

## **Dec12-04 Ultrasound Brain Imaging System**

### **Weekly Report - 13 (April 17 – April 23)**

Group Members: Justin Batcheler, Jon Driggs, Francis Ferrer, Allen Kellar, Richard Page, Amairani Tapia

Faculty Advisor and Client: Dr. Timothy Bigelow

#### **Accomplishments of the last week**

- Finished the PowerPoint and practiced for the final presentation.
- Finished final versions of the design document and project plan.
- More accomplishments under individual contributions.

#### **Plan for coming week**

- After recent changes to the parts that need to be ordered, we are shooting to have the order list completed by the end of finals week.
- Practice for Presentation on the 24<sup>th</sup>.
- Amairani
  - Learn PCB software.
- Allen
  - Understand how the AFE EVM works.
- Jon
  - Continue working on design circuit for the Transmit board.
- Francis
  - Obtain an estimate for the ultrasound transducer impedance characteristics.
- Justin
  - Understand how to connect one EVM to the other.
- Richard
  - Continue working on power regulation.

#### **Pending issues**

- Find someone that can program FPGA board.
- Finding a company that can supply us with a transducer.

#### **Individual contributions – identify specific tasks accomplished**

- Justin
  - Worked out on the test plan for the AFE
- Jon
  - Found components for and started the design of the output multiplexing circuitry, which can now be controlled with a serial interface
  - Worked to identify digital data acquisition hardware
- Amairani
  - Contacted National Instruments to find data acquisition hardware
- Richard
  - Completed power regulation designs and simulations.
- Allen
  - Worked on test plan for AFE.
- Francis
  - Worked on Ultrasound impedance.

#### **Meetings**

- Group meeting on Wednesday with everyone in attendance.
- Group meeting with Dr. Bigelow on Friday with everyone in attendance.

#### **Hours**

- Below are the hours worked for each member.

	Justin	Jon	Francis	Allen	Richard	Amairani
Last Week	13	17	12	12	13	9
Cumulative	100	172	106	100	109	100