



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 9001-2015 Certified
Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.
Phone No. 08545 - 350200; www.klef.ac.in; www.klef.edu.in; www.kduniversity.in
Admin Off: 29-36-36, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576128.

Ref: KLEF/RO/ECE/CIRCULAR

Date: 14-07-2022

CIRCULAR

Sub: Organizing event "Workshop" for the students of Electronics and Communication Engineering, of Vaddeswaram Campus of KLEF – Reg.

This is to inform that the Department of Electronics and Communication Engineering, KLEF, is Organizing a "Workshop on Digital VLSI Design: Logic Synthesis and Verification" for the students of Electronics and communication Engineering, Vaddeswaram Campus of KLEF on, 16-07-2022, as details below:

Event Name: "Workshop"

Date: 16-07-2022

Venue: R-106

All the students of ECE, are invited to attend this program.

Dy-HOD's & Year coordinators are requested to bring this information to the attention of all ECE students and encourage them to participate in this program.

To
All ECE Students,
All ECE Faculty,
Principal.

Dr. N. Suman
HOD, ECE
Professor & Head
Department of ECE
K L E F
Green Fields, Vaddeswaram,
Guntur Dist., A.P. PIN- 522 302



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified

Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.

Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in

Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

A Three-Day Workshop On “Digital VLSI Design: Logic Synthesis and Verification”

By

Always@VLSI

Department Of ECE

Name of the event: Digital VLSI Design: Logic Synthesis and Verification

Dates: 16-07-2022

Venue: R106

No. of students participated: 47

Objective of the event:

The outcome of the workshop "Digital VLSI Design: Logic Synthesis and Verification" is participants who are proficient in the principles, methodologies, and tools essential for successful digital VLSI design. Through hands-on exercises, practical demonstrations, and discussions on advanced techniques and best practices, attendees will gain a deep understanding of logic synthesis and verification processes. They will be equipped with the knowledge and skills necessary to efficiently design, synthesize, and verify digital circuits, ensuring correctness, performance, and reliability. Additionally, participants will be able to leverage industry-standard tools and methodologies to optimize design productivity, meet design specifications, and adhere to design constraints. Overall, the workshop will empower participants to excel in digital VLSI design, delivering high-quality digital circuits that meet stringent performance, power, and area requirements.

Description of the event:

The workshop "Digital VLSI Design: Logic Synthesis and Verification" offers a comprehensive exploration of the principles, methodologies, and tools essential for successful

digital VLSI design. Participants will delve into the intricacies of logic synthesis and verification processes, gaining practical insights and hands-on experience in key areas such as RTL design, logic optimization, synthesis, and functional verification. Led by experienced VLSI designers and industry experts, the workshop covers a wide range of topics, including HDL-based design, design constraints, timing analysis, and testbench development. Emphasis is placed on industry-standard tools and methodologies, enabling participants to efficiently design, synthesize, and verify digital circuits while meeting stringent performance, power, and area requirements.

Throughout the workshop, participants will engage in interactive sessions, practical demonstrations, and collaborative exercises, allowing them to apply theoretical concepts to real-world design challenges. They will gain proficiency in industry-standard design and verification tools such as Cadence Encounter, Synopsys Design Compiler, and Mentor Graphics ModelSim, enhancing their ability to develop high-quality digital designs efficiently. Additionally, participants will learn best practices for design optimization, verification planning, and debugging, ensuring correctness, reliability, and scalability in their digital designs. By the end of the workshop, participants will emerge with a comprehensive skill set, equipped with the knowledge, tools, and methodologies necessary to excel in digital VLSI design, delivering innovative and high-performance digital circuits that meet the demands of modern semiconductor technologies.

Outcome of the event:

Overall, the outcome of the workshop will be participants who are well-equipped with the knowledge, skills, and tools necessary to excel in digital VLSI design. They will be capable of developing innovative and high-performance digital circuits that meet the demands of modern semiconductor technologies, contributing to advancements in the field of digital integrated circuit design. Proficiency in Design Tools: Participants will gain proficiency in industry-standard digital VLSI design and verification tools such as Cadence Encounter, Synopsys Design Compiler, and Mentor Graphics ModelSim. This proficiency will enable them to efficiently design, synthesize, and verify digital circuits while adhering to design constraints and meeting performance targets. Deep Understanding of Methodologies: Attendees will develop a deep understanding of digital VLSI design methodologies, including RTL design, logic synthesis, optimization techniques, and functional verification strategies.

This understanding will empower participants to apply the most appropriate methodologies and techniques to their design projects effectively. **Enhanced Problem-Solving Skills:** Through hands-on exercises and practical demonstrations, participants will sharpen their problem-solving skills, learning how to address common challenges and complexities encountered in digital VLSI design. This will enable them to develop robust and reliable digital circuits that meet design specifications and requirements. **Quality Assurance:** Participants will learn best practices for functional verification, timing analysis, and testbench development, ensuring the correctness, reliability, and scalability of their digital designs. This emphasis on quality assurance will help participants deliver high-quality digital circuits that meet industry standards and customer expectations. **Optimized Design Productivity:** Armed with a comprehensive understanding of digital VLSI design principles and methodologies, participants will be able to optimize design productivity and efficiency. They will learn how to streamline the design process, minimize design iterations, and maximize design reuse, ultimately reducing time-to-market and development costs.

photos of the event:





