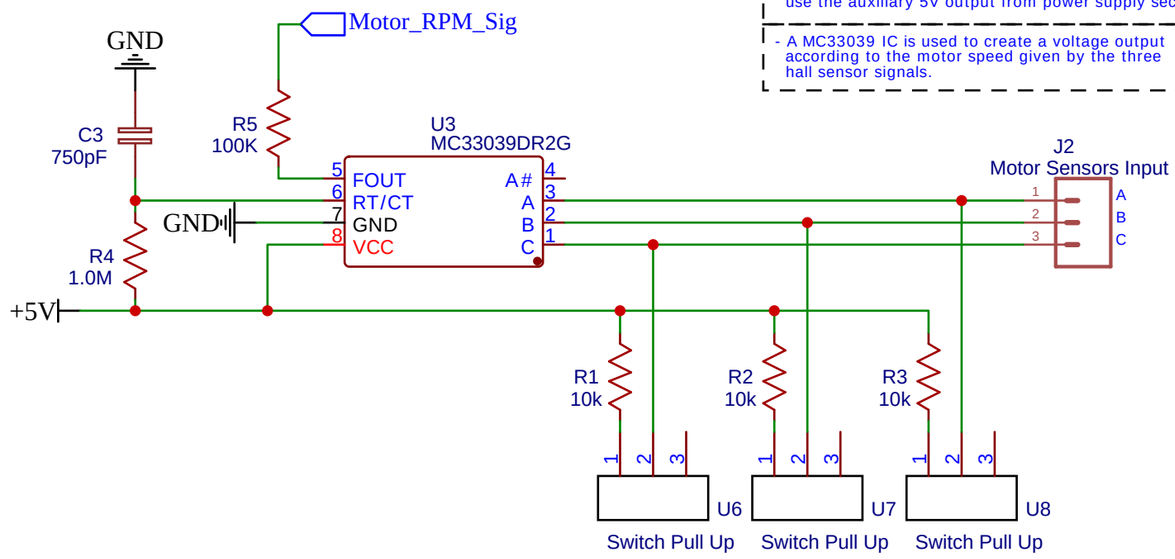


Data Logger:



Motor RPM Measurement:

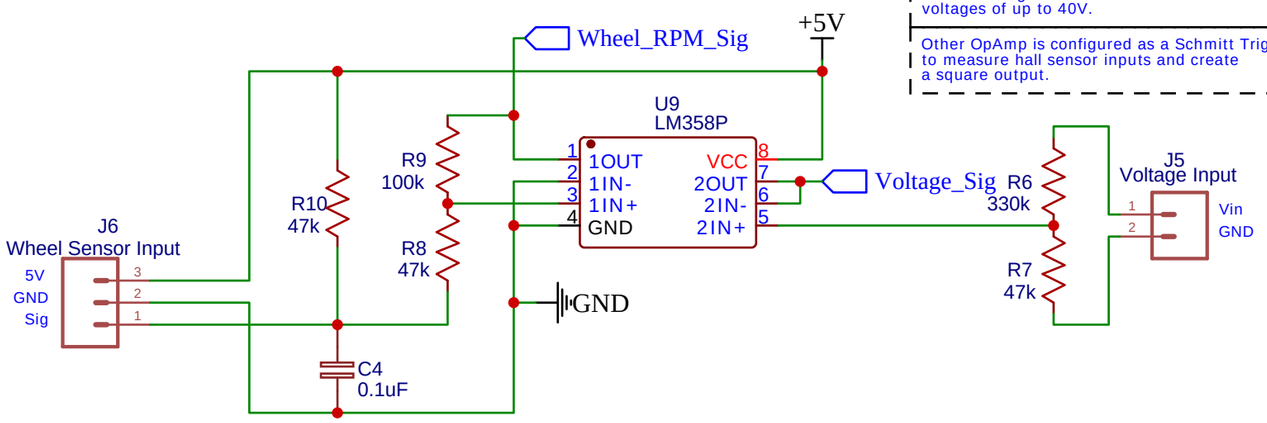
- In case the motor doesn´t supply power to hall sensor, use the auxiliary 5V output from power supply section.
- A MC33039 IC is used to create a voltage output according to the motor speed given by the three hall sensor signals.



Wheel RPM and Voltage Measurement:

OpAmp is configured as a voltage follower for the voltage divider circuit in order to measure voltages of up to 40V.

Other OpAmp is configured as a Schmitt Trigger to measure hall sensor inputs and create a square output.



Comments:

- Add LEDs to report operation status (Green and Red LED).
- Add buttons for human interaction with device:
  * Button to turn on/off the device.
  * Button for miscellaneous use.

TITLE: Telemetry System		REV: 1.0
	Company: Unisabana Herons EV	Sheet: 1/1
	Date: 2022-06-12 Drawn By: FelipeArenasUribe	