DIGITAL SYSTEMS DESING LAB / VLSI & ESD LAB

Objective:

This lab is offered to B.Tech ECE students and it is specially designed and developedfor the students to learn about Modeling of CMOS logic circuits using Mentor Graphics Tools, modeling of combinational and sequential logic circuits using VHDL/Verilog and implementation of digital circuits on Xilinx FPGAs. This lab is well provided with equipment Xilinx ISE System Edition 14.7, XUP SPARTAN 3E Kit with USB Programming cable, This lab gives practical observation on Design of CMOS Logic gates using Pyxis Schematic Editor and digital system implemented on SPARTAN 3E. At the end of the semester the student will be able to Design CMOS Logic circuit modeling using pyxis schematic editor, Digital system modeling using VHDL andimplementation on FPGAs. The Budget of this lab is around Rs. 15,26,338/-.

Details of the Equipment:

S. No	Equipment acquired up to date	Quantity
1.	HP Pro 202GI Commercial Desktop Intel Core 13-3240 Processor 4GB DDRIII RAM,500GB HDD,HP Compaq 18.5" LED	36
2.	Lenovo V520 ST i3/ 7th Gen / 8 GB - RAM/ 1 TB HDD,19.5 Monitor	01
3.	APC 3 KV online UPS 6-UPS Batteries 26ah Exide 1-UPS Rack	01
4.	Zynq-Zed20 development Board	06
5.	Zynq-Zed development Board	04
6.	Mentor Graphics Front & Back Tools-35 users	01
7.	Xilinx ISE Design Suite 14.7 (software)-25 users	01
8.	Vertex -5 Fxt ML506 Kit	01
9.	Spartan-6 Evaluation Board	02
10.	XUP Vertex 5 open SPARC Board	01

12.	Spartan-3 E with USB Programming cable	05
13	Cadence University Bundle – (10 users)	01

Lab Cost :

S.No	Academic Year	Expenditure during this Year	Total Expenditure
1	2020-21	--	Rs. 49,44,683/-
2	2019-20	Rs 10,50,000/-	Rs. 49,44,683/-
3	2018-19	Rs 10,20,117/-	Rs 38,94,683/-
4	2017-18	Rs 83,800/-	RS 28,74,566/-
5	2016-17	Rs 5,34099/-	Rs 27,90,766/-
6	2015-16	---	Rs 22,56,667/-

Lab Incharge:

Mr.G.Venkata Rao , Assoc. professor, Dept. of ECE

 Supporting Staff:
 Mr. T. Prasad, Programmer ,Dept. of ECE

PHOTOS: