



## Workshop on FULL-CUSTOM & SEMI-CUSTOM IC DESIGN FLOW USING CADENCE TOOL

**Date: From 14-11-2022 to 15-11-2022**

### **Resource Person Details:**

Mr. Shivaprasad B K, Senior Field Application Engineer, Entuple Technologies Pvt. Ltd. Completed M.Tech from B.V. Bhoomaraddi College of Engineering and Technology, Hubli, in 2014 (Affiliated to VTU, Belagavi) Specialization: In VLSI Design and Testing. He has Completed Bachelor of Engineering from SJM Institute of Technology, Chitradurga, in

2012 (Affiliated to VTU, Belagavi) Specialization: In Electronics and Communication Engineering department. He Worked as an Intern at ISRO Bangalore in the year 2014. and Has 08+ years of experience. He is the Life time member of Indian Society for Technical Education(ISTE) LM 114116 .He Has been the resource person for many FDPs/Webinars/SDPs organized by various institutions across India.

No. of Students and/or Faculty Participated: 60

Co-ordinator Details : Prof. Satyanarayan Padhy & Dr. Chandra Sekhar Dash

### **Objective:**

Objective of the Workshop is to provide

1. Understanding of Full-Custom and Semi-Custom IC Design Flow
2. Hands on Session on Different Cadence tools for IC Design

### **Outcome:**

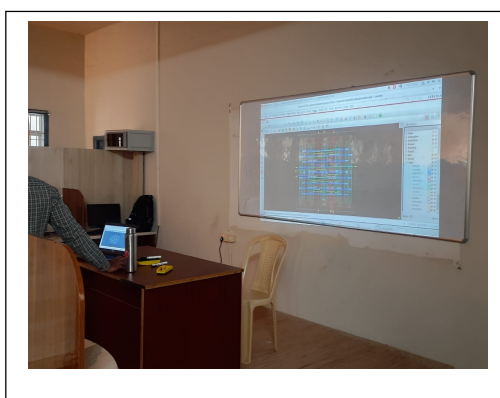
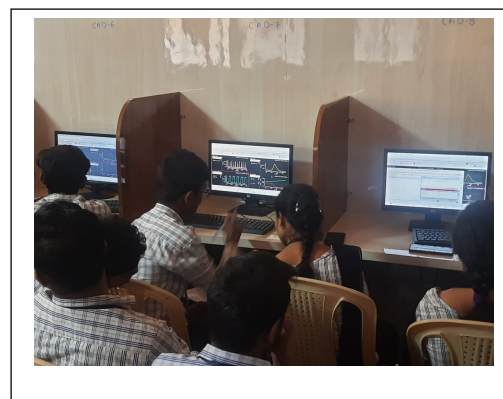
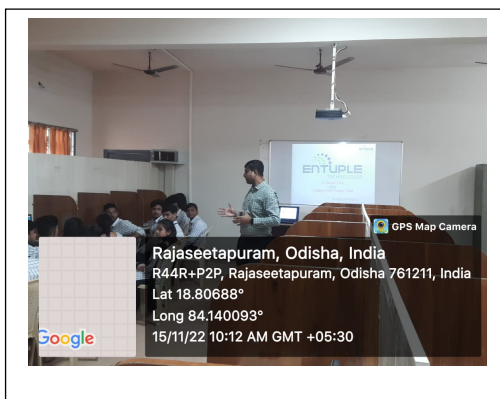
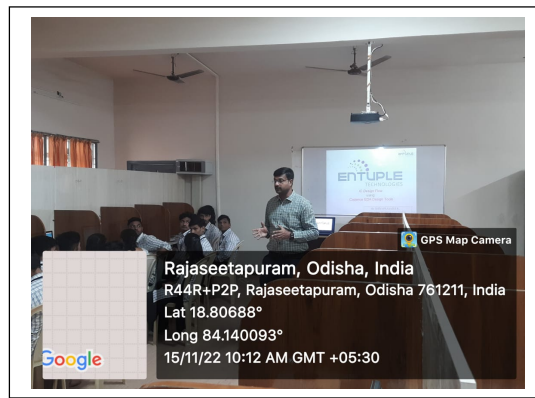
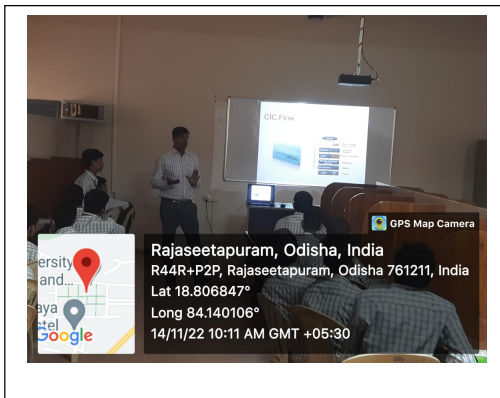
1. Understanding of Full-Custom and Semi-Custom IC Design using CIC and ASIC Design flow
2. Able to Use different cadence tools such as Virtuoso, NC Launch, Genus Synthesis, Encounter, Quantus RC and ASSURA

### **Detailed report of the activity:**

Two days workshop from 14<sup>th</sup> Nov-2022 to 15<sup>th</sup> Nov-2022 on “FULL-CUSTOM & SEMI-CUSTOM IC DESIGN FLOW USING CADENCE TOOL” organized by Department of ECE and Centre for Smart Engineering Application Centre in association with **Entuple Technologies, Bengaluru**. Total 53 students along with faculties (Prof.S.N.Padhy, Prof. Rajesh Ku Mishra, Dr. Chandrasekhar Dash, Dr. Harish Chandra Mohanta, Prof. K.Joginaidu ) and Research Scholars across different campus attended the workshop both in online and offline mode . A brief report of the workshop in day wise presented below.

