

ECE 212 DIGITAL CIRCUITS

Combined Time and Temperature Display

Lab 04 10/13/2023

Maurice Otieno (scribe) otienom@lafayette.edu

Alex Villalba

https://github.com/otienomaurice1/ece212_alex_maurice.git

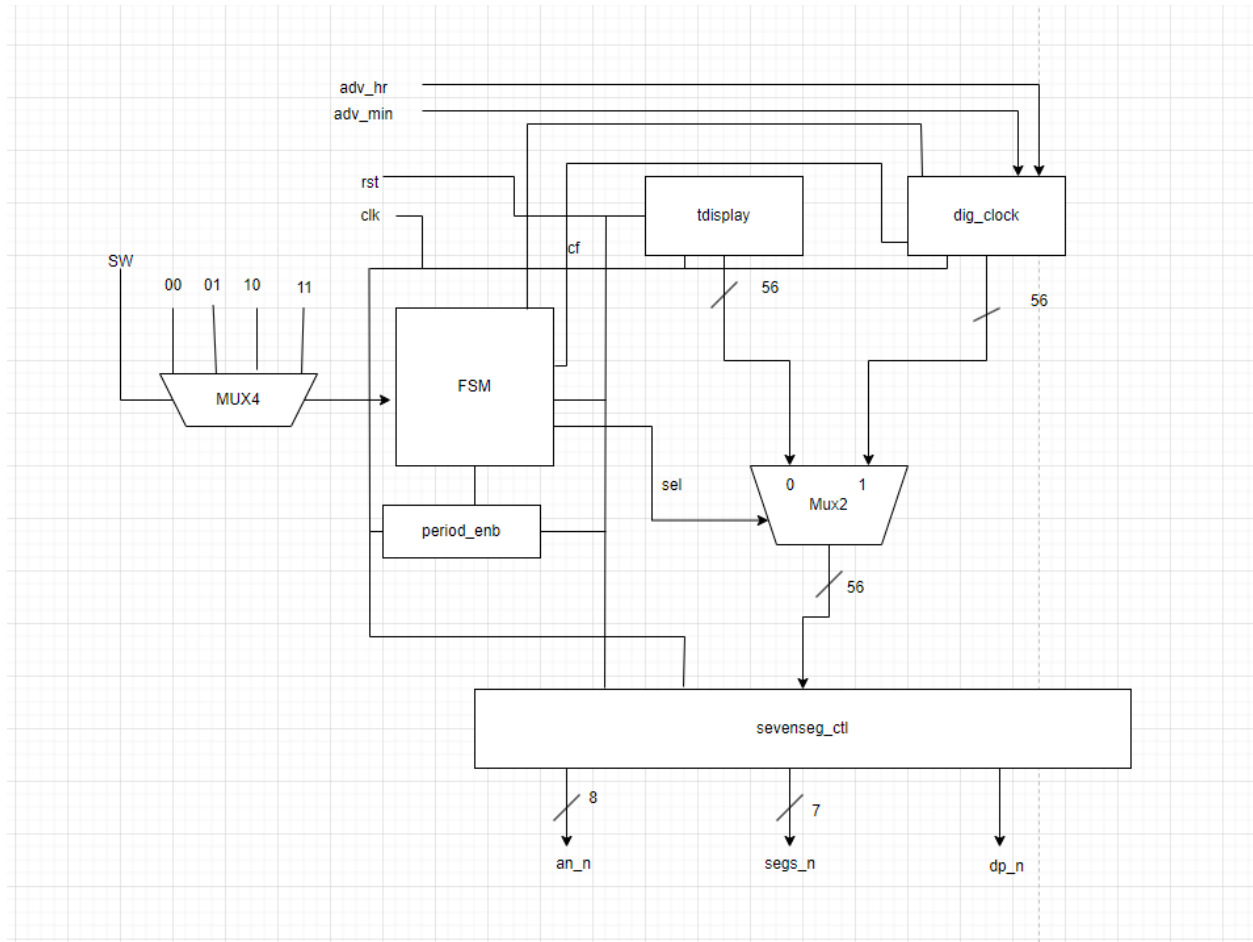
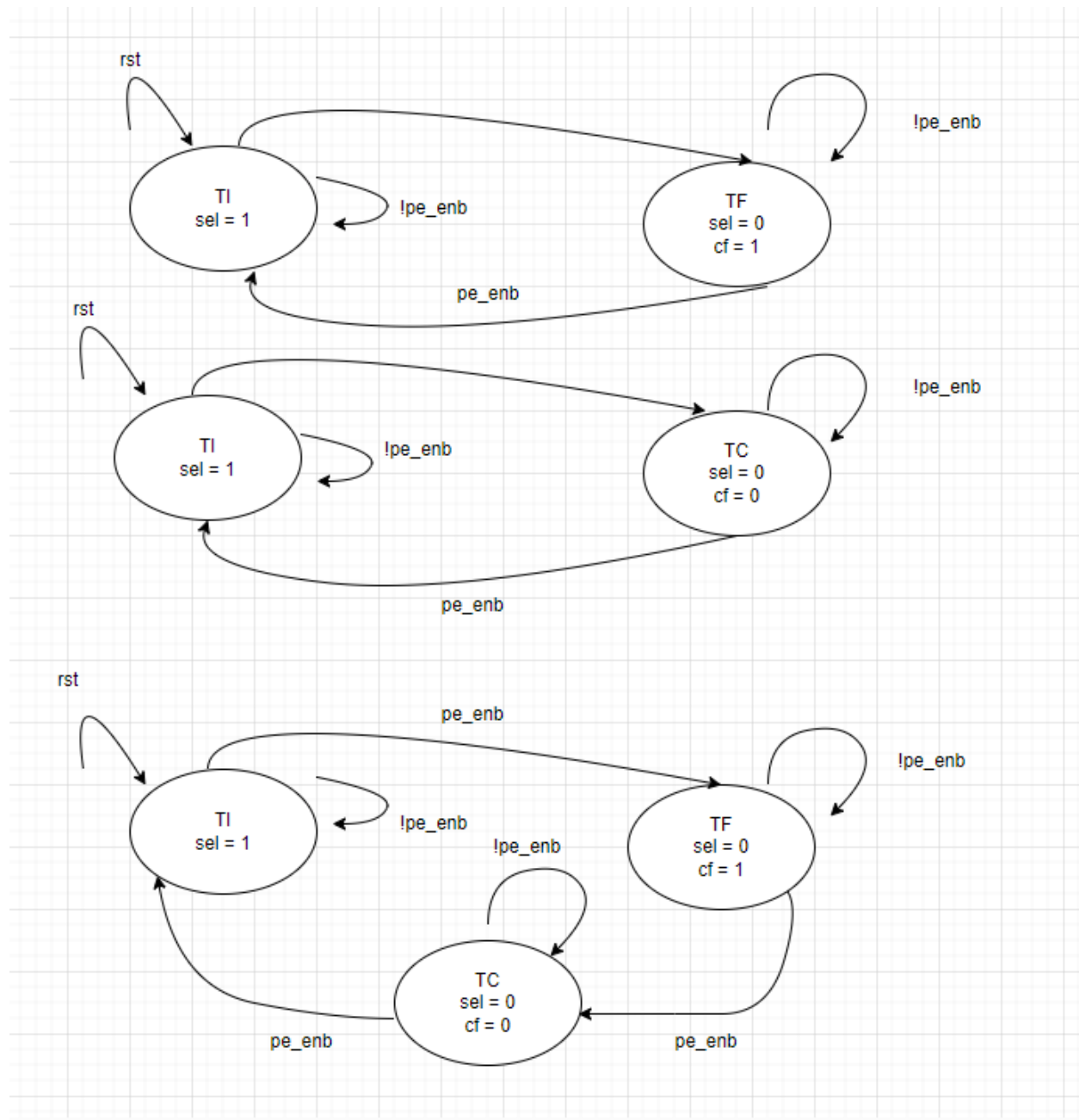


