HelloWorld_Blinky Example Project
1.00

Features

- Prints “Hello World” on LCD.
- Blinks LED in hardware.

General Description

This project provides an introduction into the process of creating a design in PSoC Creator. It accomplishes the simple tasks of printing “Hello World” on an LCD and blinking an LED using a PWM component.

Development Kit Configuration

The following configuration instructions provide a guideline to test this design. For simplicity, the instructions describe the stepwise process to be followed when testing this design with the PSoC Development Kit (CY8CKIT-001) board, but can be generalized for the PSoC 3 Development Kit (CY8CKIT-030) and PSoC 5 Development Kit (CY8CKIT-050) as well.

1. Set LCD power jumper J12 to ON position and leave the rest of the board at default configuration.
2. Connect P0_0 to LED1 on the development board.
3. Ensure that the Character LCD is connected to header P18 on the development board.

Project Configuration

The TopDesign schematic looks as shown in Figure 1 below. The Character LCD is configured in its default mode. The PWM is connected to a 250 Hz clock and its period is set to 255 to give an approximate 1 Hz PWM output. The compare value is kept at 127 so that the PWM output has a 50% duty cycle. See Figure 2.

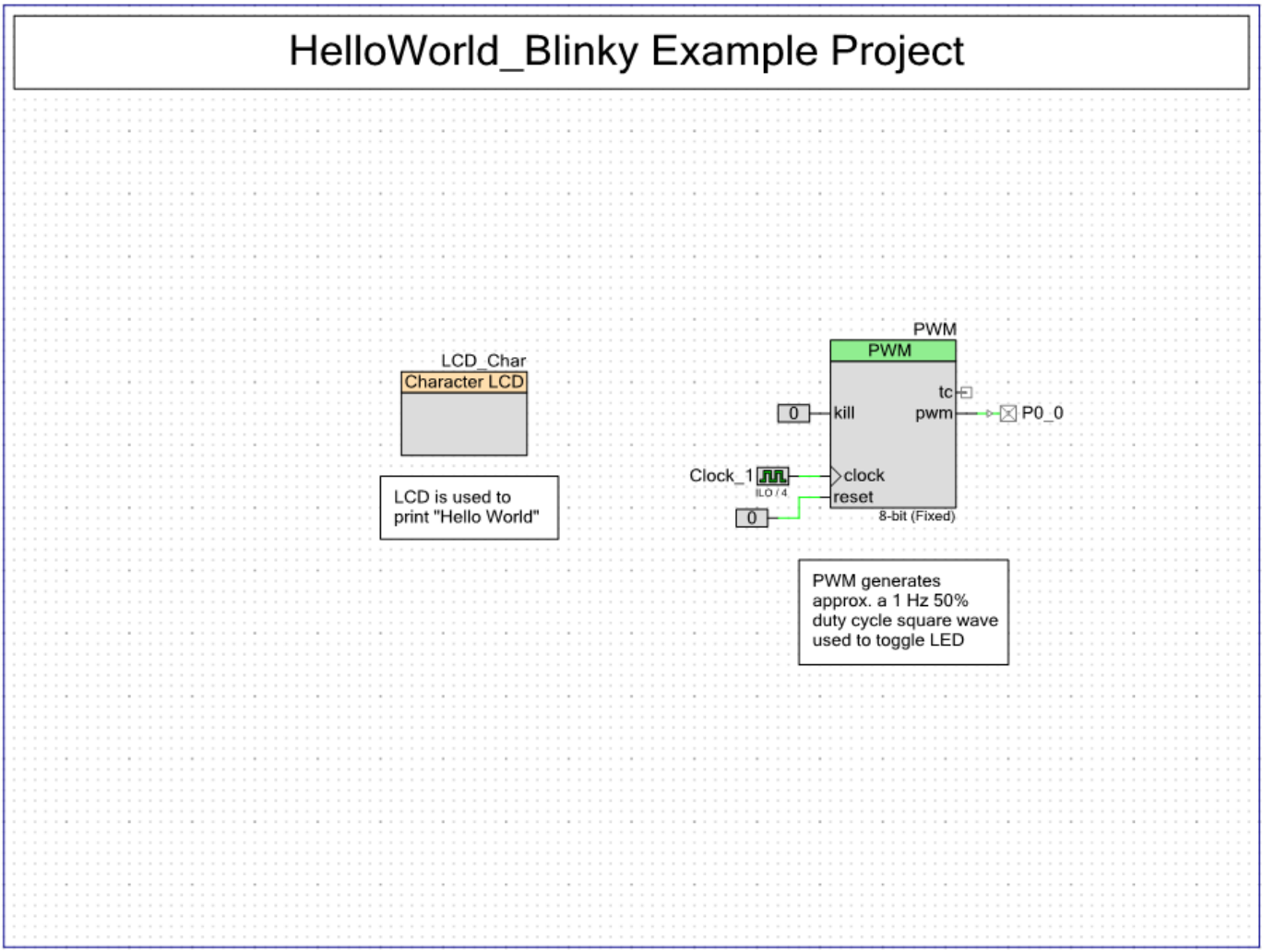

Figure 1. TopDesign schematic

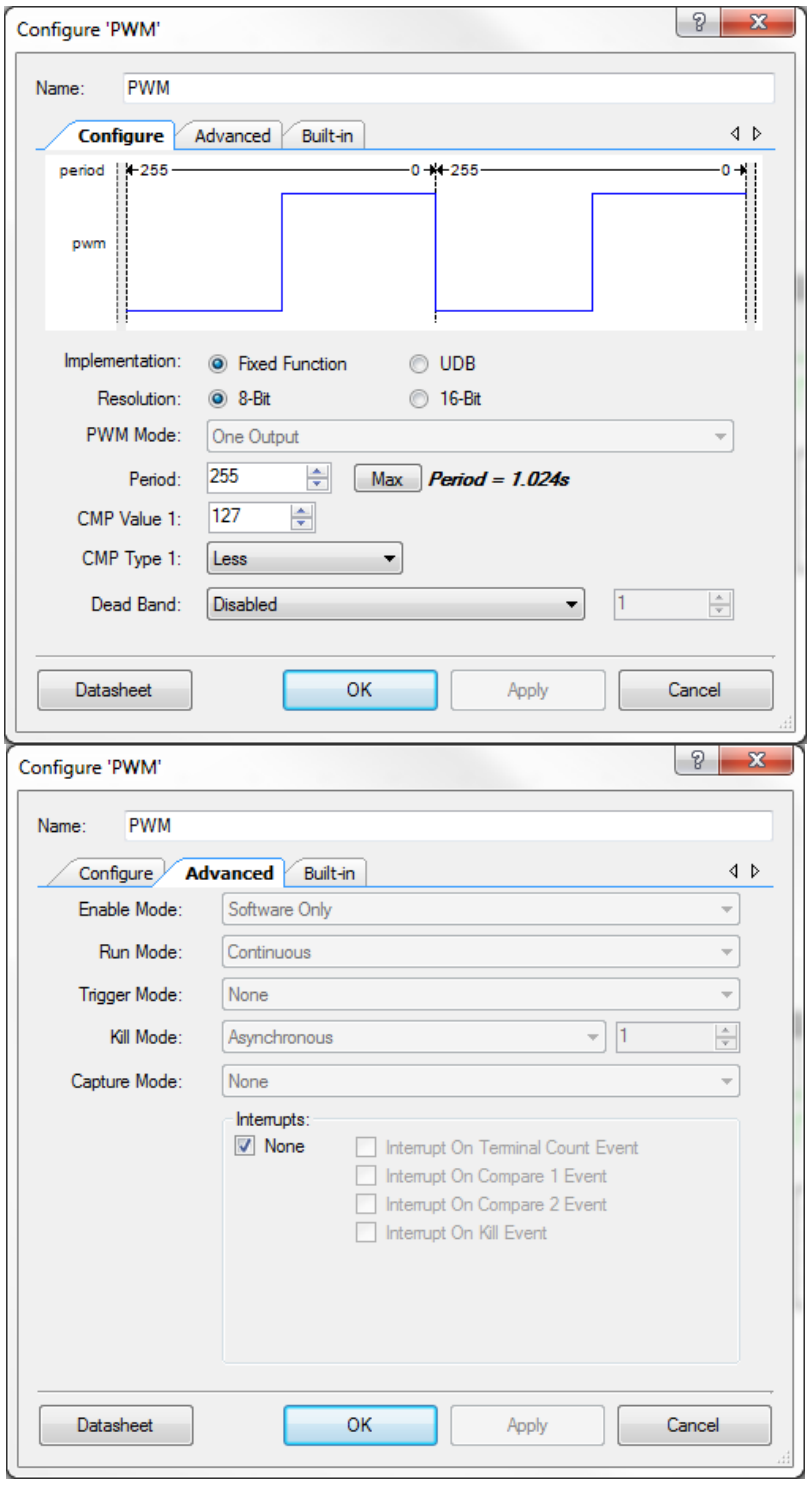

Figure 2. PWM component configuration

Project Description

In the main.c file, the PWM and LCD components are started and “Hello World” is printed on the LCD.

Expected Results

“Hello World” is displayed on the LCD and the LED blinks at approximately 1Hz.

Figure 3. Expected output on LCD

Related Material

Example Projects

- Timer
- Counter
- ADC_DMA_VDAC

Application Notes

- AN54181 - PSoC® 3 - Getting started with a PSoC 3 design project

Training

- PSoC 3 and PSoC 5 101: Introduction to the Architecture and Design Flow
- PSoC 3 and PSoC 5 102: Introduction to System Resources
- PSoC 3 and PSoC 5 103: Introduction to Digital Peripherals

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