

# Mankato Computer Technology

**IS IT TIME TO UPGRADE YOUR  
COMPUTER?**



# IS IT TIME TO UPGRADE YOUR COMPUTER?

Computers are changing all the time, with updates coming even more frequently. But when is it time for you to upgrade your computer?

Let the guys share with you the warning signs for when you have outgrown your computer, and how to go about choosing its logical successor.

# Minimum Requirements

- ▶ So the absolute minimum you want to be running Windows 10 is 4GB of RAM.
- ▶ Anything less than that and it becomes unusable.
- ▶ 8GB is optimal.
- ▶ Pentium processors and Intel Dual core processors should be tossed in the trash.
- ▶ For processors i3 is low end but ok, i5 is good, i7 and i9 are overkill for most.
- ▶ i5 is probably the sweet spot between performance and affordability.
- ▶ Solid state drives have gotten a lot cheaper over the years and people should definitely seek them out-- they will do a lot to improve performance.

# Budget, Mid, and High Range Options

Our budget option for laptops and desktops is:

i3 Processor

8GB RAM

1TB HDD



Our mid-range option (this is what I steer the majority of people toward) is:

i5 Processor

8GB RAM


1TB Solid State  
Drive



Higher end we normally special order because they are typically north of \$1,000 and if someone wants something like that they typically have a use in mind/certain specs and features that they are looking for.

# What Windows do I have?

- ▶ Windows 7 is already out of support.
- ▶ Windows 8 is going out of support in 2023.
- ▶ In terms of upgrading, it depends heavily on if your computer has drivers for Windows 10.
- ▶ For a lot of people the rule of thumb is if the computer is less than 5 years old it is worth upgrading, if older, it should be replaced.
- ▶ There are exceptions of course for people who have older top of the line machines (but most people don't).



Are you in the market  
for a new computer,  
but are overwhelmed  
by the wide variety of  
options available?

With a variety of tablets, laptops, desktops and other devices available, the market can be hard to navigate for a typical consumer.



Apple, Microsoft, Google, and other manufacturers are all vying for their piece of the market and each offer unique products.



Many people struggle with old devices simply because they want to avoid the headache that goes into finding something new.

# What to look for when you buy a computer

## Tower/Desktop

- ▶ A form of computer that has been around for quite a while is a tower.
- ▶ A tower is one style of desktop computer that, because of its size, people keep on or near a table or desk.





# Compact Desktop

- ▶ Compact desktops, which have the volume of a shoebox, and can sit be kept on your desktop.
- ▶ Check into a compact desktop, such as Intel's NCU, if you like your computer small but non portable.



# All In One

► Another form of desktop computer is called an all-in-one. With this type of computer, all the brains of the computer are stored in a casing behind the monitor, so the entire computer sits on your desk or table.



# Laptop

- ▶ A laptop is portable, weighing anywhere from 2 to 8 pounds.
- ▶ The monitor, keyboard, and mouse (in the form of a flat touchpad) are built into the laptop.



# Tablet

- ▶ A thin, flat mobile computer with a touchscreen display, which is usually in color, processing circuitry, and a rechargeable battery in a single device.
- ▶ Tablets often come equipped with sensors, including digital cameras, a microphone, and an accelerometer, so that images on screens are always displayed upright.
- ▶ The touchscreen display uses the recognition of finger or stylus gestures to replace the mouse, trackpad and keyboard used in laptops.



# Features

In addition to your computer's model, take into account which of these is most important to you:

- ▶ Memory
- ▶ Processor
- ▶ Battery Life
- ▶ Keyboard
- ▶ Screen
- ▶ Peripherals
- ▶ Software
- ▶ Warranty



## Processor

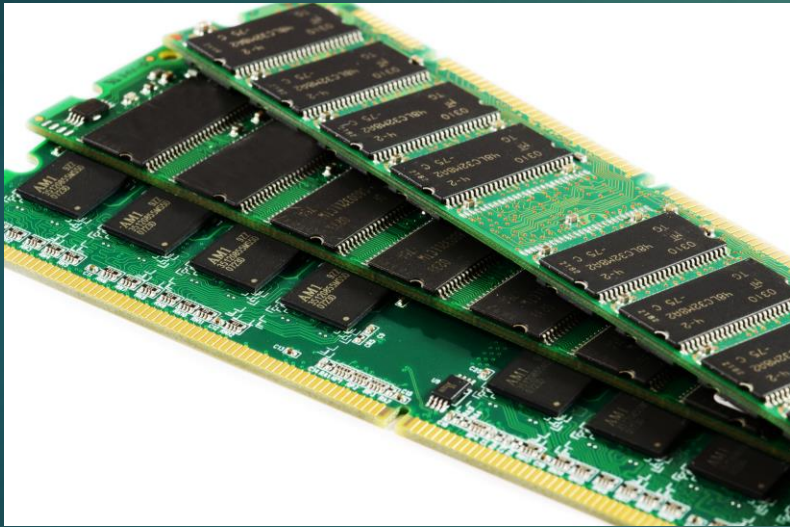
The Intel Core i3, Core i5, Core i7, and Core i9 Processors are the most powerful processors available in the consumer market. So by getting a laptop with an Intel Core i3 Processor, you are getting the most affordable option of the best quality products on the market. 4GB of RAM and 500GB Hard Drive capacity are more than enough for most users, but can be upgraded to your liking.

- ▶ Most processors today are multiple-core processors, such as the i3, i5, i7, and i9 processor lines from Intel.
- ▶ Those with two processors are called *dual-core*; those with four processors are called *quad-core*; and processors with six cores are referred to as *hexa-core*.
- ▶ The bottom line with cores is that the more you have, the faster your computer can process instructions because all the cores can work at once.



