

Team Bumblebee Critical Design Review

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Overview

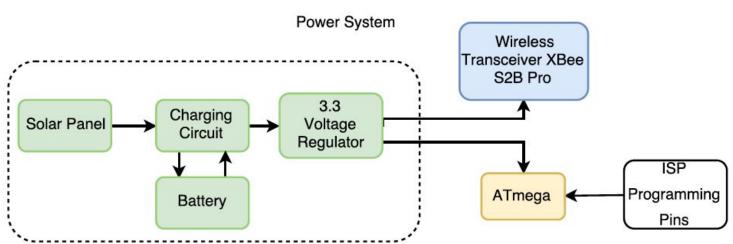


- Block Diagram
- Team Progress
- Schematic and PCB
- Updated Gantt Chart
- Problems and Solutions
- What we have yet to finish
- Questions



Block Diagram (Power)

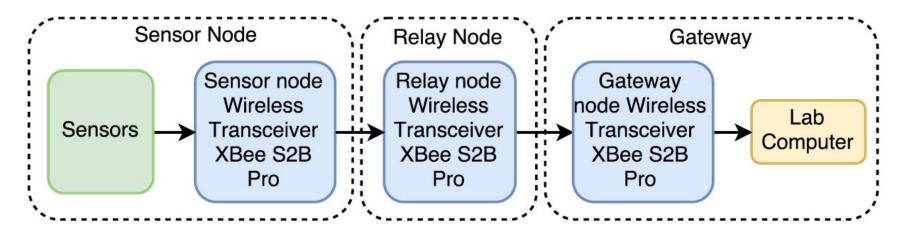








Block Diagram (Signal/Communication)



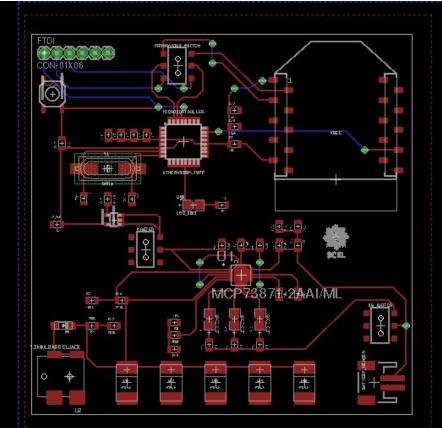


Team Progress



- Finished populating both boards
- Bootloaded and programmed one PCB
 - Second one is being difficult
- Sample packet relay testing

PCB Layout



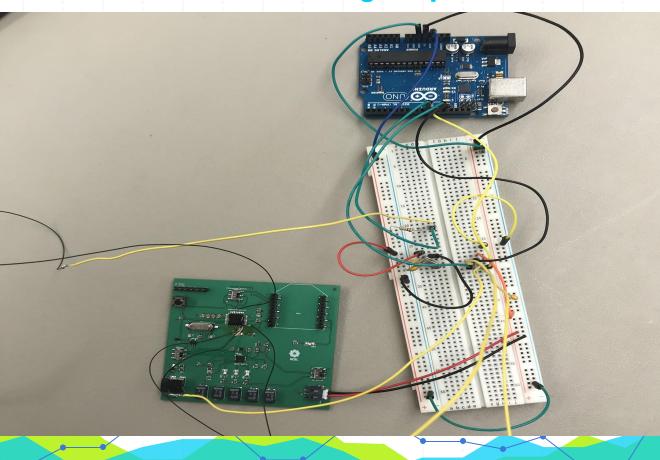


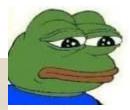




- No ISP programming pins
 - Soldered wires to microcontroller
- Bootloading
 - Worked with Andrew
- Xbee configuration
 - One of the ground solder joints was bad

Bootloading Setup







PCB Fabrication/Assembly

Firmware

Housing

Final Report

Fabrication Time
Populating
Testing

Fabrication

Deployment



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Apr-30

May-7

Apr-23

Apr-28

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Apr-9

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Apr-16



What Needs to Be Finished



- Housing
- Bootloading and programming 2nd board
- Actual power budget
- Deploy

