

COURSE HIGHLIGHTS

- Use Xilinx Design Constraints to communicate performance
- Rapidly architect an embedded system targeting the ARM processor of Zynq Device using Vivado and IP Integrator
- Extend the hardware system with Xilinx provided peripherals
- Create a custom peripheral and add it to the system
- Debug a design using Vivado hardware analyzer
- Use Vivado HLS to generate an IP-XACT compliant hardware accelerator

COURSE CONTENT

Day 1:

- 7-Series Architecture Overview
- Vivado Design Flow
- **Lab 1: Creating an HDL Design**
- Xilinx Design Constraints
- **Lab 2: Xilinx Design Constraints**
- IP Integrator and Embedded System Design Flow
- **Lab 3: Create a Processor System using IP Integrator**

Day 2:

- Embedded System Design with Custom IP
- System Debugging using Vivado Logic Analyzer and SDK
- **Lab 4: Debugging using Vivado Logic Analyzer cores**
- Introduction to High-Level Synthesis with Vivado HLS
- Improving Performance and Resource Utilization
- Creating an Accelerator
- **Lab 5: Creating a Processor System using Accelerator**
- **Lab 6: Camera Image Processing using Vivado Design Suite and Zynq-7000 Boards**

ORGANIZING COMMITTEE

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RESOURCE PERSONS

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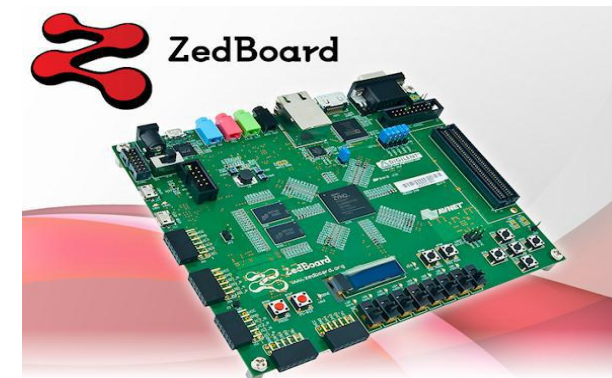
The Co-ordinator(s),
Two Days Workshop on System Design using
Xilinx Vivado Design Suite and Zynq-7000 SoC,
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Workshop

On

Two Days Workshop on System Design
using Xilinx Vivado Design Suite and
Zynq-7000 SoC

16th March 2018 and 17th March 2018



Organized by



Department of
Electronics and Communication Engineering
CEG Campus, Anna University,
Chennai – 600 025.

In Association with



ABOUT ANNA UNIVERSITY

Anna University was established on 4th September 1978 as unitary type of University. Its constituent colleges are College of Engineering, Madras Institute of Technology, Alagappa College of Technology and School of Architecture and Planning. It offers higher education in Engineering, Technology and allied Sciences that are relevant to the present needs of the society. Anna University has a strong vision to impart excellence in education, research and societal service through highly dedicated and competent teachers who are also expert researchers in various emerging and cutting edge technologies. Besides promoting research and disseminating knowledge gained there from, it fosters cooperation between the academic and industrial communities.

ABOUT THE DEPARTMENT

The Department of Electronics and Communications (DECE), which became a part of this celebrated institution in the year 1945, is one of the leaders in India in this field of technology. The department, headed by professors and lecturers who are experts in their own disciplines, aims at educating and training students with sound knowledge and awareness in the latest trends in electronics, communication and information technology.

ABOUT CoreEL TECHNOLOGIES

CoreEL Technologies (I) Pvt Ltd, CoreEL is a customer Application Specific Products & Solutions company offering Intellectual Property (IP) Hardware, Software & Engineering Services to customers, enabling them to Design Manufacture and Market world class electronic products. The portfolio of offerings include IP cores, System Design, Architecture, Validation, Sustenance, Prototype Manufacturing, Next-Gen products, Semiconductor solutions & Distribution of EDA Tools & COTS products. CoreEL was founded in 1999 and is an ISO 9001:2008 certified headquartered at Bangalore India.

About CoreEL University Program

CoreEL University Program provides Eco-System support to Indian Academia in Engineering Higher Education, in the field of embedded systems thereby enabling the delivery of quality education. CoreEL university achieves this by providing state of the art products from XILINX, MENTOR GRAPHICS, MATLAB, VxWorks (WIND RIVER), ANSYS, Speedgoat (Rapid Controller Prototyping, Hardware-in-the-Loop simulation, and deployment,) PCB Design Tools from Mentor Graphics ,Analog Discovery Kits from Digilent (Analog Discovery kit can replace the conventional regulated power supply, Function Generator, Oscilloscope, and smaller parts like Bread board etc with one portable, compact and power effective and low cost solution!) to universities Multiyear application engineering support on these products Faculty and student training, providing industry specific inputs to update the curriculum and helping universities set up Centers of Excellence in Embedded Systems arena in Engineering Higher Education, in the field of Embedded Systems thereby enabling the delivery of quality education. CoreEL achieves this by providing state of the art products from XILINX, MENTOR Graphics, MATLAB, ANSYS, VxWorks, Analog Discovery Kit, Speedgoat (Rapid Controller Prototyping, Hardware-in-the-loop simulation & development), PCB Design Tools from Mentor Graphics, etc to Universities with multiyear application engineering support on these products, faculty & student.

ELIGIBILITY

The programme is open for all college Faculty Members, Industrial Persons, Research Scholars, Intrested UG / PG Students who are eager to learn emerging domains.

PRE-REQUISITES

- Digital logic and FPGA design experience
- Basic experience with Verilog and VHDL
- Basic understanding of C programming

REGISTRATION DETAILS

- Number of seats is limited to 40.
- Registration Fee – Rs.1000/-
- DD should be taken in favor of “ **ORGANISED PROGRAMMES – ANNA UNIVERSITY** ”.

Scan and E-Mail the duly filled application along with DD to the Coordinator(s) by Mail and Post.

SCHEDULED DATES

Last date for Registration : 07.03.2018
Intimation of Selection : 09.03.2018

APPLICATION FORM

Two Days Workshop on System Design using Xilinx Vivado Design Suite and Zynq-7000 SoC

1. Name :
2. Designation :
3. Educational Qualification :
4. Name of the Institute :
5. Address for Communication :

Email :
Mobile :

6. Professional Experience :
Teaching:
Industry:

7. Participant should make on their **OWN** arrangement for accommodation.

Declaration:

The information furnished above is true to the best of my knowledge.

Date:

Place: Signature of the Applicant

Mr./Ms./Dr. _____ is an employee/student of our institute. He / She will be permitted to attend the programme if selected.

Date:

Place:

Signature & Seal
of Head of Organization