***EE 491 WEEKLY REPORT 4 Date: 9/26/16 - 10/03/16***

***Group number: MAY1740***

***Project title: Magnetic Pulse Generator***

***Client &/Advisor: Dr. Mani Mina and Neelam Prabhu-Guankar***

***Team Members/Role: Jack Lamar, Qibai Zheng, Pengchao Lian, and Ran Ma***

* **Weekly Summary (Short summary about what you did this week)**

We simulated a simple bias FET circuit in Multisim to be familiar with how to bias a FET. And try to place a NXP PSMN1R2-30YLD MOSFET in Multisim, but there is no matched stuff. So we try to import a file from online into Multisim. However, it didn’t work. Then we edit the parameters of the existing MOSFET in Multisim database. But that is too difficult.

* **Past week accomplishments (please describe as what was done, by whom, when)**
* Jack Lamar: Studied more on how to bias a FET to specific goal drain currents and gate voltages using voltage dividers. Came across a lot of issues and questions when trying to import the NXP PSMN1R2-30YLD into Multisim and PSPICE. Learned how to change FET parameters in Multisim.
* Pengchao Lian: Studied more on how to bias a FET to specific goal drain currents and gate voltages using voltage dividers. We have a meeting and set up some questions and found out that how to import the folder into Multisim.
* Ran Ma: Studied more on how to bias a FET to specific goal drain currents and gate voltages using voltage dividers. Learn about HTML for website building.
* Qibai Zheng: learned more about how to bias a MOSFET with a design goal. Make simulation of bias a MOSFET but have a lot of difficulties about there is no matched MOSFET in the database.
* **Pending issues (if applicable)**
* Jack Lamar: Lots of questions
* Pengchao Lian: What is goals for us and some questions about using Multisim
* Ran Ma: Questions about website.
* Qibai Zheng: need to ask Mani and Neelam some questions we meet
* **Individual contributions**

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| --- | --- | --- | --- |
| **NAME** | **Individual Contributions** | **Hours this week** | **HOURS**  **cumulative** |
| Jack Lamar | Importing SPICE model into Multisim and PSPICE | 2 | 10 |
| Pengchao Lian | Communicated with…  Purchased …. | 2 | 11 |
| Ran Ma | Tested/Programmed/Simulated… | 3 | 11 |
| Qibai Zheng | Learn more about bias a MOSFET and change the parameters of a MOSFET in Multisim. | 2 | 10 |

* **Comments and extended discussion**

1. Ask Neelam and Mani about which MOSFET to use and discuss modeling problems  
2. Do we have to buy our own MOSFET or is it provided?  
 - use TI MOSFET? NXP sucks.  
3. When should we start our project plan?  
4. Should we start looking into the design?  
5. When should we start building the website?

* **Plan for coming week (please describe as what, who, when)**
* Jack Lamar: Figure out project plan and timeline and get questions answered
* Pengchao Lian: continue to learn how to design the bias circuit.
* Ran Ma: Continue learning HTML and start design the website. Figure out the plan of the project.
* Qibai Zheng: ask Neelam and Mani for our problems
* **Summary of weekly advisor meeting (if applicable/optional)**