

Computer memory

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Computer memory

Computer memory is a physical electronic device that is used to store applications and data, temporarily or permanently, as required by a computer and/or its user. Here is more on the different types of computer memory...





- Computer memory is responsible for storing data and applications on a temporary or a permanent basis. It enables a person to retain the information stored on the computer. Without a memory device/arrangement in place, the processor would not be able to find a place which is needed to store the calculations and processes.



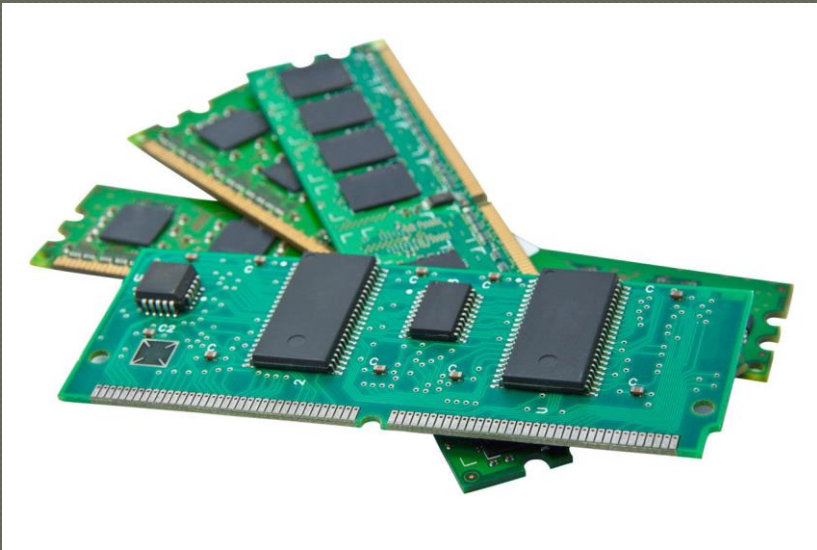
Computer memory can be primarily classified into two types: **Primary Memory** and **Secondary Memory**.





- Primary Memory (also called main memory), is used for immediate access of data by the processor.
- Most computer systems around the world use primary memory only for bootstrapping and related purposes, and use secondary memory devices for personal data storage purpose.

Primary Memory can be divided into two types – Random Access Memory (RAM) and Read Only Memory (ROM). RAM retains its contents as long as the power supply is on. A RAM chip is used as primary memory in most computers today.



SECONDARY MEMORY

Secondary memory is available on mass storage devices for permanent data storage. Data stored on a secondary device is retained even when it is not supplied any power. This data can be transported in most cases, and looks and appears the same on any machine, irrespective of where the data was first copied onto the secondary storage device.

Popular secondary memory devices include hard disk drives, flash drives (pen drives, memory cards etc.), and zip drives.



Optical Drives (CD/DVD)



- **Optical Drives (CD/DVD)**
- Philips and Sony collaborated in the '70s on a project to create a new digital audio disc. This collaboration brought together the optical disc drive technologies both the companies were earlier separately working on. Launched in 1982-83, the Compact Disc (CD) eventually went on from being an audio disc to a data storage device.



Hard disks



- As portability and convenience became keywords in modern times, hard disks have become portable. External hard disks typically use the USB plug-and-play mechanism and are very cost-effective. Modern external hard disks can hold up to 2 terabytes of data.
- Hard disks seem to be in for the long use. No better option is in sight for now, and one can easily predict that hard disks should continue to be as the preferred form of data storage.

Flash Drives



- A flash drive is a data storage device that uses flash memory for storage purposes. Typical in design, flash drives are light-weight and small in design; and are hence easily portable. Flash drives operate from the power supplied by a computer's USB port (the port in which they are plugged in).

