In this lab, I learned how to implement with two modules, QC1602A for text display and uLCD-144G2-AR for graphics display.

(1) Lab5_1 LCD_QC1602A

In this lab we build our own LCD library. All instruction is written in .h and .cpp file. This method is the basic one also we need to check datasheet to implement it.

(2) Lab5_2_textLCD

In this lab we import online library, which is easier and more readable for user.

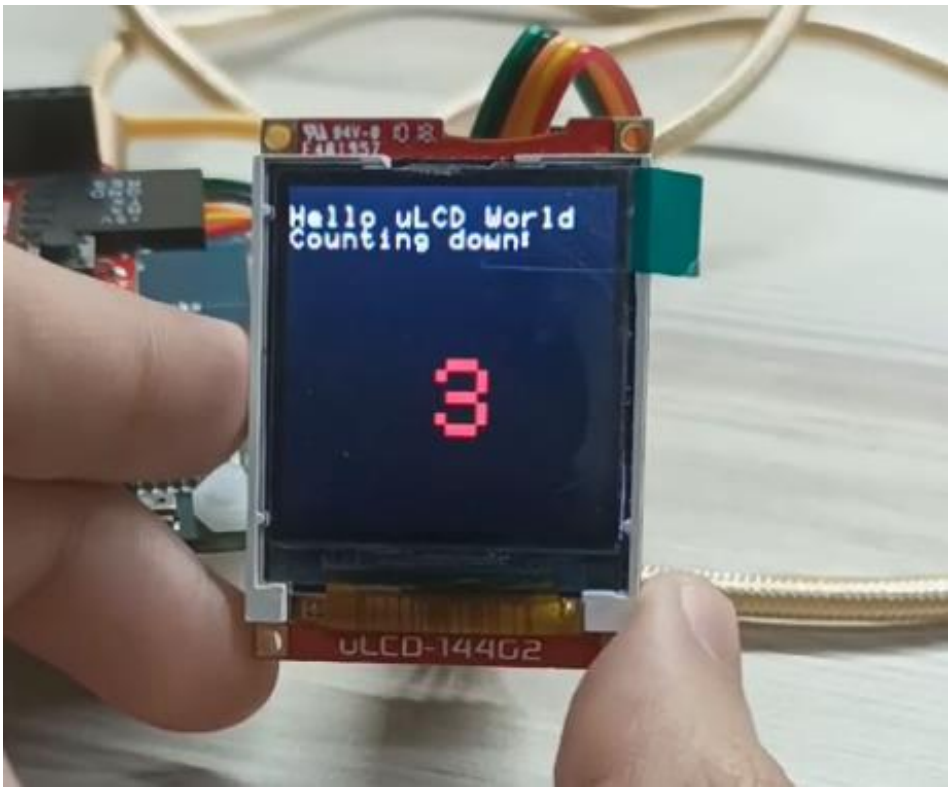
Example1: display HELLO & 0~9

Example2: counter with LED blinking

Example3: ADC display

(3) Lab5_3 uLCD

In this lab we use another module, uLCD-144G2-AR, which can do more than QC1602A. We import another library and implement it.



(4) Discussion

QC1602A use more pins than uLCD-144G2-AR which use UART interface, by two of this module we can see the difference between parallel and serial interface. Also libraries let us use the modules easier, we don’t need to check datasheet for protocol and implementation, call the function and it can be use.