

Report

A) Requirements Document

- 1) *Overview*: This project is a system that will implement a Bluetooth transceiver for the launchpad micro controller. The goal of the project is to transmit a 9600 baud rate Bluetooth message to the computer and print it to the display using coolterm. This will stand as the basis for how the controller can communicate over UART devices.
- 2) *Functional Description*: Functionally, the Bluetooth receiver should be able to handle three kinds of I/O drivers. The first, a driver routine that takes in a string and prints it back out to the port. Secondly, an I/O driver that inputs and outputs unsigned decimal numbers. Thirdly, there will be an I/O driver that takes in a number 0 to 9999 and prints out the value in terms of centimeters.
- 3) *Deliverables*: The deliverables for this project will include, a working Bluetooth transceiver connected to the launchpad device. The working C code for this project. And finally. The project report and schematics.

B. Design Document

See appendix A for the hardware schematic dataflow diagram. (Schematic)

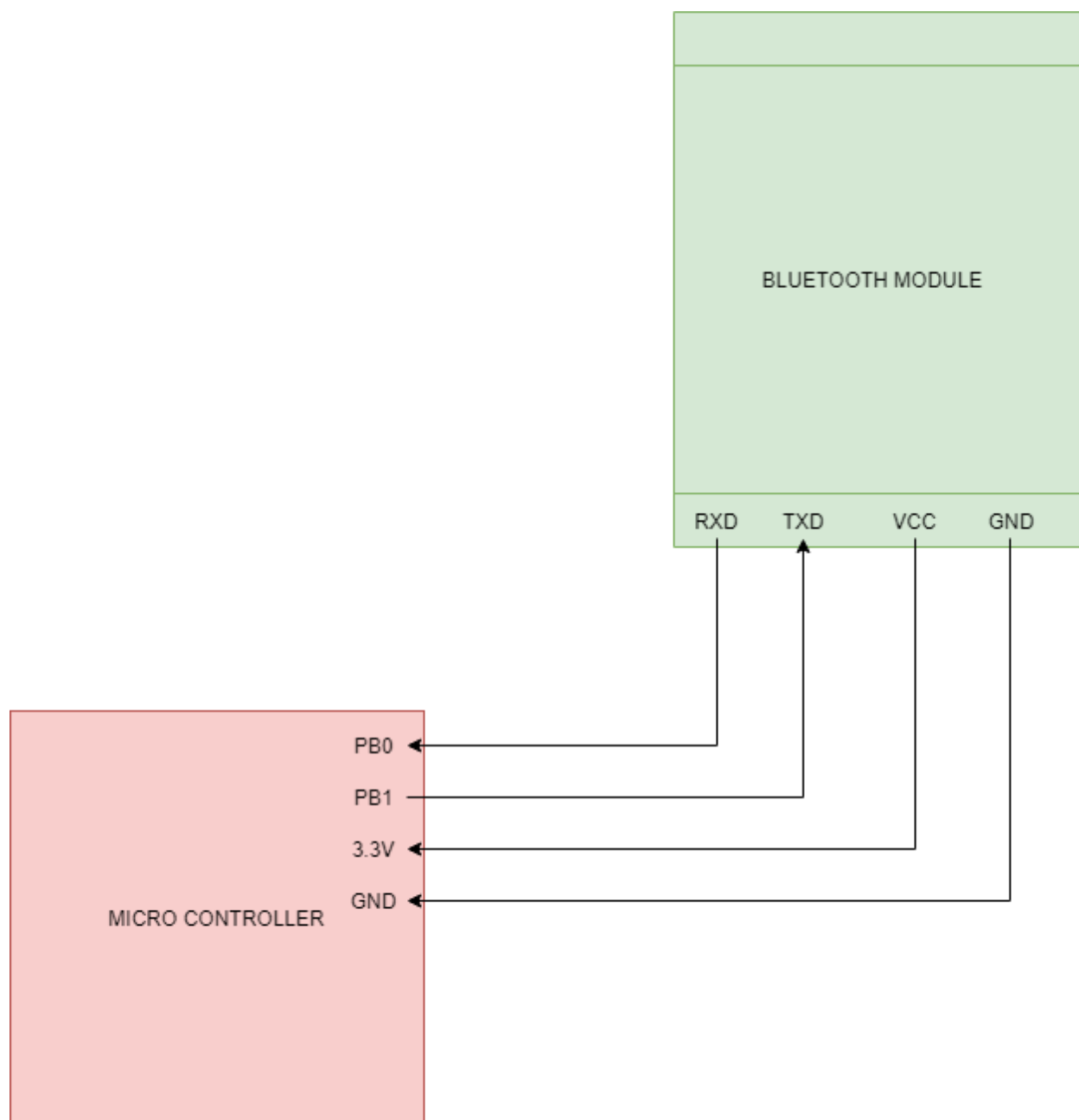
See appendix B for the software dataflow diagram. (Flow Chart)

C. Discussions

If I were to improve the design of this device, I would add the capability of LEDs and sound. I would make it so that you could send a specific string or number that would indicate a sound and you could create a piano-like device or a song maker.

D. Appendix

Appendix A.



Appendix B.