

Welcome to The VLSI Lab

(Funded by MeitY, Govt. of India)

Fostering Next Generation
Capabilities Among Chip Designers
For Making India Self-Reliant in
Electronics System Design



**Chips to Startup
Programme**

An initiative by Ministry of Electronic
and IT, Government of India

UNLOCK

*The potential of innovation with
cutting-edge
VLSI design & advanced
semiconductor solutions*

Contact Us



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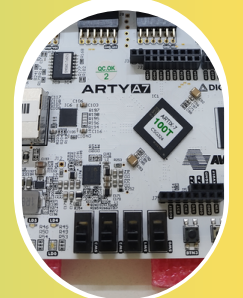


Institute C2S Server equipped with EDA Tools
from Cadence / Synopsys / Mentor / Xilinx

FPGA Boards in Our Lab



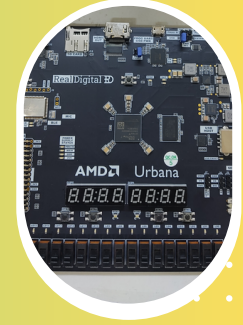
Zynq
UltraScale+



Artix A7- 100T

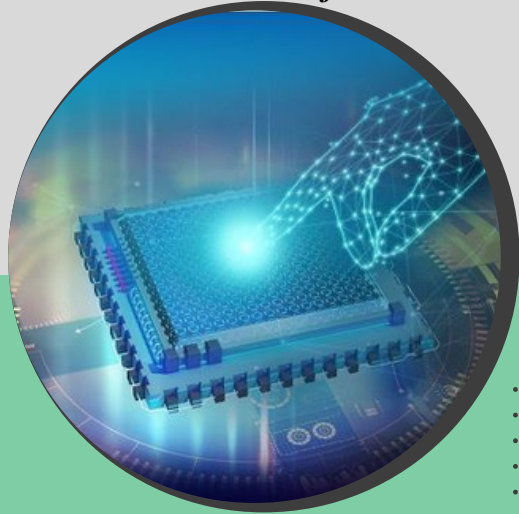


PYNQ -ZU



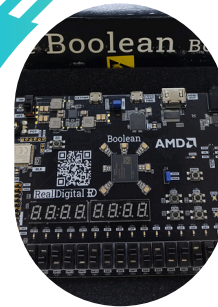
URBANA
BOARD

*“Semiconductor engineering:
Where electrons dance to the
rhythm of innovation, paving the
way for a brighter and more
connected future.”*



Our Goals

- **Build Expertise:** Train students and researchers in SoC/system design to create industry-ready talent.
- **Foster Collaboration:** Strengthen partnerships with industry and academia for impactful R&D projects.
- **Promote Innovation:** Develop reusable IP cores and design ASICs/SoCs for societal and strategic applications.
- **Support Startups:** Incubate and mentor startups to drive entrepreneurship and innovation.
- **Expand Research:** Lead advancements in ASIC/IC design, engaging faculty, students, and startups.



Boolean Board



PYNQ-Z2



Kria KV260



Kria KR260

Available Hardware Kits

- Zynq UltraScale+ MPSOC ZCUI 04
- PYNQ-Z2 FPGA Board
- PYNQ-ZU FPGA Board
- Kria KR260 Robotics Starter Kit
- Boolean FPGA Board
- Urbana FPGA Board
- Kria KV260 Vision AI Starter Kit
- Arty A7 Board
- Pmod KYPD: 16 – button Keypad

Available EDA Tools

- ✓ **Xilinx**
 - Vivado 2023
 - UEF-MATSIM
- ✓ **Cadence**
 - QUANTUS
 - ASSURA
 - CONFRML
 - GENUS
 - FOUNDRY
 - INTEGRAND
 - VMANAGER
 - INNOVUS
 - SPECTRA
 - PVS222
 - INCISIVE152
 - IC 618
 - DDI221
 - MVS211
 - LIBERATE
 - JASPER
 - STARTUS
 - MODUS
 - XCELIUM
 - PEGASUS
 - SSV221
 - SIGRITY
 - SPB
- ✓ **Mentor**
 - TANNER
 - CALIBRE
 - QUESTA
 - TESSENT
 - OASYS
 - NITRO
- ✓ **Synopsys**
 - FINESIM_VU
 - HSIMPLUS
 - HSPICE_VU
 - ICC2_VU
 - ICVALIDATOR
 - NANOTIME
 - PRIME_VT
 - SRARRC_VU
 - SYN_VT
 - VCS

Our Technical Team

- Prof. Santanu Chattopadhyay
- Dr. Rinky Sha
- Dr. Soumen Pandit
- Mr. Subrata Das
- Ms. Ramalita Sheet