

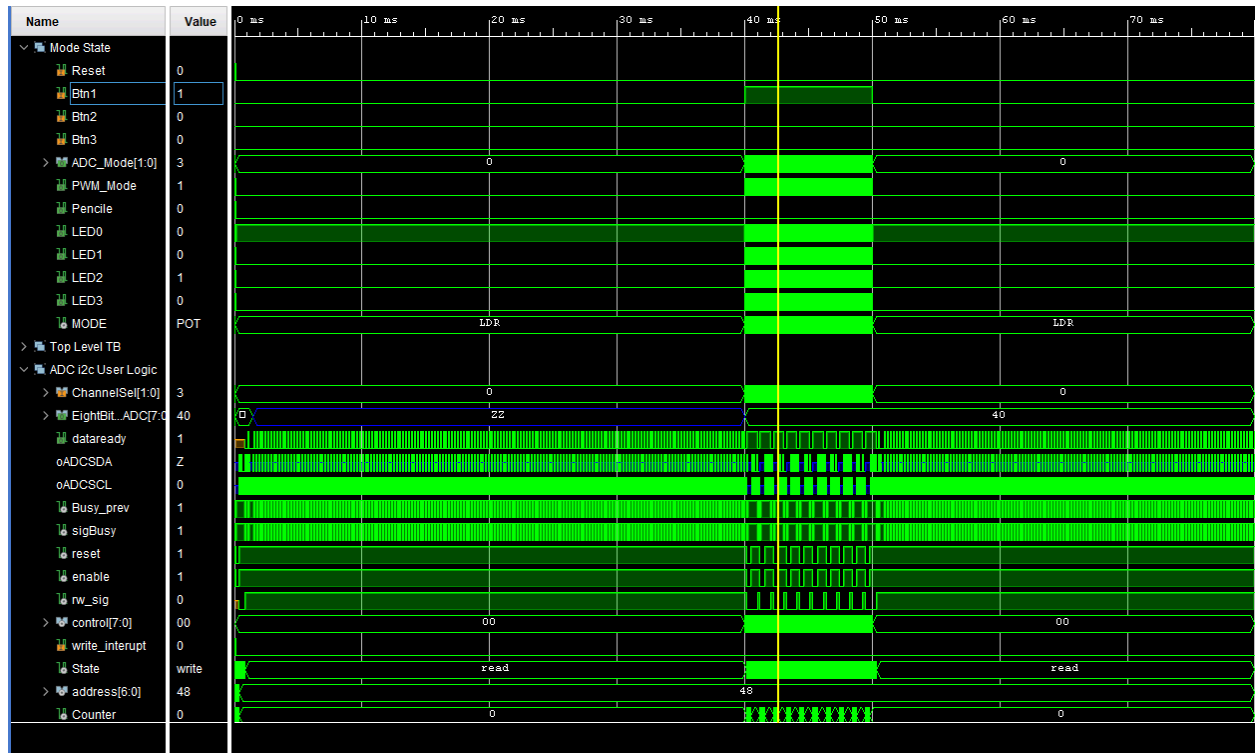
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12:12 PM

I am testing New code to try and write to ADC. how it works is in the read state we interrupt and send everything back to write mode. First i am going to see what is going on in test bench.

