

## **VLSI Design and Automation Lab** DEPARTMENT OF ELECTRONICS & COMMUNICATIONS ENGINEERING

Coordinator: Dr. Shruti Kalra, Mr. Shivaji Tyagi Location: Aryabhata II, 3<sup>rd</sup> Floor, Sector 62 Campus

## **Objective**

- The VLSI Design and Automation Laboratory is dedicated to conducting research in various aspects of the ever-expanding field of Very Large Scale Integration (VLSI) and to foster collaboration among industry and academics.
- 2. This lab provides basic and advanced facilities for experiments related to undergraduate and postgraduate coursework, B.tech and M.tech project work, and research in the areas of device modelling, simulation, and various aspects of advanced VLSI design.
- 3. Additionally, the lab has an abundance of cutting-edge tools for design and testing, including hardware facilities and EDA tools.

| ardwar | e/Software Availability  |  |               |
|--------|--|--|---------------|
|        | D  | etails of Software                           |               |
| S. No. | Software   |  | License       |
| 1.     | Mentor Graphics EDA Tool<br><b>CANCERT OF CONTROL OF CONTRUCTURA OF CONTROL OF CONTROL OF CONTROL OF </b> |  | 30            |
|        |  | Front End Universal Bundle(3900)             | 05            |
|        | Synopsis EDA Tool Suit   | Back End University Bundle(3901)             | 01            |
| 2.     |  | Full Custom University<br>Bundle(3902)       | 05            |
|        | <b>SYNOPSYS</b> ®<br>Silicon to Software   | 3D [Advance] TCAD University<br>Bundle(4458) | 01            |
|        | COMSOL   | Multi-physics, Single User CPU               | 01            |
| 3.     | COMSOL<br>MULTIPHYSICS®  | MEMS Model for Use with<br>COMSOL            | 01            |
| 4.     | VIVADO System Edition SDSOC  |  | 25            |
| S. No. | Open Source Software   |  | System        |
| 1.     | CentOS 8   |  | 15            |
|        |  | Hardware                                     |               |
| S. No. | Description  |  | Computer Name |
| 1.     | Intel(R) Core i7-10700 CPU @ 2.90GHz ; 8Core;<br>16 Logical processor; HDD - 1TB RAM - 16GB  |  | 15PC          |
| 2.     | Zed Board  |  | 5             |



ZedBoard<sup>™</sup> is a low-cost development board for the Xilinx Zynq®-7000 SoC. This board contains everything necessary to create a Linux, Android, Windows® or other OS/RTOS-based design. Additionally, several expansion connectors expose the processing system and programmable logic I/Os for easy user access. Take advantage of the Zynq-7000 SoC's tightly coupled ARM® processing system and 7 series programmable logic to create unique and powerful designs with the ZedBoard.

## **Glimpses of the Venue**







