LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)

Accredited by NAAC & NBA (CSE, IT, ECE, EEE & ME)

Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada

L.B.Reddy Nagar, Mylavaram-521230, Krishna Dist, Andhra Pradesh, India

DEPARTMENT OF ELECTRONICS& COMMUNICATION ENGINEERING

Date:21.09.2023

Report on one-week Industrial Training Program on

"VLSI Design and Verification Concepts"

Event Type : Industrial training

Date / Duration : 12th Sep 2023 to 19th Sep 2023

Resource Person : Mr. Nepolean Mani

Name of Coordinator(s) : Dr.B. Rambabu

Name of Co-Coordinator(s) : Mr.BVNR Siva Kumar

Target Audience : V-Semester B. Tech Students

Total no of Participants : 44 Nos.

Objective of the event: This Industrial Training Program provides a platform to enhance

the skills towards Design Strategies for Applications & Challenges

in Modern era of VLSI.

Outcome of event:

At the end of the program, students were able to:

☐ Understand the basics of Design and verification concepts

☐ Program in Verilog and SystemVerilog

☐ Design and implement hardware circuits using HDL-Verilog and SystemVerilog

☐ Verify hardware circuits using Verilog and SystemVerilog Test bench.

Description / Report on Event:

VLSI-Design and Verification training program for college students is designed to provide them with the essential skills and knowledge they need to succeed in a hardware design and verification career. The program covers a wide range of topics, including Verilog data types and operators, variables and assignments, modules and ports, behavioral modeling, combinational and sequential logic, testbench development, structural modeling, hierarchical design, component instantiation, timing constraints, System Verilog extension, object-oriented

programming, functional coverage, test case development, constrained-random simulation and debug techniques.

Benefits of the training program

VLSI Design and Verification training program for college students offers a number of benefits, including:

- Students will learn the essential skills and knowledge they need to succeed in a hardware design and verification career.
- > Students will be exposed to a wide range of Verilog and SystemVerilog topics.
- > Students will have the opportunity to work on hands-on projects and receive feedback from an experienced instructor.
- > Students will gain the confidence and skills they need to land a job in the hardware design and verification industry.

Conclusion

VLSI - Design and verification training program for college students is a comprehensive and valuable program that can help students prepare for a successful career in the hardware design and verification industry. The program covers a wide range of topics and provides students with the opportunity to learn from an experienced instructor. Students who complete the program will gain the skills and knowledge they need to land a job in the hardware design and verification industry.

Summary

Verilog and System Verilog training program for college students was conducted. The program was designed to provide students with the essential skills and knowledge they need to succeed in a career in hardware design and verification.

Topics Covered

The program covered a wide range of topics, including:

- Digital Concepts
- Verilog data types and variables
- Verilog modules and functions
- Verilog operators and expressions
- Verilog conditional statements and loops

- Verilog arrays and memories
- Verilog tasks and procedures
- System Verilog features
- System Verilog constraints
- System Verilog testbench development
- System Verilog coverage

Geo-Tagged Photo:



The six-day Verilog and System Verilog training program for college students was a successful program that provided students with the essential skills and knowledge they need to succeed in a career in hardware design and verification.