

Blinky_LED_1

for KIT_AURIX_TC237_TFT

Blinky LED

AURIX™ TC2xx Microcontroller Training
V1.0.0



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Scope of work

An LED is blinking based on the timing given by a wait function.

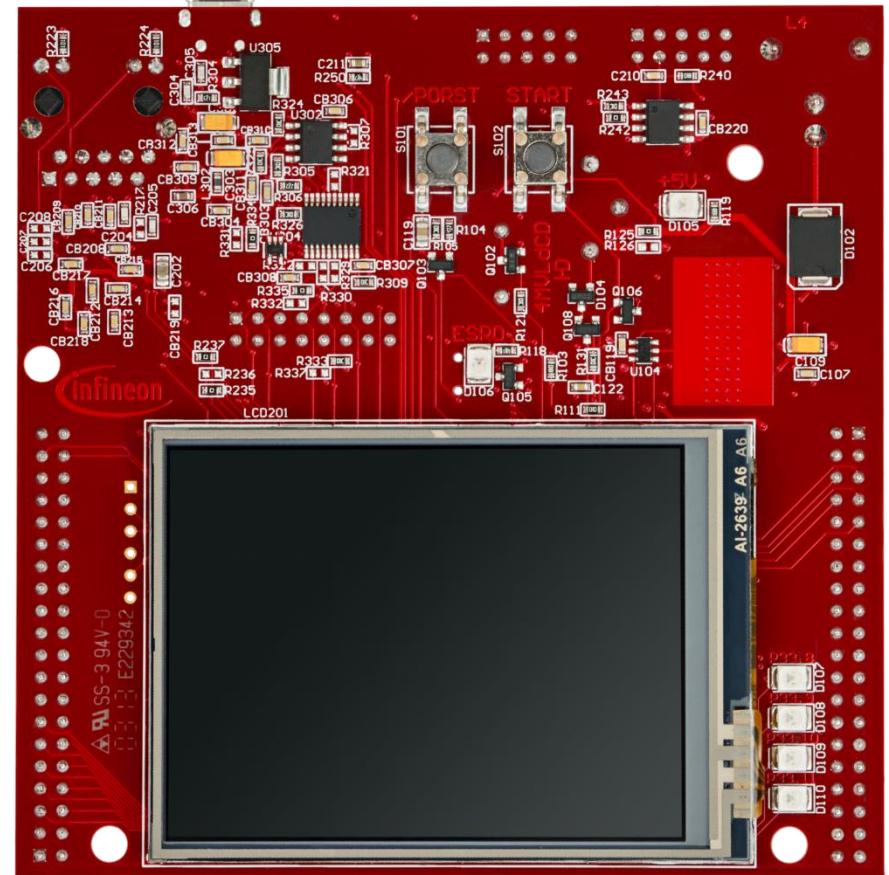
A wait function is used to add delays between switching on and switching off an LED on port pin P13.0.

Introduction

- › The individual control and data bits of each GPIO port are implemented in a number of registers. The registers are used to configure and use the port as general-purpose I/O.
- › The port input/output control registers configure the functionality and characteristics of the GPIO port pin such as port direction (input or output), pull-up, pull-down, and push-pull or open-drain functionality.

Hardware setup

This code example has been developed for the board
KIT_AURIX_TC237_TFT_AC-Step.



Implementation

Initialization of the LED

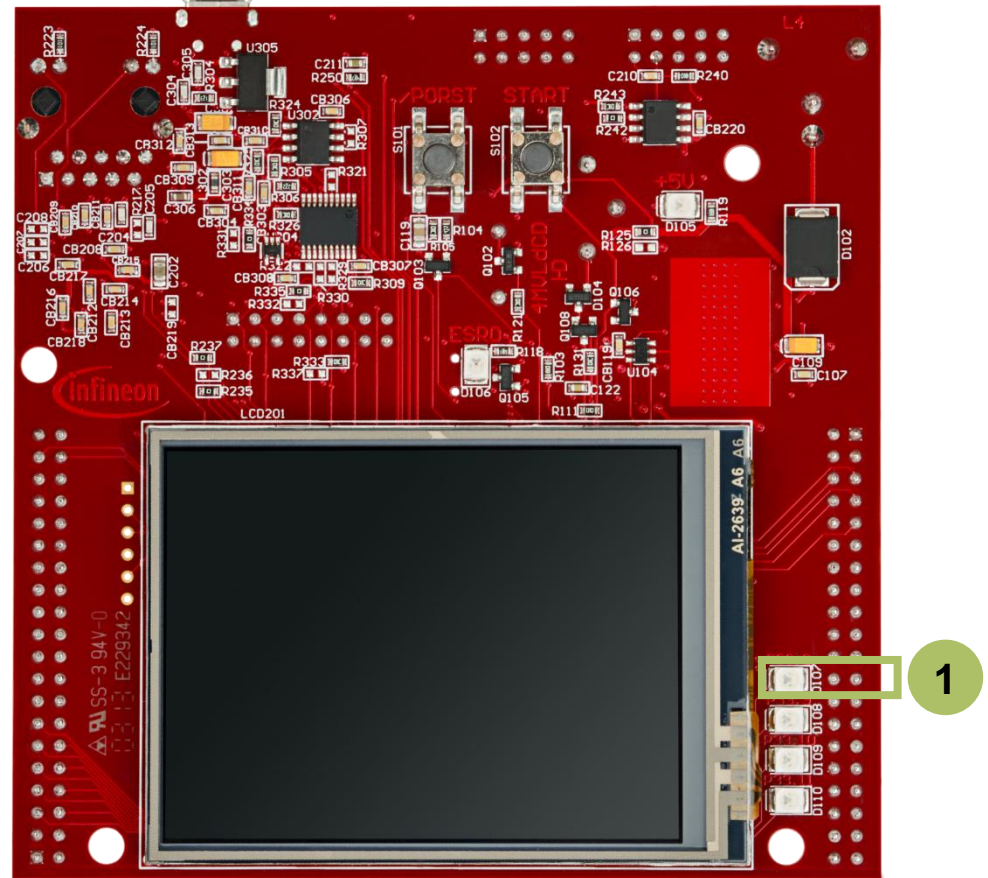
- › The LED is initialized with the function ***IfxPort_setPinModeOutput()*** from the iLLD ***IfxPort.h***.
- › The LED is switched off with the function ***IfxPort_setPinHigh()*** from the iLLD ***IfxPort.h***.

Toggling of the LED

- › The state of the LED is toggled with the function ***IfxPort_togglePin()*** from the iLLD ***IfxPort.h***.
- › This state is hold during one second with the function ***waitTime()*** from the iLLD ***Bsp.h***.

Run and Test

After code compilation and flashing the device, observe the **LED D107** (1), which should be blinking at a frequency of approximately 1 Hz.



References



- > AURIX™ Development Studio is available online:
- > <https://www.infineon.com/aurixdevelopmentstudio>
- > Use the „*Import...*“ function to get access to more code examples.



- > More code examples can be found on the GIT repository:
- > https://github.com/Infineon/AURIX_code_examples



- > For additional trainings, visit our webpage:
- > <https://www.infineon.com/aurix-expert-training>



- > For questions and support, use the AURIX™ Forum:
- > <https://www.infineonforums.com/forums/13-Aurix-Forum>

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Email: erratum@infineon.com

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