

MP-1 Write-Up

Blake VERMEER

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1 Objective

In this lab we were introduced to the Xilinx tools and the lab environment setup. Also, we did some basic VHDL coding to manipulate a UART link.

2 Initial Test

After generating the bitfile, I uploaded the file to the Xilinx board. After running the program, LEDs 1 and 4 lit up and remained lit. I then connected to the Xilinx board over the serial link using minicom. The Xilinx board simply echoed back any data sent to it over the serial link.

3 Setting up Bluetooth

4 Talking to the Quad

5 PPM Passthrough

6 Data Analysis

7 Pseudo-GPS

8 PID Controller

9 Conclusion