

Professional Zynq-7000 SoC

Online Live

Power Workshop

Applicable Technologies	Requirements	Contact
Xilinx® Zynq®-7000 SoC	Knowledge in VHDL and FPGA technology Basic knowledge of the programming language C	Michael Schwarz P. +49 7664 91313-15 E. info@plc2.de
Fee (net per person)	Inclusive	Duration
OL € 2,800	Training material	5 days
PW € 3,250	Plus beverages during breaks Lunch	5 days

Workshop

The Zynq®-7000 SoC technology of Xilinx® appeals a lot to the world of embedded applications. This 5-day Power Workshop »Professional Zynq-7000 SoC« is a setup for both, hard- and software designers who want to learn to successfully complete embedded projects with a Zynq®-7000 device as their target hardware platform.

dees to extend the embedded systems by introducing application-specific peripherals. To cater to this extensibility, the second part of the program covers embedded software aspects of Zynq®-7000 SoC-based designs. The project flow in the Vitis™ unified development platform, is used to demonstrate the steps up to the creation of its own software drivers.

Besides a detailed description of the internal architecture, this class covers the handling of the Xilinx® development toolchain with a specific focus on the Zynq®-7000 SoC devices. Moreover, there’s an in-depth discussion of the Arm®-based Processing System (PS) and its AXI-based interconnect structures to the Programmable Logic (PL). This enables atten-

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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| 01. Embedded design overview | 10. Writing code in the Xilinx® environment address management |
| 02. IP integrator and the PS configuration wizard | 11. Software interrupts |
| 03. Software development using Vitis™ | 12. Software platform download and boot |
| 04. Introduction to AXI | 13. Application debugging and profiling |
| 05. Interrupts | 14. Writing a custom device driver |
| 06. Adding hardware to an embedded system Cortex®-A9 processor basics | 15. Advanced services and operating systems |
| 07. Designing a custom AXI peripheral with the IP integrator | 16. Project management with the Xilinx® design tools |
| 08. Bus functional model simulation | |
| 09. Software platform development using Vitis™ | |