EE / CprE / SE 491 - sdmay18-13
Determining voltage and Wire Continuity
Report

4/7 - 4/20
Client: Grace Engineering
Faculty Advisor: Nathan Neihart

Team Members:

Mohamed Almansoori - Report Manager
Aaron Eaton - Chief Engineer
Matt Kelly - Meeting Scribe
Sam Kline - Meeting Facilitator
Chris Williams - Test Engineer

Accomplishments

- Aaron
  - Finished testing of directional coupler circuit
- Sam
  - Testing voltage/wire continuity code in lab
  - Work on poster and final report
- Chris
  - Tested voltage circuit with AC/DC power source from lab
  - Tested voltage circuit with AC power from wall outlet
  - Fixed issues board was having last week (soldering and PCB error)
  - Made a basic footprint on ultiboard for the directional coupler

Pending Issues

Individual Contributions

Team Member	Contribution	Hours Worked	Total Hours
Mohamed Almansoori	Get the wire continuity circuit tested using the TI launchpad, and it works as expected. We are still working on finalizing the documentation of the wire continuity circuit.	8	16

Aaron Eaton	Tested wire continuity circuit using an input of 5MHz 5V amplitude and getting an output of 2.1V amplitude for a broken wire, 1.76V for a short circuit, 1.66V for a 10 ohm load, 1.32 for a 50 ohm load, and 1.2 for a 100 ohm load. Successfully tested with TI launchpad to make sure the led turned on when the wire was disconnected indicating a broken wire.	12	20
Matt Kelly	Tested high voltage AC case for our Voltage Measuring circuit. The results supported what we expected the results to be.	2	24
Sam Kline	Testing and class assignments	7	38
Chris Williams	Fixed errors on PCB. Did low voltage AC/DC testing on circuit as well as high voltage AC testing. Created ultiboard footprint for directional coupler.	7	53

Plans for Coming Week

Chris Williams - Prepare for final Presentation