

# uebung\_2.1.5

## Student Group

First Name	Surname	Matrikel Nr.

## Table of Contents

Exercise 2.1.5 two LEDs on one digital output ..... 2

## Exercise 2.1.5 two LEDs on one digital output

For a circuit you need to control two LEDs, but unfortunately only one digital output is free. The supply voltage of the microcontroller and the board is 5V. LED1 should have a forward voltage  $U_{f,1}=2.3V$  (red), LED2 should have a forward voltage  $U_{f,2}=2.1V$  (green).

1. Design a circuit from the existing voltage levels so that both LEDs can be driven.

Existing voltage levels:

1. Supply: 5V
  2. Digital output: 5V, 0V or high impedance
1. Calculate the values for the other necessary components

\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

From:

<https://mexle.te.hs-heilbronn.de/> - MEXLE Wiki

Permanent link:

[https://mexle.te.hs-heilbronn.de/circuit\\_design/uebung\\_2.1.5?rev=1636805207](https://mexle.te.hs-heilbronn.de/circuit_design/uebung_2.1.5?rev=1636805207)

Last update: **2021/11/13 13:06**

