



Lookup Table (LUT) example project

1.10

Features

- Lookup Table with control register, status register and LCD

General Description

This example project demonstrates the working of the LUT with 2 inputs and 2 outputs.

Development kit configuration

1. This project is written for a 2X16 LCD display as the one available in the Cypress kit CY8CKIT-001.
2. Build the project and program the hex file on to the target device using MiniProg3.
3. Connect pins as described below and power cycle the device.
4. Observe the results on the LCD.

Project configuration

This project consists of the LUT component with Status and Control registers. The Control register is used to provide the input to the LUT and the Status register is used to capture the output of the LUT.

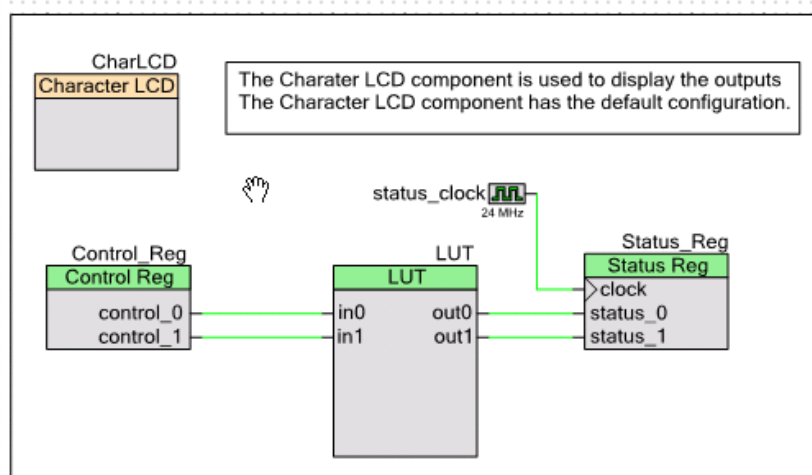
LUT Example Project

The Project explains the usage of Lookup Table (LUT) component. When the board is powered on LCD is cleared and input is provided by writing the values into control register. The output values are read into status register and displayed in LCD.

To check the LUT, set the inputs by using Control_Reg_Write() API, LUT gives corresponding output as set in configuration window. Using Status_Reg_Read() API get the outputs.

Procedure :

1. This project is written for 2X16 display as the one available on CY8CKIT-001. It will need slight modification to run on larger displays.
2. Build the project and program the hex file on to the target device.
3. Power cycle the device and observe the results on the LCD.



Parameter Settings:

Inputs = 2

Outputs = 2

Registered output = false

Control Register (Control_Reg) is used to supply the input and Status Register (Status_Reg) is used to store the outputs

Project description

In the main function initially the LCD is cleared and input is provided by writing the values into the control register. The output values are read into status register and displayed on the LCD. For the proper usage of Char LCD component please refer to the corresponding component datasheet.

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