

PSG INSTITUTE OF TECHNOLOGY AND APPLIED RESEARCH NEELAMBUR, COIMBATORE – 641062.

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai)

Two days workshop on "Hands-on Exposure to Mixed Signal IC Design Using Cadence EDA Tool" report

Event title	Hands-on Exposure to Mixed Signal IC Design Using Cadence EDA Tool
Event Category	Workshop
Date	29 th & 30 th January 2024
Department	ECE
Co-ordinators	Dr M Jayasanthi Dr S Padmapriya
Chief Guest/	Mr. Shivaprasad B K, Execution Manager, Entuple
Resource Person/Keynote Speaker	Technologies, Bangalore.
Guest Speaker/ Session Chair	-
No. of Participants	20

- 1. The workshop aimed to provide participants with an in-depth understanding of Cadence Tool, a leading software suite used in electronic design and automation, and its applications in the field of the Electronics Industry.
- 2. The Cadence Workshop was organized to facilitate knowledge sharing and skill development among faculty members and students in the department of ECE.
- 3. Over the two days, the workshop covered various aspects of Cadence, from its fundamental concepts to advanced design in Mixed Signal Circuits.
- 4. The workshop aimed to familiarize participants with Cadence, elevate their proficiency in electronic design using Cadence tools, and provide insights into the latest developments and best practices among participants.
- 5. The course commences on the first day with an introductory session on the Cadence EDA tools. This is followed by a comprehensive session on digital counter design, simulation and synthesis. The session concluded with a CMOS Inverter design and its analysis. The topics covered in this session are foundational to the course and provide attendees with a solid understanding of the principles and practices of digital and analog IC design.
- 6. The second day of the program commences with a comprehensive coverage of mixed design concepts, specifically Operational Amplifiers and ADC. This section includes an in-depth

understanding on schematic design capture, DC and transient analysis with Virtuoso tool. The transient response for the designed R-2R Ladder ADC was also done. The program has provided participants with a sound understanding of these crucial mixed IC design concepts and the ability to apply them in practical scenarios.

7. By the end of this session, participants have had a well-rounded knowledge of Mixed-signal IC design concepts and an enhanced ability to design and verify mixed signal circuits.



The Resource person from Entuple Technologies handling the session



Group photo