Figure 1 `time_temp_comb` top level diagram



Results:

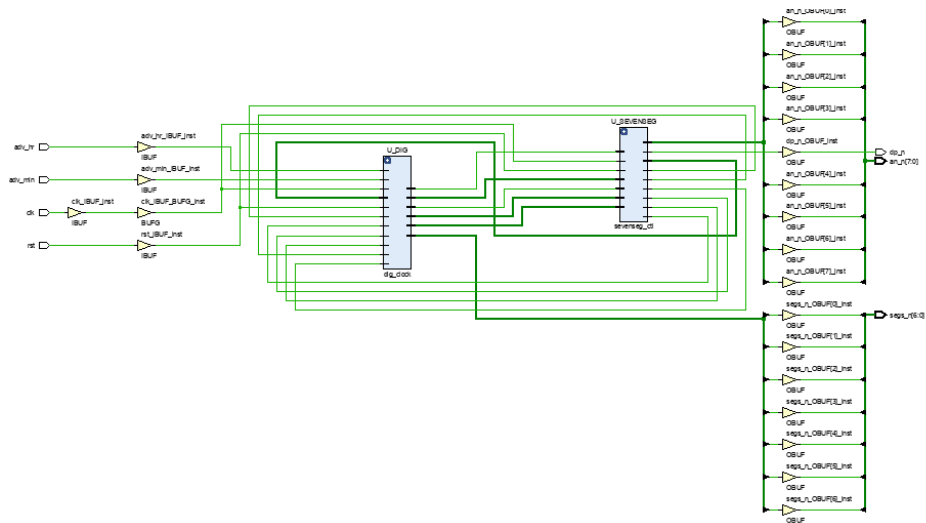


Figure 2time_temp_comb synthesized design schematic

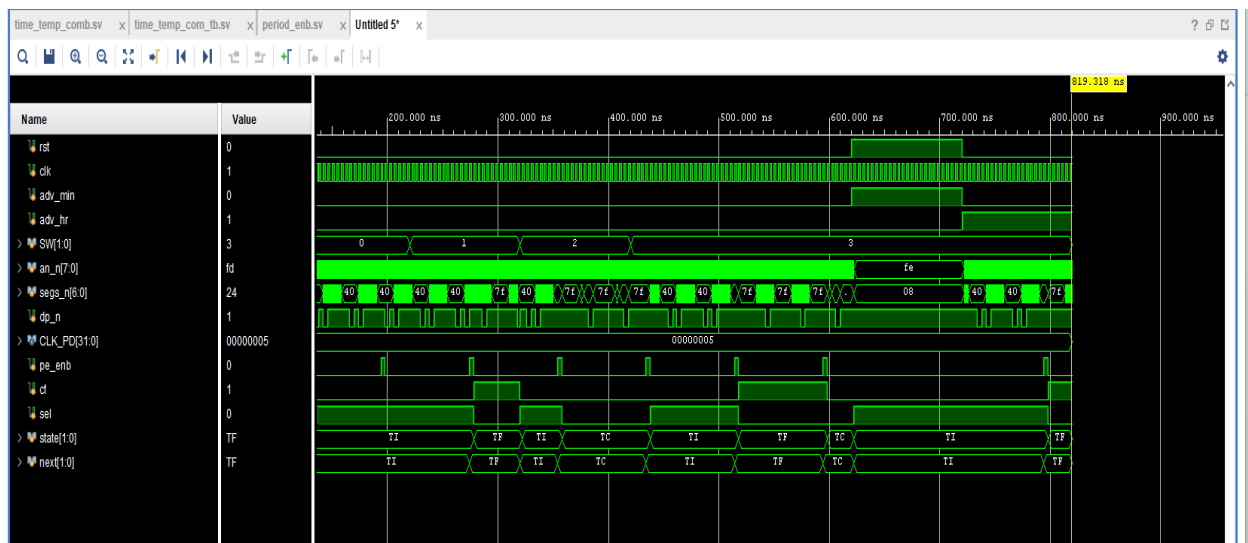


Figure 3simulation scope for time_temp_comb_tb.sv

```

141 -----
142 Start RTL Component Statistics
143 -----
144 Detailed RTL Component Info :
145 +---Adders :
146     2 Input    4 Bit    Adders := 14
147     2 Input    3 Bit    Adders := 1
148 +---Registers :
149             4 Bit    Registers := 8
150             3 Bit    Registers := 1
151             1 Bit    Registers := 1
152 +---Muxes :
153     8 Input    8 Bit    Muxes := 1
154     2 Input    7 Bit    Muxes := 1
155    17 Input    7 Bit    Muxes := 1
156     2 Input    4 Bit    Muxes := 7
157     4 Input    4 Bit    Muxes := 1
158     2 Input    1 Bit    Muxes := 2
159     3 Input    1 Bit    Muxes := 1
160 -----
161 Finished RTL Component Statistics
162 -----
163 -----

```

Figure 4synthesis report