

Group Project: Garmin - Energy Harvesting in Fitness Electronics

Website: <http://seniord.ece.iastate.edu/may1417/index.html>

Project Number: May14-17

Client: Adam Rasmussen

Advisor: Dr. Degang Chen

Group Members:

- Tyler Chenhall – Project Leader & Foot-Pod Team Member
- Rebekah Dejmal – Communications & Webmaster & Foot-Pod Team Member
- Catherine Homan – Research & HR Monitor Team Member
- Allison Sapienza - Research & HR Monitor Team Member
- Omer Vejzovic – Research & Foot-Pod Team Member
- Jeramie Vens - Research & HR Monitor Team Member

Accomplishments in the Past Week

- Held a meeting with Adam
- The thermal group ordered a breakout board to aid with debugging
- Began testing the mechanical design
 - The input charging with a piezoelectric element works, but was slow with the original capacitor. An output voltage was observed on the LTC3588
- Content is being added to the Research Document

Plan for the Upcoming Week

- The thermal group will begin more thorough debugging after their breakout board arrives
- The mechanical group will continue testing the now-modified board
 - Trying a smaller input (charging) capacitor
 - Applying a function generator as an input (for circuit verification)
 - With the shake generator from Adam
- More work on the Research Document

Pending Issues

- Circuit debugging is ongoing