EE/CprE/SE 491 Bi WEEKLY REPORT 1

9/19/21 – 10/7/22

Group number: 17

Project title: Bitcoin Mining Asic

Client &/Advisor: Prof. Duwe / Prof. Duwe

Team Members/Role:

Dawood Ghauri / Design Workflow

Constantine Mantas / Team Organization Leader

Soma Szabo/ Component Design

Courtney Violett / Testing

- o **Weekly Summary**

  These past two weeks we finished integrating the IP and other necessary components into the chip design. Verified the correctness of the integrated components and the project as a whole. Went through the process of tapeout/final pre checks for Efabless and submitted our project to them. We also worked with the group that is following us with helping them get their development environments setup and how to begin designing their chip. Our group has also begun the process of creating the firmware that will be flashed onto the chip and the necessary programs to simulate our design.

- o **Past weeks accomplishments**

  Integrated IP and all necessary components into the chip along with verifying they worked correctly.

  Went through the final processes of pre checks and tapout for our project on Efabless's website and submitted our project along with all of the other necessary documentation and licensing for our IP.

  Worked with the next team on getting their development environments setup and giving them advice on how to design their project. Also referred

- Dawood: Organized the meeting, helped lead the answering of questions, and helped with setting up dev environments for the next group.
- Soma: Finished integrating the IP and other components into the high lvl design.
- Constantine: Got our project through the final checks, tapeout, and submitted the project.
- Courtney: Verified the correctness of the integration of all components, IP, and correctness of the project as a whole.

o **Individual contributions**

NAME	Hours this week	HOURS cumulative
Constantine Mantas	7	82
Courtney Violett	7	78
Dawood Ghauri	7	82
Soma Szabo	7	89

O **Plans for the upcoming week**

- Constantine Mantas: Begin brainstorming for what kind of programs we will need to show the simulation of our project.
- Courtney Violett: Help answer any questions of the next team that will come up in the next two weeks.
- Dawood Ghauri: Start work on creating the firmware that will run on the fabricated ship.
- Soma Szabo: Work on making sure that our bring up plan is correct and up to date along with the documentation on submitting projects to efabless. Also testing more detailed gate level simulations and firmware.
- Team: Work on creating the firmware and programs needed to simulate the design working. Continue working with the following team and answering any questions that have about the design process.