

Assignment 9

1. What's the difference between static and volatile memory?

- Static memory is type of memory that uses bistable latching circuitry (flip-flop) to store each bit, that faints over the time and have to be updated all over all the time, but it is storing information over short period of time after power is lost.
- Volatile memory on other hand is a type of memory that resets and forever lost when power is disconnected.

2. Research a storage media -- electronic or otherwise and answer the following question:

a) What medium did you chose?

Laser beam and a glass or some sort of a crystal is the medium of my choice to create superman memory.

b) Is it volatile or non-volatile?

It is not volatile. And it is non-erasable and non-editable in a same time.

c) How is the medium used (e.g. magnetic datasette tape is read by a magnetic head and converted to voltage... etc.)

Superman memory crystal is a nanostructured glass for recording of 5-D digital data using femtosecond laser writing process. The memory crystal is capable of storing up to 360 terabytes worth of data for billions of years. [Wikipedia](#)

This type of a memory using a powerful femtosecond laser to write and a less powerful one to read information stored in a five-dimensional crystalline structure of a glass.

d) Is the medium still used today?

Unfortunately, you cannot find a femtosecond laser in every device and household in Canada or anywhere in the world. But light and crystalline greed information storing isn't new in its nature. Many people still using optical CD and DVD's that are using laser bigger by the order of a magnitude compared with a width of a femtosecond laser.

So, answer is no, medium is not being widely used just yet.