# Lab stock available for final project

## **Electrical**

- Op amps
  - o OP07
  - o MCP601
  - o MCP6002
  - o MCP6004
  - AD623 (an instrumentation amp, not an op amp)
  - o TL081
- Passives
  - Assorted resistors (available in lab and in the stock room)
  - 10k thermistor (490-12820-ND)
  - 47k thermistor (490-14853-ND)
  - 100k thermistor (490-5633-ND)
  - Assorted capacitors (available in lab and in the stock room)
  - o Infrared LED (1080-1071-ND)
  - Photodiode (365-1085-ND)
- Sensors
  - Solid state temperature sensor (MCP9701A-E/TO-ND)
  - Absolute pressure sensor (MPX5700ASX-ND) tracked with checkout sheet and error reports
  - Microphone (Mfg. part number: CME-1538-100LB; Digi-Key #: 102-2190-ND)
  - Thermocouple wire
- 5V regulator (MC7805CT-BPMS-ND)
- LM384 audio amp
- Teensy 4.0 tracked with checkout sheet and error reports
- Adafruit Ultimate GPS tracked with checkout sheet and error reports
- GPS antennae

## **Connectors**

- 16 DIP chip socket
- 8 DIP chip socket
- Male headers
- Female headers
- 26 Pos male ribbon cable connector (ED10537-ND)
- 26 Pos female ribbon cable connector (ED10504-ND)

### Mechanical

- Waterproof boxes tracked with checkout sheet and error reports
- PVC (same as E79)
- Velcro
- Plastic mesh
- Hex standoff (93505A518)
- Hex nut (91841A003)
- screw 1/4" (91792A077)
- screw 3/8" (91792A079)
- Rubber foam sheet (B074HQ9TBP)
- Zip ties
- Penetrator Assembly
  - Nylon bolt (95868A631)
  - Nylon nut (94812A930)
  - Rubber washer (90130A033)
  - o marine putty (50172)
  - Marine epoxy (202057892)
- Motor Assembly
  - o 12 DC Motor (232022)
  - Film Canister (B000ZQTQB4)
  - Propellor (LXE472)
  - threaded motor coupler (LXK089)
  - o T-Nut (90975A002)
  - Lock Nut (91831A005)
  - Wax (2793K31)
  - Electrical Tape (B01ETZ6SOI)
- Pressure sensor tubing (B00E6BCV0G)

### Other

- Micro sd card and adapter tracked with checkout sheet and error reports
- Battery tracked with checkout sheet and error reports
- Go Pro cameras limited supply. Must provide a very good design.
- pH sensor limited supply. Must provide a very good design.
- USB cameras limited supply. First come first served. (your phones are better)
- DAEX25W Speaker ~ 6x available for prototyping but not for permanent installation. Buy your own for your robot: unit price is ~\$25.