



ACS College of Engineering
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(A Unit of RajaRajeswari Group of Institutions)



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Report on Workshop ---VLSI Design Flow

Name of the Event : Workshop on VLSI Design

Date & Time: 29.09.2018 & 09:30 AM to 4:00 PM

Venue: Seminar Hall 1

No. of Participants: ECE students (31) + Staff (08)

Resource Person: Mr. Vaibhav Raj Purohit, Team Leader, Skandysys Technologies, Bangalore.

About the Talk

The Technical Talk started with welcoming of Mr. Vaibhav Raj purohit, Team Leader, Skandysys Technologies by Dr.M. Mathivanan by presenting a bouquet. The Speaker himself introduced about his Qualification, Current working area and about his company. He also explained about the present scenario in industries and their expectations etc. Next, he started with the design of process of a producing a packed VLSI chip physically and various steps which is popularity known as VLSI design cycle. This design cycle is normally represented as a step as shown in below

1. System specification
2. Functional design
3. Logic design
4. Circuit design
5. Physical design
6. Fabrication
7. Packaging

- **System specification:** The specification of the system to be designed exactly specified in this step. It considers performance, functionality and the physical dimensions of the design
- **Functional design:** In this step, behavioural aspects of the system and considered. The outcome is usually a timing diagram or other relationship
- **Logic design:** In this step, the functional design is converted into a logic design, using the Boolean. These expressions are minimizing to achieve the smallest logic design
- **Circuit design:** The step involves conversion of boolean expression into a circuit representation by taking into consideration of speed and power
- **Physical design:** In this step, the circuit representation of each component is converted a geometric representation
- **Design verification:** In this step, the layout is verified to ensure the layout meets the system specification and fabrication requirements
- **Fabrication:** This step is followed design verification the fabrication power consists of several steps like preparation of wafer, deposition.

The theory part was done in Morning Session, and afternoon hands on experience in the VLSI Lab was conducted for the students explaining in details the steps involved in VLSI design. The students are very much benefitted from the workshop.



Welcoming of Mr. Vaibhav by Dr.M. Mathivanan



Technical talk by Mr. Vaibhav, about VLSI design to students.



Hands-on session in VLSI lab to students.



Vote of Thanks by Lohith, VII Sem, and Memento presentation by Dr.M.Mathivanan