

# Training Efficient Debugging

## Day 1

- Introduction to Linux tracing infrastructure
- Tools and libraries for application debugging (uprobe, performance counters)
- Interfaces, tools, and methods for kernel debugging
- Remote debugging (applications and kernel)
- Analysis of latency problems with cyclictest und the Linux infrastructure
- Short intro of graphical based tools (trace compass)
- Hands-on exercises debugging a remote board
- "Best practice" recommendations for development

### **Requirement:**

Nothing on Hardware; Programming knowledge with Linux and C

#### **Software:**

Linutronix provides an USB HDD with an x86 64-bit based Debian system for the host system, a Debian toolchain and for the target system an ARM Linux, running on a running on an embedded device. The HDD is a gift for the participant and can be taken home for further studies.

#### **Number of participants:**

Due to our experience we know that a single instructor could coach a maximum of 6 persons. Our courses are therefore limited to this number of individuals.

The "Embedded Device "is an ARM virtual machine and is provided for this course by Linutronix GmbH.