
A tour of the keys to choose a notebook

In this note we will take a tour of the keys to choose a notebook, it is a small review for some tips that we must take into account before choosing the best equipment according to our needs.

Processor

We know that the microprocessor is the central element of any computer. Therefore, we must consider it when choosing a notebook. The influence of the processor on the overall performance of the equipment is important, but we will not always need to acquire the equipment with the best processor or the most expensive one; This will depend on the tasks we perform with the notebook. For example, a more powerful processor will be necessary to run demanding games and applications, but if we only use the computer to surf the Internet and run office applications, a less powerful processor will suffice. Let's know the common processors in the current equipment:

Intel Core i7: presents a higher performance than the Core i5 (therefore, it is a good idea for a gamer team). The models that end in HQ or K are more powerful, so they are suitable for demanding games and applications; Processors that have a Y have a lower performance.

Intel Core i5: they are suitable processors for demanding users. Models that end in U, such as the Core i5-7200U, are the most common, have a good performance. Those who have a Y offer less power and performance. On the other hand, those who carry HQ are better and usually appear at work stations.

An important issue is that we can find models that start with 8 (like the Core i5-8250U), which double the number of cores from two to four, improving performance.

Intel Core i3: it has a performance one step below the Core i5 and a price just a little lower; therefore, if we can choose between these two, a Core i5 is always recommended. In any case, the Core i3 is a good option for teams dedicated to simple tasks (for beginners).

AMD Ryzen Mobile: a set of chips that were designed to compete directly with the Intel Core i5 and Core i7. They are not present in most of the current equipment, but little by little they gain space in the market.

Series AMD A, FX or E: we can find them in low cost laptops. They deliver a limited performance that reaches for web browsing, multimedia viewing and running productivity applications.

Intel Pentium / Celeron: processors that were very common in low-end laptops, but hardly found in current computers. They have a much slower performance compared to the others we have known. They are only suitable for web browsing and editing light documents.

RAM

When we want to buy a laptop, we always stop to think about how much RAM we need. Here we help you determine it.

4GB is the most common quantity we will find in most low-end laptops. It is a sufficient amount to work with office applications and play some basic titles. It will be enough if we do not do several things at once or if we only use basic applications; therefore, beginner equipment usually meets this amount of RAM.

8 GB is the memory standard for the most powerful equipment. This amount of RAM will allow us to have several applications running at the same time and is perfect for a team that we use to play demanding titles, or to run professional applications of graphic design or video editing. Equipment for demanding or advanced users and some for gamers are usually offered with this amount of RAM. 16 GB is an amount of memory for users who really squeeze their equipment to the fullest. It can be useful when we use virtual machines in a professional way, to run several operating systems at the same time, to use professional editing and design applications, and when we are faced with some demanding games that recommend, at least, 8 GB of RAM, but advise a greater amount to take advantage of all the graphic characteristics of the game. Generally, the equipment for gamers is what we find with this amount of RAM.

Storage

When choosing a notebook, we should consider the storage technology that it incorporates. In the current market two options predominate:

The SSD (Solid State Drive or solid state drive) basically do the same as an HDD or hard drive; that is, they allow us to store data, although they work differently.

An HDD disc stores information on metal plates that rotate all the time. To record and read information on these plates, a component called a head is used.

An SSD disk differs from the previous one mainly because it uses flash memory instead of magnetic disks and a mechanical read head. For this reason, it is faster, because the mechanical parts that cause slowness when accessing or recording the information are eliminated.

With this in mind, the decision is simple: choose an SSD. But before we hurry, we must consider its advantages and disadvantages. Among the advantages of an SSD we have the following:

Greater reading and writing speed: it can exceed 1000 MB / s, compared to 100 MB / s of an HDD.

It does not have moving parts; therefore, it is silent and safer against falls and blows. - It generates less heat and is built thinner and lighter. - It consumes less energy, so the team will have greater autonomy. However, there is an important disadvantage: its cost. The value of an SSD is much higher; As an example, with the same design we could get 250 GB SSD or a 3 TB HDD. A big difference.

Now, if we download a lot of content, if we need a lot of storage or our budget is low, we can

resort to an HDD. If we privilege the speed over the storage capacity, we can choose an SSD; for example, for the edition of multimedia contents or to execute demanding games. In any case, it is also advisable to combine both types of discs; for example, an SSD for the operating system and applications, and an HDD to store documents or other elements, as we see in one of the gamer equipment we recommend.

