Timeline Of Computer Memory

BY WILLIAM MCGREGOR, DAVID JONES, ERIC TURNER, OLIVER DOWNES, ELLIOT LASLETT-BOWEN

1950

- Magnetic Drum Memory 1950, stored information on the outside of a rotating cylinder coated with ferromagnetic material and circled by read/write heads in fixed positions.
- UNIVAC UNISERVO Tape Drive 1951, UNIVAC tapes were 1/" wide, 0.0015" thick, up to 1,500' long, and made of phosphor-bronze with a metallic coating.
- IBM 726 Magnetic Tape 1952, the system used a unique 'vacuum channel' method of keeping a loop of tape circulating between two points, allowing the tape drive to start and stop the tape in a split-second.
- Whirlwind Core Memory 1953, Core memory is made up of tiny "donuts" made of magnetic material strung on wires into a grid. Each core stored a bit, magnetized one way for a "zero," and the other way for a "one." The wires could both detect and change the state of a bit.
- RAMAC 1956, The RAMAC disk drive consisted of 50 magnetically coated metal platters capable of storing about 5 million characters of data.
- Bryant Chucking Grinder Company Magnetic Disk Drive 1959, made up of a horizontal shaft with eight or more 39-inch magnesium disks. Few sold.

1960-70

- The Ferranti Sirius is announced. The Sirius was a small, low-cost business computer using a simple programming language.
- Dec Tape, reliable and inexpensive storage medium was used in several generations of DEC minicomputers
- IBM's 2315 disk cartridge is announced. This 1MB disk cartridge was used with the IBM 1800 and 1130 computers, and it provided easily transported "personal storage"
- Minnow, a read-only floppy disk drive designed to load microcode into the controller for the "Merlin" (IBM 3330) Direct Access Storage Facility.
- The IBM 1360 Photo-Digital Storage System is installed at Lawrence Livermore National Laboratory. The system could read and write up to a trillion bits of information—the first such system in the world. The 1360 used thin strips of film on which were written data created by an electron beam and a wet photographic development process. The system used sophisticated error correction and a pneumatic robot to move the film strips to and from a storage unit. Only five were built.

1970s

- First IBM Computer to use semiconductor memory
- Illiac IV Supercomputer
- IBM 3340 Data Module
- IBM 3850 Mass Storage System
- Intel 1103 Memory Chip
- DEC RL01
- Japanese Manufactured Dynamic Random tiddies (DRAM)
- Commodore 1530 Datasette
- LaserDisc
- ROM Chips
- Shugart ¼-inch flexible disk drive
- Bubble Memory

1980s

Seagate ST506 hard disk drive

- 5mb of data
- 5x as much as a hard drive
- 4million units sold

3 ½-inch floppy drive

- Was the main new format to come out of the 1980s

Bernoulli Box

- 5mb to 230mb of data
- Was removable allowing for large files to be transferred easily

CD ROM

- 550mb of pre recorded data

Flash memory

- A type of memory that was solid state and also able to be rewritten multiple times.

1990

- IBM 9345 hard disk drive is introduced. Codenamed "Sawmill," it was the first hard disk drive to use magneto-resistive heads. Magneto-resistive heads gave the 9345 an advantage over its competitors, as the bits could be stored more densely.
- A prototype solid state disk (SSD) module is made for evaluation by IBM. SanDisk, which at time was known as SunDisk, manufactured the module which used non-volatile memory chips to replace the spinning disks of a hard disk drive.
- When CompactFlash is introduced by SanDisk, it is quickly adopted and becomes the preferred memory storage option in many consumer as well as professional electronic devices
- The Digital Video Disc (DVD) format is introduced, and its storage capacity is a huge increase over the common compact disc (CD)
- The Iomega Zip Disk is released. The initial Zip system allowed 100MB to be stored on a cartridge roughly the size of a 3 ½ inch floppy disk
- IBM releases the Microdrive in 170 MB and 340 MB capacities. At the time of their introduction, they were the smallest hard drives in the world.

2000's

- 2000 - USB Drives - a quick storage solution that allows for easy transfer of data between devices and doesn't have the problems of earlier solutions such as scratches or magnetism erasing data.
- 2003 - BLU-RAY - A dvd that allows for that allows for higher res video to be stored on it (1080p to 4k). It was named after the thin blue laser used to read and write data on to its surface
- 2006 - Cloud based services - Services such as Amazon, Dropbox and Google have made data storage much more efficient in the form of the cloud, a service where you pay for the use of the company's servers to store data which allows for much less onsite data storge and can be more space efficient.
- 2000 ish - 1TB HDD – the first 1 TB HDD's made data storage much more efficient for end users.