

Lect. 31: Summary

● Topics Covered

- Part 1: Basics

Lect. 1: Introduction

Lect. 2: Review of basic circuits

Lect. 3: Review of basic circuits2

Lect. 4: Operational amplifier

Lect. 5: Semiconductors

Lect. 6: PN junction diode

Lect. 7: Diode circuits

Lect. 8: Diode Rectifier

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● Topics Covered

- Part 2: BJT Circuits

Lect. 9: Transistors

Lect. 10: Bipolar Junction Transistors

Lect. 11: BJT circuits at DC

Lect. 12: BJT small signal model

Lect. 13: BJT CE amplifier

Lect. 14: BJT CE with ER

Lect. 15: BJT current mirrors

Lect. 16: BJT differential amplifiers

Lect. 17: BJT emitter follower

Lect. 18: Design project #1

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● Topics Covered

-Part 3 : MOSFET circuits

Lect. 19: MOSFET

Lect. 20: PMOS

Lect. 21: MOSFET small-signal model

Lect. 22: MOSFET small-signal model(2)

Lect. 23: MOSFET current source and active load

Lect. 24: High-frequency response of MOSFET CS

Lect. 25: MOSFET CG amplifier

Lect. 26: MOSFET cascode amplifier

Lect. 27: MOSFET source follower

Lect. 28: MOSFET differential amplifier

Lect. 29: MOSFET differential amplifier(2)

Lect. 30: Design project #2

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What is the goal of this course?

In Lect. 1

What do we plan to do in this course?

- Understand what transistors do: **new electronic devices**
- Learn how to use transistors for useful works:
electronic circuits for useful functions such as amplification

Do you understand what transistors do?

Do you know how to use transistors for amplification?