Day-1 started with presentation in VLSI Design Flow on Full-Custom IC Design flow using Cadence Tools by resource person Mr. **Mr. Shivaprasad B K** (Senior Field Application Engineer). Different tools such as Virtuoso, ADEL, and RC Extraction were highlighted along with different parameter of IC design such as power calculation, delay calculation, area, RC Extraction in the presentation. All the participants were completed the hands on practice on complete Full-Custom design flow by taking their own designs. Different parameters such as power, area and delay calculations were calculated using cadence tools. Day-2 started with presentation on Semi-Custom Design flow using cadence along with demonstration of different tools such as NC Launch, Genus Synthesis, Encounter, Quantus RC and ASSURA. Participants completed hands on practical session on complete Semi-Custom IC Design Flow. All the participants were completed the hands on practice both frontend and Backend design using complete ASIC design flow. Different parameters on timing, area and power were analysed to validate the designs done by the participants.

**Photographs of the event:**



List of Students/Faculty Attended or Scan Copy of Signature Sheet:



CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT, ODISHA  
WORKSHOP ON "FULL-CUSTOM & SEMI-CUSTOM IC DESIGN USING CADENCE TOOL"

Date: 14.11.2022 to 15.11.2022

ATTENDANCE SHEET

Day-1  
14-11-2022

SL.NO.	NAME	REGD.NO.	FULL SIGNATURE
1	Amiya Kumar Dash	210101150009	Amiya Kumar Dash
2	Ravi Raj Robince	210101150011	Ravi Raj Robince
3	YERNAGULA RASHIT	210101130014	Yernagula Rashit
4	Lugalapu Mounika	210101130002	Lugalapu Mounika
5	Sasaram Sizi	210101130001	Sasaram Sizi
6	T. Uma Shankar	210101121023	Tenturu Uma Shankar
7	Aditya Bhardwaj	210101130008	Aditya Bhardwaj
8	P. MANIKANTA VARAPRASAD	210101130006	Palavajala manikanta varaprasad
9	Anukriti Kumari	210101130011	Anukriti Kumari
10	Avinash Kumar	210101130018	Avinash Kumar
11	Somit Kumar Pradhan.	210101130010	Somit Kumar Pradhan.
12	Vikash Kumar	210101150003	Vikash Kumar
13	K. Pawan Kumar	210101131025	K. Pawan Kumar
14	B. Mami chandu	210101130016	B. Mami chandu
15	P. Prartham	210101130004	P. Prartham
16	S. Anudeep	210101130003	S. Anudeep
17	T. Lokeshwara Rao	210101151013	T. Lokeshwara Rao
18	S. Kalyan Kumar	210101151014	S. Kalyan Kumar
19	R. Rajesh Kumar	210101130007	R. Rajesh Kumar
20	B. Ram babu	210101130019	B. Ram babu
21	A. Santosh Kumar	210101130009	A. Santosh Kumar
22	B. Anil Kumar	210101130013	B. Anil Kumar
23	Eeshan Choudhury	210101131022	Eeshan Choudhury
24	T. Charan Kumar	210101131021	T. Charan Kumar
25	A. Venu	210101131024	A. Venu
26	S. Sandeep	210101130005	S. Sandeep
27	B. Anil Kumar	210101130013	B. Anil Kumar



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ATTENDANCE SHEET

Day-2  
15-11-2022

SL.NO.	NAME	REGD.NO.	FULL SIGNATURE
1	Amiya Kumar Dash	210101150009	Amiya Kumar Dash
2	Ravi Raj Robince	210101150011	Ravi Raj Robince
3	YERNAGULA RASHIT	210101130014	Yernagula Rashit
4	Lugalapu Mounika	210101130002	Lugalapu Mounika
5	Sasaram Sizi	210101130001	Sasaram Sizi
6	T. Uma Shankar	210101121023	Tenturu Uma Shankar
7	Aditya Bhardwaj	210101130008	Aditya Bhardwaj
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19	B. Ram babu	210101130019	B. Ram babu
20	R. Rajesh Kumar	210101130007	R. Rajesh Kumar
21	A. Santosh Kumar	210101130009	A. Santosh Kumar
22	Eeshan Choudhury	210101131022	Eeshan Choudhury
23	T. Charan Kumar	210101131021	T. Charan Kumar
24	S. Sandeep	210101130005	S. Sandeep
25	B. Anil Kumar	210101130013	B. Anil Kumar
26			
27			

15/11/22

Prartham 15/11/22

Ashish 15/11/2022

The screenshot shows a Zoom meeting interface. The main content is a presentation slide titled "CIC Flow" which details the Virtuoso design flow: START -> Virtuoso Schematic Editor/Composer -> Simulation -> Multi-Mode Simulator -> Layout -> Virtuoso Layout Suite -> Physical Verification DRCLVS -> PVS/Assura -> RC-Extraction -> Quantus -> GDS II -> Virtuoso. The bottom of the screen shows a list of 28 participants in the meeting, including names like Satyanarayan Padhy, Shivaprasad B, Ritisingha Das, and others, with their respective IDs and status icons.

Brochure related to the event:



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UNIVERSITY

WORKSHOP ON

**FULL-CUSTOM & SEMI-CUSTOM IC DESIGN USING CADENCE  
TOOL**

14-11-2022 to 15-11-2022

*Organised by :*  
Department of ECE &  
Centre for Smart Engineering  
and Application



Speaker

**Mr. Shivaprasad B K**  
Senior Field Application Engineer,  
Entuple Technologies Pvt. Ltd.

Coordinators:  
Prof. Satyanarayan Padhy  
Dr. Chandra Sekhar Dash

Pre-registration form link: <https://forms.gle/y7Yozo8gJYshD4Ds8>  Link (Click here)

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