

CC32xx Timer Demo Application

Overview

Every GPTM(General purpose timer module) block can be used as two 16-bit timers/counters (referred to as Timer A and Timer B) that can be configured to operate independently as timers or event counters, or concatenated to operate as one 32-bit timer. Timers can also be used to trigger μ DMA transfers.

Following operating modes are supported:

1. 16 or 32-bit programmable one-shot timer
2. 16 or 32-bit programmable periodic timer
3. 16-bit general-purpose timer with an 8-bit prescaler

Application details

This application is to showcase the usage of Timer DriverLib APIs. The objective of this application is to showcase the usage of 16 bit timers to generate interrupts which in turn toggle the state of the GPIO (driving LEDs).

Two timers with different timeout value(one is twice the other) are set to toggle two different GPIOs which in turn drives two different LEDs, which will give a blinking effect.

Source Files briefly explained

1. **main** - contains main function implementing LED blinking using timers.
2. **gpio_if** - APIs to get pin number from GPIO number and set them.
3. **pinmux** - Pinmux configurations as required by the application.
4. **timer_if** - APIs for timer.

Usage

1. Run the reference application (Flashing the bin/IAR/CCS).
2. Observe the two LEDs blinking with different frequencies(one is twice the other).

Limitations/Known Issues

None.

Article Sources and Contributors

CC32xx Timer Demo Application *Source:* <http://processors.wiki.ti.com/index.php?oldid=178070> *Contributors:* Codycooke, Malokyle