CMPE 460 Laboratory Exercise 1

Intro to K64F GPIO and Keil μVision

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Performed: January 29, 2021
Submitted: February 05, 2021

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By submitting this report, you attest that you neither have given nor have received any assistance (including writing, collecting data, plotting figures, tables or graphs, or using previous student reports as a reference), and you further acknowledge that giving or receiving such assistance will result in a failing grade for this course.

Your Signature: _____

Description

The purpose of this lab is to gain experience using *Keil µVision* to program the *NXP K64F* microcontroller. The lab focused on using the GPIO pins to enable a push button switch as an input and an LED as an output.

GPIO Command Information

GPIOx_PDOR

$GPIOx\_PDOR =< value >$ sets the entire register x to $< value >$

GPIOx_PSOR

$GPIOx\_PSOR =< value >$ sets all bits from $< value >$ in register x high if they have a '1' bit in $< value >$

GPIOx_PCOR

$GPIOx\_PCOR =< value >$ clears all bits from $< value >$ in register x if they have a '1' bit in $< value >$

GPIOx_PTOR

$GPIOx\_PTOR =< value >$ toggles all bits from $< value >$ in register x high if they have a '1' bit in $< value >$

GPIOx_PDIR

$if(GPIOx\_PDIR ==< value >)$ tests whether port x an input register is high or low

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Student's Name: Jacob Meyerson Section: 2

Demo		Point Value	Points Earned	Date
Demo	Pre-Lab: Port & Pin Table	10	10	01/29/21
	Yellow LED	20	20	1/29/21 BJS
	R,G,B,C,M,Y, W LED Cycle	25	25	1/29/21 BJS

To receive any grading credit students must earn points for both the demonstration and the report.

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Worksheet		Point Value	Points Earned	Comments
Worksheet	Lab Description	15		
	Question	20		
Total for prelab, demo, and report		100		