MAX32600 Timer GPIO Blink Demonstration

April 3, 2015

1 Abstract

This document describes the Blinky sample application provided for the MAX32600. This application demonstrates how to set up a square wave pulse width modulation using a 32bit timer to a GPIO with the provided firmware APIs.

2 Requirements

- MAX32600B EvKit
- Olimex JTAG ARM-USB-TINY-H
- Sample code for this application located in `Firmware/Applications/BlinkyTMR`
- GNU ARM toolchain
- Optional: An oscilloscope for viewing the GPIO output signal.

3 Setup

- Load the compiled max32600.elf file onto the MAX32600 EvKit.

4 Observation

- The green LED should blink with a 1Hz rate, %50 duty cycle.

5   Source Code Overview

5.1   Drivers In Use

- Instruction Cache
- Clock Manager
- Power Manager
- GPIO
- 32bit timer

5.2   Interrupts Enabled

None

5.3   Code Operation

- Enable Instruction Cache
- Setup Clocks; system clock, systick and timet
- Initialize the pulse train module
- Set GPIO for timer output
- Use timer helper function to calulate timer parameters for timer ticks and prescale
- Start 32bit timer