



# Critical Design Review

Team Avocado  
Weatherbox  
(EE 296)  
Mentor: Kenneth



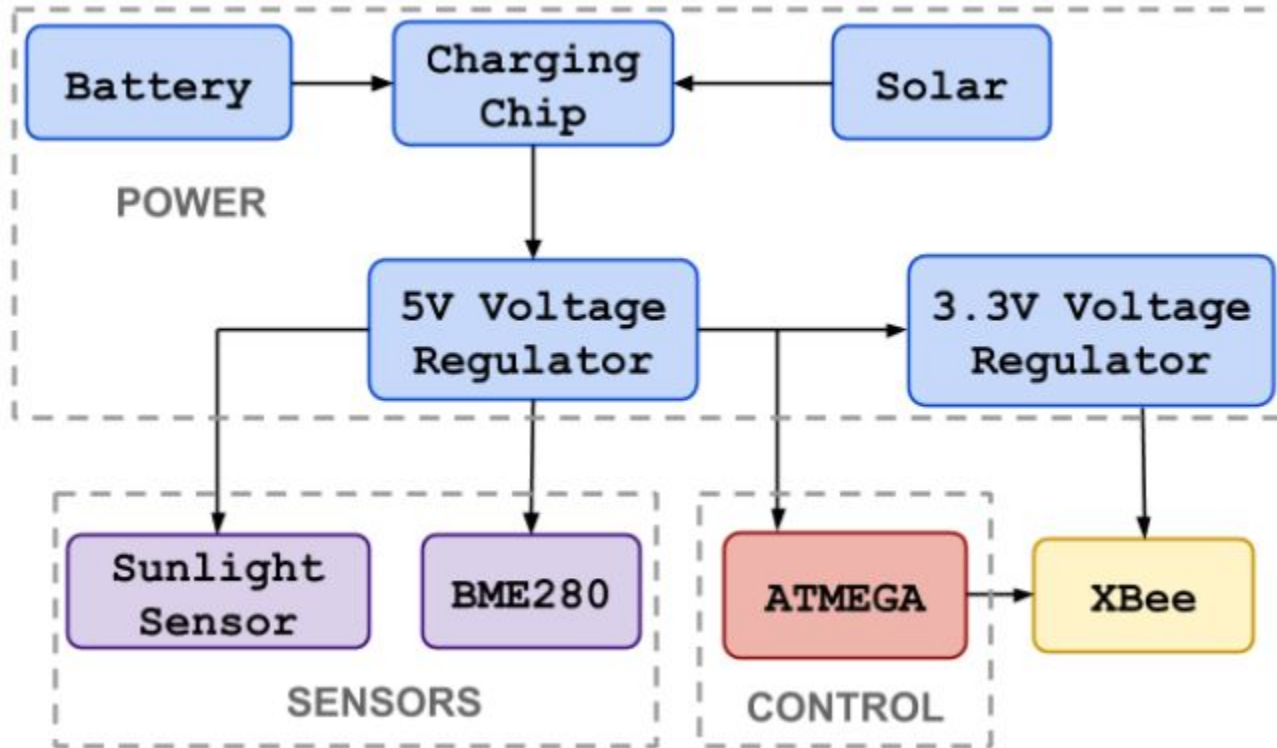
# OVERVIEW



- Block Diagram
- Progress
- Code
- Schematic
- Upcoming Tasks
- Timeline/Schedule
- Problems/Issues



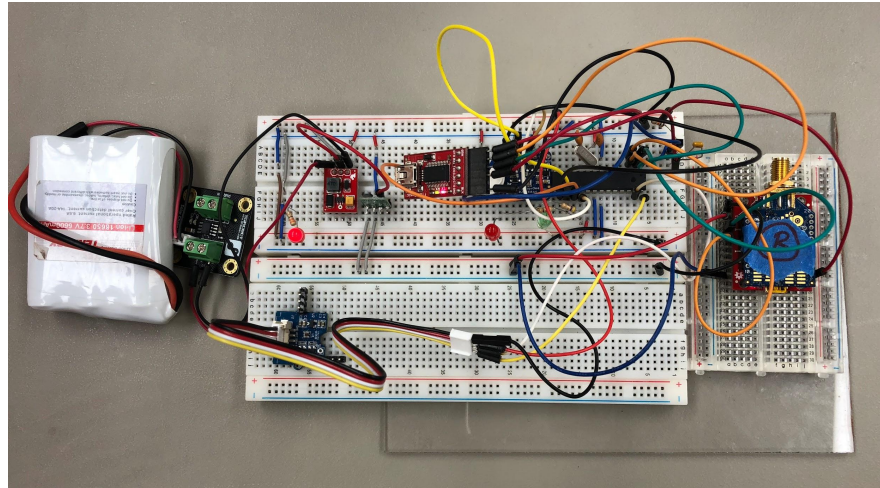
# BLOCK DIAGRAM



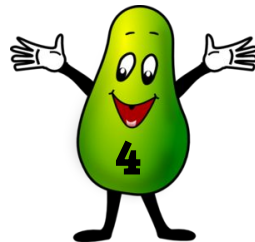
# PROGRESS



- Breadboard circuit design
- Eagle schematic design
- Soldering practice



Bare Arduino



# CODE



Algorithm:

