

LAB 11D

COUNTING

OBJECTIVES:

- To count pulses

REFERENCE:

- Mazidi & Naimi “The STM32F103 Arm Microcontroller and Embedded Systems,” Chapter 11.

MATERIALS:

- Keil IDE
- Blue pill or any other STM32F10x trainer board
- ST-Link V2
- Square wave generator

ACTIVITY 1

- Using counter, write a program which counts on rising edges and sends the counter value to the PC using UART.
- Using wave generator, generate a 10 Hz wave and connect it to the timer input pin.

ACTIVITY 2

- Using counter, write a program which counts on rising edges and toggles PC13 after 10 clocks.
- Using wave generator, generate a 10 Hz wave and connect it to the timer input pin.