

# Memory

A	Secondary Storage: Types
<b>Flash</b>	A type of SSD which stores information by forcing electrons through a barrier with a large current
<b>Magnetic</b>	Cheap storage which requires moving parts and writable magnetic disks
<b>Optical</b>	Cheap storage which requires a laser and a disk
<b>Solid State Drive (SSD)</b>	Memory with no moving parts

C	Primary Storage
<b>Main memory</b>	Other ways of saying RAM
<b>Primary storage</b>	
<b>Virtual memory</b>	Part of secondary storage which is used as main memory when RAM is full
<b>Dynamic RAM</b>	Single transistor / capacitor RAM which needs to be refreshed every few milliseconds
<b>Static RAM</b>	4/5 transistor RAM which can hold data without being refreshed (but does need power)

D	Key Vocab
<b>Read Only Memory (ROM)</b>	Non-volatile memory which cannot be over-written. Generally used for booting
<b>Storage device</b>	Any hardware which can hold, read and write data
<b>Storage medium</b>	The type of material or method used to store data
<b>Tertiary storage</b>	External high-capacity storage
<b>Volatile</b>	Memory which requires power
<b>Non-volatile</b>	Memory which persists without power

B	Secondary Storage: Qualities
1	<b>Capacity</b> Amount of data a storage device can hold
2	<b>Durability</b> How well the device resists damage
3	<b>Portability</b> How easily the device can be carried
4	<b>Reliability</b> How well the data resists corruption
5	<b>Speed</b> How quickly the data can be read from the storage device
6	<b>Cost</b> Pounds per GB

E	The Cloud	
Cloud	Remotely located storage and software, accessed via the internet	
	Advantages	Disadvantages
1	No need to update application software	Entrusting potentially sensitive data with outsiders
2	No need to maintain the equipment, software or data	Safety and security of sensitive data is outside your control
3	No need to employ network managers or other technical staff	The service must be totally reliable
4	Service provider takes care of backups	Requires internet connection
5	Easy to share files and collaborate across platforms and locations	