

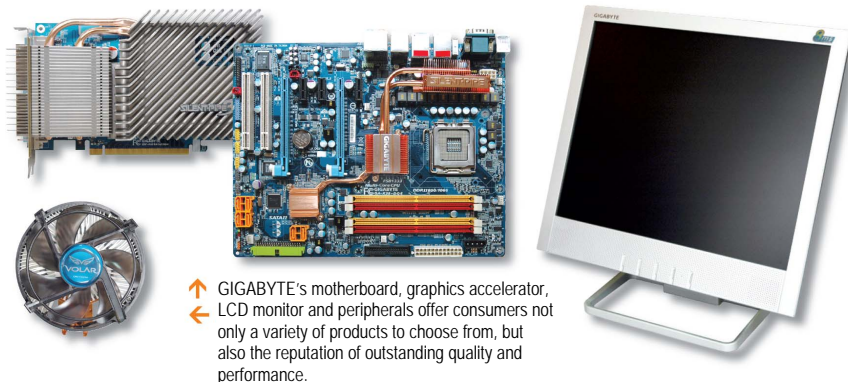
Chapter 1 Before You Start

1.1 Introduction

Many new PC users often hesitate to build their own systems because they fear their limited understanding of the components such as the CPU and motherboard will make it impossible to know where to begin. For even those brave enough to try, it can be very discouraging if after all the components have been installed, the PC malfunctions or fails to boot.

If you are thinking about building your own PC, but are hesitant because of past bad experiences, there's no need to worry. In recent years, the development of computer hardware has brought about great advances in specifications and performance, making building your own PC easier than ever. Additionally, more user-friendly operational interfaces and lower hardware costs make this the best time ever to do it yourself. And with GIGABYTE, you can be assured to get the highest performing, most stable products available today.

As a leading motherboard manufacturer, GIGABYTE is committed to delivering a complete IT solution by supplying a wide range of PC components including graphics accelerators, LCD monitors, optical devices, networking and communication devices, and peripherals. To fulfill this goal, GIGABYTE's annual publication of "Build Your Own PC in 30 Minutes" provides the latest information about PC components. With its clear and straightforward instructions, GIGABYTE's DIY guidebook can help you get your PC up and running in record time.



↑ GIGABYTE's motherboard, graphics accelerator,
↘ LCD monitor and peripherals offer consumers not
only a variety of products to choose from, but
also the reputation of outstanding quality and
performance.

Build Your Own PC in 30 Minutes

1.2 Preparing Your Toolkit

You have just bought all the components for your new PC. Before you begin to put your system together, it is important to do some basic preparation. Even though the documentation supplied with the motherboard or system case is very helpful, there are still many details to take into consideration before installation in order to prevent any delays along the way. So, let's take a look at the tools we will need to ensure a smooth and efficient installation.

Step 1... Installation Tool



1. Screwdriver and screw kit

A regular cross-head screwdriver with a pointed head. The length should be at least 15 cm. It's strongly recommended that you use a magnetic screwdriver to attract screws for easy installation.

Screws are usually supplied with the chassis, optical device and hard disk drive. However, you may purchase additional screws to prevent screw shortage.



2. Sharp-nose pliers

Sharp-nose pliers used to be used to tighten pillars or remove chassis panels, but today are no longer necessary for most parts. You can still have them ready, just in case you need them.



3. Anti-static wrist strap

High precision electronic products are vulnerable to damage from static electricity. With Taiwan's island climate with high humidity, static probably won't be an issue. However, if you are in a drier area or country, you are advised to wear an anti-static wrist strap or gloves when building a PC. Doing so can avoid replacing or having to repair damaged parts due to static electricity.



4. Flashlight

It is inconvenient to install the parts and make detailed adjustments inside the chassis in dim light. Please use a flashlight to help avoid part damage caused by improper installation.

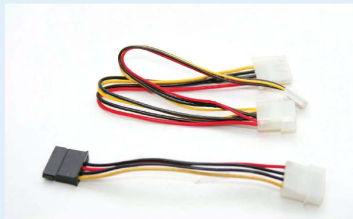


Step 2»» Cables and Wires



1. Cables

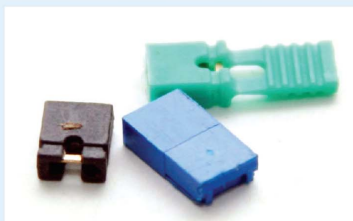
They are used to connect a hard disk drive, floppy disk drive or optical drive. For hard disk drives, there are different cables for Parallel ATA (PATA) IDE and Serial ATA (SATA) drives (see Section 2.5 for more information). These cables are standard accessories provided with most motherboards. To connect more storage devices, you may need to purchase additional cables, depending on the product purchased.



2. Power Cables

If your power supply does not have a power connector for SATA hard disk drives, you need to buy SATA power cables. If the power connectors from the power supply are insufficient, you can use an adapter to connect more devices. (Please pay attention to the wattage of the power supply; insufficient wattage may cause the system to be unstable.)

Step 3»» Auxiliary and Maintenance Tools



1. Jumper cap

Some hardware devices, such as PATA hard disk drives and optical drives, need jumpers to configure the master and slave settings in order to install two devices with one cable. That's why jumper caps come in handy. You are advised to purchase additional jumper caps in case of inadvertent loss.



2. Driver CD and Documentation

After installing the hard disk drive, you need to install the operating system and drivers. Drivers are supplied with the motherboard and accessories. In addition to hardware installation, you need to install drivers and utilities for proper functioning of your system.