

# 21장 집적회로 (IC)

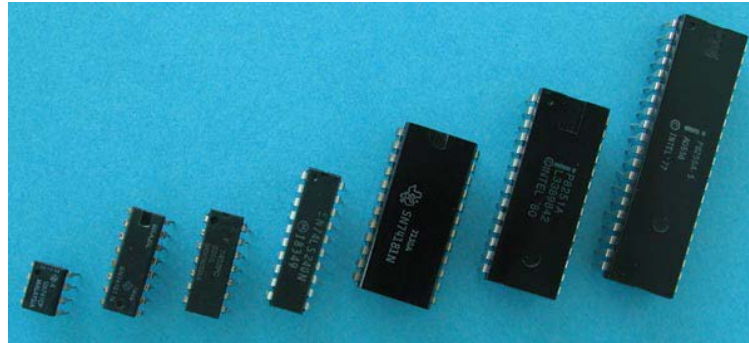
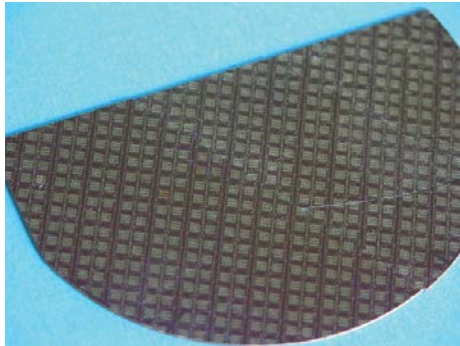


# Introduction of Integrated Circuits (IC)



# Introduction of Integrated Circuits (IC)

- A complete electronic circuit in a package no larger than that of a conventional low-power transistor.
- Consist of diodes, transistors, resistors, and capacitors.
- Produced with the same technology and materials used in making transistors and other semiconductor devices.



# Advantages of Integrated Circuits

- They are small in size, approximately one-eighth of an inch square.
- Consume less power.
- Operate at higher speeds.
- More reliable.
- Many are produced at the same time.
- Reduce the number of parts needed to construct electronic equipment.

# Disadvantages of Integrated Circuits

- Cannot handle large amounts of current or voltage.
- Only four types of components are included.
  - § diodes
  - § transistors
  - § resistors
  - § capacitors
- They cannot be repaired.