



**Ref: KLEF/RO/ECE/CIRCULAR**

**Date: 02-08-2021**

**CIRCULAR**

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

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This is to inform that the Department of Electronics and Communication Engineering, KLEF, is Organizing a "Workshop on Advanced VLSI Design Techniques" for the students of Electronics and communication Engineering, Vaddeswaram Campus of KLEF on, 04-08-2021, as details below:

Event Name: "Workshop"  
Date: 04-08-2021  
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. M. SUMAN**  
PHOD, ECE  
Department of ECE  
Dr. M. Suman  
Green Fields, Vaddeswaram  
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## **Koneru Lakshmaiah Education Foundation**

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### **A Three-day Workshop On “Advanced VLSI Design Techniques”**

**By**

**Always@VLSI**

**Department Of ECE**

**Name of the event:**Advanced VLSI Design Techniques

**Dates:**04-08-2021

**Venue:**R106

**No. of students participated:** 42

#### **Objective of the event:**

The objective of the workshop "Advanced VLSI Design Techniques" is to provide participants with a comprehensive understanding of cutting-edge methodologies, techniques, and technologies in the field of Very Large Scale Integration (VLSI) design. Specifically, the workshop aims to:

- Explore Emerging Trends:** Introduce participants to emerging trends and innovations in VLSI design, including advanced digital design methodologies, low-power design techniques, high-speed design considerations, mixed-signal integration, and design for manufacturability (DFM). The workshop will provide insights into the latest developments shaping the future of semiconductor technology.
- Hands-On Learning:** Offer hands-on learning opportunities, practical demonstrations, and real-world case studies to allow participants to gain practical insights and expertise in state-of-the-art VLSI design techniques. Participants will have the opportunity to explore advanced design tools and methodologies, enabling them to tackle complex design challenges effectively.
- Address Specialized Applications:** Discuss design considerations for specialized applications such as Internet of Things (IoT), automotive electronics, and biomedical devices. By examining the unique requirements and challenges of these domains, participants will gain a holistic understanding of the diverse applications of advanced VLSI design.

### **Description of the event:**

The workshop "Advanced VLSI Design Techniques" offers an in-depth exploration of cutting-edge methodologies, techniques, and technologies in the field of Very Large Scale Integration (VLSI) design. Participants will delve into advanced topics that go beyond traditional VLSI design principles, gaining insights into emerging trends and innovative approaches that are shaping the future of semiconductor technology. Led by industry experts and experienced practitioners, the workshop covers a diverse range of topics, including advanced digital design methodologies, low-power design techniques, high-speed design considerations, mixed-signal integration, and design for manufacturability (DFM). Emphasis is placed on hands-on learning, practical demonstrations, and real-world case studies, allowing participants to gain practical insights and expertise in state-of-the-art VLSI design techniques.

Throughout the workshop, participants will have the opportunity to explore advanced design tools and methodologies, enabling them to tackle complex design challenges and optimize design performance, power, and area. Discussions on emerging technologies such as machine learning, neuromorphic computing, and quantum computing will provide participants with insights into future directions and opportunities in VLSI design. Additionally, the workshop will address design considerations for specialized applications such as Internet of Things (IoT), automotive electronics, and biomedical devices, offering participants a holistic understanding of the diverse applications and domains of advanced VLSI design. By the end of the workshop, participants will emerge with a deep understanding of advanced VLSI design techniques and technologies, equipped with the knowledge and skills necessary to drive innovation and advancements in the field of semiconductor design.

### **Outcome of the event:**

The outcome of the workshop "Advanced VLSI Design Techniques" is participants who are equipped with advanced knowledge, skills, and tools to excel in the field of Very Large Scale Integration (VLSI) design. Through hands-on learning, practical demonstrations, and in-depth discussions, attendees will achieve several outcomes:

**Proficiency in Cutting-Edge Methodologies:** Participants will gain proficiency in cutting-edge VLSI design methodologies, including advanced digital design techniques, low-power design strategies, high-speed design considerations, mixed-signal integration, and design for manufacturability

(DFM). They will be able to leverage these methodologies to tackle complex design challenges effectively.

**Mastery of Advanced Tools:** Attendees will master advanced design tools and software used in VLSI design, enabling them to optimize design performance, power, and area. Practical demonstrations and hands-on exercises will ensure participants can effectively use these tools to design and validate complex VLSI circuits.

**Understanding of Emerging Technologies:** Participants will gain insights into emerging technologies shaping the future of VLSI design, such as machine learning, neuromorphic computing, and quantum computing. They will understand the implications of these technologies on VLSI design and be prepared to adapt to future trends and advancements.

**Application to Specialized Domains:** Through discussions on specialized applications such as Internet of Things (IoT), automotive electronics, and biomedical devices, participants will learn how to apply advanced VLSI design techniques to address the unique requirements and challenges of these domains.