Mentor explaining the logic synthesis

Participant's List:

| S. NO | STUDENT ID | STUDENT NAME | DEPT | SIGNATURE |
|-------|------------|------------------------------------|------|---|
| 1. | 2100049095 | ALETI SANTHOSH . | ECE |  |
| 2. | 2100049084 | JALDU MOUNIKA NAGA RAMA SUDHA | ECE |  |
| 3. | 2100049082 | MEDISETTI GUNASRI | ECE |  |
| 4. | 2100049081 | MALE SAI MANIKANTA | ECE |  |
| 5. | 2100049080 | TALLA VENKATA GOPI ROHITH | ECE |  |
| 6. | 2100049079 | VELAMARTHI ABHINAY ANAND | ECE |  |
| 7. | 2100049077 | VEERAMACHANENI VENKATA NAVEEN | ECE |  |
| 8. | 2100049076 | YANAMALAMANDA VAMSI | ECE |  |
| 9. | 2100049072 | CHEEPURUPALLI BALA SRIDHAR | ECE |  |
| 10. | 2100049071 | ADIREDDY JYOTHI BHAVANI SHANKAR | ECE |  |
| 11. | 2100049068 | JANGILI SIVA SAI PRAKASH | ECE |  |
| 12. | 2100049065 | UPPALA RAVI TEJA | ECE |  |
| 13. | 2100049064 | POKALA SURYA AKASH | ECE |  |
| 14. | 2100049063 | PRUDHVI GOPAL VELISALA | ECE |  |
| 15. | 2100049051 | SYED ASHRUF | ECE |  |
| 16. | 2100049050 | MADEM SIVA MASTHAN REDDY | ECE |  |
| 17. | 2100049047 | KORIVI AKHIL | ECE |  |
| 18. | 2000049032 | KUCHIPUDI LAKSHMI MANJU PRAVALLIKA | ECE |  |
| 19. | 2000049031 | GEDELA YASHWANTH SAIRAM | ECE |  |

| | | | | |
|-----|------------|-----------------------------------|-----|-------------------|
| 20. | 2000049029 | KUNDELLA GANESH YADAV | ECE | Ganesh |
| 21. | 2000049028 | MYNAMPATI VENKATA SAI SRI PRABHAS | ECE | Prabhas |
| 22. | 2000049026 | SRIPATHI CHANDANA | ECE | Chanda |
| 23. | 2000049022 | KRAPA LOKESH | ECE | Lokesh |
| 24. | 2000049019 | VYSHNAVI VIPPAGUNTA | ECE | V. Vaishnavi |
| 25. | 2000049016 | JINKA JITENDRA SAI KARTHIK | ECE | Sai Karthik. |
| 26. | 2000049015 | YADALA VENKATA NITHISH KUMAR | ECE | N. V. Nithish |
| 27. | 2000049013 | GUDURU BALAJI INDUJA | ECE | Balaji |
| 28. | 2000049045 | CHAPARALA TEJA SRI | ECE | Teja Sri |
| 29. | 2000049041 | MELAM VEERA SAI TEJA | ECE | M. Veera Sai Teja |
| 30. | 2000040281 | VANTEDDU PRAVEEN REDDY | ECE | V. Praveen |
| 31. | 2000040273 | GAYATHRI KETINENI | ECE | Gayathri |
| 32. | 2000040272 | APPANI GOPICHANDU | ECE | Gopichandu |
| 33. | 2000040270 | PODURI ABHISHEK SURYA | ECE | Abhishek |
| 34. | 2000040269 | MANOJ KUMAR ROKKAM | ECE | R. Manoj |
| 35. | 2000040268 | GANDREDDI CHAITANYA NAIDU | ECE | Chaitanya |
| 36. | 2000040266 | BOJJA SIVA VAISHNAVI | ECE | Vaishnavi |
| 37. | 2000040261 | MALISSETTY ROHAN | ECE | Rohan |
| 38. | 2000040258 | PATHAN HASAN ZAHEERKHAN | ECE | Zaheer Khan |
| 39. | 2000040256 | NALI BHARGAVA SARASWATHI | ECE | N. Bhargava. |
| 40. | 2000040252 | KOTA LAKSHMI MANOGNA | ECE | Manogna |
| 41. | 2000040249 | BODDOJU VISHNU VARDHAN | ECE | B. Vishnu. |
| 42. | 2000040245 | GURRAMPATI PREETHI REDDY | ECE | Preethi |

| | | | | |
|-----|------------|-----------------------------|-----|-------------------|
| 43. | 2000040244 | VISHNU VARDHAN REDDY | ECE | <i>Vishnu</i> |
| 44. | 2000040196 | RAJARIKAM KIREETI | ECE | <i>R. Kireeti</i> |
| 45. | 2000040193 | KANAMARLAPUDI VENKATA SURYA | ECE | <i>Rohith</i> |
| 46. | 2000040187 | VALLAMKONDA SATVIKA | ECE | <i>Satvika</i> |
| 47. | 2000040184 | SURALA DEVA VENKATA SAI | ECE | <i>Anudeep</i> |

S. Vamsee Krishna
In charge

Always@VLSI Technical Club
Mr S. Vamsee Krishna

Dr. M. Suman
HOD, ECE
Department Head
Department of ECE
K L E F
Green Fields, Vaddeswaram,
Tuntur Dist., A.P. PIN- 522 502