

Lattice FPGA Project Weekly Progress Report - Week 13

Report date: 2025/04/03

- **Last Week (time in hours)**

- Team Review
 - SPI integration complete with Yosys toolchain
- Nathaniel Fraly
 - Met with Roy regarding Radiant issues (1)
 - Attempt to fix Radiant issues (1)
- Riley Cox
 - Worked on Radiant issue (1)
 - Created GitHub Guidelines document (2)
 - Started on alternative SPI module; unit test and synthesized test show good results (12)
- Mohammad Alshaiji
 - Continued working on integrating SPI controller (8)
 - Debugging Logic Analyzer (1)
 - Created merged c program for screen testing (1)
- Xiang Li
 - Finished structure of SPI verification doc (2)
 - Research on functions in ST3375 Adafruit library (3)
- Haoyang Han
 - Design push-button circuits (2)
 - design Shaft system in 3D modeling (4)

- **Next week**

- Team Plan
 - Integrate user interface
- Nathaniel Fraly
 - Add in button, PWM, and color change modules
- Riley Cox
 - Help with LCD screen C program
 - Integrate button and pwm to icicle
- Mohammad Alshaiji
 - Modify Screen program to function with pwm and button
 - Continue with unit and systemic testing of SPI controller
- Xiang Li
 - Refine C code as needed
- Haoyang Han
 - Completed 3D modeling (Version 3.0)

- **Blocked**

- Team Blocks
 - Radiant still not working with icicle
 - Rahul still hasn't dropped off hardware
 - Logic analyzers on order for Riley and Nathan
- Nathaniel Fraly
 - Radiant. Close to beginning attempts at the RV32 IP block for Radiant.
- Riley Cox
 - Still having Radiant issues

- Mohammad Alshaiji
 - N/A
- Xiang Li
 - N/A
- Haoyang Han
 - N/A