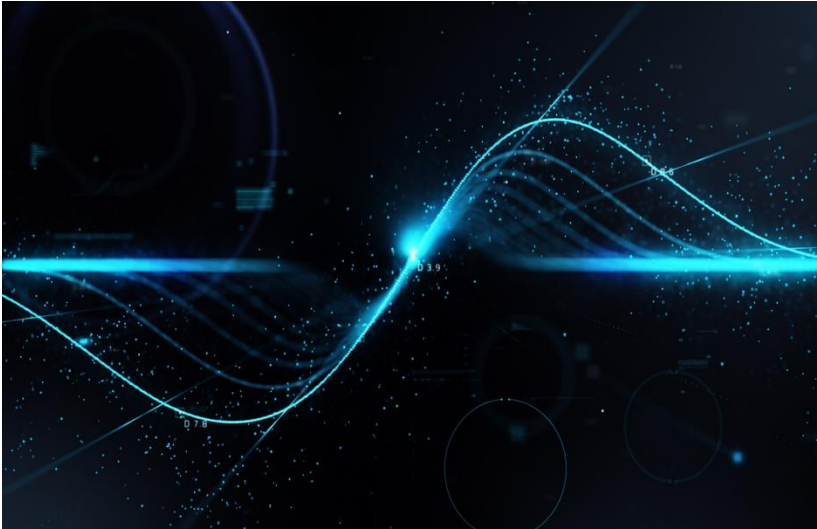




Department of Electronics and Communication Engineering

Teaching Slides at a Glance

Signals and Systems



A Signal is an electromagnetic or electrical current that carries data from one system to another system.

A System is any process that produces an output signal in response to an input signal.

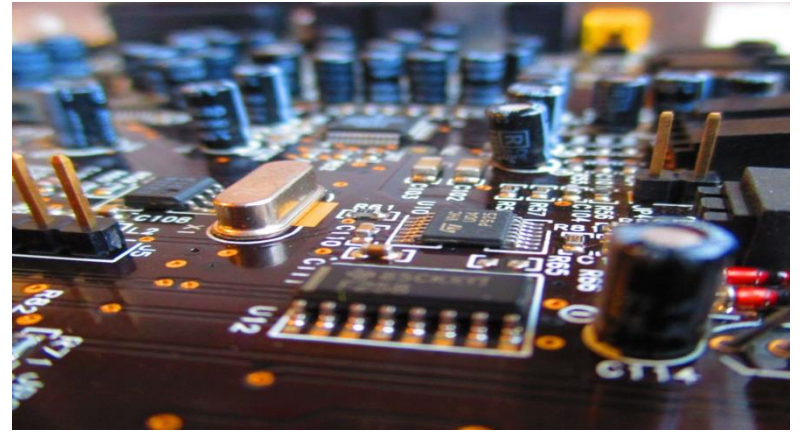
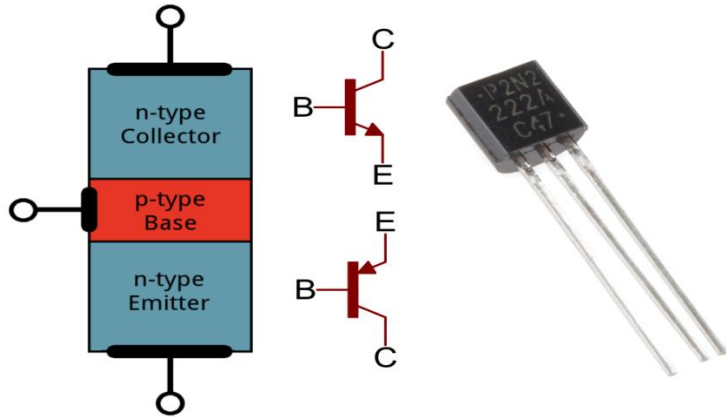
Microprocessor & Microcontroller

A **Microprocessor** is a computer processor where the data processing logic and control is included on a single integrated circuit(IC), or a small number of ICs.

A **Microcontroller** (MCU for microcontroller unit) is a small computer on a single metal-oxide-semiconductor (MOS) integrated circuit chip.



