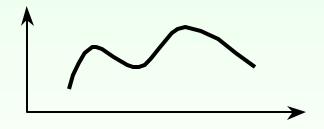
# **Introduction of Analog Circuit**

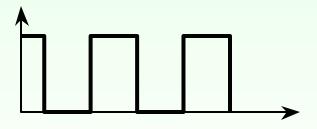
**Analog Signal:** Continuous Signal in Time and Numerical

Digital Signal: Discrete

Signal in Time and Numerical



**Waveform of Analog Signal** 

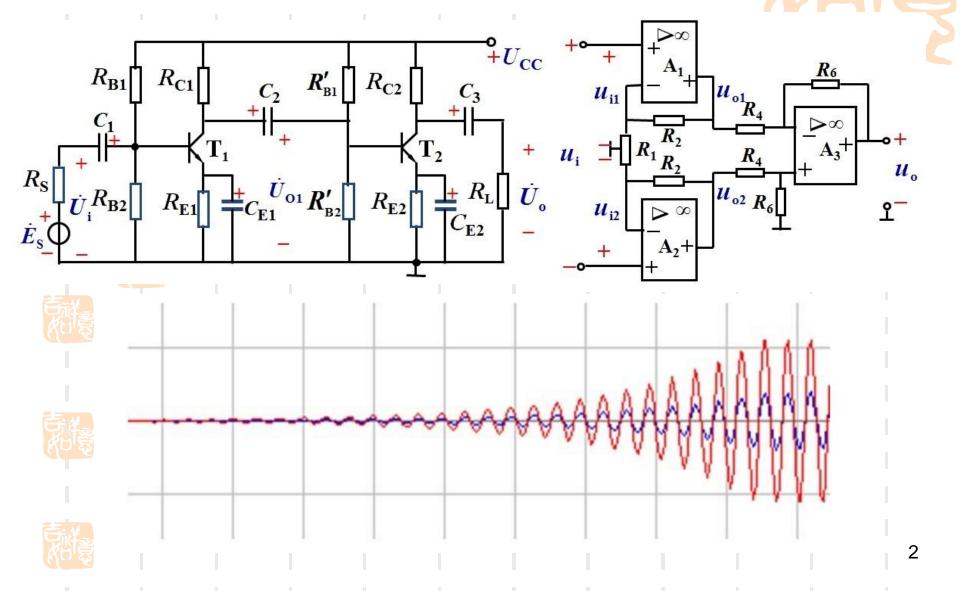


**Waveform of Digital Signal** 

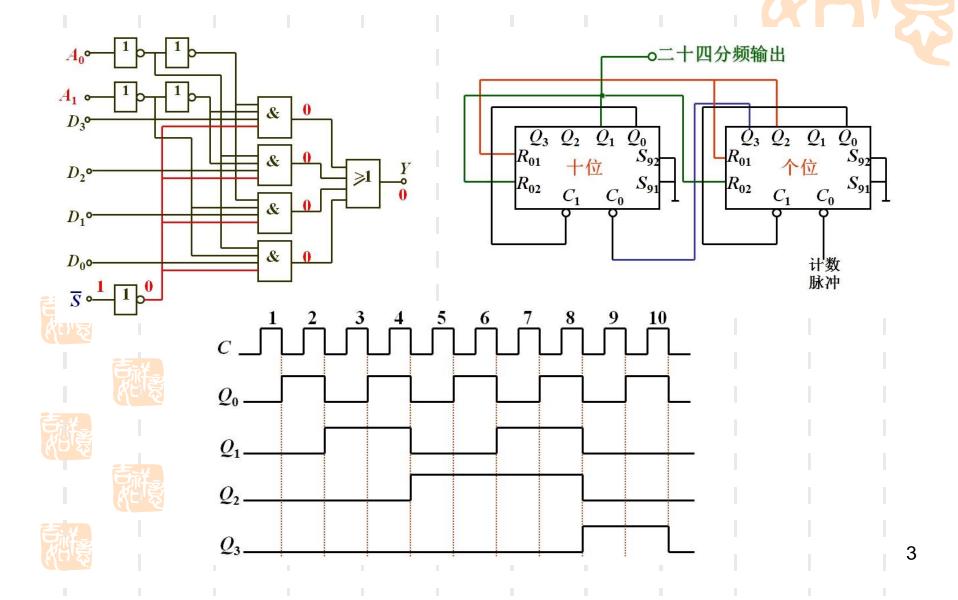
Analog circuit is an analog signal transmission and processing electronic circuit.

**Digital circuit** is a digital signal transmission and processing electronic circuit.

## **Instance**



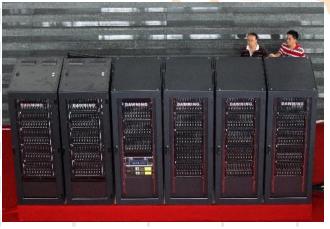
## **Instance**



# **Application**















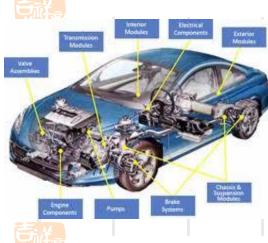




# **Application**











#### **Research Contents**

- Analog Circuit
- Semiconductor Devices/ Integrated Circuit;
- Weak Signal Amplification;
- Waveform Generation and Transformation;
- Different kinds of Amplifying Circuit;
- **Digital Circuit** 
  - Boolean Operations and Expressions;
- Logic Gates;
- Design and Analyze Methods of Sequential Logic and Combinational Logic Circuit;

### **Main Contents**

- 1、Semiconductor (6学时)
- 2、Basic Amplifying Circuit (8学时)
- 3、Application of Integrated Operational Amplifier(8学时)
- 4、Signal Generating Circuit (4学时)
- 5、DC Regulated Power Supply (4学时)
- 6、Boolean Algebra and Logic Simplification (4学时)
- 7、Combinational Logic Circuit (8学时)
- 8、Sequential Logic Circuit (6学时)

### **Assessment Methods**

- 1. Final Examination: 70%
- 2. Homework + Quizzes: 30%













## **Teaching Material**

#### **Textbook**

- ROBERT BOYLESTAD, LOUIS NASHELSKY 著/李 立华改编《 Electronic Devices and Circuit Theory》 9th International Edition
- Thomas L. Floyd 著/余璆改编《Digital Fundamentals》 10th Edition

#### Reference book

- 童诗白《模拟电子技术基础》高等教育出版社
- 康华光 《电子技术基础》高等教育出版社
- 秦曾煌《电工学(第七版)(下册):电子技术》高等教育出版社