

Group number: 18

Project title: Radio Frequency Readout Device (RFRD)

Client &/Advisor: Dr. Qiao

Team Members/Role: Brandon Baxter/Team Leader, Vaughn Dorsey/Team Webmaster, Luke Myers/Team Communication Leader, Kurt Turner/Team Key Concept Holder, Aaron Haywood, Robert Buckley, Mehdy Faik, Kellen Yoder, Michael Miller

o Weekly Summary

This week we finally received our IC PCB. We assembled the parts on our board and conducted initial testing. Kurt then completed the design for version B of our IC PCB layout and ordered it. In addition to this, we worked on the design document and project poster.

o Past week accomplishments

- Brandon Baxter: Worked on...
- Vaughn Dorsey: This week, I primarily worked on getting the user interface information into the documentation where necessary. I also continued UI development related to the settings panel.
- Luke Myers: This week I worked on organizing and assigning parts for the design document as well as working on the design document and poster.
- Kurt Turner: Version A board assembly and test, arrived on Wednesday. Version B IC PCB layout and order. Poster and Design document work.
- Aaron Haywood: Poster and Design Document, impedance matching for Antennas
- Robert Buckley: Created the base design for the poster, including the layout and the rough draft of most sections.
- Mehdy Faik: Antennas are done. Sent to Hartman to cut. New rectifier is researched and done. Parts on the way for new impedance match network; already have workable boards from last order. Note to next antenna team is done. Cleared my sections of the design doc. Devised and assembled uick and dirty mechanical support for antennas using plastic tubs.
- Kellen Yoder: worked on poster
- Michael Miller: worked on documentation

o Pending issues

- Brandon Baxter: Worked on...
- Vaughn Dorsey: None
- Luke Myers: None
- Kurt Turner: Waiting on Version B of the PCB, used the wrong NOR gate part on version A.
- Aaron Haywood: Reader section of the poster and design document, matching network optimization
- Robert Buckley:
- Mehdy Faik: If the antenna coupling gets de-tuned just by the plastic tubs, I'll have to cut away a lot of plastic material. If that still doesn't work I'll have to get really crafty and make some type of wooden goal post lookalike. Finding my ideal materials has been hard but I think this first iteration of mechanical support will do its job.
- Kellen Yoder:
- Michael Miller:

o Individual contributions

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Brandon Baxter			
Vaughn Dorsey	Design Document Work Meetings UI Development	6.5	34
Luke Myers	Worked on preparations for the design document and poster.	9	53
Kurt Turner	Poster/Design Documentation IC PCB testing/designing	14	74
Aaron Haywood	Poster/design document reader optimization	5	46

Robert Buckley	Works on the poster	4	67.5
Mehdy Faik	See above. Friday (8), Saturday (4), Sunday (2), Tuesday (3)	17	70.5
Kellen Yoder	poster	4	41.5
Michael Miller	Documentation	5	43

o Plan for coming week

- Brandon Baxter: Worked on...
- Vaughn Dorsey: Continue adding on to the design document and add some information and a screenshot or two of the UI to the poster.
- Luke Myers: Continue work on the design document. Possibly get the demodulator working.
- Kurt Turner: Fix issue with version A PCB if time permits. Build version B when it arrives.
- Aaron Haywood: Finish poster and Design document
- Robert Buckley:
- Mehdy Faik: What is this poster everyone is talking about. Note to self. Find out but be discreet. It sounds like a big deal.
- Kellen Yoder: finish poster
- Michael Miller:

o Summary of weekly advisor meeting

4/4/17 Advisor Meeting

Dr. Qiao and Nine Members Present

We began by lamenting our inability to get parts that we need. Our PCB is still in transit and we have yet to receive it. Mehdy is waiting on a sheet of copper.

We discussed what the next steps are after we receive our PCB- solder, test, update our next PCB, and order it with the hope of receiving it in a timely manner.

We need to add a future section in our design document to detail how things should go moving forward.