Electronic Devices and Circuits

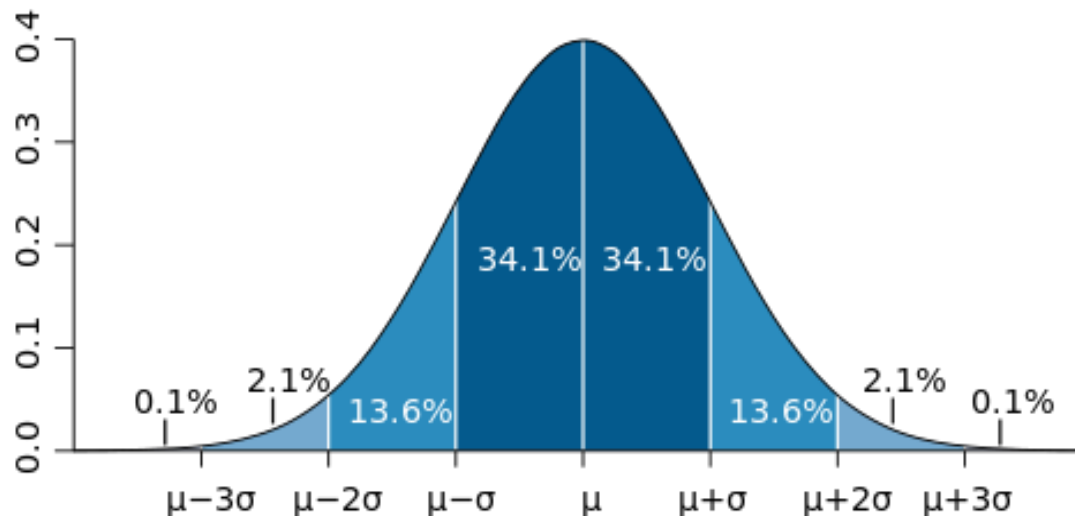


The device which controls the flow of electrons is called electronic device. These devices are the main building blocks of electronic circuits.

One of the most crucial components of an electronic circuit, transistors have revolutionized the field of electronics. These tiny semiconductor devices with three terminals have been around for more than five decades now. They are often used as amplifiers and switching devices.

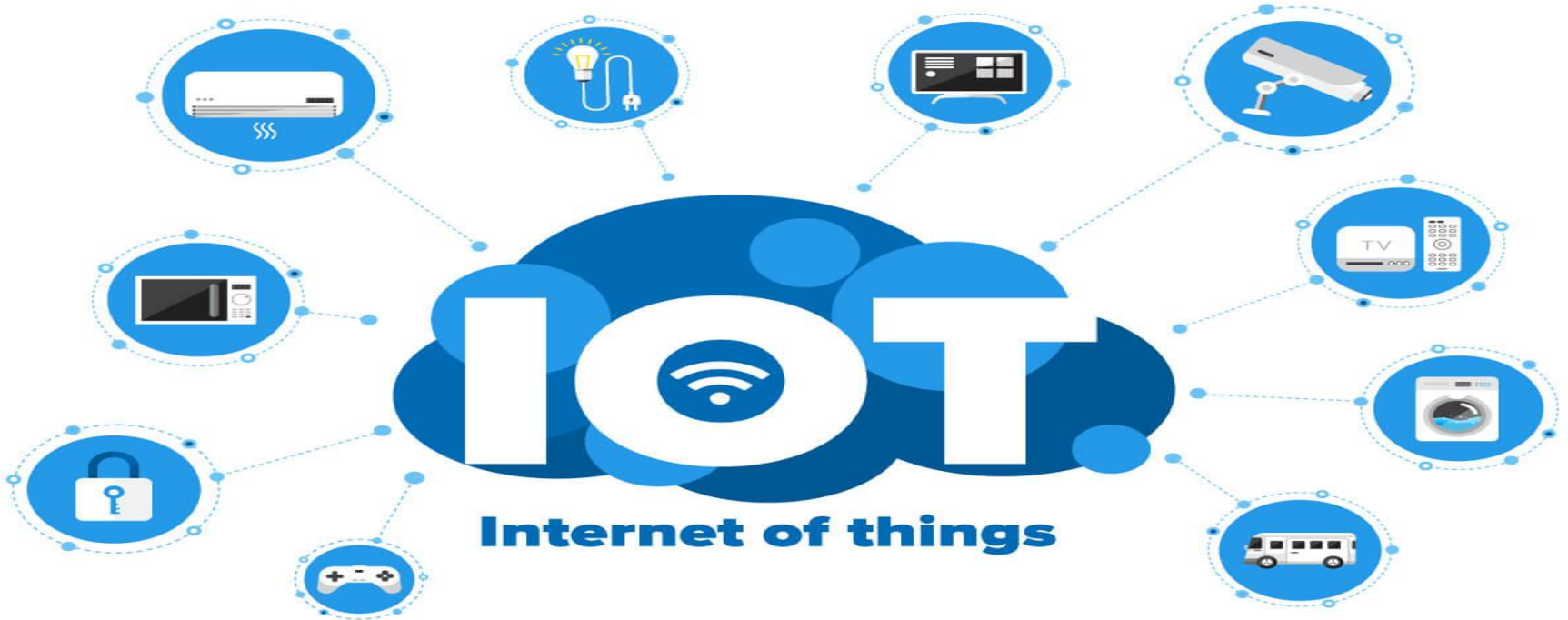
Random Variables and Stochastic Process

A stochastic process, also known as a random process, is a collection of random variables that are indexed by some mathematical set. Each probability and random process are uniquely associated with an element in the set. The index set is the set used to index the random variables.



INTERNET OF THINGS

The Internet of things or IoT is a network of interrelated devices and exchange data with other IoT devices and the cloud IoT devices are typically embedded with technology such as sensors and software and can include mechanical and digital machines and consumer objects.



CLOUD COMPUTING

Cloud computing is the on-demand availability of computer system resources, especially data storage (cloud computing) and computing power, without direct active management by the user. Large clouds often have functions distributed over multiple locations, each of which is a data center. Cloud computing relies on sharing of resources to achieve coherence and typically uses a pay-as-you-go model, which can help in reducing capital expenses but also lead to unexpected operating expenses for users.

