

**EE/CprE/SE 491 WEEKLY REPORT 13**

**9/26/2022 - 9/2/2022**

**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 focused on reviewing the main PCB and finishing the daughter boards.

○ **Past week accomplishments**

- Design Review of main PCB – Stone, Rachel, Evan, Charles, Josh
- Design of 5 volt regulator PCB - Evan
- Ordered board and components – Stone
- Implemented Tuning pages of GUI - Josh
- Researched AWS integration - Josh

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

*Please elaborate.)*

○ **Individual contributions**

<b><u>NAME</u></b>	<b><u>Individual Contributions</u></b> <i>(Quick list of contributions. This should be short.)</i>	<b><u>Hours this week</u></b>	<b><u>HOURS cumulative</u></b>
Stone Widder	Reviewed and Ordered PCB	6	46
Rachel Teberg	Reviewed PCB, Added IO and PWM code to autotune code	6	26
Joshua Baringer	Implemented Tuning pages of GUI, AWS Research	4	31

<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	Reviewed and Ordered PCB	6	46
Rachel Teberg	Reviewed PCB, Added IO and PWM code to autotune code	6	26
Evan Pasero	Review of PCB 5V board schematic	4	25
Charles Sang		5	25

○ **Plans for the upcoming week**

**Joshua:** Integrate autotune code into GUI with Rachel. Ask Mark about AWS access. Edit Device Tree configurations.

**Stone:** Create testing plan for main PCB, Review power PCB

**Rachel:** Start testing autotune program

**Charles:** Investigate parts pricing and ordering and build a testing model for the power supply and regulation circuit.

**Evan:** Layout for 5V board

○ **Summary of weekly advisor meeting**

In our advisor meeting this week we discussed how we powering our BBB and about our new plan to put the 5volt regulator on a daughter board for testing. We also discussed our new design for the 5volt regulator. We were given some advice on graphing in python for our manual PID tuning UI and decided on a time for preliminary autotune testing. We were also told that we would not be having a meeting next week due to Dr. Jones having an international convention to attend.