

Computing Y10 – Secondary Stage

Key vocabulary

Secondary Storage	A non-volatile storage medium which stores files and programs. Examples include the hard drive (HDD) and solid state drives (SSD).
Magnetic devices	Magnetic disks are read and written to with a moving head inside the disk drive. They often contain moving parts and are susceptible to damage. Magnetic devices can be either internal or portable.
Solid State devices	SSD has no moving parts. It retains an electronic charge using logic gates. Examples include SD cards and USB memory sticks. Also referred to as flash storage.
Optical devices	Optical media includes CD, DVD and Blu-Ray disks. Lasers are used to read and write data to a disk. Data is stored on tracks around the disk as a series of pits which represent binary code.
Cloud storage	Cloud storage refers to saving data in an off-site location maintained by another party. Examples include Dropbox, Google and Microsoft. This relies on having an internet connection to be able to upload and download files from a cloud server.

Comparing secondary storage

Capacity	The amount of space that is available to store files. Generally measured in GB.
Speed	How quickly a computer can read and write data from a storage device.
Portability	How easy a device is to be transported. Some devices may be permanent hardware, others may be easier to transport.
Durability	Will the device withstand a certain amount of damage without corrupting files?
Reliability	The length of time that a device is expected to last for, how long will it retain functionality?
Cost	The cost of a device is compared in terms of cost per GB.

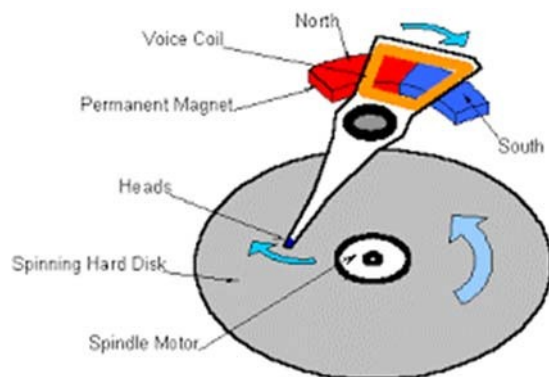


Figure 1 - Magnetic storage

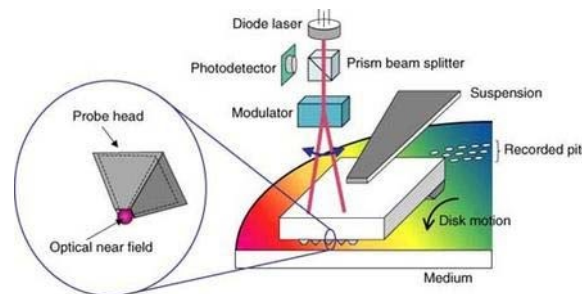


Figure 2 - Optical storage

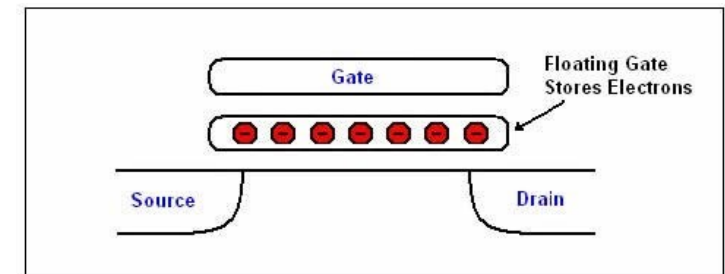


Figure 3 - Solid State storage