ECE 437 Lab5 Milestone 1

libiano2

October 2023

Milestone 1

Figure 1. shows the waveform from the hardware internal logic analyzer. We followed the Lab 5 tutorial to setup the ILA and used the waveform window to perform hardware-in-the-loop simulation analysis.
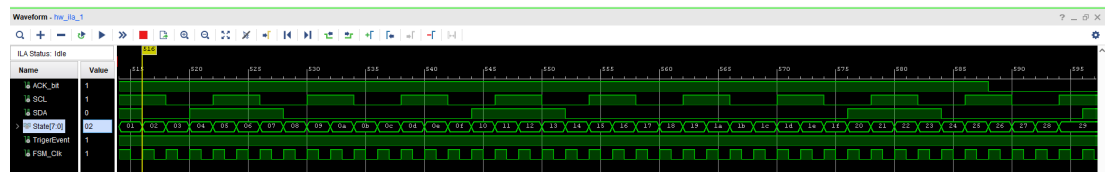

Figure 1: Waveform window from the ILA with SCL, SDA, State ACK_bit, FSM_clk, and TriggerEvent.

Milestone 2

Post-Lab Questions

1. SCL can run at a maximum at 400 kHz.

2. Just loop a control command in python sent to an OkWireIn. If we have our I2C to be one-shot, we can loop multiple one-shot triggers to capture data quickly.

3. -55 to 150 degrees celcius.

4. 13-bit $\rightarrow$ .0625C
   16-bit $\rightarrow$ .0078C