

Lattice FPGA Project Weekly Progress Report - Week 7

Report date: 2025/2/20

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

- Team Review
 - Getting SPI module ready for integration
 - Prepare SPI library
- Nathaniel Fraly
 - Troubleshoot Radiant duplicate module error (4)
- Riley Cox
 - Researched Adafruit SPI library (2)
 - Researched ST7735 library to determine how we communicate with LCD(2)
- Mohammad Alshaiji
 - Simulate SPI controller on Questasim [3]
 - Revised SOC Block Diagram [1]
 - Synthesized SPI controller using Radiant [2]
- Xiang Li
 - Research on Adafruit ST7735 Library (2)
 - Write down the command list need to send through SPI (4)
- Haoyang Han
 - Modeling for 3D printing (4)
 - Research on debounce button (2)

- **Next week**

- Team Plan
 - Prepare accessory code
 - Continue SPI work
- Nathaniel Fraly
 - Get button interface ready
- Riley Cox
 - Work with Nathan to develop code to interface with button
 - Work on SPI library
- Mohammad Alshaiji
 - Update meeting notes on Github
 - Ensure that SPI controller Operates correctly on ICE40
 - Utilize SPI controller on ICE40 To drive LCD
- Xiang Li
 - Light up the screen
 - Find the commands for color control
- Haoyang Han
 - Improved 3D modeling
 - Solving Hardware Issues

- **Blocked**

- Team Blocks
 - Just Nathan's
- Nathaniel Fraly
 - Will need help figuring out Radiant duplicate module issue
- Riley Cox
 - None

- Mohammad Alshaiji
 - N/A
- Xiang Li
 - None
- Haoyang Han
 - N/A