

Random Access Memory

Random Access Memory (or RAM) is the part in the computer, phone, data server, etc., that allows applications or data to be opened or switched through. RAM comes in different forms, the most common of which are DRAM (Dynamic Random Access Memory), SRAM (Static Random Access Memory), SDRAM (Synchronous Dynamic Random Access Memory), and DDR (Double Data Rate).

RAM uses transistors to communicate with different parts of the computer, specifically the CPU, to switch between tasks and whatnot. Different types of RAM have different uses. DRAM, SDRAM, and DDRAM are generally used in computers, while SRAM is often used in CPU cache and graphics processing. DDR RAM is far more efficient than DRAM and SDRAM in computers, as it transfers data at twice the speed of the others. RAM comes in different speeds and storage sizes, which can affect how many processes can be run and how fast they get done.

RAM comes in different shapes or sizes; usually made up of silicone, copper, or gold. They vary in size based on the type. Common shapes of DDRAM, SDRAM, and DRAM generally come in a 5-inch length by 1-inch width. This form of RAM can be switched and replaced, while other types of RAM may be stuck onto the motherboard. As mentioned before, RAM is used to execute operations between the electronic components, which is done using transistors, relaying the information.

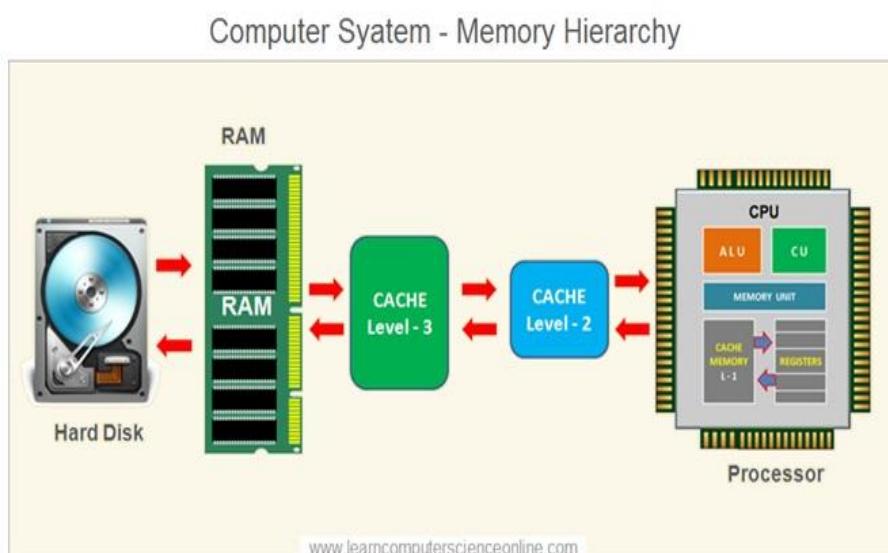


Figure 1 ([learncomputerscienceonline.com](http://www.learncomputerscienceonline.com))

Figure 1 represents the process of how RAM functions. The 'Cache' models that are represented between the two are very small pockets that hold little bits of data that allow repeated processes to be performed faster in the future. Essentially, the gap between the time the RAM can react to the information and hold the load until the process is finished, and all data that was being processed by the temporary memory is gone.

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