# Memory

- ▶ Your computer should have at least 4 gigabyte (GB) of RAM.



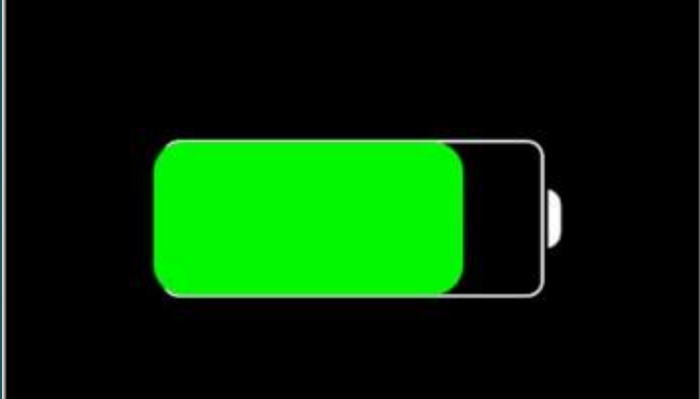
## Type of hard drive:

- ▶ Computers have traditionally used hard drives to store programs and data. In many computers a solid state drive is used in place of a hard drive.
- ▶ The access speed (how fast your computer retrieves data) of solid state drives is much higher than the access speed of hard drives.
- ▶ If you need a computer which processes information very quickly look for one with a solid state drive.



## Battery Life

- ▶ If you choose a laptop and will be using your laptop in settings without a power source, such as on a plane or in the doctor's waiting room, look for a model with longer battery life (some offer 10 hours or more).



## Wireless Capability

- ▶ To connect to some wireless devices and networks, you need wireless capability.







### Keyboard:

- ▶ Make sure the keyboard feels comfortable to you.

### Manufacturer support:

- ▶ Check the warranty and technical support available. Also check for helpful documentation on the manufacturer's website.

### Included software:

- ▶ Some computers come with utility programs such as antivirus software or productivity software such as Microsoft Office. Be aware that some of this software offer only short-term trial versions and you have to pay to buy the full version upgrade.

# Screen:

- ▶ Computers come with screens that range from 9 inches on smaller laptops to 28-inch desktop models.
- ▶ A 15-inch monitor is comfortable for most people, but if you do work with higher-end images or watch videos, consider a larger screen as larger screens may be easier on your eyes.
- ▶ Consider getting a touchscreen to take advantage of all of Windows 10 touchscreen features.



# Peripherals

- ▶ **CD/DVD drive:** Computers might come with a CD or DVD drive or not. If a computer is right for you in other ways but doesn't have a CD/DVD drive, consider opting for an external drive.
- ▶ **Graphics and sound cards:** If you want to use multimedia or game software, ask for more sophisticated sound and video features such as a discrete graphics card or discrete sound card.
- ▶ **A webcam:** If you will be calling your friends or grandchildren over a service such as Skype, it's useful to have a built-in webcam to transmit video images while talking. Most computers today include a webcam located just above the computer screen.



# Looking for something special?

- ▶ Of course, we can also special order a computer to meet your needs should they be more specific or out of the norm.
- ▶ Any computers purchased through Mankato Computer Repair can be serviced at our office should they need it.
- ▶ If you do have a problem with your computer while it is under warranty, you can bring it to us to handle the warranty process instead of having to ship it off to another state for several weeks.
- ▶ So if you are in the market for a new computer, but are wary of diving into a market with a plethora of options available, give us a call to get pricing on something that will meet your needs without breaking the bank!



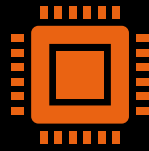
# Computer Tips

- ▶ **Set up a password:** By assigning a password to your Windows user account, you may prevent people from accessing your files and personal data.
- ▶ **Protect your laptop from damage:** If you have a laptop invest in a good case for your laptop to protect it from damage when travelling. Also, get a screen protector, which is a thin sheet of plastic that you place across your screen to prevent scratches.
- ▶ **Consider using a picture password:** If your computer or laptop is in a spot where other people surround you, consider using a picture password, which is almost impossible for people to get past. Also be aware that using a pin rather than a password is probably the least secure way to go because it's so short and made up entirely of numbers.



### Computer

**Maintenance:** You need to perform some basic maintenance on your computer to keep it running in top shape. Here's some advice to keep your computer secure and performing optimally:



**Windows Firewall:** Turn on the Windows Firewall feature to stop people and programs from downloading malicious code and viruses to your computer from the Internet.



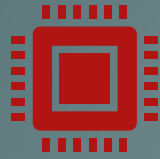
**Antivirus software:** You can use antivirus software such as Windows Defender, which comes with all Windows 10 computers, or a third-party antivirus program such as MacAfee, to scan your computer and remove viruses.



**Use System Restore:** You can create a System Restore Point to save current settings and revert to those settings if your computer begins having problems. This can happen after installing a new program or driver for hardware.



**Optimize your hard drive:** Optimizing your hard drive cleans out any damaged or obsolete files to improve your computer's performance.



**Battery life:** If you have a laptop or tablet, you should be aware that all batteries wear out and your computer's is no different. If your battery doesn't hold a charge as long as it used to, consider buying a replacement battery from the manufacturer.



**Perform a Disk Cleanup:** Use the Disk Cleanup feature to free up some disk space on your hard drive. This helps your computer perform better.

# Maintenance Continued