Ports

As we know, notebooks include a variety of connectors and standards, which can vary between models. In this sense, it is important to make sure that the equipment has the ports that we need. For example, an HDMI connector is essential to link the computer image with a monitor or HDTV. Card readers will be recommended only for those who use them to download images from a camera or access the information contained in the memory of the smartphone, although the truth is that it is usual to do it via cable or use the cloud.

Most conventional notebooks will have USB 3.0 and HDMI ports. But more and more equipment uses USB Type-C ports, which is an advantage because it is reversible and can be used to connect various devices, since it transmits different types of signals, which saves many specific cables. To compare the USB versions, we can say that USB 2.0 can reach 480 Mb / s, USB 3.0 up to 4.8 Gb / s and USB 3.1 (with type C connector, better known as USB Type-C) offers a speed of up to 10 Gb / s.

Wifi

Regarding the compatibility with WiFi, it is not a point of concern, since all the current equipment incorporates it. What we must keep in mind is that WiFi standards b, g and n operate over the 2.4 GHz band, which is almost universally available, with speeds of up to 11 Mbit / s, 54 Mbit / s and 300 Mbit / s. But we also have the ac standard, which operates in the 5 GHz band, which offers less congestion and interference, although with a shorter range.

If we need more compatibility and more range, we can search for WiFi 802.11n; On the contrary, if we want less interference and, therefore, greater speed, we can benefit from WiFi802.11ac. We can also look for a device that supports dual band WiFi or add an adapter that fulfills this function.

Screen

It is important to keep in mind that, the more pixels the screen has, the more content we can place on it and the image will be clearer. Most notebooks for beginner users have 1366 x 768 screens, and those designed for demanding users generally offer 1920 x 1080, Full HD or 1080p. Some high-end equipment or gamers have screens of 2560 x 1600, 3200 x 1800 or even 3840 x 2160; these are clear, but we must consider that they consume more energy, therefore, will affect the autonomy of the notebook.

As for the most common technologies, we must know that LED and LCD use the same technology to visualize the images, but they integrate a different kind of lighting. An LCD uses cold cathode fluorescent lamps and an LED uses light-emitting diodes. If we need to compare them, it is important to know that LED offers greater gradation in the intensity of light, which

gives better quality to colors and a better dynamic contrast ratio, so it is more appropriate for games and intensive graphics applications. We must bear in mind that LED (the most common in the current market) is LCD with backlight. On the other hand, we can also find LED monitors with IPS technology. These offer as an advantage, extreme viewing angles and improved color quality. OLED, on the other hand, is a technology that comes to grant an option to the typical LED or LCD; It works with an organic light emitting diode, which allows it to present more vivid colors.

If we must compare, an LED screen will offer a lower cost, but also, less potential to show colors and increase the angle of vision; although this improves with the inclusion of technologies such as IPS. If we want perfect viewing angles and an impressive range of colors, an OLED screen will be the best decision, although we will be affected by higher values.

As for the tactile capacity, if we need a conventional portable equipment, we will not get much benefit with a touch screen, but we must consider that the convertible equipment is accompanied by touch screens (among our recommended we can find a convertible computer).

Another important point is the size of the screen. Let's see the most common:

- 13 to 14 inches: good balance between portability and ease of use. Due to its lower weight, it is adequate when we want portability.
- 15 inches: it is the most common size. It will be suitable for notebooks that do not move very often.
- 17 to 18 inches: it is suitable for notebooks that will be used as a replacement for a desktop computer, either to run high-level games or to increase productivity.

Graphic processor

For those looking for a device for beginning users, an integrated graphics chip (which shares the system's memory) will suffice. The tasks of navigation, the execution of office applications or others that do not make an excessive consumption of resources will work without problems with an onboard graphical processor. However, if we are gamers, we work modeling 3D objects or perform high resolution video editing, it is essential to have a dedicated graphics processor.

For example, we can find equipment with Nvidia GTX 1050, GTX 1050 Ti or GTX 1060 cards, although the GeForce GTX 1080 is the most powerful of NVIDIA for laptops, allows to run virtually any current game in very high quality. We can see AMD's graphical options at www.amd.com/es-xl/products/graphics/notebook, while Nvidia's options can be found at www.nvidia.es/graphics-cards/geforce/pascal.