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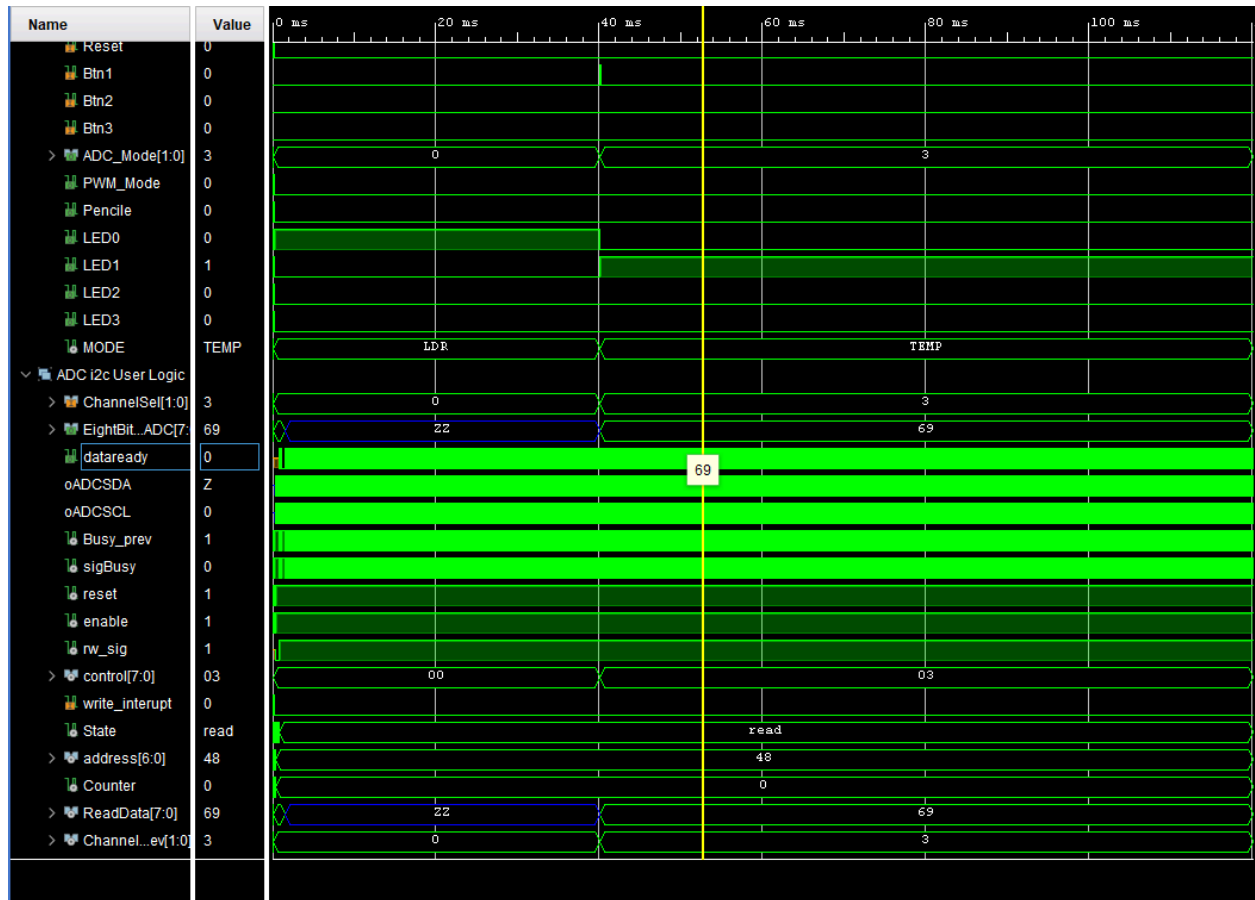


This test dose Indeed prove that the interrupt seems to work. However the interrupt signal did not move. I am going to test it on the board. And checking the code button 1 is a pulse.

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As one can assume it did not work. The issue would be maybe the signal (Pencil > garry > write_interrupt) pips so slightly it fails? Going to try sim one more time.

