

Max Cost= 147\$

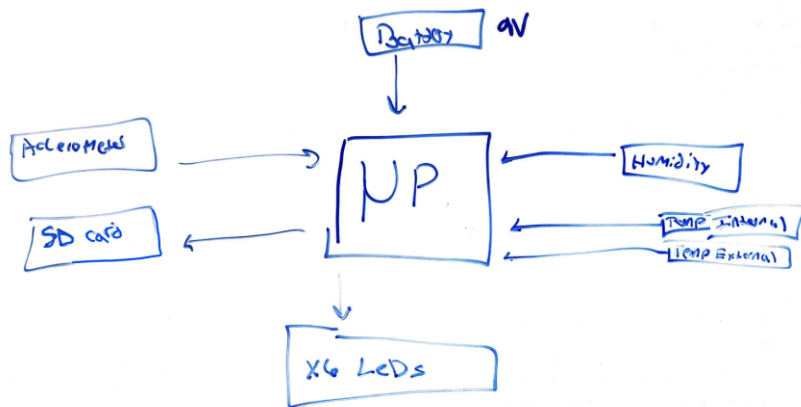
Max Weight=200 g

Parts:

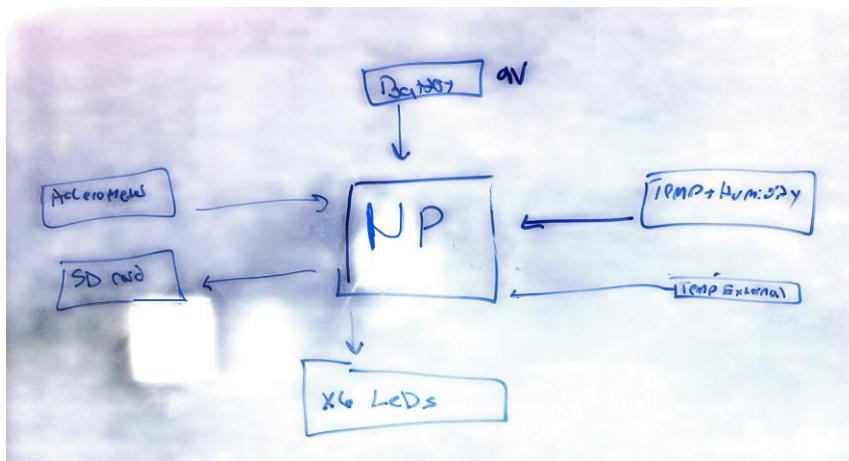
Name of Part	Mass	Price	Step File
4 Different Colored LED's	.8g	Negligible	Can be found on KiCad
Arduino Uno Shield	10.82 g	4\$	Built on KiCad
4x 330 Ohm Resistor	1g	Negligible	Found on KiCad
		1.30	
8 Pin socket	.5g	Negligible	On kiCad
4x Headers	1g	Negligible	On Kicad
DS18B20	1g	10\$	Not Needed
Knockoff Arduino Uno	25 g	9.99\$	https://www.amazon.com/WWZMDiB-ATmega328P-microcontroller-De-20&linkCode=df0&hvadid=721245378154&hvpos=&hvnetw=g&hvrnd=
Temperature Sensor – TMP36	.5g	2.75	Might be Needed : https://www.snapeda.com/parts/TMP36GT9/Analog9
Temp + Humidity	.5	2.44	Link: https://www.ebay.com/itm/404982542150?_skw=DHT22&itmmeta=01Jm3e3MsfyfEnnEiGcJROdAQIKoxGT1vDXeb9C0STuflcnwZI41a0PoM3xvLcu5aRWucVaeSuh3BzLi3P7%7Ctkp%3ABFBM-tzg57Fl Step:
Pressure Sensor	5g	23.95	Link: https://www.mouser.com/ProductDetail/Honeywell/ABPDANN030
Accelerometer: SEN-20659	3g	14.95	Link; https://www.digikey.com/en/products/detail/adafruit-industries-llc/163/5353580?gclid=aw.ds&&utm_adgroup=&utm_source=google&Cj0KCQjwhMq-BhCFARIsAGvo0KcYl3tA8Ncvpq6TVn-a_pZadgXGQlwLh
DataLogger	2g	7.69	Link: https://www.digikey.com/en/products/detail/adafruit-industries-llc/254/5761230?gclid=aw.ds&&utm_adgroup=&utm_source=google&Cj0KCQjwhMq-BhCFARIsAGvo0Kd3hJZrwPeZU3P9ZkMWRwyvGReap8rKuBMoMYMagH

SD-Card	3g	7.69	
Total:	45g	93\$	

Initial Block Diagram:



Final Design Block Diagram:



Power Analysis:

Best design run on ~100ma

