

sdmay23-47: CyDAQ DSP Platform Firmware and Software Redesign

Week 2 Report

October 1 - October 7

Team Members

Blake Fisher — *GUI Dev*

Long Zeng — *Hardware Dev*

Cole Langner — *CLI Dev/Testing*

Yohan Bopearatchy — *Hardware Dev*

Wyatt Duberstein — *CLI Dev*

Jens Rasmussen — *GUI/CLI Dev*

Corbin Kems — *CLI Dev*

Summary of Progress this Report

Software:

Researched existing CLI tool for references and possible improvements

Got new CLI to create a configuration and send it to the zybo board

Researched pipeline solutions for GUI/CLI

Hardware:

Started research on writing firmware that allows communication from the CLI

Setting up the templates codes for at least 4 modes

Pending Issues

Software:

CLI testing still needs to be done. Could potentially be very breakable right now

CLI still needs to implement more functions to be demo ready

Need to set up pipelines and tests

Hardware:

Firmware testing is still unknown. Needs more research

Firmware needs to communicate with the new CLI

Firmware needs some assistance about how to load the software onto the testing board

Plans for Upcoming Reporting Period

Software:

Have a hello world program setup using PyQt

Start designing UI

Set up pipelines on gitlab

Hardware:

1. Fix the dual-core branch, and merge into the current branch
2. Set up the firmware to support all of the commands in format.
3. Start testing the call & response with the front-end.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Blake Fisher	Looked more into PyQt and Python. Going to start hello world in PyQt soon	3	0
Long Zeng	Researched existing hardware implementation and cleaned up vivado in repo	3	
Cole Langner	Read through existing CLI code to better understand existing implementation. Researched possible pipeline solutions.	3	0
Yohan Bopearatchy	Researched firmware implementation for communication with the CLI	3	0
Wyatt Duberstein	Researched the existing CLI repos to get a better understanding of the different modules	3	0
Jens Rasmussen	Started research on GUI implementation that will start soon	3	
Corbin Kems	Got config process working on new CLI and re-wrote function to send config to zybo	4	0

Gitlab Activity Summary

Nothing to report.

Commit statistics for master Sep 20 - Oct 06

Excluding merge commits. Limited to 2,000 commits.

master

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- Total: **19 commits**
- Average per day: **1.1 commits**
- Authors: **5**

Commits per day of month

