



2010 Xilinx Invitation of University Professors Workshop

Embedded Linux on Xilinx MicroBlaze

Dear professor:

To promote in FPGA-based embedded systems and with the higher education reform in China, XILINX University Program and E-Elements will be organized by the university professor, 2-day workshop training courses in Tsinghua University in Beijing. XILINX Distinguished Lecturer for the well-known Australian Global University Program Courses lecturer John Williams, this training **Embedded Linux on Xilinx MicroBlaze**.

This course is part of the training includes theory and experiment, combined with laboratory equipment and lab manual to complete the whole course of lectures. Through this training, you can master the FPGA-based embedded systems knowledge, familiar with experimental procedures; can be qualified for university-related teaching, curriculum development and the development of research projects; but also to lay a good foundation for later courses, and on this basis to a higher level of research. It's free to use this textbook in college courses and teach students to open the.

The training equipped with the hardware experimental platform, Professors can participate in live demonstrations and hands-on operation and application tools for Xilinx original and genuine software donations. The training of professors in free and experimental quota of seats is limited. Please registration time will be arranged for places as soon as possible.

Participants request:

1. Have the basic digital design experience
2. Have basic knowledge of HDL (VHDL or Verilog)
3. ISE FPGA basic concepts and have experience with the use of EDK.

Seminar time and Venue

Time: December 2010 Dec.6,7 (Monday, Tuesday).

Location: Tsinghua University, Beijing

Organizers : Xilinx University Program/ E-elements

Contact: JinShengAi 010-82757632/ 18600031656

Sponsor : Tsinghua University Contact: Kang Zhao 010-62773440

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Thank you for your participation and support!



Xilinx University Program Distinguished Lecturer and Course Introduction Workshop



John Williams

<http://www.itee.uq.edu.au/~jwilliams/>

Dr. John Williams has rich experience on porting uClinux to Microblaze in Xilinx FPGA. He is currently a Postdoctoral Research Fellow in the School of ITEE (Information Technology and Electrical Engineering), at the University of Queensland, Brisbane, Australia. He is working on architectures and design methodologies for reconfigurable System-on-Chip (rSoC). John earned his Ph.D from the Department of Electronic Engineering at QUT.

Course Name: Embedded Linux on Xilinx MicroBlaze

Course Objectives:

1. Basic understanding of Linux and embedded Linux: kernel architecture, device drivers and hardware interfaces, memory management and MMU vs noMMU kernels
2. Ability to create a working MicroBlaze Linux system using Xilinx EDK and PetaLinux
3. Ability to create, develop and debug embedded applications
4. Understanding of hardware interfacing options for MicroBlaze
5. Ability to create and integrate a simple custom hardware core
6. Ability to create a simple device driver