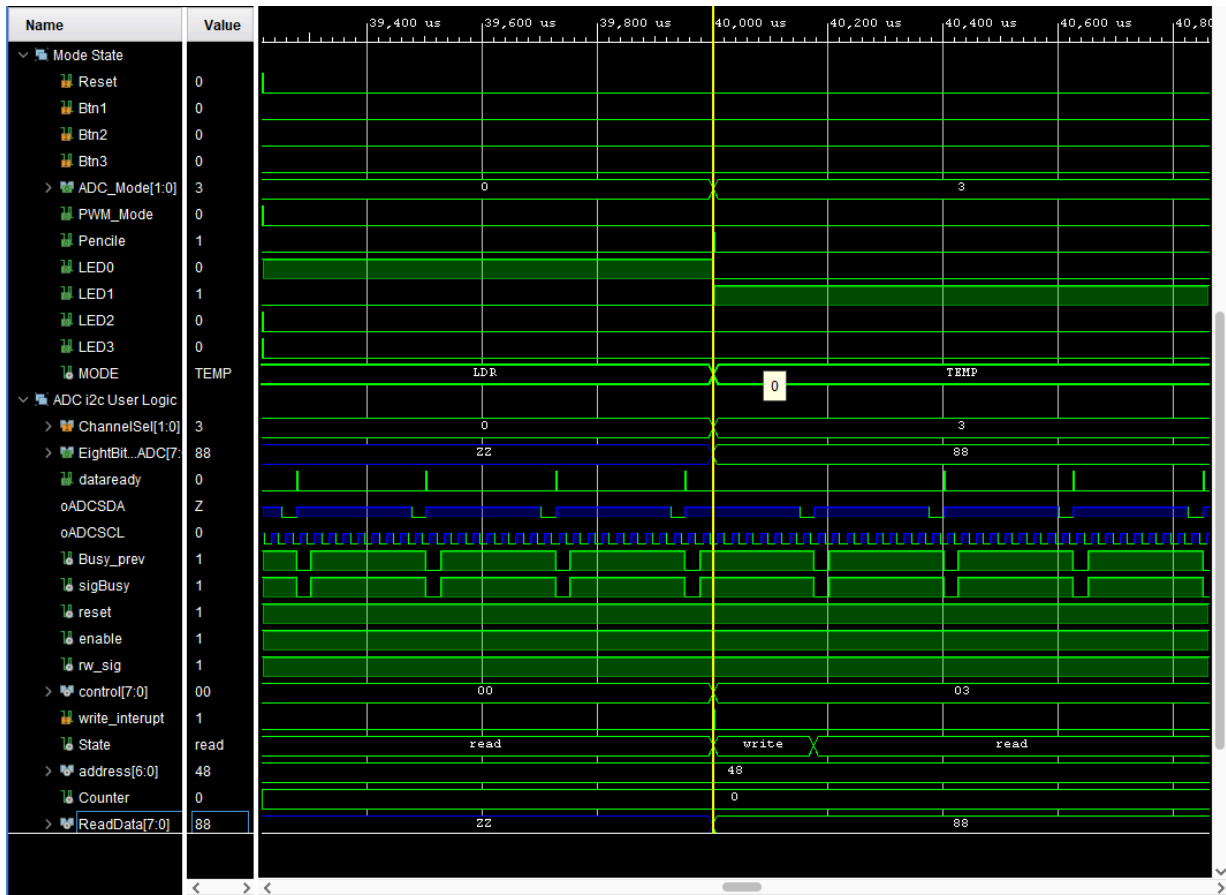


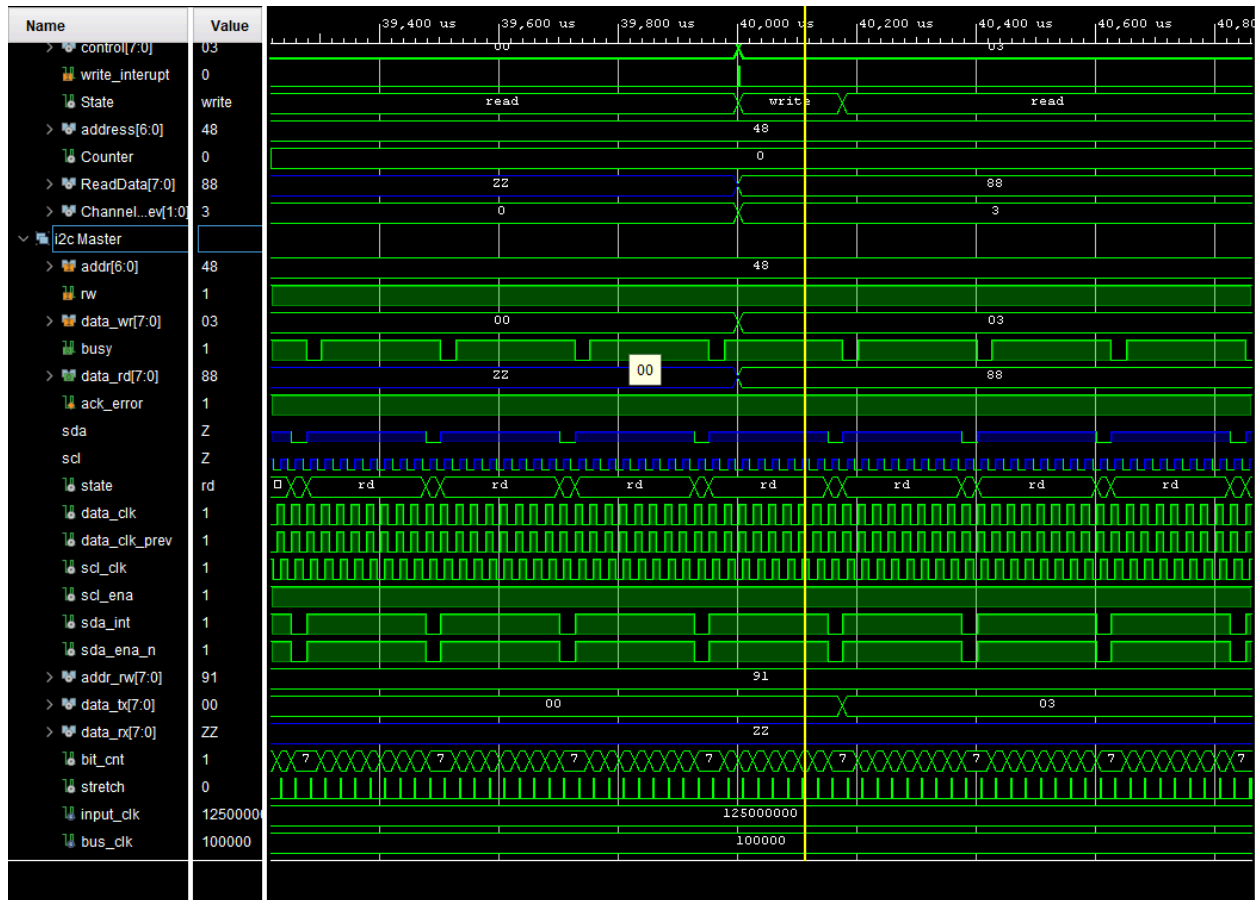
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I have now moved the enable to the if statement in Mode_SM and then once we enter the state it changes to 0. I am going to simulate the result and see if we get something.

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We Got the Result we were looking for. The write mode did spike however the main i2c Logic did not budge. This may be due to the slave acknowledge ment not spiking to properly move the states. Another thing to look at would be the rw_sig in ADC user logic we may need to manually set it to 0 depending on if 1 is read 0 is write.