Main driver: Call upon functions and complete its “routine”, as well as holding all the libraries

Transmit: Driver will reset to clear and create the packet

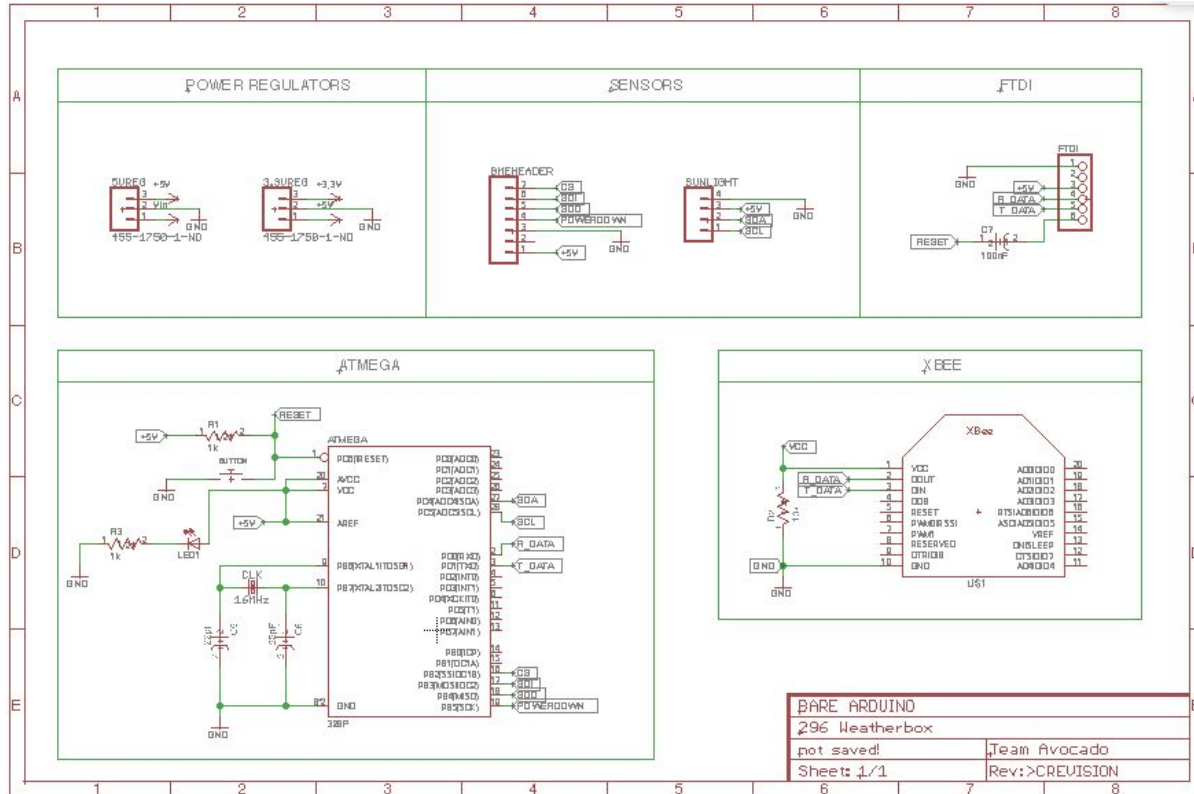
Macros: To contain any macros and extra

Sensors: Show how the sensors will be reacting

Schema: Contains struct for the data collected



# SCHEMATIC



BARE ARDUINO  
 296 Weatherbox  
 not saved! Team Avocado  
 Sheet: 1/1 Rev:>CREVISION



# UPCOMING TASKS



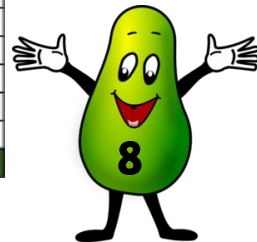
- PCB design
- Housing
- Weatherbox software code
- Testing/debugging



# TIMELINE / SCHEDULE



Clyde F., Rammell T., Sharmaine J.		Team Avocado																		
Week	6	7	8	9	10	11	12	13	14	15										
Day	2/20	2/22	2/27	3/1	3/6	3/8	3/13	3/15	3/20	3/22	4/3	4/5	4/10	4/12	4/17	4/19	4/24	4/26	5/1	5/11
<b>Tutorials</b>																				
Arduino																				
Github																				
Eagle																				
<b>Presentations</b>																				
Proposal Presentation																				
Preliminary Design Review	█	█																		
Critical Review									█	█										
Final Presentation																	█	█		
<b>Modules</b>																				
BME280 Sensor																				
Solar Irradiance Sensor																				
Microprocessor																				
XBee																				
Charging Circuit			█	█																
Battery			█	█																
Solar Panel			█	█																
<b>Build</b>																				
Eagle Schematic Design	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Design PCB Layout																				
Software/Code								█	█	█	█	█	█	█	█	█	█	█	█	█
<b>Breadboarding</b>																				
Testing/Debuging											█	█	█	█	█	█	█	█	█	█
<b>Final Report</b>																			█	█





# PROBLEMS / ISSUES



- Sensor code compiling error
- New Solar charging chip (3.5 mm barrel jack)
- New 5V regulator





 QUESTIONS 

