Programmable Logic

Programming and using programmable logic components

Embedded systems increasingly combines programmable electronics and software. These two components of the system contribute critically to the proper functioning of the system and must be designed and controlled not only separately but also in their interactions. **Ac6-training** offers practical training courses to enable you to master the implementation of programmable logic components and their interactions with the software components of your systems. **ALT1 - CYCLONE-V CORTEX-A9 HARD PROCESSOR SYSTEM** This course covers the hard IPs present in Cyclone-V Intel (Altera) FPGA family, based on ARM Cortex-A9 CPU

H1 - Lattice Mico32 FPGA embedded processor Implementing and programming a processor core in an FPGA

H2 - Lattice Diamond Mastering Diamond for FPGA optimisation and debug

HX4 - AMD (Xilinx) - Microblaze implementation This course explains how to design a SoC based on MicroBlaze, AMD proprietary IPs and/or custom IPs using EDK

HX5 - AMD Zynq All Programmable SoC: Hardware and Software Design This course explains how to design a System on Chip (SoC) based on the AMD Zynq-7000 All Programmable SoC

MSP - Microchip SmartFusion2 Programming This course describe the Microcontroller Subsystem (MSS) of SmartFusion2 Microchip FPGAs

RV1 - RISC-V Architecture This course covers and explains the implementation of the RISC-V CPU This course provides a comprehensive overview of the RISC-V architecture and instruction set for attendees. They will learn the basics of RISC-V, including RISC-V Assembler and Simulator, writing and running assembly code, and RISC-V C Programming. The course covers topics such as interrupt and exception handling, memory management, multiprocessing and concurrency, performance optimization, hardware and system design, and future developments. Hands-on experience will be provided through lab sessions.

V0 - Programmable components fundamentals This training is intended to professional who want to use or maintain programmable components This training is intended to professional who want to use or maintain programmable components

V1 - VHDL Language Basics FPGA Programming and Simulation with VHDL

V2 - Advanced VHDL for FPGA Acquire a strong design methodology with the best of VHDL for simulation and synthesis

V3 - Design with SystemC System Design and Simulation with SystemC