Weekly Progress Report

Week 6

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Summary:

During week 6 we met twice with our advisor Roy Kravitz. He was present to our Monday meeting and shared insights. During the Friday meeting, we demoed our presentation. We also set a date to meet with our sponsor on Friday 21st of February. We are continuing into working on the minimum port.

Updates for the Capstone Proposal

Bliss Summary: Had midterm

Doing:

TODO:

- Continue Minimum Port
- Build an example for the HiFive Board using the freedom SDK
- Look into Zephyr
- Google Bare Metal programming
- Re-Read GNU Make manual
- Look into CleanFlight Makefiles structure
- Continue to look into CleanFlights board/chip connections

Done:

- Talked with Mark to clarify with the project
- Met with Roy to discuss new project ideas about whether to peruse integration from the Metal libraries provided by SiFive and up or go down from CleanFlight code and build in register connections that way

Eric Summary:

Doing:

• Working on the minimum port

TODO:

- Begin designing hardware shield
- Create custom Makefile based on Minimum Port strategy (see PDS)
- Get the Makefile to build for the HiFive as a Target
- Continue with minimum port

Done:

- Project Proposal
- PDS presentation slides
- Looked proto shield
- Created PDS presentation slides
- Began research options for hardware shield
- Updated PDS based on Roy's suggestions

Nikolay Summary:

Doing:

• Min port

TODO:

- Min port
- Build an example for the HiFive Board
- And traceback using the Freedom SDK
- Contact Cleanflight maintainers
- Prep for the presentation
- How to port in bare-metal
- Research freedom metal API

Done:

- License
- Weekly Progress report
- Start adding the docs in the shared drive
- Modified ppt for Proposal
- Contacted a maintainer in Cleanflight repo

Ruben Summary:

• Emailed Roy with contact info

- Emailed Michal about an update on HiFive boards and Amazon status, proposed regular meetings with Galois
- Metal API presentation on the slides
- Minimum port
- Created new directories in cleanflight
- Made changes to files in cleanflight

Done:

- Sent the required emails
- Started min port with the metal API provided by Freedom

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- Receipts and shopping with Michal
- Email Michal for the Friday meeting
- Continue with min port (goal with compiling sample program)

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Challenges:

• Midterms

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Notes:

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- Giving Project Proposal presentation at Galois Inc. Friday, Feb. 21
- Update from Michal amazon cart with drone kit and other items arrive 2/18. Also, the sifive boards should be available by 2/21