

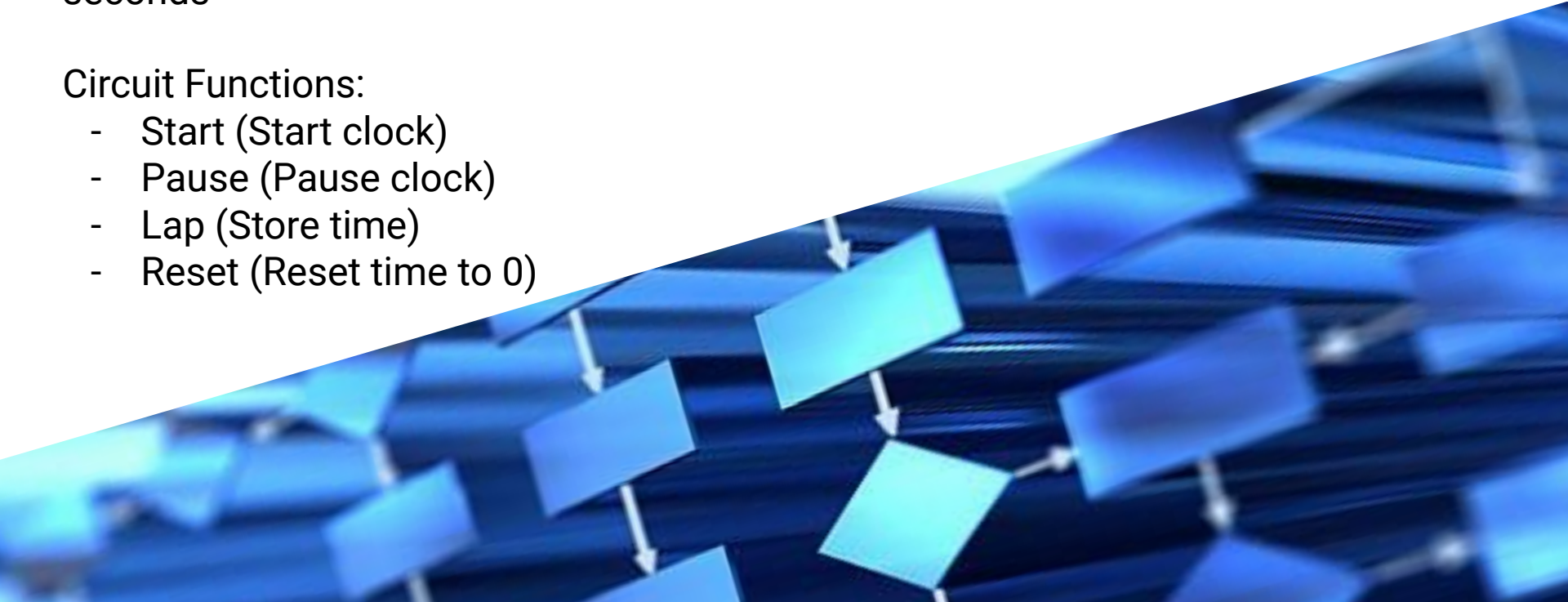
STOPWATCH

Goal: Display time passed since start pressed in increments of minutes, seconds, and hundredths of seconds

