NAME: Cole Bardin

ECE-C204 Lab Exam 2 (Sec 061A) 08/19/2022

Start: 9:00 AM

Deadline for checkoff : 10:20 AM

Deadline for online submission: 10:30 AM

Problem Description

For this problem, you need to start two 32-bit timers – TIMER32\_0\_BASE in periodic mode and TIMER32\_1\_BASE in one-shot mode. The mode is controlled by the second argument of the driverlib function Timer32\_startTimer which should be *false* for periodic mode and *true* for one-shot mode. The one-shot mode generates only one interrupt after the timeout set and then shuts off the timer for good. The respective ISRs are named T32\_INT1\_IRQHandler T32\_INT2\_IRQHandler

Start with Listing 7.8 (provided as zip folder). It flashes RED LED1 at 1 sec intervals. Modify the code such that it alternately flashes RED LED2 and GREEN LED2 at 1 sec intervals. You will get a partial credit of 5/10 for getting this part checked off.

Then add code to introduce the one-shot timer with a timeout of 10 secs. The purpose of the one-shot timer is to change the colors of LED2 to BLUE and PURPLE (instead of RED and GREEN) when it times out. In other words, the LED2 should alternately flash BLUE and PURPLE after 10 secs have elapsed

Checkoff

Source for MCLK **HFXTCLK** Source Frequency **48 MHz**

MCLK DIVIDER **1** MCLK FREQUENCY **48 MHz**

TIMER\_0\_BASE PRESCALER **16** TIMER\_0\_BASE FREQUENCY **3 MHz**

TIMER\_1\_BASE PRESCALER **16** TIMER\_1\_BASE FREQUENCY **3 MHz**

Periodic timer works correctly OK / NOT OK

One-shot timer works correctly OK / NOT OK

Initials **CB** Date 8/19/2022 Time 9:27 am

Comments

**Self-checkout**

**GRADE /10**