

ECE2049 E22: Homework 3 Solutions

Problem 1

The problem asks us to determine a few things about the following code example that uses digital I/O on the MSP430 (explanations in comments):

```
#include <msp430.h>
void configure_io(void)
{
    P2SEL &= ~(BIT5|BIT4|BIT0); // Set pins P2.5, P2.4, and P2.0
                                // to digital I/O mode
    P2DIR &= ~(BIT5|BIT4);      // Set pins P2.5 and P2.4 as inputs
                                // (ie. set bits 4, 5 of P2DIR to 0)
    P2DIR |= (BIT0);            // Set pins P2.0 as output
                                // (ie. set bit 0 of P2DIR to 1)
}
```

- a. This example configures pins P2.5, P2.4, and P2.0.
- b. Pins P2.5 and P2.4 are configured as inputs, P2.0 is used as an output