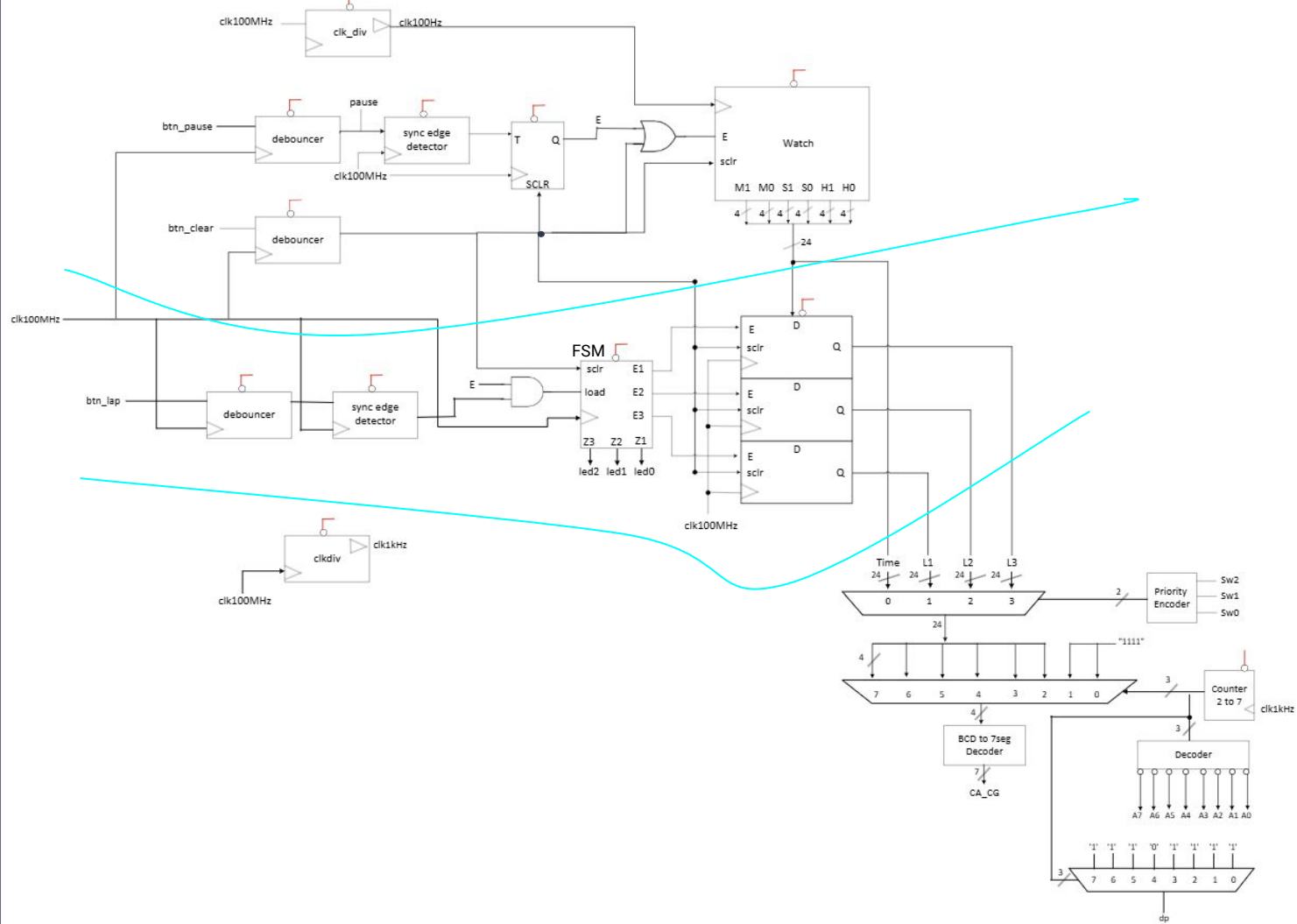
Team Members:
Nicholas Rushaj
Tolin Faraj
Samantha Peters

Circuit Functions:

- Start (Start clock)
- Pause (Pause clock)
- Lap (Store time)
- Reset (Reset time to 0)

