**Advantages of memristors:**

* Has properties which can’t be duplicated by the other circuit elements (resistors, capacitors, and inductors
* Capable of replacing both DRAM and hard drives
* Smaller than transistors while generating less heat
* Works better as it gets smaller which is the opposite of transistors
* Devices storing 100 gigabytes in a square centimeter have been created using memristors
* Quicker boot-ups
* Requires less voltage (and thus less overall power required)

**Disadvantages of memristors:**

* Not currently commercially available
* Current versions only at 1/10th the speed of DRAM
* Has the ability to learn but can also learn the wrong patterns in the beginning
* Since all data on the computer becomes non-volatile, rebooting will not solve any issues as it often times can with DRAM
* Suspected by some that the performance and speed will never match DRAM and transistors