

Compact Embedded Linux

Online Live

Workshop

Applicable Technologies	Requirements	Contact
Processor based embedded Linux systems like AMD Zynq™ and others	Basic knowledge of Linux as an operating system Basic knowledge of Makefiles and C-programming	Michael Schwarz P. +49 7664 91313-15 E. info@plc2.de
Fee (net per person)	Inclusive	Duration
OL € 1,900	Training material	3 days
WO € 2,300	Plus beverages during breaks Lunch	3 days

Workshop

To harness the full power of advanced electronic devices such as FPGAs, developing processor-based embedded systems with Linux is an outstanding option.

Developers face the challenge to develop their own embedded Linux system for a specific hardware platform. In this seminar, the participants will learn how to create and customize the components of an embedded Linux system and how to create a Linux system tailored to their specific applications. All aspects like development toolchains, bootloader, root file system, and Linux kernel for embedded systems will be covered. These components will be configured, compiled, and used by the participants. Only free tools like the GNU compiler, U-Boot boot-

loader, or BusyBox are used. This course is hands-on, so each section will conclude with an exercise to gain a deeper understanding of the training material.

The target platform for this training is the AMD Zynq™, but the tools and techniques learned can also be applied to other technologies such as processor systems.

Due to accompanying exercises, the course offers in-depth and practice-oriented training. Attendees of the online live course will do the practical exercises in the afternoon on their own.

Agenda

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| <p>01. Introduction
Course objectives
Linux background</p> | <p>03. Linux kernel architecture
Linux root filesystem concept
Using the console
Memory devices
Cross compiler and libraries</p> |
| <p>02. Linux components for an embedded system
Configuring the bootloader
Device tree</p> | <p>04. BusyBox
Init system
Device files and utilities</p> |