

## Memory & Storage

### Introduction:

Electronic computer memory and storage was first created in the 1940's using the Manchester Mark I Williams-Kilburn tube. This creation drastically revolutionized the usage of computers by speeding up data storage and recovery. Over the past 70 years computer memory and storage have evolved greatly. Now we have the ability to create a whole computer the size of a rice grain, but still have plenty of memory and storage. The most modern forms of memory and storage use processors that can have up to 3 TB of RAM and 48 TB of storage. This was achieved on the HP Z8 PC. This report will go over the history of how we have achieved specifications like these.

### Time Period:

During the 1940's we had a great need to revolutionize America's computer world. This was due to World War 2. Our main concern was used during the Manhattan Project. Scientists had to make several long calculations that would take ages to do by hand, but minutes or even seconds to do on a computer. Our first creation was the Manchester Mark I Williams-Kilburn tube. This was used in the MANIAC computer at Los Alamos National Labs. This revolutionized work on the Manhattan Project and helped us complete it in record time in order to end the war. The discovery of computerized memory and storage lead to other creations, such as magnetic drum memory and magnetic core memory. All these creations kept leading to new discoveries therefore revolutionizing the computer world.

### Citations:

<https://www.computerhistory.org/revolution/memory-storage/8/325>

<https://www.computerhistory.org/timeline/memory-storage/>

<https://petapixel.com/2017/09/13/hp-z8-pc-can-upgraded-insane-3tb-ram-48tb-storage/>