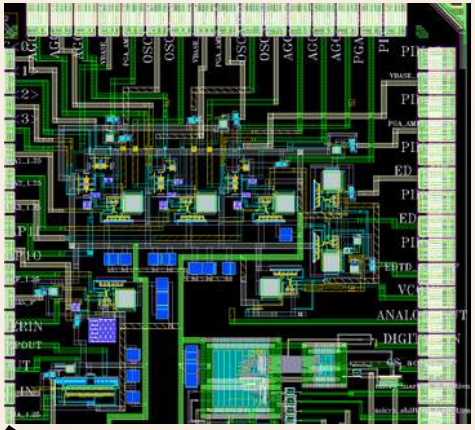
ISLAMIC UNIVERSITY OF SCIENCE AND TECHNOLOGY

ISLAMIC UNIVERSITY OF SCIENCE & TECHNOLOGY
AWANTIPORA, KASHMIR

Kalam Academy Of Skill And Training

VLSI LAB

THE VLSI LAB AT IUST AWANTIPORA TO PROVIDE PRACTICAL EXPERIENCE IN DESIGNING AND IMPLEMENTING VLSI CIRCUITS, BOTH IN DIGITAL AND ANALOG DOMAINS. IT FOCUSES ON FAMILIARIZING STUDENTS WITH PROFESSIONAL DESIGN TOOLS (EDA) AND HARDWARE LIKE FPGAS. THE LAB IS USED FOR UG/PG PRACTICALS AND RESEARCH ACTIVITIES AT THE M.S AND PH.D LEVEL



VLSI chip layout, or physical design

THE VLSI LAB AT IUST AWANTIPORA LIKELY HAS VARIOUS EQUIPMENT FOR DIGITAL CIRCUIT DESIGN AND PROTOTYPING. THIS INCLUDES TOOLS LIKE ALTERA DE2-115 AND BASYS-3 FPGA BOARDS, NI DIGITAL ELECTRONICS FPGA BOARDS, AND TOOLS FOR SIMULATING AND VERIFYING DESIGNS

SOFTWARE AVAILABLE

XILINX
ALL PROGRAMMABLE
VIVADO

VIVADO DESIGN SUITE IS A SOFTWARE SUITE FOR SYNTHESIS AND ANALYSIS OF HARDWARE DESCRIPTION LANGUAGE (HDL) DESIGNS, SUPERSEDING XILINX ISE

Custom IC Design
Virtuoso
cadence

Cadence Virtuoso is a **comprehensive electronic design automation (EDA) platform used for designing, analyzing, and verifying analog, mixed-signal, and RF integrated circuits (ICs), as well as packages and boards.**

The VLSI lab at IUST Awantipora focuses on practical, skill-building projects that bridge theoretical knowledge with real-world applications. Examples include a computer vision-based fruit grading system, a lightweight security mechanism for IoT healthcare, and a solar dryer design. These projects utilize advanced digital tools and involve hands-on lab sessions

Skilling Tool	No of Licences
Cadence Virtuoso	30
Xilinx Vivado	25

HARDWARE COMPONENTS

Hardware for prototyping and testing VLSI designs, including programmable logic devices (FPGAs) and microcontrollers