



Hardware Recommendations - Q3 2022

Philosophy behind these recommendations:

These recommendations are designed with the following attributes in mind:

- Stability
- Longevity
- Durability

Why?

The hardware and components JV Computers recommends are designed to compliment each other in order to bring you Stable, Long-lasting, Durable computing performance. A computer is something you and your employees use every day, and for many varied tasks. The recommendations below respect that the stability and performance of your computer is tantamount to the stability and performance of your and your employee's productivity every day.

A common mistake is to seek out the cheapest thing you can find and end up quickly frustrated at poor performance you're stuck with, or having to replace too early. These recommendations are designed to provide the user with a machine that will perform well and last for between 5 and 6 years. Even if you don't purchase through JV Computers, it is recommended that machines are replaced on a rotating, scheduled basis so that no machines in your organization are ever older than this, helping to prevent sudden and unexpected hardware failures / crashes while keeping a manageable and reasonable IT budget.

Any component series or models not listed below are not recommended, but feel free to ask questions about specific use-cases for more information.

Definitions

Minimum: Will yield long-lasting, satisfactory results for most users working with basic functions, such as internet browsing, e-mail, and word processing.

Better: For users working with higher resource-use applications such as QuickBooks and other database programs, presentation work, and moderate to heavy multi-tasking

Even Better: For users with heavy multi-tasking, higher resolution content creation, CAD programs, etc.

Desktop / Mini PC and Laptop Workstations

	Minimum	Better	Even Better
Processors AMD Ryzen series ¹ Intel Core i series ⁴	Ryzen 3 or 3G ²	Ryzen 5 or 5G ²	Ryzen 7 ³
	Core i3	Core i5	Core i7
RAM (DDR4)	8 GB	16 GB	32 GB
Solid-State Drive (SSD)	256	512	Dependent upon your needs

¹ Ryzen 4000 or 5000 series (preferred)

² G = integrated graphics

³ Discreet graphics card required

⁴ Core i 8th series, or above (11th preferred)

Storage:

512 GB is *highly recommended, or more*, (dependent upon your specific needs)

A minimum 256 GB SSD is recommended as the primary storage device for any desktop / laptop workstation. This is due to the size of Windows 10 Updates which, upon installation, will expand many large temporary files as part of the install and will prevent smaller drives from properly functioning. Legacy, spinning platter storage Hard Disk Drives (HDD), are not recommended for workstation / laptop storage due to lack of speed and durability. SSDs have no moving parts and are nearly 10 times as fast for read/write access compared to HDDs. (HDDs still have their place in redundant array file servers and long-term archival.)

OS: When it comes to the Operating System, Windows 10 Pro is the recommended OS for business machines and is often a requirement of either your existing network (Windows domain Server), or for many industry-specific business software applications. In other situations, Windows 10 Home will work fine.

Keyboard & Mouse:

Most people prefer wireless for the convenience. **Lenovo**, **Logitech** and **Microsoft** have been making reliable and ever more power-efficient keyboard and mouse sets for many years. All three brands have reasonably priced products for their respective performance and durability.

Office Productivity Software:

Despite a long-held assumption, a full license for Microsoft Office or other commercially licensed office productivity software has never been included with a computer unless specified in a bundle sale. There are a few different ways to purchase the software you need and several different license configurations to suit your needs. However, there are free alternatives available, as well.

Warranty

JV Computers prefers and provides Lenovo machines with a **3-year On-Site, Next Business Day** repair warranty, directly from the manufacturer. You don't have to worry about shipping out your machine or laptop to the manufacturer – they send a technician directly to you, the next day in the unlikely event you should you need hardware repair!

Laptop – specific:

Screen Size and resolution: 15.6” (minimum 1920x1080)

Most users will prefer the standard 15.6” screen size which strikes a good balance between visibility and portability. It’s not too large, while still allowing for a keyboard with regularly sized keys with familiar spacing and a number pad on the side. A 14” screen with a 1920x1200 resolution, which, being a little taller than a standard 16:9 ratio screen, will provide a nice viewing experience for those looking for a smaller, typically thinner laptop without a number pad.

A resolution of no less than 1920 x 1080 is recommended. Lower resolution screens will only appear sharp when set at their native resolution in the operating system which can sometimes make things appear too small for comfortable viewing. When magnifying things in Windows to 125% or 150%, lower resolution screens will pixelate causing fonts and objects to appear jagged or blurry.

Mouse: Bluetooth

Some users are not comfortable using a touch pad and prefer a mouse, instead. While wireless mice are a dime a dozen, laptops have only a few USB ports to spare and a standard 2.4 GHz wireless mouse will require a USB port to be used for its transmitter. However, most laptops include a built-in Bluetooth receiver, so why not take advantage of it by using a Bluetooth mouse?

Carrying Case:

Don’t forget a carrying case. Targus and Lenovo are tried and true brands providing high-quality laptop cases in various configurations for many years.

What can JV Computers do to help?

Following the recommendations, you’ll find a well-performing and durable machine to last you the next several years. Technology can be overwhelming, so if you’d prefer, JV Computers can do the research for you and provide you with a recommended purchase for a consultation fee of **\$150**.

(Fee waived for those clients on a Managed Services Plan)

What about setup?

JV Computers currently offers a flat-rate setup fee of **\$600** for non-MSP clients. This includes:

- Initialization of the new machine, including:
 - Creation of local or domain user account, safety administrative user account
 - Download and installation of all currently available Microsoft Windows updates, Office productivity software, and installation of other necessary software and printer drivers
 - Data transfer from old machine (if recoverable, depending on state of old machine’s storage)