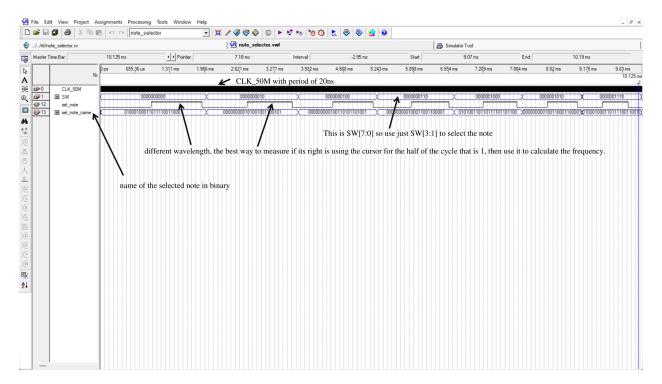
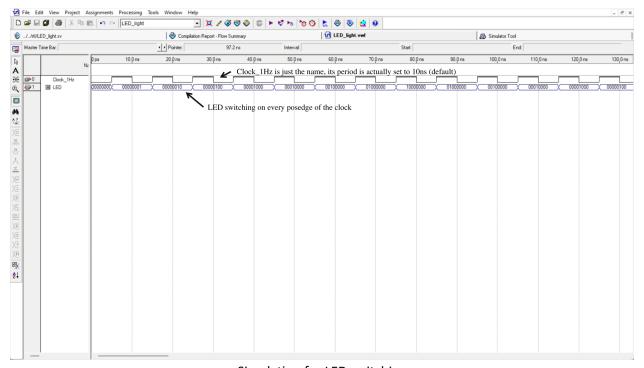
Xuan Tung Luu - 30236798 - README

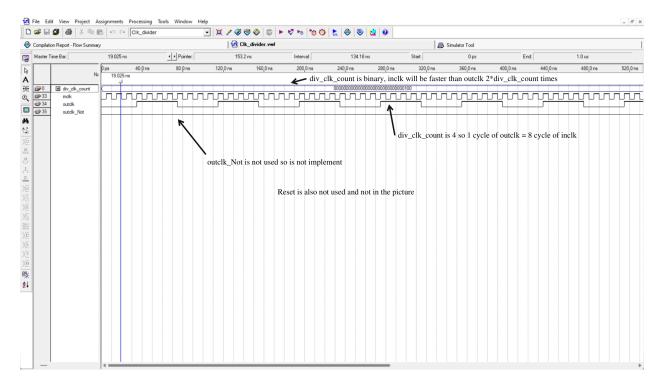
- 1. My SOF file is located at "xuan\_tung\_luu\_30236798\_Lab\_1\rtl\Basic\_Organ\_Solution.sof"
- 2. Everything works I believe.
- 3. Please zoom in to see clearer.



