**Interfacing 4x4 Keypad and 16x2 LCD Display**

**Connections:**

**16x2 LCD:**

-RS on PA6

-E on PA5

-R/W on PA7

-Data on Port B

**4x4 Keypad:**

-Rows on PE0-3

-Columns on PC4-7

**Details:**

I wrote a library to interface with the 16x2 LCD display and a 4x4 Matrix Keypad and wrote the main loop to get input from the keypad and display it on the LCD, but if a “\*” is received the screen should be cleared.

It contained a main.c, lcd.c, lcd.h, keypad.c and keypad.h files. The code was written to run on the TIVA C development board from TEXAS INSTRUMENTS which contains the tm4c12306hpm CORTEX-M4 Microcontroller running at 16MHz.

The code was CMSIS compliant and all written in C.