

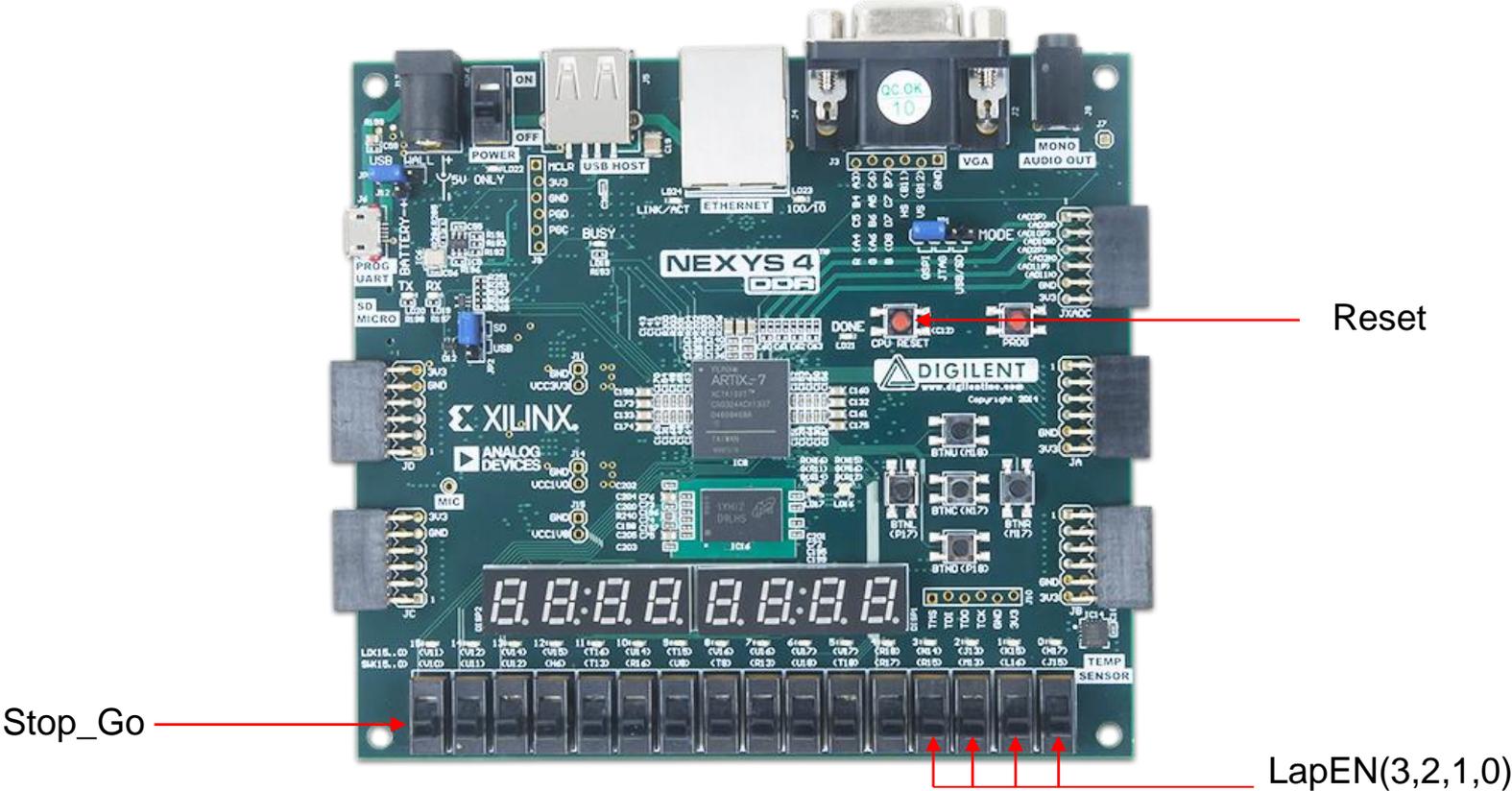
Digital Stopwatch with Lap Function

Khanh Nguyen, Etjen Zeka, Abigail Yaldo, Danish Ibadat

What is it?

