

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

### **Weekly Report - 8 (Mar 6 – Mar 12)**

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**

- Working on getting running simulations for Cadence models found.
- Realized National Instruments does not have any products that fit our needs.

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

- Focus on finding A/D and D/A cards to bring about the waveform generation and acquisition.
  - We will create our own board if nothing is found.

#### **Pending issues**

- Finding companies that build A/D and D/A cards.

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

- Richard:
  - Designing and simulating the high voltage switching transistor and variable gain amplifier models obtained from Texas Instruments.
- Amairani and Allen:
  - In process of getting a working variable gain amplifier model.
- Justin and Francis:
  - Worked on designing and simulating the T/R switch.
- Jon:
  - Looking for a suitable H-Bridge IC to use for high voltage switching. Will upload these models into Cadence OrCAD for simulation.

#### **Meetings**

- Group meeting on Wednesday with everyone in attendance except for Amairani.
- Group meeting on Friday with everyone in attendance.

#### **Hours**

- Below are the hours worked for each member.

Justin	Jon	Francis	Allen	Richard	Amairani
3	6	6	4	6	4