**EEE339**

**Assignment 1**

**Digital clock manual**

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**Functions**

1. 4-digit minute and second display (MM: SS)
2. 4-digit stopwatch with second and tenth of a second display (SSS: DS)
3. Up/Down counting
4. Timer with flashing LEDs
5. Multitasking (ability to change screens to display 1 and 2)
6. Time setting

**Switch and keys guide**

**SW0 =>** To run the clock (Enable)

**SW1 =>** Reset the clock to 0000 (Clear)

**SW2 =>** Change the counting direction for the clock (Up/Down counter)

**SW3 =>** Change the display (show stopwatch or clock)

**SW4=>** To run the stopwatch (Enable)

**SW5 =>** Reset the stopwatch to 0000 (Clear)

**SW6 =>** Change the counting direction for the stopwatch (Up/Down counter)

**KEY0 =>** Increase the value of display 0 by 1

**KEY1 =>** Increase the value of display 1 by 1

**KEY2 =>** Increase the value of display 2 by 1

**KEY3 =>** Increase the value of display 3 by 1

**NOTE:** The 7 segment LED displays are numbered from right to left; indicating the leftmost display as 3 and the rightmost display as 0.

**NOTE:** Keys 0-3 would only have an effect if the counter is paused: enable switch is down.