**Memory-Storage Devices**

Most digital computers store data both internally and externally. As a computer processes data, it temporarily stores information in main memory. Memory chips are soldered onto RAM modules, that plug into special sockets on a computer's motherboard. In dynamic RAM each chip consists of millions of transistors and capacitors.

Another type of internal memory consists of a series of read-only memory (ROM) chips. The data stored in ROM persists when power is removed.

Floppy disks, hard disks, and magnetic tape store data by magnetically rearranging metal particles on their surfaces. Hard-disk drives, or hard drives, contain nonremovable magnetic media and are used with all types of computers.

Flash memory is a electronic storage medium that combines the recordability of RAM with the persistence of ROM. It has become standard for portable devices such as digital cameras, cellular telephones, PDAs, MP3 players, and video-game machines.

Optical discs are nonmagnetic auxiliary storage devices. Data is encoded on a disc as a series of pits, called lands. Recordable CDs— called CD-R for write once/read many (WORM) discs and CD-RW for rewritable discs—have been used to periodically back up changing databases or to create (“burn”) one's own music CDs.