NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

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NPTEL Video Course - Electronics and Communication Engineering - NOC: Design and Simulation of DC-DC converter
Subject Co-ordinator - Prof. L. Umanand
Co-ordinating Institute - IISc - Bangalore
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - System Overview
Lecture 2 - Understanding Rectifier with C-filter
Lecture 3 - Setting up qEDA, ngSpice and Octave
Lecture 4 - Simulation walk-through
Lecture 5 - Designing the rectifier capacitor filter circuit
Lecture 6 - Startup surge limiting
Lecture 7 - DC-DC converter concepts
Lecture 8 - Buck, Boost and Buck-Boost Converters
Lecture 9 - Simulation Example of Buck Converter
Lecture 10 - Understanding Buck Converter
Lecture 11 - Understanding Boost and Buck-Boost
Lecture 12 - Forward Converter Topology
Lecture 13 - Waveforms and Design
Lecture 14 - Simulation of Forward Converter
Lecture 15 - Forward Converter with Lossless Core Reset
Lecture 16 - Transformer Design
Lecture 17 - Inductor Design
Lecture 18 - Flyback Converter Topology
Lecture 19 - Pushpull Converter
Lecture 20 - Half and Full Bridge Converters
Lecture 21 - Close Loop Operation of Converters
Lecture 22 - Simulation examples
Lecture 23 - Multi-Output Converters
Lecture 24 - Concluding Remarks
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