

# **TeachSurfing Workshop**

## Basic C coding on microcontroller MSP430

The workshop can be split in two parts or there can be two workshops with the same content delivered on the two available dates.

### **TeachSurfer**

Felix Kiefer

#### **Date & Duration:**

Available on 19.10. and the 22.10.2018 Planned for 180-240min

#### **About the TeachSurfer**

Felix Kiefer is a student of electrical engineering at Technische Hochschule Mittelhessen THM and is working at Bender GmbH & Co. KG in Gruenberg, Germany. Bender is a global player specialized on electrical safety. The focus of Mr. Kiefer's studies is electronics development and circuit simulation.

Mr. Kiefer loves to inspire people by sharing his knowledge about electrical engineering. His aim is to arouse interest in doing own small projects with electronics components.

Next to his technical expertise Mr. Kiefer is interested in sustainability, nature, handcraft, board games, cooking, and exploring cultures by traveling.

# **Workshop summary**

The goal of this workshop is to learn how to put C code on a Microcontroller. After a theoretical introduction to this specific Hardware, participants will write C code and program it on an MSP430 board guided by practical exercises and supervised by the TeachSurfer.



#### Target group

- Age 16+
- People who know basic C programing statements like: if/else, while, for
- People who know basic C operators like: ==, <, !=, ++, &, |, ~</li>
- People who have a basic understanding of the C programing language
- max. 20 people per workshop

#### **Required Material**

- computers with windows 7 and "TI Code Composer Studio" installed
- bring an own USB stick is recommended to ease the workflow

#### Agenda

- presentation about myself and my background
- short outlook to career paths in electrical engineering
- · introduction to microcontrollers
- basic C coding step by step (main part)