

Present: Mack Hall, Jorian Bruslind, and Zach Bendt

Absent: N/A

ECE 342

2/14/19

Week 6 In-Class Group Meeting Notes

- 2nd PCB revision now all components mounted/preliminarily tested
 - Output plugs have been mounted to the PCB
 - Enables full-scale testing with full NEMA-15R inputs and outputs
 - Stress testing components is now the next step
 - Case is still undergoing further revisions
 - Front bottom screw hole will be relocated to align with wall adapter input
 - New revision no longer includes upward cutout for resettable fuse
 - New input plug includes quick-acting fuse within design
 - Old fuse did not act quick enough to be useful anyway
 - New design will now include cutout to support power to user over USB
 - USB power will not be monitored/disableable
 - Screw hole dimensions will be slightly tweaked for easier assembly
 - I²C voltage and current sensing code is still under development
 - Further debugging has taken place
 - Still inaccurately reading voltage
 - I²C-experienced Senior has been contacted for potential help
 - Analogue current sensing code is functioning properly
 - App now organizes bluetooth communication packets in a more effective manner
 - Further troubleshooting needed relating to quickly switching relays on/off
 - Sometimes randomly loses connection to MCU
 - WiFi communication framework is under development
 - Utilizes NodeRed servers to update voltage and current values to user
- Group meetings plan to continue every Thursday
 - Communication frequency and quickness in Slack and in-person discussions are satisfactory and should be continued
 - Any additional questions/comments/concerns are highly encouraged to be asked through these channels
- Next steps
 - Try to fix newly introduced app bugs
 - Try to fix I²C communication between current/voltage sensor and MCU
 - Contacted Scott Merrill about potentially looking over code
 - Introducing/developing WiFi capabilities
 - Stress test mounted components
 - Further revising/printing enclosure