

EE 491 WEEKLY REPORT 3

Date: 9/26/2016

9/20/16-9/26/16

Group number: MAY1729

Project title: Garmin Power Sensor Test Fixture

Client: Jeremie Vens

Advisor: Professor Degang Chen

Team Members/Role:

Amna Aftab/Key Concept Holder #1

Brandon Floyd/Team Leader

Stephen Julich/Webmaster

Francis Wagner/Team Communication Leader

Xi Zhu/Key Concept Holder #2

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

We met in person with our client Jeremie Vens on Wednesday morning at 8 AM, and we met as a team on Thursday evening at 5 PM. Currently on our second rough draft of a block diagram, the focus of the group has been on the least invasive method to measure current on the front end of the circuit. We have anticipated that we will need different circuits for different ranges of ampere measurements, so we've also begun researching digital potentiometers. That said, we are keeping an open mind as we are early in the process, and we've yet to consult our faculty expert.

o **Past week accomplishments (please describe as what was done, by whom, when)**

- Xi Zhu: Fix bugs of system and went through one third of the Cadstar tutorial.
- Brandon Floyd: Participated in two team meetings. Confirmed a time and location of our first advisor meeting with Professor Chen.
- Stephen Julich: Did some internet research on current mirrors and measurement. Simulated a current mirror circuit in Multisim to gain some familiarity with the hardware. Attended two group meetings.
- Amna Aftab: Researched on current mirrors and started simulating the design using Multisim and Pspice. Participated and managed the meeting minutes for the two group meetings.
- Francis Wagner: Participated in two team meetings. Considered circuit configurations proposed by client. Gained client approval for documentation. Organized weekly times and meetings. Coordinated weekly report.

Pending issues (if applicable)

- N/A

o **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Xi Zhu	See above past week accomplishments.	5	8
Brandon Floyd	See above past week accomplishments.	3	7
Stephen Julich	See above past week accomplishments.	3	10
Amna Aftab	See above past week accomplishments.	4	9
Francis Wagner	See above past week accomplishments.	5	9

o **Comments and extended discussion**

- Every group member has attended every meeting. We are pleased with the workload balance, and we are grateful to have had a face-to-face meeting with our client so early on in the project.

- **Plan for coming week (please describe as what, who, when)**
 - We are meeting with Degang Chen on Thursday at 1 PM. We plan to pick his brain on circuit designs to measure current.
 - Simulate potential circuit designs with PSpice to gauge the most effective methods.
 - Continue developing project planning document.

- **Summary of weekly advisor meeting (if applicable/optional)**
 - N/A