sdmay20-39: Batteryless, Encapsulated Hydrometer

Week 7 Report January 13 - January 30

Team Members

Jason Cheng — Technology Lead Zach Higgs — Project Lead Craig Philipp — Communication Lead Ben Colson — Test Lead Harel Cohen — Hardware lead

Summary of Progress this Report

We have so far been reviewing our progress from the past semester, and creating a timeline so that we can figure out what has to be done from this point forward to meet our goals and deliver a final product. Right now, we have a good starting point, since our circuit works and we have been able to use it to narrow down a final product. From this point forward, we will introduce two different testing boards, one with a new MOSFET driver that will help us be able to drive down rise time. The other board will have a smaller, but more universal footprint without the daughterboards to reduce noise and decrease extraneous connections and traces in the board. By doing parallel development, we can more quickly run through iterations, and better approach our solution with the intention of merging the tests into a final solution before our IRB.

Pending Issues

Driver needs to be sourced and tested MOSFET needs to be created as an Altium part Testboard needs to be properly documented Breadboard approach needs to be validated

Plans for Upcoming Reporting Period

Create virtual and breadboarded solution for driver Create Altium parts to create test boards

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Jason Cheng	Created new gantt breakdown of coming semester. Helped plan out timeline and semester project, as well as introducing parallel development strategy.	10	0
Zach Higgs	Organize meetings and analyze schedules to find weekly meeting times. Scheduled work sessions and broke down tasks.	10	
Craig Philipp	Set up communications meetings with advisor	10	0

	and team to better continue in this semester. Finished documentation and started this semester's files.		
Ben Colson	Organize meetings and analyze schedules to find weekly meeting times. Scheduled work sessions and broke down tasks.	10	
Harel Cohen	Organize meetings and analyze schedules to find weekly meeting times. Scheduled work sessions and broke down tasks.	10	0

Gitlab Activity Summary Nothing to report.