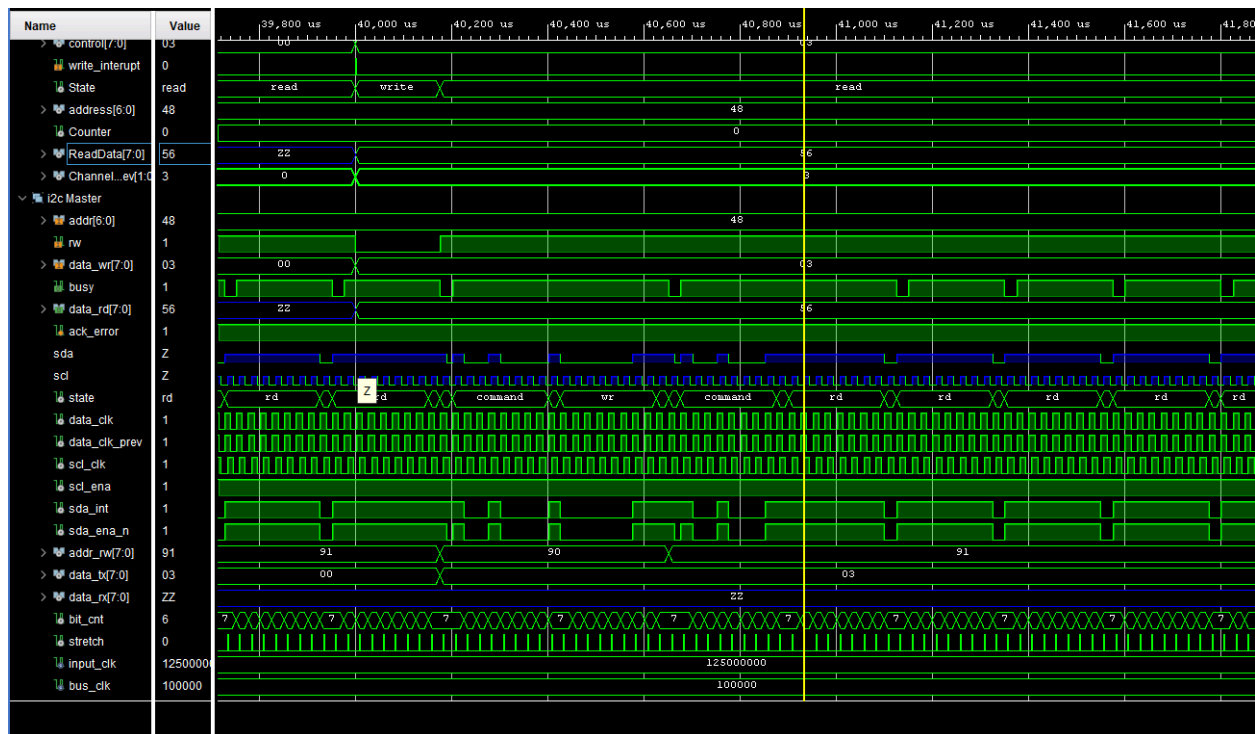
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1:14 PM

After running the program on the board again I am getting dead fish. The ADC is still not changing channels. After trying other ports we do get sensor data from the potentiometer ect, but we are not getting there. In my personal opinion, code up a mux to swap outputs rather than changing the channels through i2c until it works. In terms of the potentiometer it dose not really show up on the PWM the best. I am going to try high jacking the rw_sig and force it to 0 and see what happens on the sim.

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So... The behavior seems to now be how we want it seeing as the write appears in the main. I am going to run the board and see what happens.

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I have successfully caused the ADC to change Channel on purpose and will see results on Oscilloscope. Further Review may be necessary to determine the inputs of other sensors in the system but i can say confidently things are working as expected for the time being.

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According to the project to my understanding our use of clock gen and PWM is backwards. And to my understanding this is the order of channels by process of sublimation and given documentation .

Ch0 - AIN0 > Light Dependant Resistor

Ch1 - AIN1 > Thermistor(TEMP) < Unresponsive?

Ch2 - AIN2 > A sine wave?

Ch3 - AIN3 > Potentiometer (POT)

Put a focus on refactoring code, testing, and reread project requirements.

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2:01 PM

I have flipped pwm and clock gen items may need refactoring to align with btn2 on and off. I have also attempted to reorder outputs to try to better align with the state machine.