

## **sdmay23-47: CyDAQ DSP Platform Firmware and Software Redesign**

Week 1 Report

September 26 - September 30

### **Team Members**

Blake Fisher — *GUI Lead*

Jens Rasmussen — *Project Lead*

Corbin Kems — *Engineer Lead II*

Wyatt Duberstein — *Engineer Lead*

Long Zheng — *Firmware Lead*

Yohan Bopearatchy — *Firmware Lead II*

Cole Langner — *Test Lead*

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### **Summary of Progress this Report**

Software:

Started new CLI tool and got it pinging the zybo board

Set up the CLI folder in the repo

Picked a GUI framework (PyQT)

Hardware:

Vivado and Vitis have been set up correctly with version 2020.1.

Ran through both the hardware and software sides of the firmware.

Pushed firmware onto gitlab.

Started adding command supports following the format.

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### **Pending Issues**

Software:

Unknown how GUI will talk to the CLI tool (decoupled)

Learning Python/PyQT

Hardware:

Dual-core branch is missing some files on the hardware implementation.

Command Line command format needs to be set up for the firmware.

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### **Plans for Upcoming Reporting Period**

Software:

Have a hello world program setup using PyQT

Start designing UI

Set up pipelines

Hardware:

Fix the dual-core branch, and merge into the current branch

Set up the firmware to support all of the commands in format.

Start testing the call & response with the front-end.

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## Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Blake Fisher	Researched languages and tools that we can use to create the UI	4	0
Jens Rasmussen	Started documentation	4	
Corbin Kems	Worked on CLI Tool	4	0
Wyatt Duberstein	Worked on CLI Tool	4	0
Long Zheng	Worked on Firmware	4	
Yohan Bopearatchy	Worked on Firmware	4	0
Cole Langner	Researched Tests and pipelines	4	0

## Gitlab Activity Summary

