

Embedded Design with PetaLinux Tools

Online Live

Workshop

Applicable Technologies	Requirements	Contact
Xilinx® FPGAs Zynq® SoC, Zynq® UltraScale+™ MPSoC and RFSoc, Versal®	Basic knowledge of embedded systems software design Knowledge of the C programming language and Linux is advantageous	Michael Schwarz P. +49 7664 91313-15 E. info@plc2.de
Fee (net per person)	Inclusive	Duration
OL € 1,300	Training material	2 days
WO € 1,700	Plus beverages during breaks Lunch	2 days

Workshop

With PetaLinux, Xilinx® offers an open source Linux Operating System (OS) solution for Zynq® families and FPGAs using the MicroBlaze™ core. In the beginning, this workshop teaches fundamentals concerning the usage of an embedded Linux OS.

ded system with user applications. Furthermore, the basics of binding hardware peripherals with their respective driver support are discussed. After attending this workshop, you will be able to work with an embedded Linux system.

PetaLinux offers a simpler form of kernel configuration, based on shell scripts, simpler methods, QEMU simulation, firmware packing, templates, and documentation. The great advantage of PetaLinux is the maintenance of open source Linux-based systems in the Xilinx® toolchain.

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.

Additionally, it will make Linux easier for beginners to configure the kernel, support the hardware peripherals quickly, and efficiently develop the embed-

Agenda

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| 01. Introduction to embedded Linux | 09. Device drivers, user space I/O, and loadable modules |
| 02. Embedded Linux components | 10. Custom hardware development and interfacing |
| 03. Driving the PetaLinux tool | 11. Board bring up with the Vivado® design suite and PetaLinux tools |
| 04. Application development and debugging | 12. Device drivers for the hardware |
| 05. Customizing the kernel and root file system | 13. PetaLinux advanced configurations |
| 06. Customizing the PetaLinux project | |
| 07. Networking and TCP/IP | |
| 08. PetaLinux booting and packaging | |