**Dec12-04 Ultrasound Brain Imaging System**

**Weekly Report - 7 (Feb 28 – Mar 5)**

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**

* Jon:
  + Spoke with National Instruments and received a quote for a system that would be capable of the waveform generation and acquisition that we need. However, the cost of the system is too large. I am working with a local NI representative to explore other options.
* Everyone:
  + Found Cadence files for different components of the ultrasound. Currently working on getting working simulations for these components.

**Plan for coming week**

* Have a working simulation of one channel.
* Look into an alternative hardware solution as the current one is too expensive.

**Pending issues**

* N/A

**Individual contributions – identify specific tasks accomplished**

* Richard, Amairani and Allen:
  + Imported Cadence files from Texas Instruments for the high voltage switching transistor and variable gain amplifier.
  + In process of getting a working simulation of high voltage pulse generator.
* Justin and Francis:
  + Continue to work on the design of the T/R switch.
* Jon:
  + Working on uploading models into Cadence OrCAD for simulation. Also continuing to improve the design of the high-voltage switching circuitry.

**Meetings**

* Group meeting on Wednesday with everyone in attendance except for Justin.
* Group meeting on Sunday with everyone in attendance.
* Group meeting on Monday with everyone in attendance.
* Bigelow was out of town so we did not have a meeting this week.

**Hours**

* Below are the hours worked for each member.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Justin | Jon | Francis | Allen | Richard | Amairani |
| 6 | 12 | 8 | 7 | 8 | 7 |