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How to Buy Computer Memory

How do you know when to buy more memory for your computer? Or how much memory you'll need? If you can afford it, you should always buy as much memory as you can, since it boosts system performance.

But not all of us need 1 GB of RAM - most home users need only about 512 MB of RAM. Besides, computer memory is very expensive. This article will help you analyze when you need to buy memory and much memory is required in various scenarios.



A typical stick of computer memory

When to Buy More Memory

Thinking back on my experience with building computers, there are usually five scenarios under which you'd buy memory for your computer:

- When upgrading your operating system
- When installing new applications
- When installing multimedia cards
- When adding computer peripherals
- When your hard disk starts 'chugging'

Let's look at these in turn.

When Upgrading Your Operating System

Each time I upgrade my operating system, I find that I need to buy more memory. Your operating system is a huge memory hogger. Windows XP, for example, requires at least 512 MB RAM to run smoothly (at least on my PC). Windows 2000 needs at least 256 MB RAM. Always check the operating system manufacturer's documentation carefully - they always tend to understate memory requirements.

When installing new applications: Business software like Microsoft Office, video editing applications like Adobe Premiere Pro and games like Half-Life 2 really need a LOT of memory. Some will refuse to run if they find your memory lacking. Other applications will run but will crawl like a snail. Newer software these days assume you have a huge amount of memory. Again, check the manufacturer's documentation carefully for memory requirements.

When Installing Multimedia Cards

Two types of cards come into mind - video cards and sound cards. Video cards have a built-in memory but they also consume main system RAM. Don't be fooled by that fancy video card that says it'll deliver fantastic 3D graphics performance. Video cards depend a lot on your main system RAM. Without sufficient memory, the video cards will still perform poorly even if they are the latest and greatest versions (the ATI Radeon 9800 Pro comes to mind).

When Adding Computer Peripherals

If you add a printer or scanner to your system, you should also consider buying more memory. Printers consume system memory particularly when printing huge files. Scanners consume memory when handling large image files.

When Your Hard Disk Starts 'Chugging'

In general, you can tell whether you should be buying more memory by listening to your hard drive. Yes, by listening to your hard drive. If it makes a long drawn 'chugging' noise whenever you copy or edit large files, you can be sure you need a memory upgrade.

You see, when your system is low on memory, it borrows space from your hard disk to make 'virtual memory'. This process is called 'paging' and it's very, very slow and irritating 😞. Get that memory upgrade and avoid this problem at all costs!

How Much Memory Do You Need?

Depending on the type of software applications you are using, the amount of memory you need will differ. As a bare minimum, computers these days need at least 256 MB of RAM. Refer to the table below to see how much memory you will need based on the type of software you use.

Type of Computer Usage	Recommended Amount of Memory
Administrative Word processing, email, spreadsheets, surfing the web, general gaming, not many applications open at once.	256 MB to 512 MB
Executive/Professional Word processing, email, spreadsheets, presentations, videos, photos, surfing the web, general gaming, several applications open at once.	512 MB to 1 GB
Graphics Design/Software Development 3D CAD software, enterprise programming suites, simulation or modeling software	1 GB or more

Conclusion

This article has explored the various scenarios when a memory upgrade is necessary. Once you determine you need a memory upgrade, decide how much

memory you want. Remember that your motherboard has a limited number of slots for memory, so check that whatever memory you buy can fit into those slots. Good luck and happy shopping!

Buy Computer Memory Online

If you plan to invest in more computer memory, you need to know the correct RAM module to select. One of my favorite sites for buying computer memory is Crucial.com. This online store offers a plethora of memory products and they give your money back if memory upgrades are not compatible with your system. Definitely worth a visit.

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