

Computer Memory Classification

Primary Memory

It is accessed directly by the processor..
It is the fastest memory available.
It allows a processor to access running execution applications

Secondary Memory

Programs and data are kept on a long-term basis.
Large capacity.
Cost Low and Slow

Volatile
contents are lost once power is switched off

Non-Volatile
Keeps its contents regardless of Power.

Magnetic Memory

Optical Memory

Example:
Registers, Cache and RAM

Example:
PROM, EEPROM, UVEPROM

Magnetic Tapes, Hard disk and Floppy Disk.

CD-ROM, CD-R, CD-RW, DVD-ROM, DVD-R, DVD-RW

RAM (Random Access Memory)

Temporary Storage
Stored data in MBs
Fastest memory.
Most expensive.
Used for Normal operation.

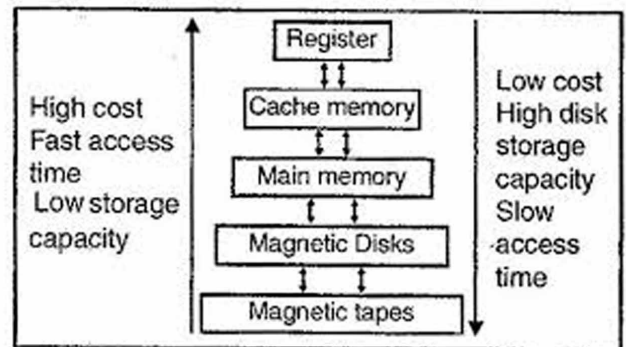
ROM (Read only Memory)

Permanant.
Stored in GBs
Slower than RAM.
Cost LOW.
Used for Startup operation.

Secondary Memories are Non-volatile.

Primary Memories are Semi-conductor Memory (Integrated Circuits-ICs)

Memory hierarchy



Types of Read Only Memory (ROM):

PROM (Programmable read-only memory) – It can be programmed by user. Once programmed, the data and instructions in it cannot be changed.

UVEPROM (Erasable Programmable read only memory) – It can be reprogrammed. To erase data from it, expose it to ultra violet light. To reprogram it, erase all the previous data.

EEPROM (Electrically erasable programmable read only memory) – The data can be erased by applying electric field, no need of ultra violet light. We can erase only portions of the chip.



Life must continue. And continue towards perfection, through progress, evolution, through self-initiative. Impatience can not lead to do that. Frustration is its enemy.