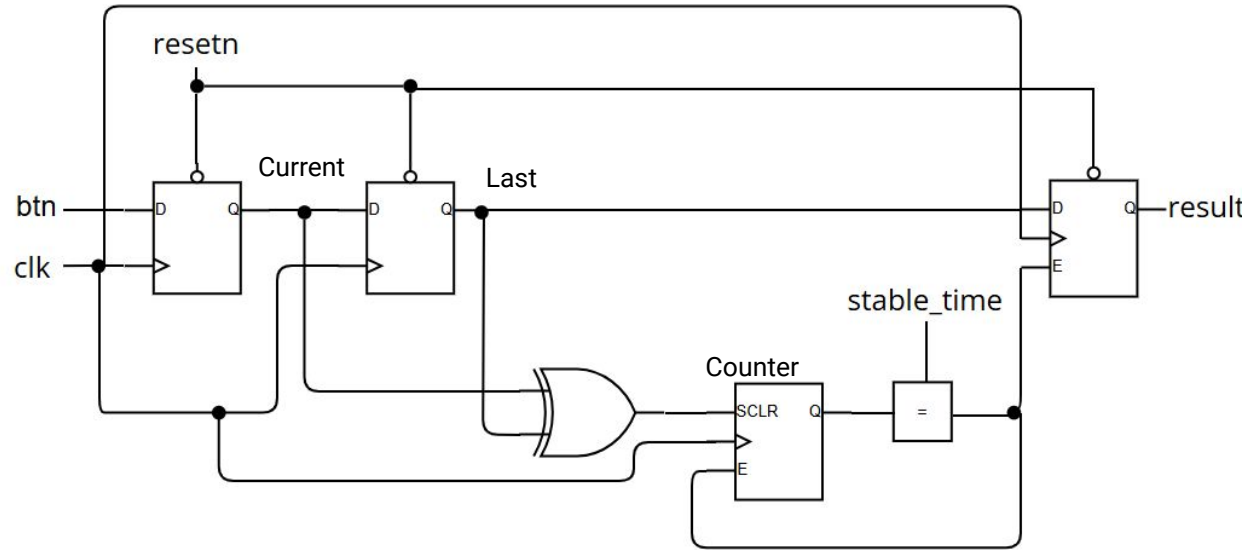


Block Diagram (Top):



Component Breakdown

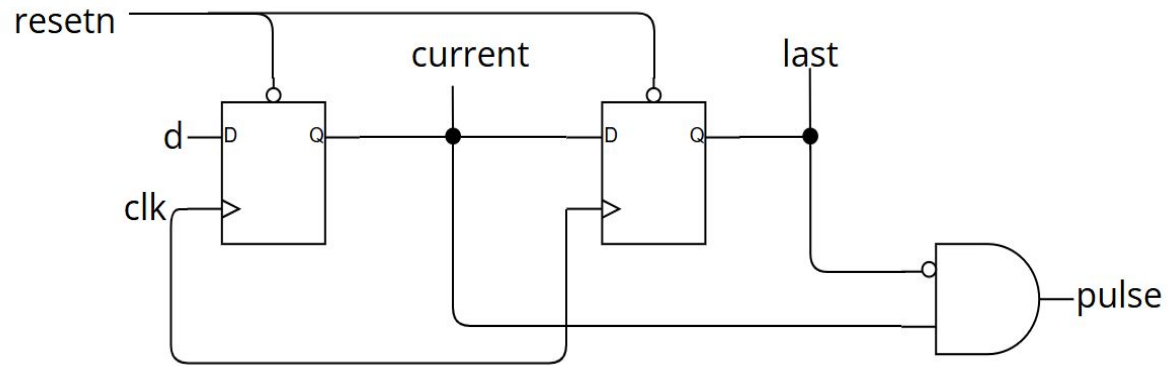
Debouncer:



Inspired by this page: <https://forum.digikey.com/t/debounce-logic-circuit-vhdl/12573>

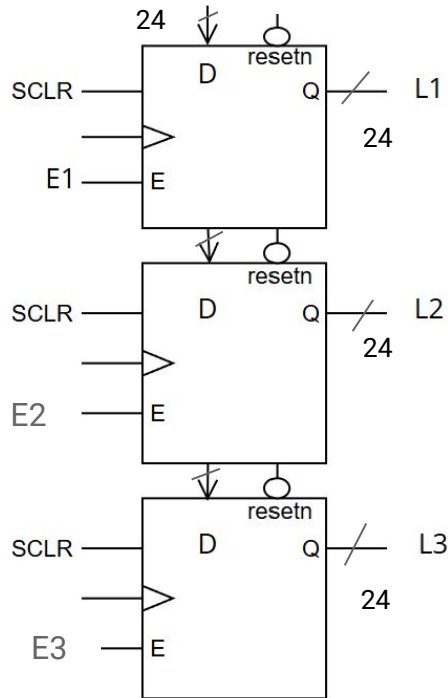
Component Breakdown:

Synchronous Edge Detector:

