ASUS PC DIY

ASUS | REPUBLIC OF GAMERS | TUF GAMING

Build your own PC as easy as 1, 2, 3

Quality. Reliability. Innovative.

Best Practices for PC DIY
The Primer for PC Building

Once you've chosen your next PC's CPU, RAM, and storage device, ASUS makes everything else you need, from the motherboard, graphics card, case, power supply and CPU cooler to the mouse, keyboard, and display. You can build better knowing that all of our components are built to the highest standards of quality, reliability, and usability, from the hardware itself to the software that controls it all. And unified aesthetics across our Republic of Gamers and TUF Gaming product families, plus easy RGB LED lighting control with Aura Sync, make your build look as good as it performs.

1 Plan your PC for your needs

The best part about building your own PC is that you can make a system that's tailored just for you. The two most important questions when planning your build are what you'll be using it for and how much money you can spend on it.

For productivity use and only light gaming, for example, you can build around an attainable CPU with integrated graphics and a motherboard with the essential ports and expansion slots you need.
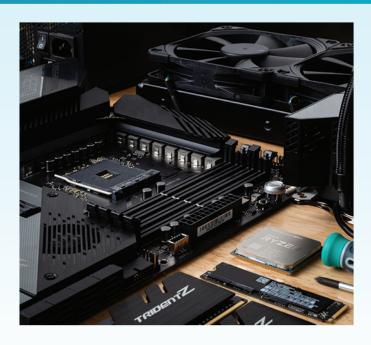
Enthusiast and high-end builders with more to spend, especially gamers and content creators, will want to plan around pricier and higher-performance CPUs, fancier motherboards with cutting-edge connectivity and distinctive style, and powerful, quiet-running graphics cards that can game with realistic image quality and high frame rates. The sky's the limit.

Knowing exactly what you'll use your PC for and how much you have to spend will allow you to allocate the most money to the parts that will enhance your day-to-day work and play and less on the ones that don't.

2 Pick your parts list

The seven crucial components that make up a high-performance PC are the CPU, motherboard, RAM, graphics card, storage device, case, and power supply (as well as the all-important Microsoft Windows operating system software). Depending on your choice of CPU, you may also need to add a CPU cooler to your parts list.

Once you've chosen a CPU, the RAM to go with it, and a storage device for all your important data, you can outfit a powerful build using nothing but high-quality, easy-to-use components from ASUS that are built to work best together. We make a wide range of motherboards, graphics cards, cases, power supplies, CPU coolers, and even mice, keyboards, and monitors to complete your next build.

If you don't know where to start when choosing components, we'll soon be publishing a comprehensive guide that will help you pick parts like an expert.

3 Put it all together

When it's finally time to put together your PC, be sure to find a workspace that's clean and spacious enough for you to lay out all of the components you'll be assembling.

Seek out a hard, non-conductive surface, like a wooden table or ceramic floor, to serve as the foundation of your workspace. Avoid standing on or building on carpeted surfaces that might cause static build-up and discharge, as a static zap could damage your expensive components. Regularly touch a bare metal surface during your build to discharge any potential static buildup, and for extra safety, obtain and use an anti-static wrist strap.

Make sure that you have all the tools you need, including small and medium Philips screwdrivers, at hand to tighten the various screws that secure components to one another and to the PC case. It can also be handy to have alcohol wipes and thermal compound at hand in case you need to apply or replace the thermal compound for your CPU cooler.

If you're not sure how to assemble your system, carefully read the included manuals for each one, especially the motherboard, before beginning to understand how the various components go together. For extra help, you can search out build guides online that will walk you through the process of building a PC step-by-step, or you can even consult online communities like the ASUS PC DIY Facebook group for more specific questions.

Rehearse the build process in your head before beginning to put components together for real. Remember the seven (or eight) critical components we discussed above and make a checklist to be sure that you've installed them all according to their manufacturer instructions.

Once you've put all of your parts together, perform a final check before plugging it in and turning it on. Secure any loose cables inside your PC using zip ties or any included hook-and-loop cable ties that may be included with your case. Make sure that all of your cooling fans are connected to the appropriate motherboard headers so that components won't overheat. Check over your motherboard manual to ensure that all of the power cables for your system are fully connected.

With those checks complete, connect a monitor, mouse, and keyboard to the appropriate ports on your PC and plug the power cable into your power supply. Once that's all done, press the power button on your PC. If all has gone well, you'll be rewarded with a power-on self test (POST) screen and enter into the motherboard's firmware interface, where you can check your PC's basic vital signs and that all components are being recognized by the system before proceeding to install your operating system software.

Once you've installed your operating system, you can enjoy the fruits of your labor with a PC that's not just tailored to your unique needs, but also a project you can feel proud of completing on your own. Planning, picking parts, and putting them all together may have seemed intimidating at first, but once it's all done, we think you'll agree that building your own PC is as easy as 1-2-3.

To learn more about ASUS PC DIY and building solutions, visit **asus.com/us/site/PCDIY**