- Electric Powered Digital Stopwatch
- Measures times
- Save time instant

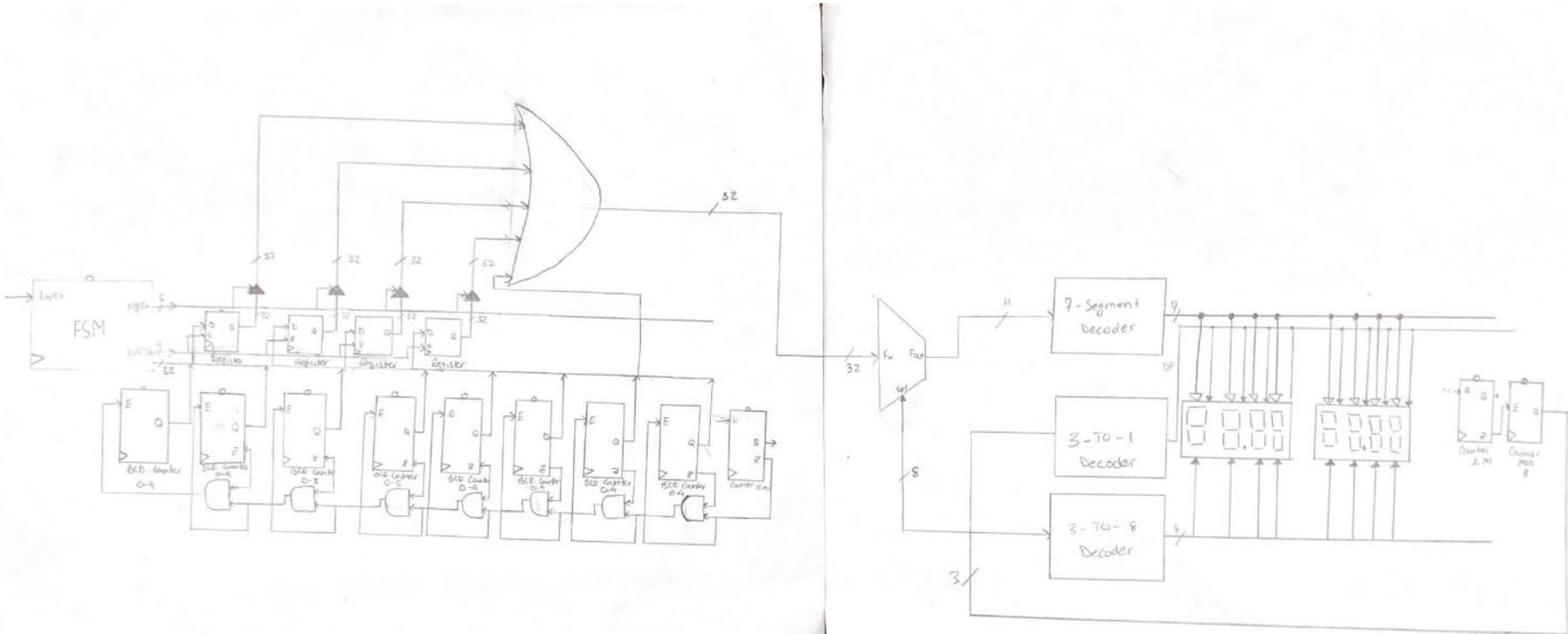
Switches and Buttons Layout



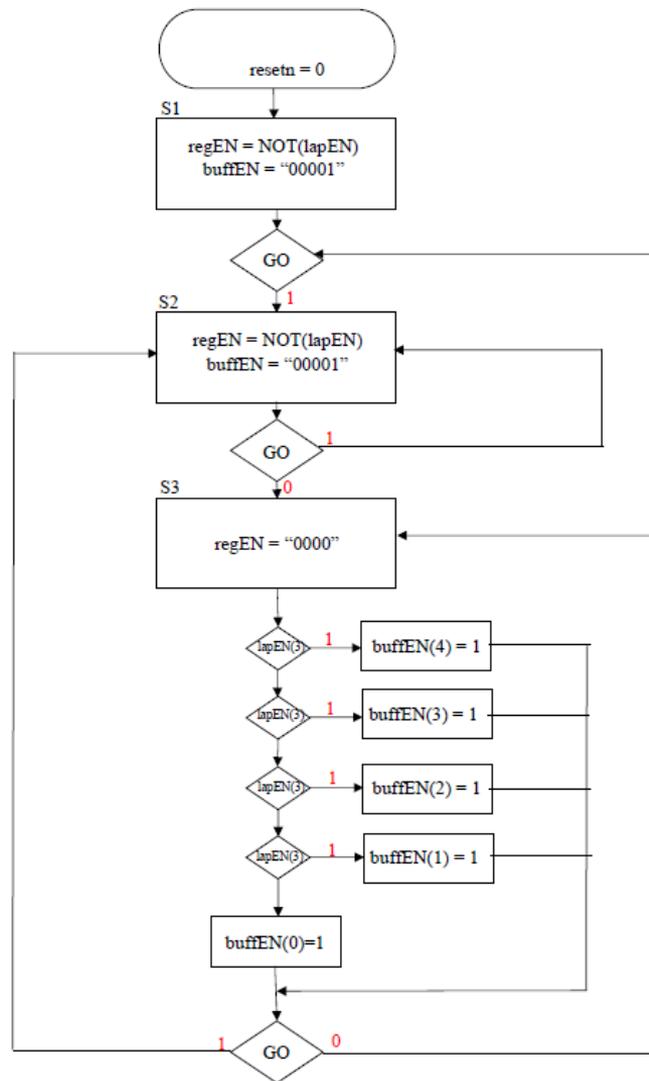
Function

- 10ms (0.01s) increments
- Stop_Go - starts and stops time
 - High - starts
 - Low - stops
- LapEn - record a certain instant of time
- Reset - reset time back to 0
- Clock - 100 mHz

