Blinky_LED_1
Blinky LED

AURIX™ TC2xx Microcontroller Training
V1.0.0

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_TC297_TFT_BC-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.
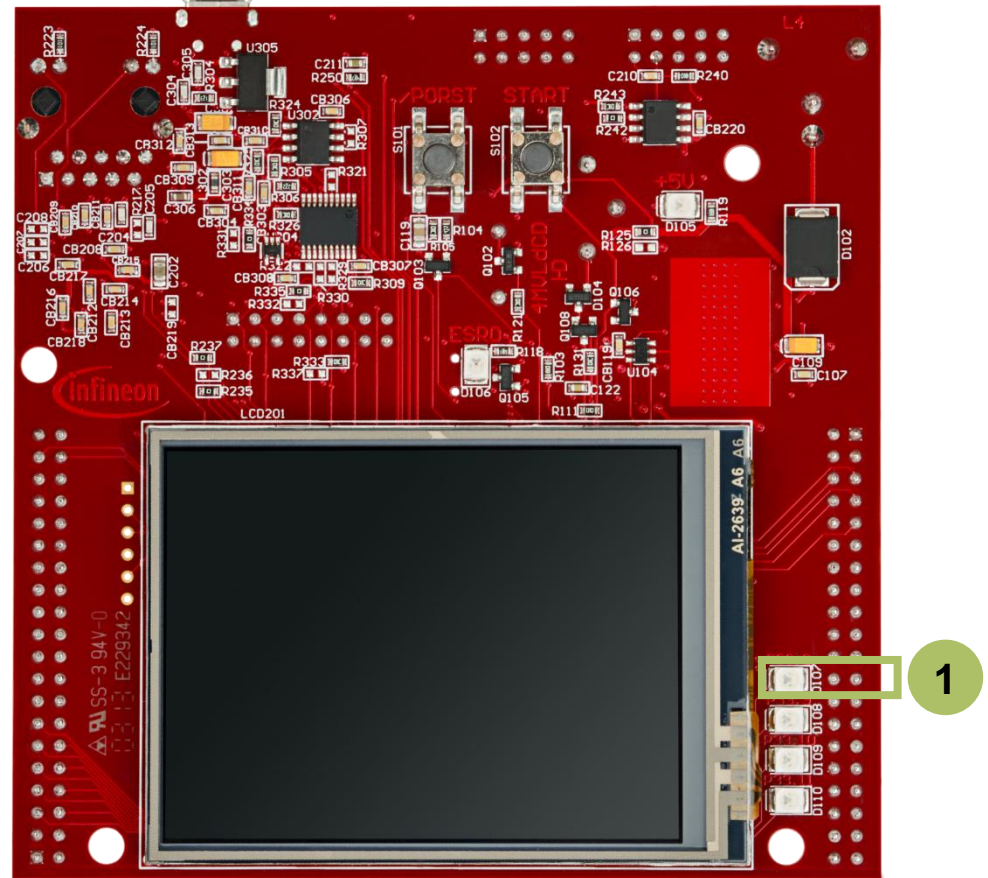
References

› 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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