

RANDOM ACCESS MEMORY

Oleshkevich A. A., student
Scientific supervisor – Turcheniuk M. E., lecturer
Belarusian National Technical University
Minsk, Republic of Belarus

Random access memory (RAM) is a component that allows a computer to store data for a short time and access it quickly. The computer loads the program or the requested document into memory from storage, and then accesses each piece of information in RAM. Many operations rely on memory, so the amount of RAM you have is critical to your system's performance.

Inside a computer, memory works in conjunction with the processor and storage (hard drive or solid state drive) and is used to access and use data. For example, when you need to access and edit spreadsheet data, the following happens:

1. Programs and files are in storage.
2. The system processor transfers program data from storage to RAM for short-term storage and use.
3. After that, the processor accesses data from memory, which is a kind of bank of available computer workspace. The amount of memory installed helps to determine how fast applications can run and how well your computer can multitask.

There are various types of memory. For a more precise definition of the type of random access memory, it is necessary to mention the purpose of its use. The most common type of RAM is the DRAM type, which stands for Dynamic Random Access Memory. It is called dynamic because the data are constantly updated. The other type is SRAM or Static Random Access Memory. Static means that the data do not need to be updated. SRAM is faster, but more expensive. Both types of RAM are volatile. When the power is turned off, all data are lost.

RAM is intended for short-term access. To perform daily tasks quickly and easily, you need to have enough memory.