

# Real Time Clock (RTC) Code Example

# **Objective**

This example demonstrates the Real Time Clock component operation configured in the fixed Daylight Saving Time (DST) mode, active alarm issuing.

# **Procedure**

- 1. This project is written for a 2x16 LCD display as the one available in the Cypress kit CY8CKIT-001 DVK.
- 2. The CY8CKIT-001 DVK besides default configuration should have LCD power jumper (J12).
- 3. Build the project and program the hex file on to the target device using MiniProg3.
- 4. Power cycle the device and observe the results on the LCD.

### **Schematic**

RTC RTC	The RTC component is configured with enabled daylight savings time functionality and "Monday" as start of week day.
LCD Character LCD	The Character LCD component has the default configuration.



#### **PSoC Resources**

Cypress provides a wealth of data at www.cypress.com to help you to select the right PSoC device for your design, and quickly and effectively integrate the device into your design. For a comprehensive list of resources, see KBA86521, How to Design with PSoC 3, PSoC 4, and PSoC 5LP. The following is an abbreviated list for PSoC:

- Overview: PSoC Portfolio, PSoC Roadmap
- Product Selectors: PSoC 1, PSoC 3, PSoC 4, or PSoC 5LP. In addition, PSoC Creator includes a device selection tool.
- Datasheets: Describe and provide electrical specifications for the PSoC 3, PSoC 4, and PSoC 5LP device families.
- CapSense Design Guides: Learn how to design capacitive touch-sensing applications with the PSoC 3, PSoC 4, and PSoC 5LP families of devices.
- Application Notes and Code Examples: Cover a broad range of topics, from basic to advanced level. Many of the application notes include code examples.
- Technical Reference Manuals (TRM): Provide detailed descriptions of the architecture and registers in each of the PSoC 3, PSoC 4, and PSoC 5LP device families.
- PSoC Training Videos: These videos provide step-bystep instructions on getting started building complex designs with PSoC.

#### Development Kits:

- CY8CKIT-042 and CY8CKIT-040, PSoC 4 Pioneer kits, are easy-to-use and inexpensive development platforms. These kits include connectors for Arduino™ compatible shields and Digilent® Pmod™ daughter cards.
- CY8CKIT-049 is a series of very low-cost prototyping platform for sampling PSoC 4 devices.
- CY8CKIT-030 and CY8CKIT-050 are designed for analog performance. They enable you to evaluate, develop, and prototype high-precision analog, low-power, and low-voltage applications powered by PSoC 3 and PSoC 5LP, respectively.
- CY8CKIT-001 is a common development platform for all PSoC family devices.
- The MiniProg3 device provides an interface for flash programming and debug.



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