



### 10 CONSIDERATIONS FOR A NEW PC

When purchasing a new computer, there are several key specifications that you should consider to ensure you get a system that meets your needs. Whether it's for basic office work, web browsing, or entertainment, here are 10 key aspects to keep in mind:

**1. Processor (CPU):** The processor is the brain of the computer.

- Current systems have dual-core or quad-core CPUs from either Intel or AMD.
  - Intel offers the Intel Core i3, i5, i7 or i9
  - AMD offers the Ryzen 3, 5, or 7.
- Personally, I would go with the Intel i5 or i7, or the AMD Ryzen 5 or 7.
  - The Intel i9 is more for high end graphics and video editing work, and the i3 and Ryzen 3 are on the lower end and will not provide the level of “snappy” performance that the higher CPUs will.
- Each category of CPU also has multiple “generations”, which is found in the numbers following the CPU type. For example, an Intel Hexa-Core i5-12500T is a 12<sup>th</sup> Generation CPU based on the -12500T which follows the i5 CPU type. This would perform better than an Intel i7-11700T (an 11<sup>th</sup> Generation CPU) even though an i7 is generally more powerful than an i5.

**2. Memory (RAM):** Random Access Memory is crucial for multitasking and overall system responsiveness. Aim for at least 8GB of RAM for smooth performance with everyday tasks. For more demanding users, 16GB or more may be beneficial.

- Think of RAM as a desk, and every program that you run is a stack of paper. The more RAM you have, the more desk space you have, so you can have more stacks of paper on your desk at one time, which means more programs can run simultaneously.

**3. Storage:** Consider the type and capacity of storage. A Solid State Drive (SSD) offers faster boot times and application loading compared to a traditional Hard Disk Drive (HDD). Aim for at least 256GB of SSD storage, or a combination of SSD and HDD for larger storage needs.

- Many users today pay for online storage, such as Microsoft OneDrive, Google Drive, Apple iCloud, etc. as opposed to storing everything on their local hard drive. It is outside of the scope of this essay to assess all of the benefits and drawbacks of cloud storage vs local, but if you want to have your files on your local drive, or if the idea of paying for a subscription service to house all your data irks you, a large local hard drive is the way to go.

**4. Graphics:** For everyday use, integrated graphics found in most modern CPUs are sufficient.

- If you plan to do some light gaming or graphic design work, consider a dedicated graphics card for improved performance.



**5. Display:** If the computer comes with a built-in display (known as an “All In One” or AIO) consider the size, resolution, and display technology. A Full HD (1920x1080) resolution is recommended for most users, while higher resolutions provide better image quality for multimedia consumption.

**6. Ports and Connectivity:** Ensure the computer has an adequate number of USB ports, including USB 3.0 or or USB-C. Other ports like HDMI, DisplayPort, and a card reader may also be important based on specific needs.

- There are various “USB hubs” that can be purchased to add USB ports to systems that are lacking; AIOs and laptops are the most common systems that may benefit from such a hub.

**7. Operating System (or OS):** Choose a computer that comes with an operating system suitable for your needs, whether it's Windows, macOS, or a Linux distribution.

- There have been rumors of Microsoft moving in the direction of making Windows a subscription based service, which would mean you (the user) would have to pay an annual fee to use your own computer. While currently a rumor, one only has to look at what has happened with Microsoft Office (which is now a subscription based service called “Microsoft 365”) and you can see why the rumor seems a likely probability. This is where an alternative operating system, such as the Google Chromebook OS, or a Linux desktop distribution, is a very strong option if you're simply browsing the web, checking email, or watching streaming services.
- I personally moved off of Windows as my primary OS back in 2017, and while I continue to stay up to date with the Microsoft OS, I have not regretting my decision at all. If you're curious to try Linux, feel free to [contact me](#) to discuss the viability, details and options.

**8. Battery Life (for laptops):** If purchasing a laptop, consider the battery life if you plan to use it on the go. Look for a laptop that offers at least 8 hours of battery life for all-day usability.

**9. Build Quality and Design:** Consider the build quality, weight, and design of the computer, especially if you plan to carry it around frequently.

**10. Price:** Set a budget and look for a computer that offers the best balance of performance and features within that budget.

Hopefully this has armed you with the necessary information to make an informed purchase, but if you need assistance in making a new PC purchase let me know and I'll be happy to either review a system that you're considering or find systems for you.

Surf safe!

Christopher