Cranberry

EE496 PDR

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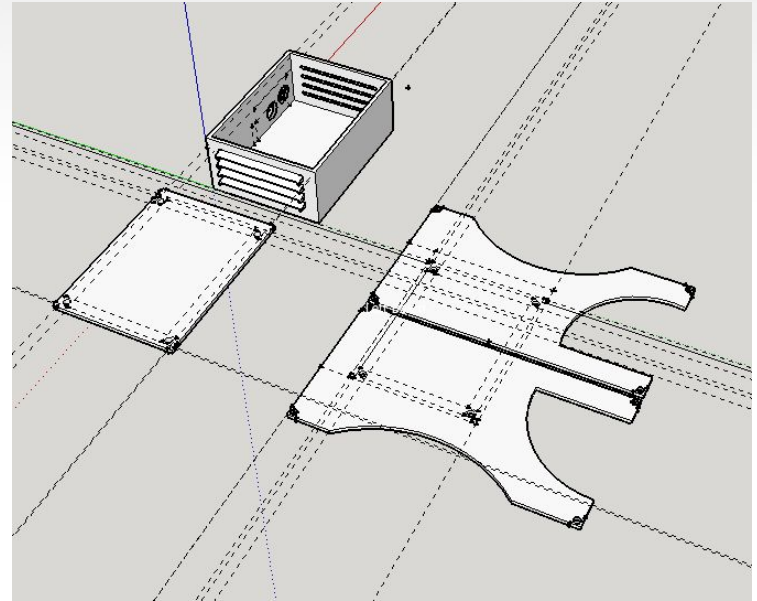
Overview

- Cranberry Overview
- Block Diagram
- Team Progress
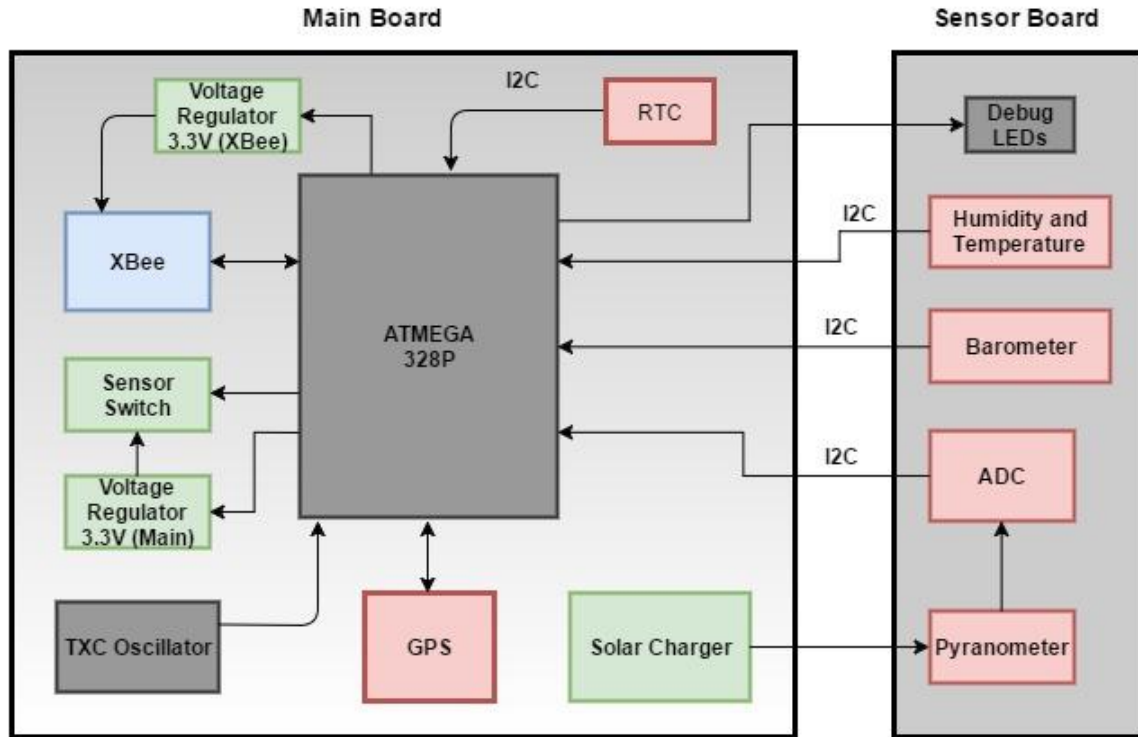- Problems
- Remaining Work
- Gantt Chart
- Questions

Cranberry Design Overview

- 2.25" X 2.25" stacked boards
- Top: Sensor Board (4v)
- Bottom: Main Board (4v)
- Sensors:
  - Solar Irradiance, humidity, temperature, pressure
  - Version 4.1: GPS, real time clock
- Housing Design
  - Two main parts: box and panels
  - Mounting piece

Block Diagram

4

Team Progress

- Cranberry v4.1 boards came in
- Debugging solar panel readings on v4.0
- Kane gained more soldering experience
- Lum learned how to communicate using XBEEs
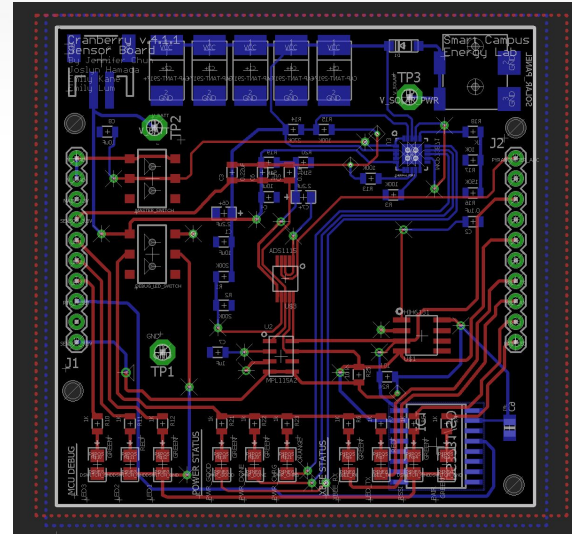
Problems

- Solar panel voltage reading still wrong
  - Pulling data from wrong spot
- v4.1 potential rewiring problems

Remaining Work

- Solder new v4.1 boards

- Continue to fix panel reading

- Housing

- Implement GPS & RTC

Gantt Chart

	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7
Cranberry Update	X	X															
Implement GPS and RTC		▮	▮														
Solder 2nd Board (4.0)		X	X														
Debug 2nd Board (4.0)			X	X	X	▮	▮										
Deploy (4.0)										▮							
Order/Receive Cranberry 4.1				X	X	▮											
Solder Cranberry 4.1						▮	▮	▮									
Test and Debug 4.1								▮	▮	▮		▮	▮	▮	▮	▮	▮
Deploy (4.1)													▮		▮	▮	▮
Final Report															▮	▮	▮

Any Questions?