

## How to pick the most appropriate motherboard for your needs

Well, finally it's the time for a new computer, you have chosen a good processor, a good GPU but you don't know what motherboard to buy, then you've come to the right place. The "Motherboard" is the most important computer component, without it you can't build the computer of your dreams, every cable or fan you have plug's into the motherboard. Warning, you need to check that the motherboard is compatible with your CPU or RAM.

### Watch out for the socket!



The most important thing you need to check is that motherboard socket is right for your chosen CPU. You can check what socket the CPU requires on Intel's or AMD's web page. For example, Intel's most popular socket is LGA1151 and AMD, on their newest processors, uses AM4 socket.

**If you buy the wrong type of motherboard it could be a very costly exercise!**

### Compatible RAM with motherboard!



This is a component that often gets overlooked, but you need to make sure that the RAM is compatible with the motherboard and also how many RAM slots the motherboard has, because what you get when you buy cannot be changed. If you have DDR4 RAM, then you must buy a motherboard that supports DDR4 RAM or if you have DDR3 RAM you need to buy DDR3 motherboard. Smaller motherboards tend to have two slots for RAM, but bigger and more expensive motherboards have up to eight or more RAM slots. For video games 16GB is most ideal RAM amount, unless you have a rig that you use for video editing and such, you don't need more than that.

### **Motherboard sizes**

There are three most common motherboard sizes, they are ATX, micro-ATX and mini-ITX motherboards. The ATX motherboard is the biggest of the three and offers the most RAM and expansion slots. It goes without saying really that it is usually the most expensive of the three, but for modern gaming this is the motherboard you want, although it is not always necessary as I mention later in this paragraph. The other two motherboards are smaller and have less slots but are good motherboards if you want a cheaper computer. CASES, whichever Motherboard you opt for make sure that the case will accommodate your chosen Motherboard! With the smaller motherboards you can normally buy smaller and cheaper cases, hence if you have a mini ATX case, but still want to game, you need a smaller ATX board.

### **Motherboard ports**

What you need or want varies from person to person depending what ports you use the most. Some people may want more USB 3 ports, others want more



audio ports. Always check how many ports the motherboard you are looking for has. There are USB 3, USB 2, audio, USB type C, USB 3.1 Gen1 and Gen2, HDMI, Display port, PS/2 and Thunderbolt 3 ports. Ports you probably want the most are the USB 3 and USB 2 ports. USB 3.1 Gen2 and USB type C ports are good to have for the near future but for now not many peripherals support this standard yet. If you want a particular motherboard, but it does not have all the ports you want do not be overly concerned, there are usually extra ports on the case you buy and there are PCI accessories that will accommodate you as well. If you need any assistance, please contact [sales@gccy.ci.uk](mailto:sales@gccy.ci.uk)

### **Motherboard chipsets**

For Intel motherboards you can choose from the cheaper motherboards that can't be overclocked or the more expensive ones that can. The ones that can be overclocked are the ones that have the letter "Z" in the chipset name e.g. Z370, Z170-A, Z77, Z87... Motherboards with chipsets with letters "B", "H", "Q" ... are not "overclockable" motherboards. Also, if you want to overclock your processor you must be sure that your processors name ends with the letter "K" because that is Intel's unlocked version of processors or if you are a real enthusiast the "X" series processors and motherboards will also support overclocking (X stands for extreme edition).

On the AMD's side the B350 and B300 chipsets still support overclocking. But with that you will get less ports over the X370 motherboard. The "Ryzen" range of Processors ALL support overclocking, so bear this in mind when choosing your motherboard. All sound quite daunting so far? Don't worry, if you need any assistance, please contact [sales@gccy.ci.uk](mailto:sales@gccy.ci.uk)



### Price range

With everything said how much should you spend on a motherboard? Well it all depends on what you want.

In the price range up to €100 you can get AMD boards that supports overclocking. But on the Intel's side you can't buy a motherboard that supports overclocking in that price range. But you can find Z370 board for just over €120

€100-€150 price range. Here you can get higher-end AMD motherboards and lower-end Intel motherboards that can be used for overclocking.

€150-€200 price range. Here are the more premium motherboards with RGB lights and with a more premium look. Better heatsinks, VRMs (voltage regulation modules) – very important for serious overclocking. You will also find motherboards with more ports.

€200+ price range. These are the boards for extreme overclocking and for CPUs like Intel Core X and AMD Threadripper. These boards have a stylish premium look with giant heatsinks.

Check out our range of Motherboards, if you are looking for something specific that is not listed contact us at [sales@gccy.co.uk](mailto:sales@gccy.co.uk) and we will be able to help you quickly and efficiently. Lastly, Motherboard prices fluctuate A LOT, the prices above were correct at the time of writing, but there are often offers available.

**For any and all free advice**  
**Contact: [sales@gccy.co.uk](mailto:sales@gccy.co.uk)**