EE / CPRE / SE 492 - sdmay20-38

4/3/20 - 4/16/20
Client: Henry Duwe
Faculty Advisor: Henry Duwe

Team Members:

Jake Tener - Team member, SW focus
Jake Meiss - Team member, HW focus
Andrew Vogler - Team member, FPGA focus
Zixuan Guo - Team member, FPGA focus
Justin Sung - Team member, FPGA focus

Weekly Summary

- Establish communication via SPI between the MSP and Nano
- Finished work on schematics for PCB design and start to work on Layout
- Testing of C++ scripts, beginning documentation process
- Port the MAC design into Libero IDE and confirm functionality
- Simulation on MAC

Past Week Accomplishments

- MAC Design - Zixuan Guo
  - Finished simulation and MAC is functional
  - Able to communicate with the SPI and the AMBA protocol.

- PCB Design - Jake Meiss
  - Began documentation

- SW - Jake Tener
  - Finished testing C++ Script
  - Begin documentation drafting

- HW - Justin Sung, Andrew Vogler
  - Debugged SPI communication between the MSP and Nano.
  - Drafted documentation detailing setup and usage

Pending Issues

- Data transmission is not being caught by the SPI core in the Nano.
- Full testing of C++ program may yield less accuracy than hoped for
- Coronavirus implications on project. We will not be able to attend lab to work on applying software to hardware. Also meeting together and with client will get extremely hard.
- Documentation of struggles and incompletion due to Coronavirus

- Toggle MAC into the FPGA

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Jake Tener	SW	5	79
Jake Meiss	PCB Design	5	77
Andrew Vogler	HW	3	73
Zixuan Guo	MAC Design	4	73
Justin Sung	HW	4	80

Plans for Coming Week

- Draft explicit documentation on our design process and decision
  - Setup guide information
  - Development process documentation
- Integrate the MAC design into Libero IDE
- Electrical Design
  - Documentation and testing plans
- Software
  - Begin Documentation drafting