

2 day course - Industrial applications, realtime and Linux

Agenda

Caveats: This is not an introduction in the development process of Linux for embedded devices. It definitely presumes basic knowledge of Linux and C.

Day 1

- ☐ **Linux and industrial applications**
Overview, typical applications, advantages when using Linux
- ☐ **Introduction realtime Linux**
Overview – different approaches to get realtime Linux
Introduction of Preempt-RT patch
How to get your own realtime Linux system (create and configure your system)
- ☐ **Evaluation of your realtime Linux system – presentation of (required) tools**

Day 2

- ☐ **Linux tracing infrastructure – a first overview**
- ☐ **Graphical representation of trace files**
- ☐ **Tracing of application with realtime constraints (uprobe)**
- ☐ **Linux tracing infrastructure used to debug latency challenges**

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 and a Codesourcery toolchain and for the target system an ARM Linux (running in a virtual machine). 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.