

# [How much ram is enough report sample](https://assignbuster.com/how-much-ram-is-enough-report-sample/)

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RAM or Random Access Memory represents a computer read/write memory for data storage. Usually RAM is a volatile storage, where data is lost as soon as the power is disconnected from the computer. It is a temporary data storage for program and system instructions, as well as for the data which is to be processed. Thus, CPU transfers all the data from the long-term memory into RAM and accesses it from there. Moreover, all the new data is first created in RAM and then transferred into the permanent storage devices (Soper 37).

RAM can be subdivided into two main types: static and dynamic. Static RAM is more expensive and holds the data without external refresh mechanisms. Static RAMs are usually faster than dynamic ones, however they are significantly bigger due to the fact that they consist of 4-6 transistors (unlike dynamic RAMs, which use only 2). Static RAM often functions as a cache memory for CPUs. Dynamic RAMs consist of a transistor and a memory cell and can only hold data if it is continuously refreshed. Despite their inferior performance compared to static memory, dynamic RAMs are used in computers quite extensively due to their low cost and smaller size.

RAM can be located in various parts of hardware, however standard personal computers have 1-4 RAM chips on the motherboard. The amount of RAM needed for a computer depends on the type of the operating system and the software used. Personal computers today often possess 2-8 GB of RAM, however, additional memory can be installed if needed. Graphical applications and videos usually require more RAM, while basic computer performance can run with as much as 1 GB using Windows 7 or Vista. Although there is a limited to the amount of RAM that can be used on the computer, the rule of thumb is that the more RAM a computer has, the faster it operates (Oja and Parsons ).

## References

Oja, Dan, and June Parsons. Computer concepts - Illustrated Introductory. 8th ed. Boston,   
MA: Course Technology , 2011.   
Soper, Mark. Maximum PC. October 2005: 37. Print.