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ECE-447-201

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<p align="center">Lab 4: Timer Controlled LED Matrix</p>

Introduction: The purpose of this lab is to implement timers in such a way that we generate the pattern from previous labs. However, for this lab a second shifter will be used to light the red LEDs which is essentially the inverse of the first pattern.

Hardware Design: I could not locate a footprint for the led matrix, I used several resistors set to the number of the pin to visualize the connections and I used resistors to visualize the pins on the MSP430 I hope this is acceptable and what you were looking for.
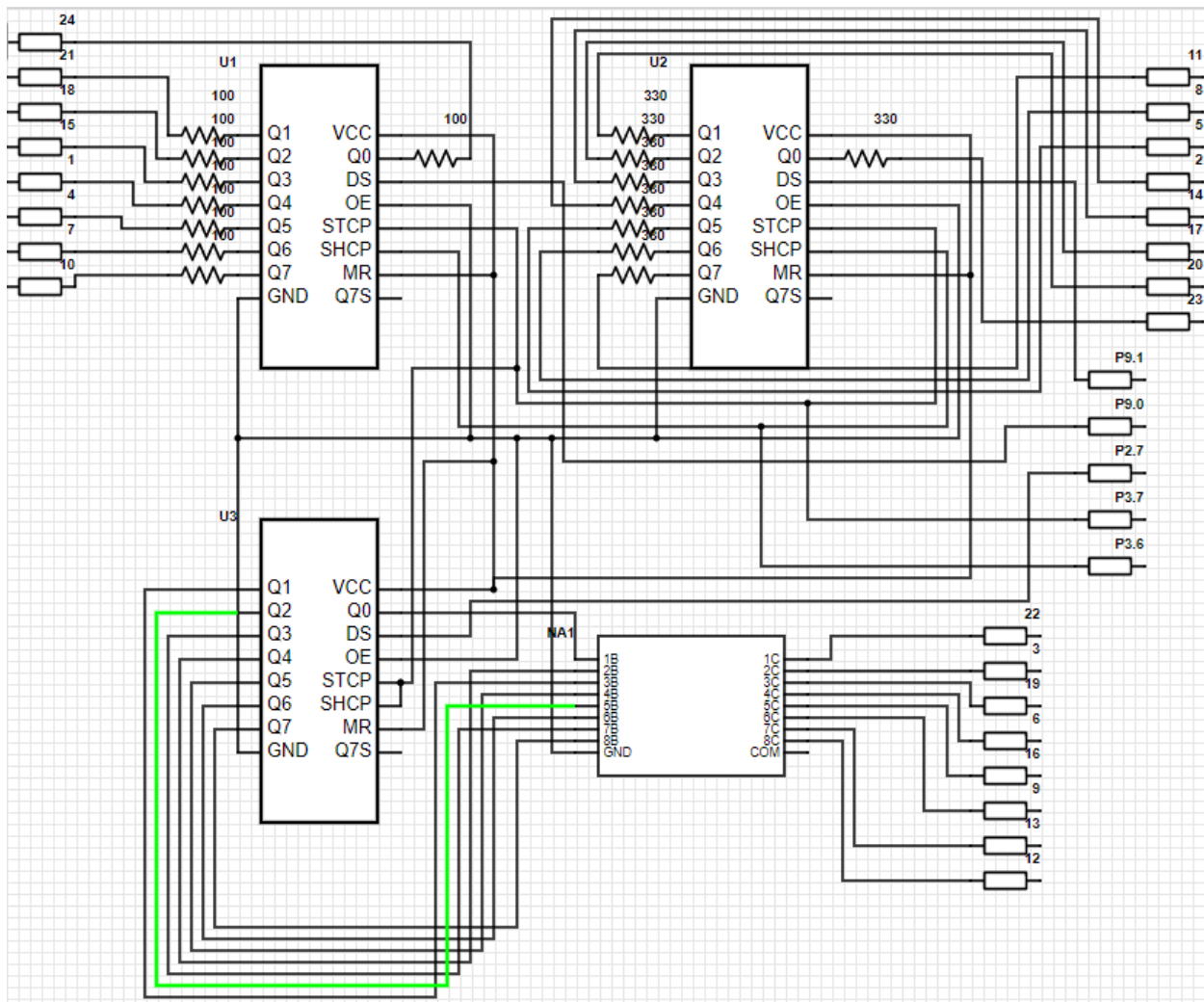
Software Design:
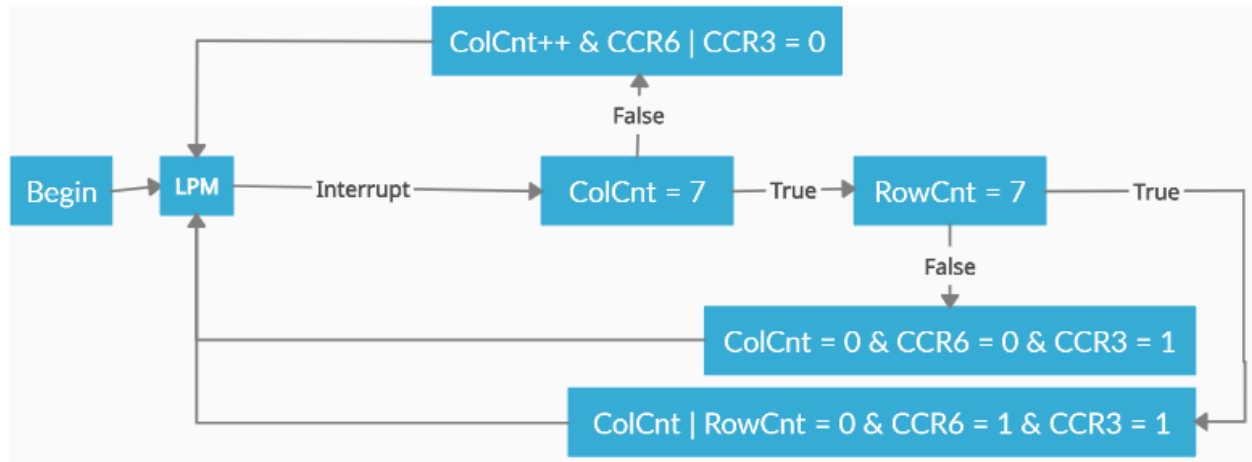
Conclusions: This lab was tricky, but I am glad I managed to complete it I learned a lot about timers and realized my code was never severely incorrect the biggest problem for me was understanding how to implement timers for the very first time.

Questions: Column Clock ≈ 4500 [Hz]

Row Clock ≈ 580 [Hz]

Display Refresh = 75 [Hz]

Demo Video: http://youtu.be/cvregfwnFJ4