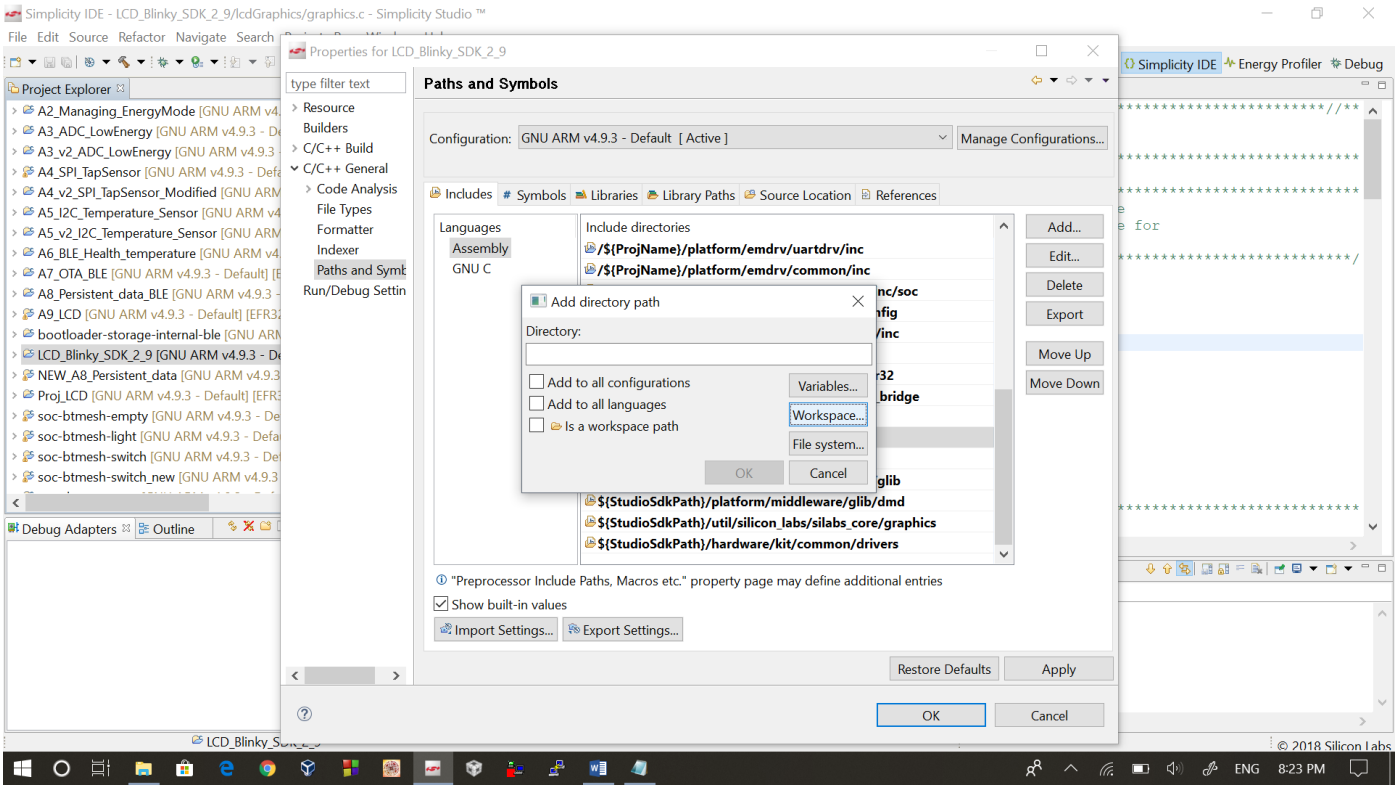
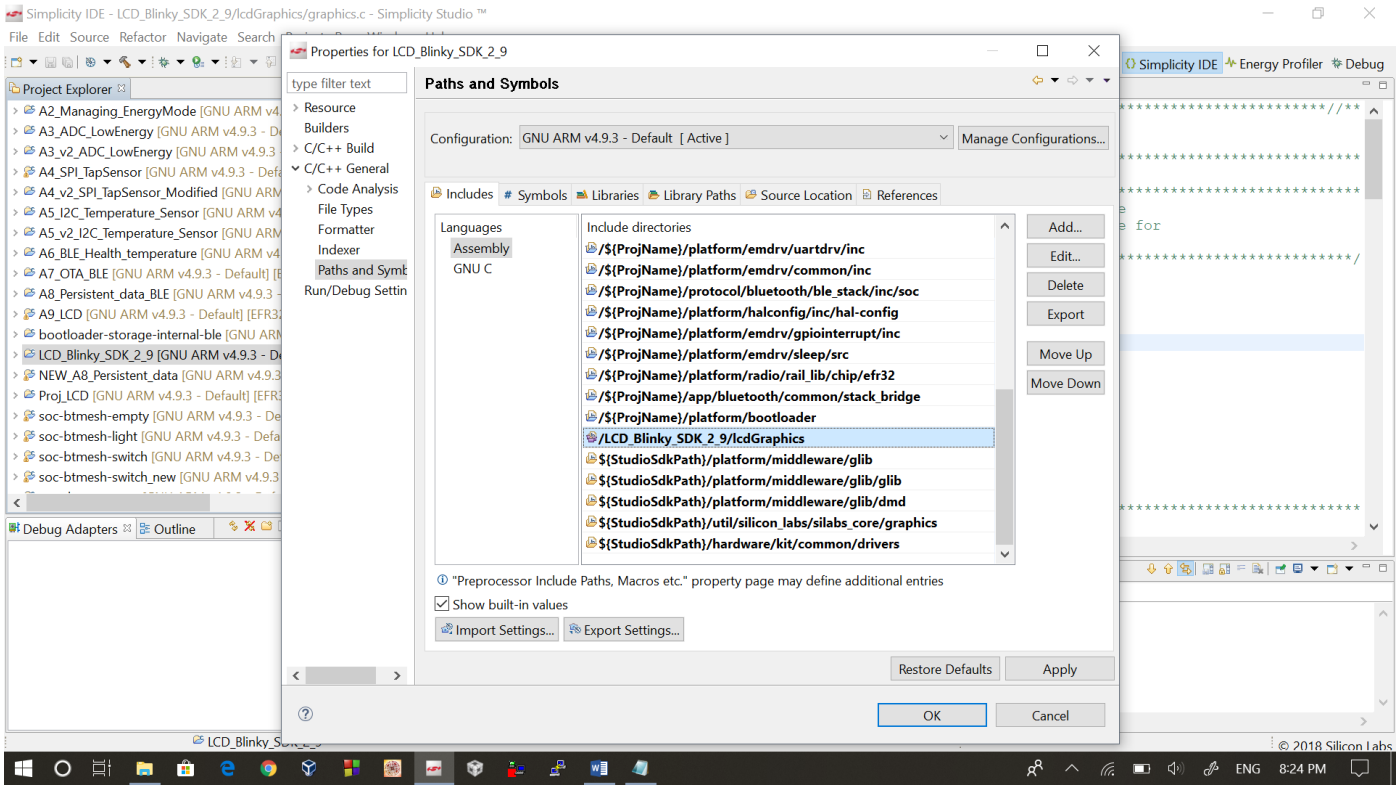
ECEN 5823
Internet of Things Embedded Firmware
FALL 2018

