EE/CprE/SE 491 WEEKLY REPORT 20 11/15/2022 - 11/28/2022

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

There was not a ton of work done the week before thanksgiving break as we were waiting for the PCB's to come in. The boards came in Monday and Tuesday of thanksgiving break. We got them soldered and did some basic testing before leaving for break on wednesday. We ran into an issue while testing everything together as the BB would not stay powerd. We also tested and started troubleshooting the autotune code.

#### Past week accomplishments

- Soldered Main PCB Stone
- Soldered Reg PCB -Stone
- Extensive testing of Reg PCB –Stone, Rachel, Evan, Charles, Josh
- Helped test autotune Josh, Rachel
- Changed sql libraries in command line program Josh
- Developed scripts for OS recovery Josh
- Got GUI running on display Josh
- Minor Debugging of GUI on display Josh
- <u>Pending issues</u> (If applicable: Were there any unexpected complications?
   Please elaborate.)
  - 5V regulator board has a slew rate higher than 50 ms and therefore does not turn on the BBB, currently working to reduce slew rate

## o **Individual contributions**

NAME	Individual Contributions (Quick list of contributions. This should be short.)	<u>Hours this</u> <u>week</u>	HOURS cumulative
Stone Widder	Soldered PCBs, Tested PCBs	25	113
Rachel Teberg	Worked on testing and troubleshooting autotune code, Helped test and troubleshoot PCB	12	76
Joshua Baringer	Test autotune, switched sql libraires, wrote script, Got GUI running on the display	20	95
Evan Pasero	Planning for final presentation + troubleshooting 5V board	7	74
Charles Sang	PCB testing and working on poster board	12	70

# o Plans for the upcoming week

**Joshua**: Prepare for the demo, strech goal of getting touch integrated.

Stone: Try to Come up with soultion for Slew Rate problem. Update website. Work on poster

**Rachel**: Help fix display issues and test tuning, Implement graphing, work on presentation

Charles: continue PCB testing and poster board material.

Evan: Continue doing work for final presentations, continue troubleshooting 5V reg board

## Summary of weekly advisor meeting

We discussed our progress and the issue we were having with tkinter. We discussed our plan for working during break and what we hoped to have done by the next meeting.