NPTEL Video Course - Electrical Engineering - NOC:Digital Electronic Circuits

Subject Co-ordinator - Prof. Goutam Saha

Co-ordinating Institute - IIT - Kharagpur

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 30 - Multiplication and Division
Lecture 31 - SR Latch and Introduction to Clocked Flip-Flop
Lecture 32 - Edge-Triggered Flip-Flop
Lecture 33 - Representations of Flip-Flops
Lecture 34 - Analysis of Sequential Logic Circuit
Lecture 35 - Conversion of Flip-Flops and Flip-Flop Timing Parameters
Lecture 36 - Register and Shift Register
Lecture 37 - Shift Register
Lecture 38 - Application of Shift Register
Lecture 39 - Linear Feedback Shift Register
Lecture 40 - Serial Addition, Multiplication and Division
Lecture 41 - Asynchronous Counter
Lecture 42 - Decoding Logic and Synchronous Counter
Lecture 43 - Cascading
Lecture 44 - Counter Design with Asynchronous Reset and Preset
Lecture 45 - Counter Design as Synthesis Problem and Few Other Uses of Counter
Lecture 46 - Synthesis of Sequential Logic Circuit
Lecture 47 - Moore Model and Mealy Model
Lecture 48 - Algorithmic State Machine (ASM) Chart and Synthesis of Sequential Logic Circuit
Lecture 49 - Circuit Realization from ASM Chart and State Minimization
Lecture 50 - State Minimization by Implication Table and Partitioning Method
Lecture 51 - Digital to Analog Conversion - I
Lecture 52 - Digital to Analog Conversion - II
Lecture 53 - Analog to Digital Conversion - I
Lecture 54 - Analog to Digital Conversion - II
Lecture 55 - Certain Performance Issue of ADC and DAC
Lecture 56 - Introduction to Memory
Lecture 57 - Static Random Access Memory (SRAM)
Lecture 58 - Dynamic RAM (DRAM) and Memory Expansion
Lecture 59 - Read Only Memory (ROM)
Lecture 60 - PAL, PLA, CPLD, FPGA