I2C_LCD_Example Example Project
1.0

Features

- Communicate on 2-wire I2C bus
- Support of NXP PCF2119x command format

General Description

This example project demonstrates functionality on the I2C LCD component. In this example project the I2C LCD component is used to display a custom character set of the NXP PCF2119x compatible LCD module. It also demonstrates the example of usage of address macros and custom commands.

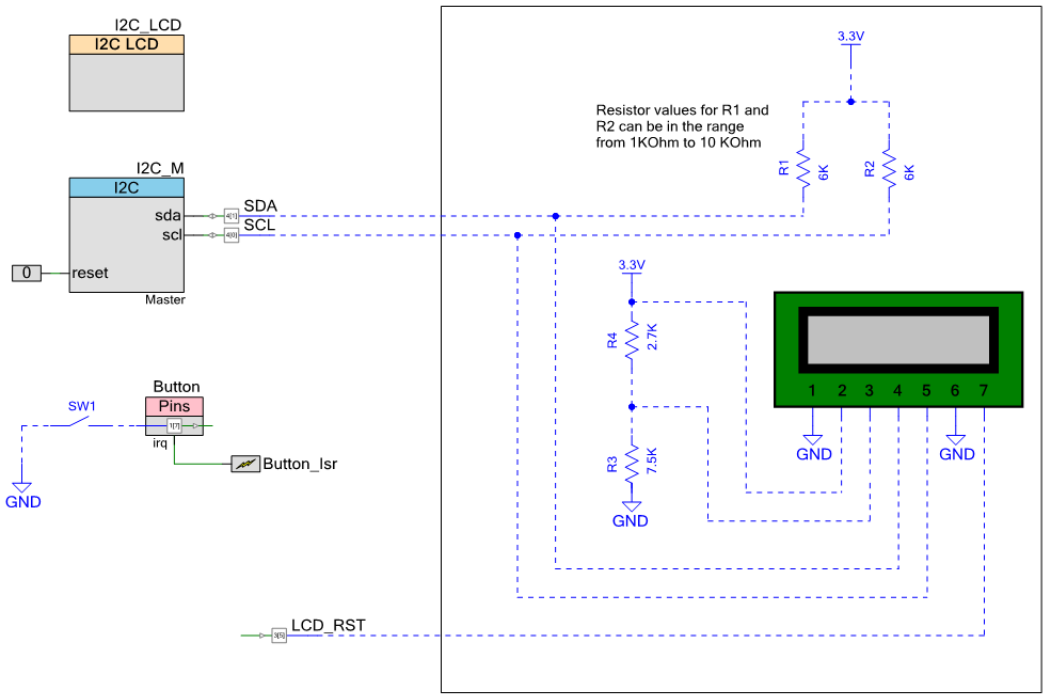
Development Kit Configuration

This example project is designed to run on CY8CKIT-001 from Cypress Semiconductor. A full description of the kit, along with more example programs and ordering information, can be found at http://www.cypress.com/go/cy8ckit-001.

Project Description

1. Make sure DVK CY8CKIT-001 is in its default configuration.
2. Connect R1-R4 resistors as it is shown on Figure 1.
3. Connect SDA pin and SCL pin to pin 4 and 5 of the LCD module.
4. Connect pins 1-3, 6 and 7 of LCD module as it is shown on Figure 1.
5. Connect button pin (P1[7]) with button SW1 on DVK CY8CKIT-001.
6. Build the project and program the hex file into the target device.
7. Wait and observe the two lines output of the custom character set.
8. Press the SW1 button of CY8CKIT-001 and observe the LCD output flip.
9. Press the button again and observe the LCD output get back to its normal state.

Figure 1. Example Project Design Schematic



Expected Results

The expected result is printed strings on the LCD module, "CYPRESS!" in the first row and "Cypress!" in the second row. The displayed output is flipped top to bottom on the button press.

	Original strings	Flipped strings
First row	CYPRESS!	Cʎpɹǝssi
Second row	Cypress!	CʎPRESSi

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