

EE/CprE/SE 491 WEEKLY REPORT 14

10/3/2022 - 10/10/2022

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**

This week we continued working on the power board. We also worked on combining all the code and making sure it all works together. At the very end of the week we received all of our components and main PCB board.

○ **Past week accomplishments**

- Started Autotune testing – Josh and Rachel
- Compiled all of the code into one program – Josh and Rachel
- 5V regulator board finished –Stone and Evan
- Received, soldered, and ran basic tests on the PCB – Josh, Stone, Charles, Rachel

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

Please elaborate.)

- *Struggling to install BBB library on Josh's computer*
 - *BBB has library so we are going to run it on the BBB, but if that doesn't work we will have to recreate that library ourselves*

○ **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 | Redid 5V board layout, Soldered Main Board | 8 | 54 |
| Rachel Teberg | Helped to combine code, troubleshooted issue with Josh downloading package, Basic PCB testing | 6 | 32 |
| Joshua Baringer | Helped combine code, Basic PCB testing | 7 | 38 |
| Evan Pasero | Finished 5V regulator board (help from Stone) | 10 | 35 |
| Charles Sang | Create testing procedures | 2 | 27 |

○ Plans for the upcoming week

Joshua: Test PCB to BBB connection, Test autotune and GUI code on display.

Stone: Test the rest of the main PCB, Come up with way to test gentle shutdown without 5v board

Rachel: Work with Josh to test code

Charles: work with Evan on power regulation testing and commissioning.

Evan: Design testing procedures with Charles, help Stone test PCB.

○ Summary of weekly advisor meeting

We did not have a meeting with our advisor this week due to Dr. Jones being away for a conference