

NASA PROJECT

ENCE3210 Final Project

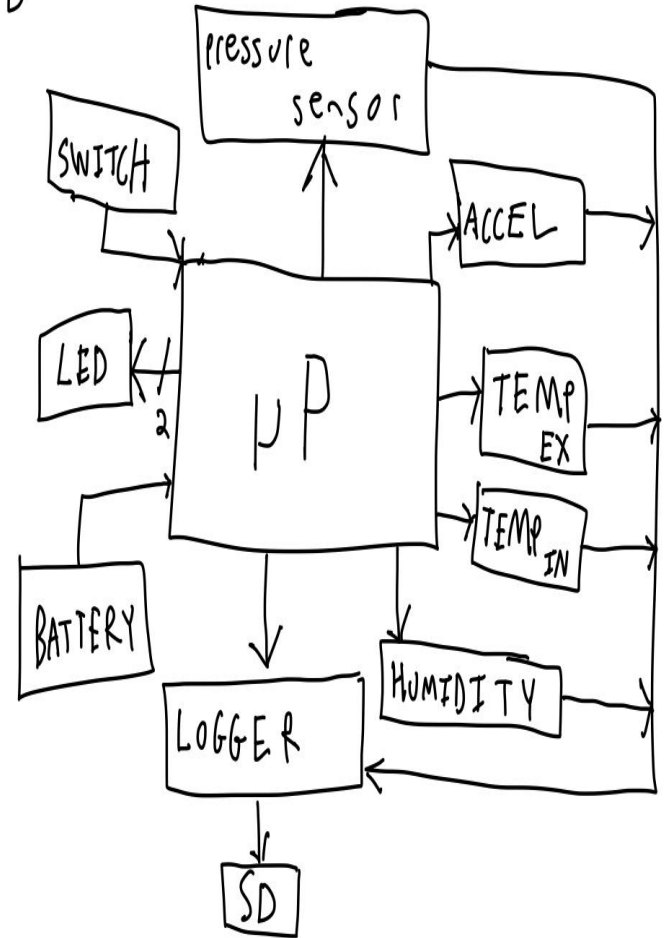
Hampton Zinn
Weather Balloon
3/14/2025



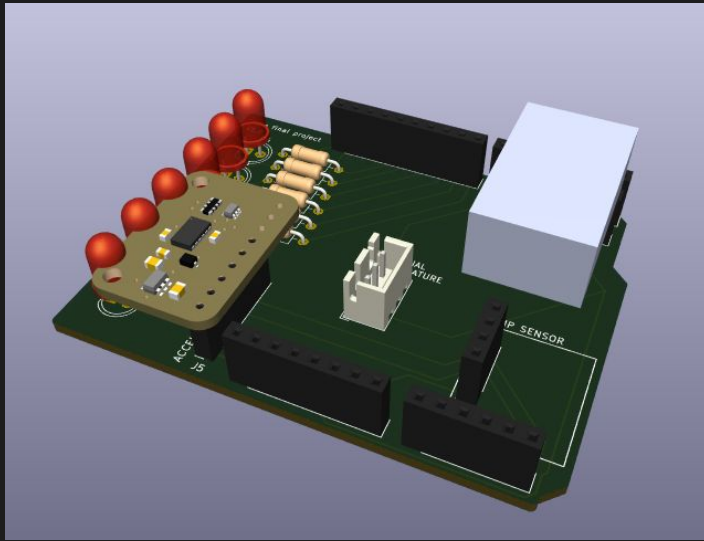
Phase I: System Evaluation

- MAX WEIGHT: 94.4g
- MAX CURRENT: .25mA
- BATTERY LIFE: w/ 9V, 2.8 hours
- FEASIBILITY: YES, BUT...
- COST: \$232.50

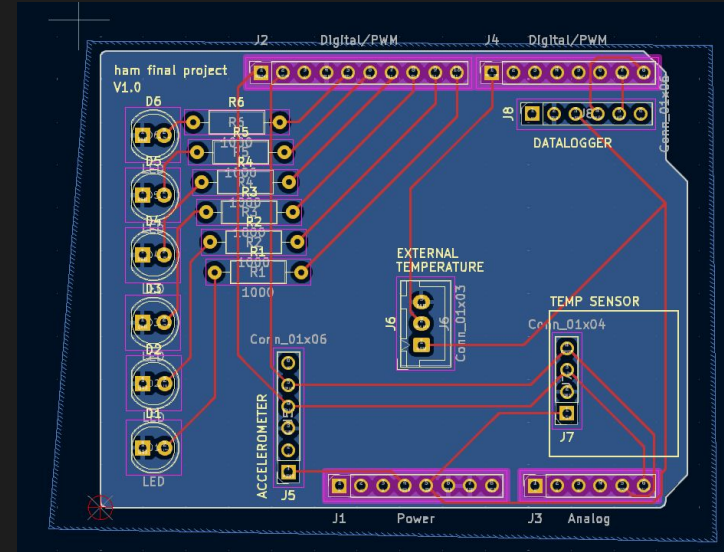
P1-BD



ORIGINAL PART	PRICE (USD)	AVAILABILITY	WEIGHT	MAX AMPERAG
EXTRA PARTS 1	18	Y	35	
EXTRA PARTS 2	6	Y	23	
DEV-13955 (LOGG	17.5	Y	2.5	5
ADXL335 (ACCEL)	17	Y	4.5	0.32
SEN-09569 (HUMID	20	N	2	0.2
LED	1	Y	0.4	6
PRESSURE (015PA	126	Y	2	3.5
RESISTOR x2	6	Y	2	10
Arduino Uno	27	Y	25	0.05
	238.5		96.4	25.07
NEW PARTs				
EXTRA PARTS 1	20 (+20~ shippir	Y	40	
EXTRA PARTS 2	6	Y	25	
DEV-13955	15	Y	2.5	5
ADXL375(accel)	5	Y	4.5	1.5
LED	3	Y	1.2	18
Arduino Uno	27	Y	25	0.05
DS18B20 - EXT TE	5	Y	4	1.5
MS8607 - TEMP, HI	10	Y	1.4	0.14
RESISTOR x6	6	Y	2	30
	77		105.6	56.19



Phase II: Rework-ish



- NEW CURRENT: .56 A
- NEW BATTERY LIFE: 5.6 hrs
- NEW WEIGHT: 105.6g
- NEW COST: \$77.00
- FACTS & FEATURES