ECE 312 Lab 4 Specification Sheet
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LAB H11

Stopwatch

Description

The purpose of the stopwatch is to track the time passed after the press of a button displayed in “HH:MM:SS.hh” format. The stopwatch is precise to 1/100th of a second, accurate to ±1 second over a 1 hour period. A piezo buzzer generates a 1kHz tone for 100ms at the start of each second.

Operating Conditions

Operating voltage range of the device: 4V to 5.5V
Operating temperature: +20ºC to +80ºC
Storage temperature: -65ºC to +150ºC
Maximum DC Current per I/O pin: 40.0mA

Setup Instructions

To operate the device, connect VCC (Pin 7) to a voltage source that is within the operating voltage range, GND (Pin 8, 22) to ground. *Refer to Figure 1 for the device’s schematic.*

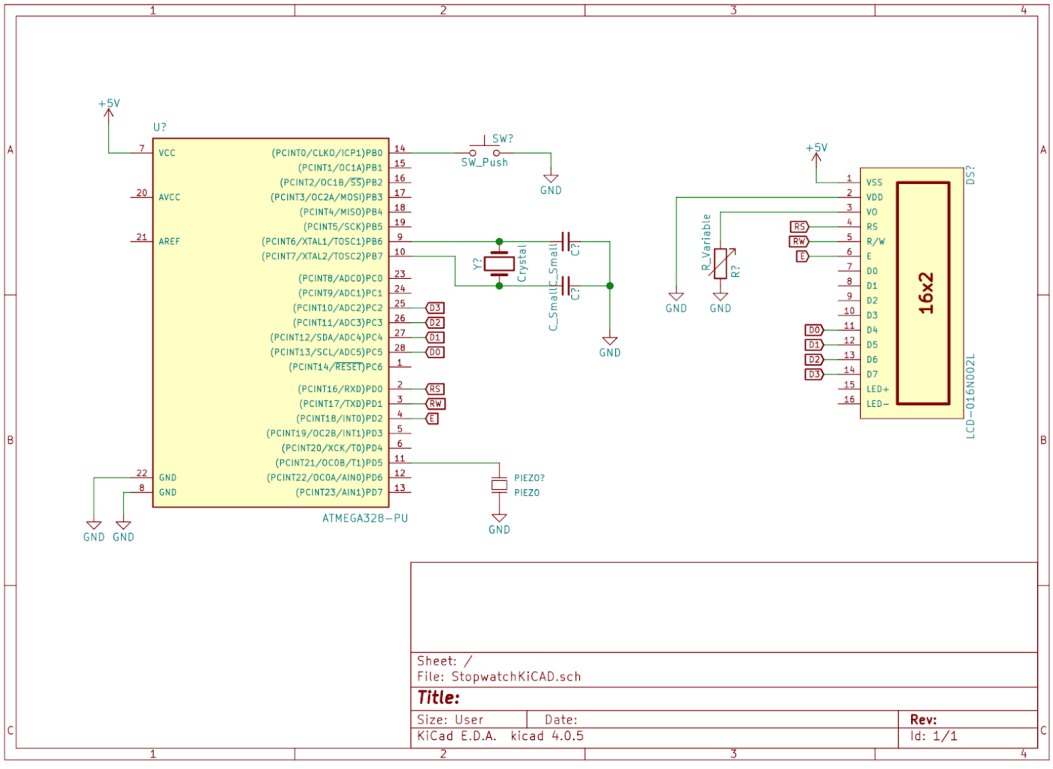

Figure 1: Schematic

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Usage Instructions

Press the button to start the stopwatch. Pressing the button for a short time while it’s running pauses the stopwatch. A short press while it’s paused will resume it, and a long press while paused resets the stopwatch.

Testing