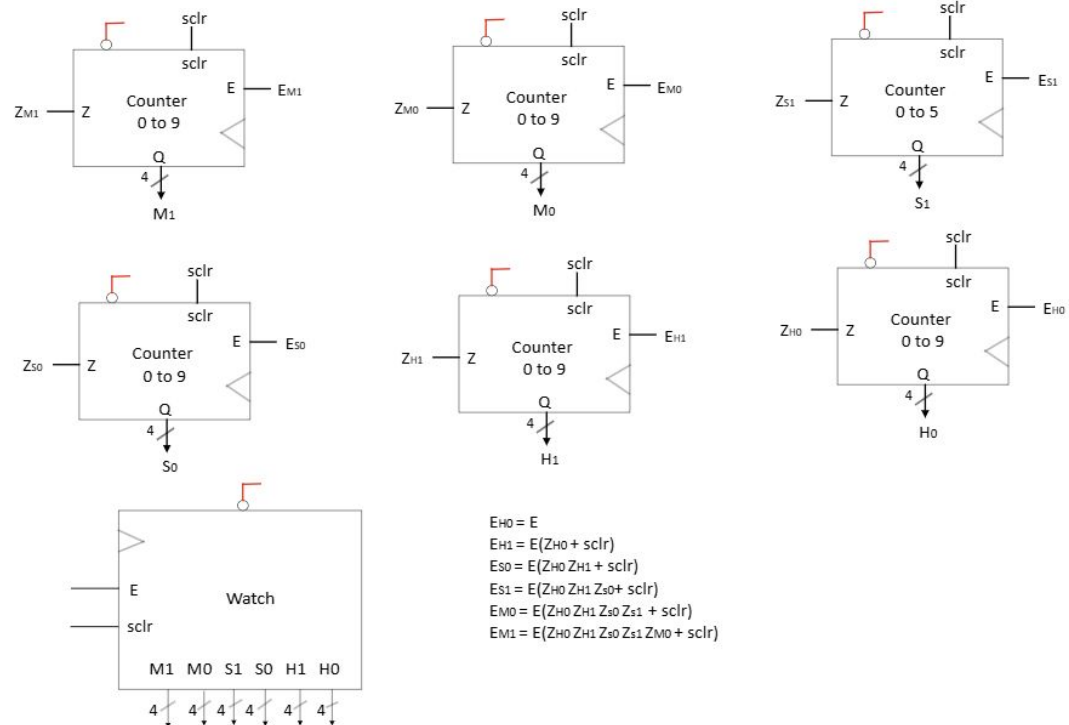


Component Breakdown:

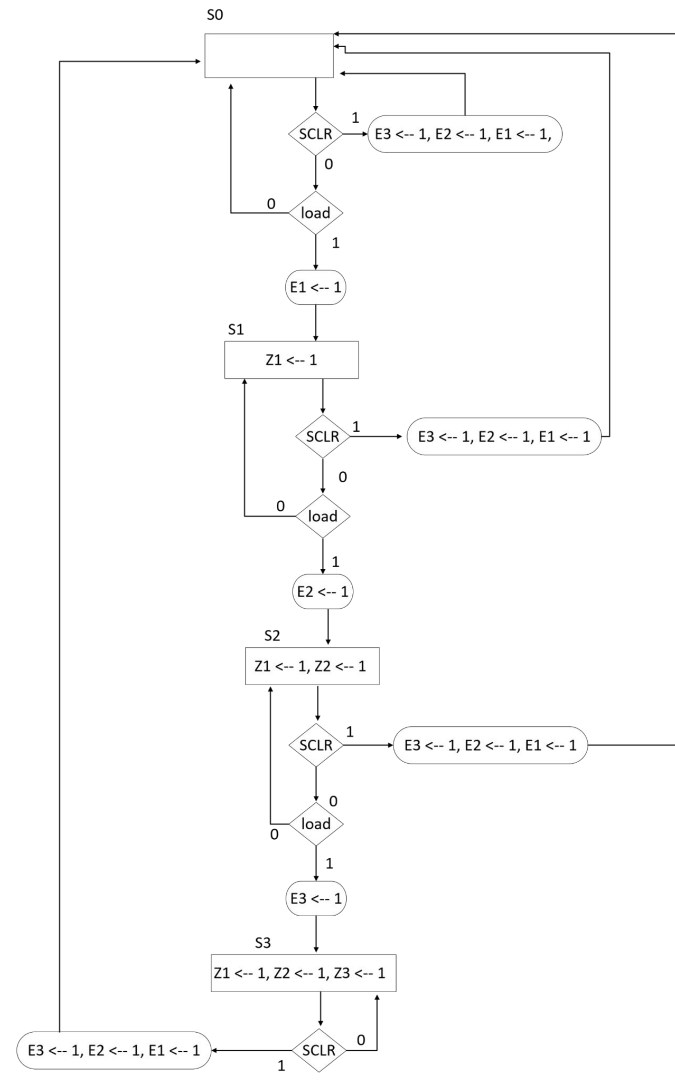
Lap Registers:



Watch:



ASM Diagram:



Component Breakdown

7 segment Serializer

