PLC2 Embedded

Compact Zynq-7000 SoC for the Software Designer

Online Live

Workshop

Applicable Technologies	Requirements	Contact
Zynq®-7000 SoCs	Conceptual understanding of embedded processing systems, writing and modifying scripts for user applications, compiler settings and bootloader operation. Comfort with the C/C++ programming language	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

This workshop introduces you to software design and development for the Xilinx® Zynq® SoC using the Xilinx® Vitis™ unified development platform.
You will learn the concepts, tools, and techniques required for the software phase of the design cycle. Topics are comprehensive, covering the design and implementation of the Board Support Package (BSP) for resource access and management of the Xilinx® standalone library. Major topics include device driver use, user application debugging, and integration.

Practical implementation tips and best practices are also provided throughout to enable you to make good design decisions and keep your design cycles to a minimum.

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

01. Overview of embedded software development
02. Embedded UltraFast™ design methodology
03. Zynq®-7000 SoC architecture overview
04. Driving the Vitis™ software development tool
05. System debugger
06. Standalone software platform development
07. Linker script management
08. Migrating from SDK to the Vitis™ platform
09. Software interrupts: writing interrupt handlers
10. Operating systems overview
11. Linux: a high-level introduction
12. Linux software application development
13. Booting overview
14. Software profiling
15. Understanding device drivers
16. Custom device drivers