

EE/CprE/SE 491 WEEKLY REPORT 18

11/1/2022 - 11/7/2022

Group number: SDDEC22-01

Project title: Plastic Machine Embedded IOT Controller

Client & Advisor: Mark Hansen & Dr. Jones

Team Members/Role:

Stone Widder - Technical Lead

Joshua Baringer - Software Lead

Rachel Teberg – Team Lead / Recorder

Evan Pasero – Technical Support

Charles Sang - Controls Lead

○ **Weekly Summary**

On the hardware side we spent the week finishing testing the PCB boards and redesigned the boards. Both boards have been ordered. On the software side we continued working on getting the touch functionality working. We ordered a new display which should be here tomorrow.

○ **Past week accomplishments**

- Finished schematic and layout for new PCB revs – Stone, Evan
- Reviewed schematic and layout for new PCB revs- Rachel
- Tested touch connector and ordered new display – Josh
- Loaded GUI, Commandline and autotune code onto bbb – Josh
- Tested default configurations for pins for the final PCB revs - Josh

○ **Pending issues** *(If applicable: Were there any unexpected complications?*

Please elaborate.)

○ **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u> <i>(Quick list of contributions. This should be short.)</i>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Stone Widder	Tested both boards, redesigned main board	10	82
Rachel Teberg	Assisted testing main board, reviewed new main board	8	58
Joshua Baringer	Touch connector trouble shootig, code	10	69

<u>NAME</u>	<u>Individual Contributions</u> <i>(Quick list of contributions. This should be short.)</i>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Stone Widder	Tested both boards, redesigned main board	10	82
Rachel Teberg	Assisted testing main board, reviewed new main board	8	58
	loading onto bbb		
Evan Pasero	5V Reg Schematic + Layout, Batt Testing, Reg Testing	12	63
Charles Sang	Testing ac monitoring circuit	8	52

○ Plans for the upcoming week

Joshua: Test GUI, and autotune via keyboard and mouse. Test touch connector of new display when it comes in

Stone: Help with testing GUI and PID tuning

Rachel: Help with testing GUI and PID tuning, continue working on integrating matplotlib into tuning.

Charles: Help with PCB and finish testing ac monitoring system and 15v rail capacitance.

Evan: Begin working on final presentation, research on boxes.

○ Summary of weekly advisor meeting

During the advisor meeting this week we discussed the testing we did on the boards and all the issues we have found and fixed for the next revision. We also went over the issues and progress on the display testing. We were told we were making good progress but need to step it up a bit to be able to finish. We were also given the goal of having a mostly functional demo before thanksgiving.