## Simulation for tone organ

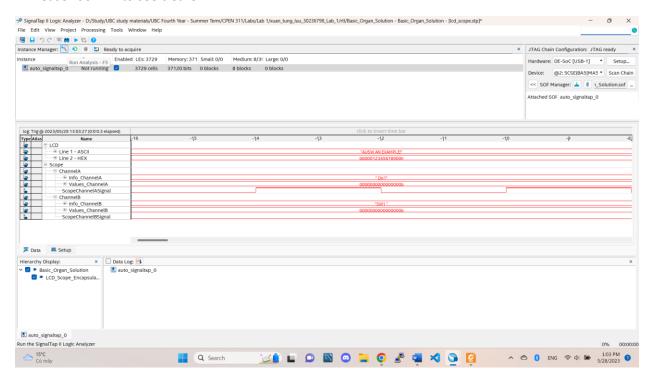


Simulation for LED switching

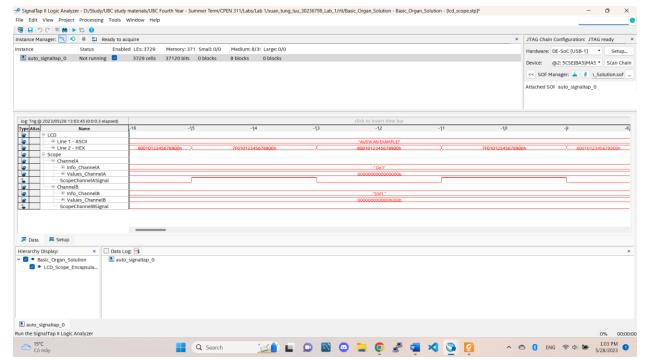


Simulation for clock divider

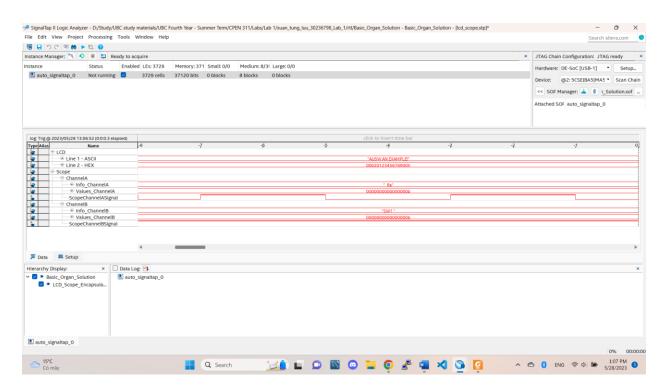
## 4. Please zoom in to see clearer



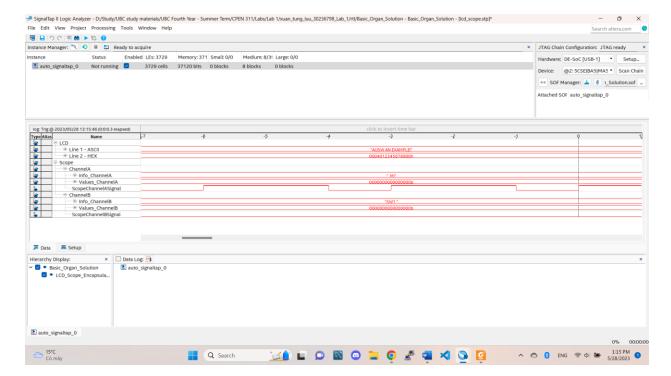
Do1 with SW0 off



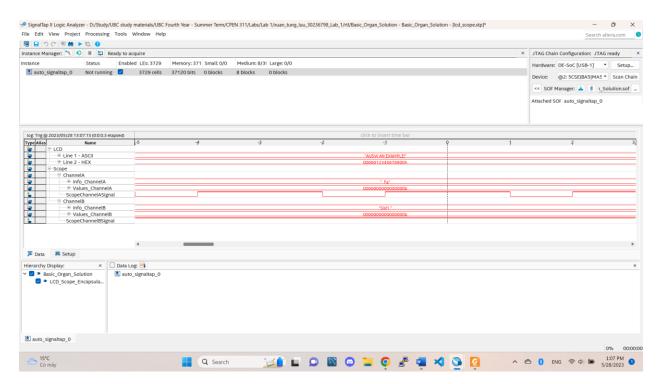
Do1 with SW0 on



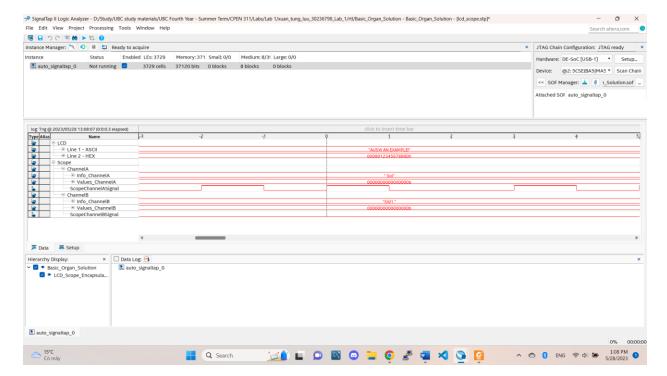
Re with SWO off



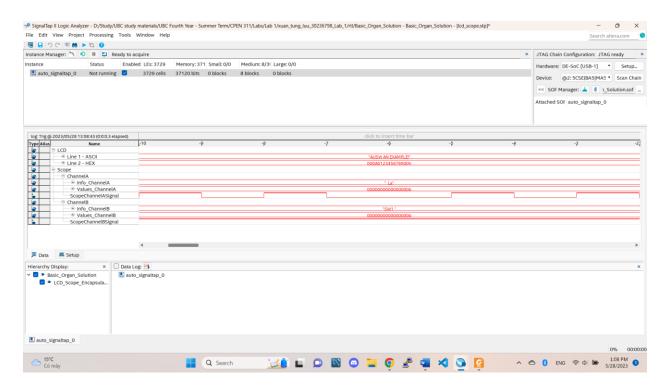
Mi with SW0 off



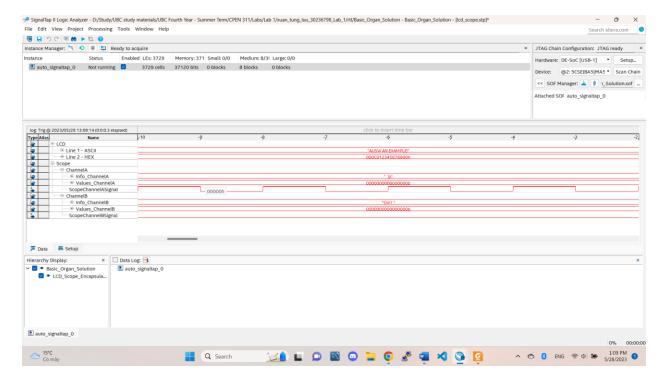
Fa with SW0 off



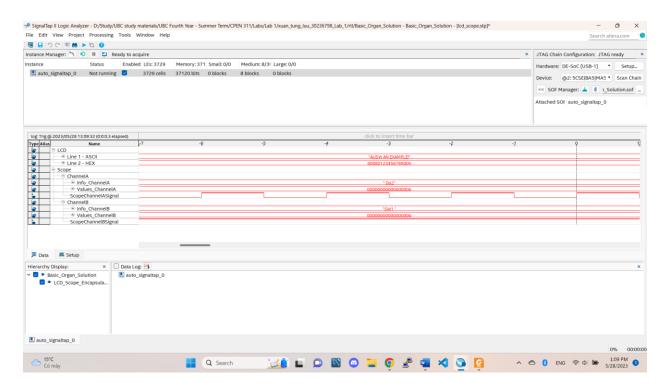
Sol with SW0 off



La with SW0 off



Si with SW0 off



Do2 with SW0 off

- 5. I use Quartus 9.0sp2 to run the simulation.
- The simulation project for clock divider is located at "xuan\_tung\_luu\_30236798\_Lab\_1\sim\frequency\_divider\Clk\_divider.qpf"
- The simulation project for LED switching is located at
- "xuan\_tung\_luu\_30236798\_Lab\_1\sim\LEDS\LED\_light.qpf"
- The simulation project for tone organ is located at
- "xuan\_tung\_luu\_30236798\_Lab\_1\sim\tone\_organ\note\_selector.qpf"

Open the project using Quartus 9.0sp2 and inside the files of each project, there is a waveform file ready to be used. The waves on the waveform file are exactly the same as the pictures. If there are further simulation, just change the inputs in the waveform files.

6. The files I wrote for this lab is Clk\_divider.sv, note\_selector.sv and LED\_light, I only instantiated a little bit in Basic\_Organ\_Solution.v. In the simulator tool of Quartus 9.0sp2, tick on the box to allow it overwrite the original input file so that the same file can show the simulation (it took me 15min to figure this out...).

The bonus question is in the doc/ folder.