Pc building sim free

Few things in life are as satisfying as building your own computer. The combination of finely peddly, fully functional computer from diverse parts offers a real sense of creation. Even better, rolling out your own results in cheaper and more personally tailored PCs than what you can find at big-box stores. Building a PC sounds daunting, but it's actually pretty simple. Still, a few key details can trip up even seasoned wizards who are not conscious. This handy-dandy guide will help you avoid the most common mistakes when creating a computer – and their associated frustrations. Before you buy Pay attention when you buy your components, or your DIY PC could end up borked even before you start. The beginning of something beautiful. Not all parts of your computer are compatible with each other. The most obvious example is the relationship between processors and motherboards. For example,

Intel's second- and third-generation Sandy Bridge and Ivy Bridge chips need an LGA 1155-compatible motherboard, while fourth-generation Haswell chips use LGA 1150 and enthusiast-focused Extreme Edition processors require expensive 2011 sockets. You could do your homework- or you could do PCPartPicker.com. This useful site indexes virtually every part of your computer that you can buy to help you plan your build, and informs you of any part of the incompatibility. It also points to the lowest available prices for the listed components. PCPartPicker.com notifies you if the selected components are not compatible. (Click to enlarge.) Don't be stingy when choosing a power supply, especially since it would hurt to spend all your time getting the rig together just to make it fall under electric load. Check out PCWorld's guide to picking power supplies for more information, and head to the excellent Thermaltake power calculator to estimate how much juice your kit will suture down. If you're buying a video card that needs to connect to a power supply through one or more six or eight-pin power connectors, make sure your selected power supply has them. Another common mistake is to forget about all the small accessories. Don't forget to purchase any additional cabling you might need, such as SATA cables to connect storage units and video cards to your motherboard. (Check which cables come with your motherboard first,) Pick up a tube of quality heat paste-I prefer Antec or Arctic Silver-if you plan to install an aftermarket CPU cooler because the disposable pipes that come with many CPU coolers are of low quality and limited quantity, which can be a problem if you make a mistake in mounting the cooler and need to start over. And did you forget to include the disk drive? Finally, look at the dimensions of your device to make sure that the pieces fit into the selected case. Aftermarket coolers and top-end graphics cards take more space than you might think and even middle class video cards could have difficulty squeezing into some compact cases. In front of you Newegg While you're pulling all your pieces out of their boxes, make sure you follow the plethora of screws and cables you ripped out with them. PC building involves many small screws, and they are not always the same type of screws. Keep your order. Most of the process of creating a PC should be straightforward, especially once you read the manuals. Following the installation instructions on a multihdred-dollar investment is a must even if you are a DIY vet and know what you are doing. Building a computer is a complex, methodical process, and missing a major step at the beginning could mean dismantling the entire machine later. Preparing the motherboardShous for the fun part! It's time to roll up your sleeves, dive in and stop. No, really. Before you install the first component or do anything else, take the Motherboard I/O shield — the port cover on the back of your computer — and install it in the case. If you forget to install I/O Shield, you'll need to pull the entire motherboard ever down the line to put it in its right place, and that's a big headache. (Believe me.) Seriously: Get that thing now. As for the main parts, the CPU is the heart of your computer and you will want to install it first. This process is quite straightforward; just make sure that both the processor and the socket you set it into are clean and clean before installation. Once this is done, the next natural step would be to install a CPU cooler. But hold the horse! If you are using an aftermarket cooler rather than a small, stock cooler Intel or AMD available, install ram first. A large cooler can make it difficult to insert RAM into memory slots after a fact. Enthusiast-class RAM modules with higher hours sometimes have higher heat spreaders that can bump into larger aftermarket CPU coolers. If the CPU cooler is massive, you may need special low-profile RAM. The most common error when installing RAM is simply not reading the manual. Does your motherboard prefer to configure two, four-channel, or three-channel memory? Placing memory sticks in the correct slots specified by the manufacturer is also essential: If you don't do your homework, your system could end up using a single-channel configuration that downloads performance instead. RAM in place? Okay, now's a colder time. Cooler installation throws a few curveballs at you. The cooler cooler sits on top of the CPU to pull heat away from the processor, with a thin, air-bubble-free layer of heat paste between them. Some coolers, including AMD and Intel stock models, come with pre-painted thermal paste. By contrast, most aftermarket coolers require you to use your own heat paste. Using too much or too little heat paste could lead to heating woes down the line. Plop roughly pea size dot paste in the middle of the CPU for best results. (PCWorld's guide to installing a CPU cooler provides tips for the entire process.) And don't forget to peel from the CPU cooler in the aftermarket cooler! To create a solid seal without bubbles, you do not need much thermal paste. Speaking of which, if you are using an aftermarket cooler with tower-style cooler design, make sure to place the radiator fans so that they point to the exhaust fans at the back or top of the housing. You don't want all that hot air blowing around inside a case–or worse, blowing right at your expensive graphics card. Putting it all together With the previous steps to do, it's time to place the motherboard in case. Well, almost. (Your motherboard's I/O shield is in, right?) Picture: Newegg.com case came with brass risers (or standoffs) designed to take the metal side of the case away from the motherboard. Forgetting to insert those and flipping on power could fry your PC components, so don't forget about them. Screw the risers until they're finger-tight, but don't make the mistake of overloading them because the brass threads are oh-so-easy to undress. And read the manuals again to ensure that you only install the risers you need. The risers you have inserted into the housing must be the same as the mounting holes on the motherboard. If you're working in an ultra-small case and have a good reason to do otherwise, install the power supply before slapping it on your motherboard. The space can get cramped in case once the motherboard is in place. From now on, everything is pretty simple. Not all PCI Express x16 slots are equal. The two slots on this Intel motherboard look similar, but one has a full 16-lane electrical connection, while the other has only 8 lanes. The only big mistake you could make at this point is installing your video card in the wrong PCI Express slot. While many motherboards sport several physical PCI-E x16 slots, some of them can only offer PCI-E x8 capabilities. Always install your video card in the slot closest to the processor to ensure the best performance, and check out the motherboard guide to find out the best use of other PCI-E slots if you're installing multiple graphics cards. [Read now: How to upgrade your video card] In addition, the most common mistake is the inability to think about cable management while you wire everything up. The clean case not only looks gorgeous, but also has better airflow - which is an essential aspect to make your pc nice and chilled. Think about how you will route your SATA cables, power cables and other connections when you install them. Try to tuck as much as possible behind the motherboard tray, and remember: Twist the links are your friends! It may seem counterintuitive to anyone who has ever taken a basic electronics course, but the white wire in the connectors on the front panel in most cases is a negative guide. The last mistake – forgetting to engage something – kicks everyone out at least once. All it takes is one badly seated connector to prevent your computer from starting or introducing annoying ghosts into your After installing all all components, provide the case with thorough overcrowding to ensure that everything that should be plugged in is plugged in and properly plugged in. Internal connectors often have positive and negative leads that need to be connected in a certain way. If in doubt, read the manual and be sure to connect your motherboard and video card to the power supply! Another reading final result: Functional, mess-free, and gorgeous. The following tips above should help you avoid the most common and frustrating computer creation errors. If you're looking for even more tips on how to build your own rig, PCWorld is a step-by-step guide to building a PC you'll bring, with pictures galore. Now go for it! Note: When you buy something by clicking on the links in our articles, we can get a small commission. Read our affiliate link policy for more information. Details.