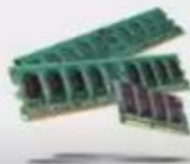# Some basic concepts(Contd.,)

- **Measures for the speed of a memory:**
  - memory access time.
  - memory cycle time.
- **An important design issue is to provide a computer system with as large and fast a memory as possible, within a given cost target.**
- **Several techniques to increase the effective size and speed of the memory:**
  - Cache memory (to increase the effective speed).
  - Virtual memory (to increase the effective size).

Internal organization of memory chips

- Each memory cell can hold one bit of information.
- Memory cells are organized in the form of an array.
- One row is one memory word.
- All cells of a row are connected to a common line, known as the "word line".
- Word line is connected to the address decoder.
- Sense/write circuits are connected to the data input/output lines of the memory chip.

Internal organization of memory chips (Contd.,)