



 Analog System Lab Kit PRO
Texas Instruments

PMLK
Power Management Lab Kit
LDO Experiment Book

Peripheral Explorer Kit TMS320F28375D

Power Line Switcher Kit 555TL-SW001

QSPI Flash Controller LAUNCHPAD

Time Base I/O Kit MSP430G47

LowESD



Smart Grids













- DIGITAL DESIGN**
Name of Department
1. Design and simulation of logic gates
 2. Design and simulation of 2, 3, 4 bit adder & full subtractor
 3. Design and simulation of full adder & full subtractor
 4. Design and simulation of multiplexer & demultiplexer
 5. Design and simulation of register & decoder
 6. Design and simulation of flip flops
 7. Design and simulation of up-down counter decade counter
 8. Design and simulation of different shift registers
 9. Design and simulation of binary multiplier
 10. Design and simulation of binary divider
 11. Design and simulation of binary multiplier
 12. Project based on digital design using VHDL lab
- Keep the equipment area neat and tidy.
 - Do not bring bags inside the laboratory.
 - Do not eat or drink in the laboratory.
 - Replace insulated probes and leads at the first deterioration.
 - Avoid stepping on electrical wires or any other computer cables.
 - Never assume a circuit is off. Double check it.
 - Never assume grounds and do not use adaptors that defeat the equipments ground.
 - Avoid wearing rings, bracelets, and similar metal items when working around exposed electric circuits.
 - Do not touch, connect or disconnect any plug or cable without your lecturer/laboratory technician's permission.
 - Do not work on equipment before you know proper procedures and are aware of any potential safety hazards.
 - Use protective clothing and safety glasses when handling high vacuum devices and cathode ray tubes.
 - Unauthorized experiments are not allowed in the Laboratory.
 - While disassembling a circuit, first remove the source of power.
 - Do not touch the live circuit with bare hand.



ICFAI University
Recognized under the section 20B
ICFAI Tech School

DIGITAL DESIGN USING VHDL (ECL-2)

Name of Experiment

1. Design and simulation of logic gates
2. Design and simulation of NAND & NOR gates
3. Design and simulation of XOR gate using NAND & NOR gates
4. Design and simulation of half adder & full subtractor
5. Design and simulation of full adder & full subtractor
6. Design and simulation of multiplexer & de-multiplexer
7. Design and simulation of encoder & decoder
8. Design and simulation of flip flops
9. Design and simulation of up-down counter decade counter
10. Design and simulation of different shift registers
11. Design and simulation of binary multiplier
12. Design and simulation of floating point arithmetic
13. Project based on digital design using VHDL Lab.

General Instructions to the Students

- Report any broken plugs or exposed electrical lecturer/laboratory technician immediately.
- Keep the equipments inside the laboratory area neat and tidy.
- Do not bring bags inside the laboratory.
- Do not eat or drink in the laboratory.
- Replace insulated probes and leads at the first deterioration.
- Avoid stepping on electrical wires or any other computer equipments ground.
- Never assume grounds and do not use adaptors that do not remove grounds, and similar metal items.
- Avoid wearing rings, bracelets, and similar metal items working around exposed electric circuits.
- Do not touch, connect or disconnect any plug or cable without your lecturer/laboratory technician's permission.
- Do not work on equipment before you know proper procedure and are aware of any potential safety hazards.
- Use protective clothing and safety glasses when handling vacuum devices and cathode ray tubes.
- Unauthorized experiments are not allowed in the Laboratory.
- While disassembling a circuit, first remove the source of power.
- Do not touch the live circuit with bare hand.