**Innovation and Creativity:** Armed with advanced knowledge and skills, participants will be empowered to drive innovation and advancements in VLSI design. They will be inspired to explore new avenues for innovation, push the boundaries of traditional design approaches, and contribute to the advancement of semiconductor technology.

### **Photos of the event:**



**Faculty explaining the FPGA design flow**

**Participant's List:**

S.NO	ID.NO	NAME	BRANCH	SIGNATURE
1.	2000040320	KOTLA CHENNA KESHAVA REDDY	ECE	<i>Chenna Paul</i>
2.	2000040317	CHEVURI CHARAN TEJA	ECE	<i>Teja</i>
3.	2000040307	CHALLAGUNDLA KAVYA	ECE	<i>Kavya</i>
4.	2000040304	MIRIYALA ASHOK	ECE	<i>M. Ashok</i>
5.	2000040301	PINNINTI JAYA PRAKASH	ECE	<i>Jaya Prakash</i>
6.	2000040298	THOTA NAGAMANI	ECE	<i>Nagamani</i>
7.	2000040295	MATTA DEVI SREE REDDY	ECE	<i>Dev. Sree Reddy</i>
8.	2000040290	GUNDUBOYINA VIJAY KUMAR	ECE	<i>Vijay Kumar</i>
9.	2000040281	VANTEDDU PRAVEEN REDDY	ECE	<i>Praveen</i>
10.	2000040273	GAYATHRI KETINENI	ECE	<i>Gayathri</i>
11.	2000040272	APPANI GOPICHANDU	ECE	<i>Gopichandu</i>
12.	2000040270	PODURI ABHISHEK SURYA	ECE	<i>Surya</i>
13.	2000040269	MANOJ KUMAR ROKKAM	ECE	<i>Manoj</i>
14.	2000040268	GANDREDDI CHAITANYA NAIDU	ECE	<i>G. Chaitanya</i>
15.	2000040258	PATHAN HASAN ZAHEERKHAN	ECE	<i>Zaheer Khan</i>
16.	2000040257	GURRAM SURYA KANTH SUJITH	ECE	<i>G.S.K. Sujith</i>
17.	2000040256	NALI BHARGAVA	ECE	<i>Bhargava</i>
18.	2000040252	KOTA LAKSHMI MANOGNA	ECE	<i>Manogna</i>
19.	2000040249	BODDOJU VISHNU VARDHAN CHARI	ECE	<i>Vishnu Vardhan</i>
20.	2000040245	S. GURRAMPATI PREETHI REDDY	ECE	<i>Preethi Reddy</i>
21.	2000040244	P. VISHNU VARDHAN	ECE	<i>Vishnu Vardhan</i>
22.	2000040243	B. THANNEERU VENKANNA BABU	ECE	<i>Babu</i>
23.	2000040241	GOTTUMUKKALA TARUN	ECE	<i>Tarun</i>
24.	2000040238	DANTHANALA SASI KANTH	ECE	<i>D. Sasi Kanth</i>
25.	2000040236	KODI RAVINDRANADH	ECE	<i>Ravindranadh</i>
26.	2000040235	RAAVI PAVAN KUMAR	ECE	<i>Pavan</i>
27.	2000040233	ILA NAVEEN	ECE	<i>Naveen</i>
28.	2000040232	MOHAMMAD IBRAHIM	ECE	<i>Mohammad Ibrahim</i>

29.	2000049015	YADALA VENKATA NITHISH KUMAR	ECE	Nithish kumar
30.	2000049012	RAMALA DHEERAJ	ECE	Dheeraj
31.	2000049011	KAMMILI LALITH MADHAV	ECE	Lalith Madhav
32.	2000049009	M. VADDI DEEPAK	ECE	Vaddi
33.	190040545	VANGA SATVIK REDDY	ECE	Satvik
34.	190040524	TUMMALA KARTHIK	ECE	T. Karthik
35.	190040522	TORATI AJAY CHANDRA	ECE	Chandra
36.	190040513	TARIGONDA JAHNAVI	ECE	T. Jahnavi
37.	190040506	SYAMALA NAGA KOTI REDDY	ECE	Naga Koti Reddy
38.	190040503	SUREDDY DINESH REDDY	ECE	Dinesh Reddy
39.	190040501	SURAGAM GNANENDRA	ECE	Gnanendra
40.	190040495	SUBRAMANYAM YADAVILLI	ECE	Subbu
41.	190040483	SISTLA SATHWIC SANJAY	ECE	S.S. SANJAY.
42.	190040474	SHAIK MOHAMMED KHAALID	ECE	Shaik

S. Vamsee Krishna

In charge  
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