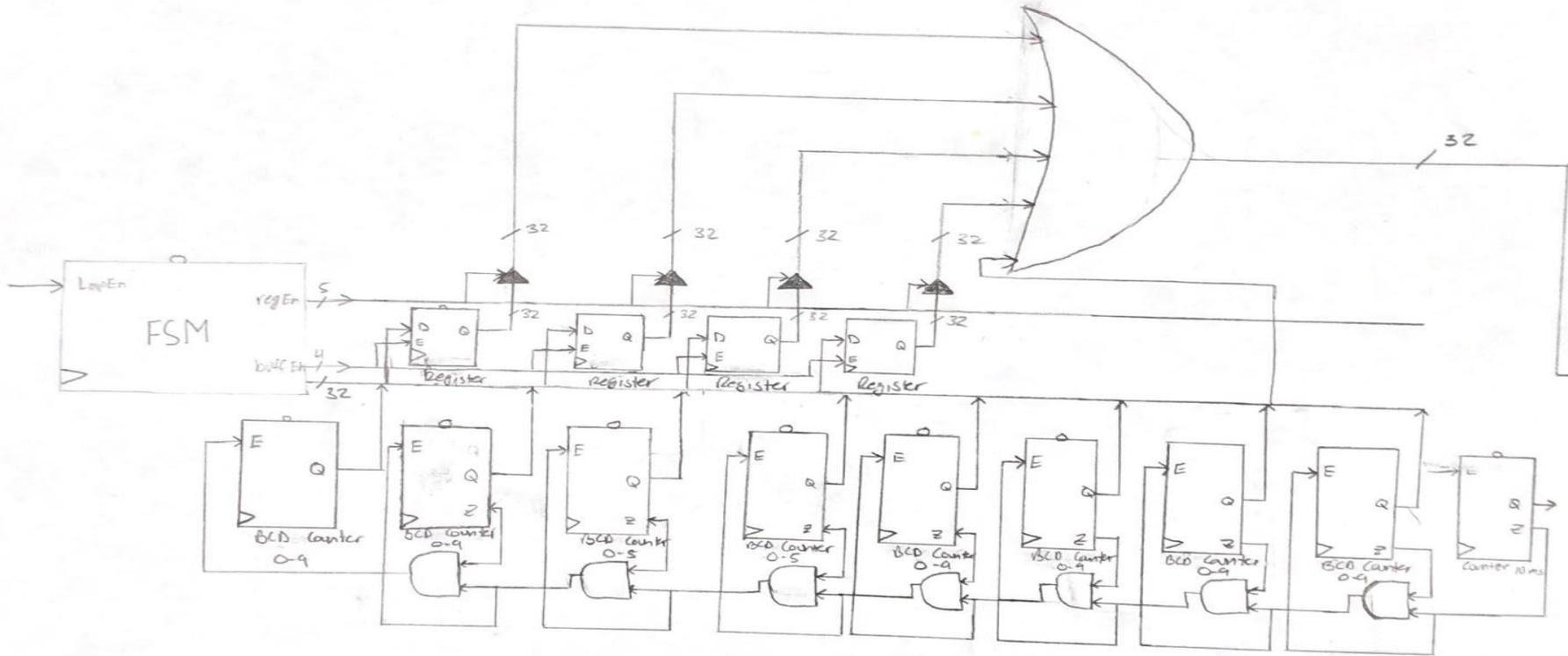
Overall Circuit



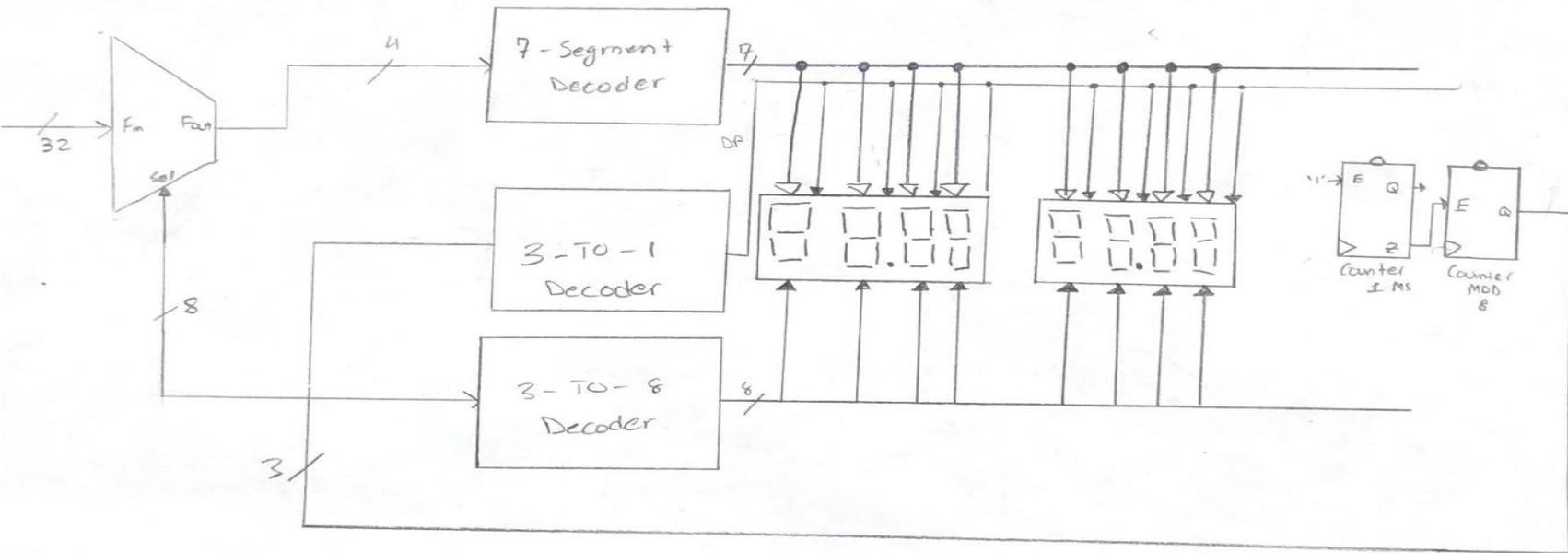
FSM



Counters and Registers



Welcome to the Light Show



References

- http://www.secs.oakland.edu/~llamocca/Fall2019_ece2700.html
- <http://www.secs.oakland.edu/~llamocca/VHDLforFPGAs.html>
- http://www.secs.oakland.edu/~llamocca/Fall2017_ece2700.html