Follow the below steps to interface the LCD in your project:

1. Copy the folder "lcdGraphics" into the root project directory (Create a copy and not create a link)
2. Add the "lcdGraphics" folder in the Source Location tab under: C/C++ General > Paths and Symbols.
   a. Go to properties of the project (right click), C/C++ General> Paths and Symbols.
   b. Under Assembly and GNU C section (In Includes), select add, go to workspace, expand your current project and select the lcdGraphics.



3. Add these paths manually in **both Assembly and GNU C** [Click add and paste these paths]:
   a. ${StudioSdkPath}/platform/middleware/glib/glib
   b. ${StudioSdkPath}/platform/middleware/glib/dmd
   c. ${StudioSdkPath}/util/silicon_labs/silabs_core/graphics
   d. ${StudioSdkPath}/hardware/kit/common/drivers



4. Add this line in hal-config.h (can be found in project folder):
   a. Change (0) to (1) for #define HAL_SPIDISPLAY_ENABLE (1)
   b. #define HAL_SPIDISPLAY_FREQUENCY (1000000)

5. In main.c
   a. add #include "lcd_driver.h"
   b. use this type of code
      LCD_init("BLE Server"); OR LCD_init("BLE Client");
      LCD_write("Connected", LCD_ROW_CONNECTION);
      //LCD_ROW_CONNECTION can be found in lcd_driver.h with other row value

macros
//Each row will have a Row value define associated with it. Each Row corresponds to the actual row on the LCD.
Go through “lcd_driver.h” file in the lcdGraphics folder and read the comments to understand how to use the driver.

These steps are tested on the Blinky Project provided by Professor Graham and the LCD works.
These steps should work, if not - ping me with the issues and I will try to resolve it

#cuboulder
#foreverbuffs
#happycoding