Table of Contents

- The sequence of installation may differ depending on the type of case and devices used.
- Refer to the user's manual included for detailed motherboard specifications.

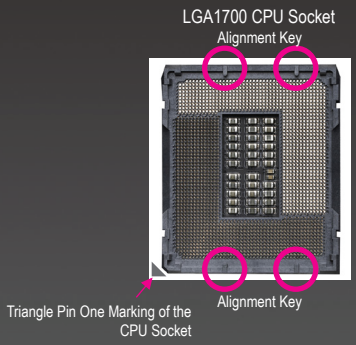
- Before installing the devices, make sure they are compliant with the connectors on your computer.
- Before installing the devices, be sure to turn off the devices and your computer. Unplug the power cord from the power outlet to prevent damage to the devices and the system components.
- Place the computer system on a stable surface to prevent improper installation resulted from shaking.

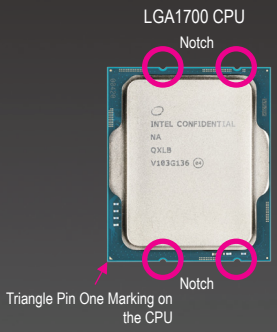
Installing the CPU and CPU Cooler

A. Installing an Intel® CPU

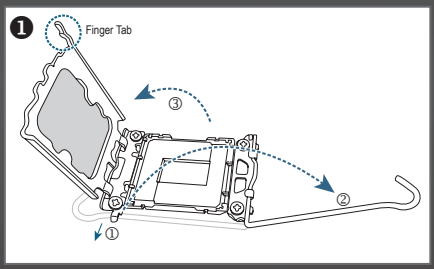
Refer to the following instructions based on your CPU specifications. Skip this step if the motherboard has a built-in CPU.

A-1 LGA1700 Socket

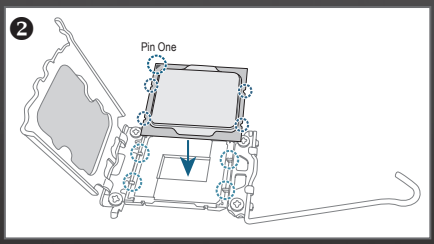




①Gently press the CPU socket lever handle down and away from the socket.
②Completely lift up the CPU socket locking lever.
③Use the finger tab on the side of the metal load plate to lift open the metal load plate with the plastic protective cover attached to it.

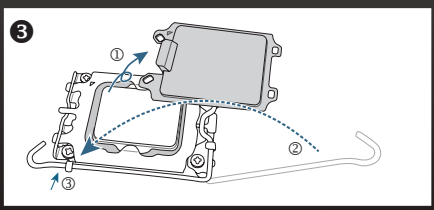


Hold the CPU with your fingers by the edges. Align the CPU pin one marking (triangle) with the pin one corner of the CPU socket (or you may align the CPU notches with the socket alignment keys) and gently insert the CPU into position.



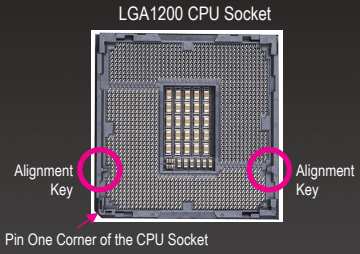
Make sure the CPU is properly installed and then close the load plate. The plastic protective cover will pop off, just remove it. Secure the lever under its retention tab to complete the installation of the CPU.

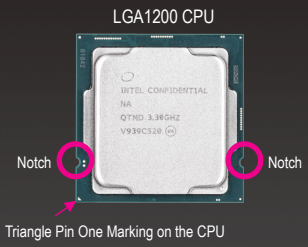
* Always replace the plastic protective cover when the CPU is not installed to protect the CPU socket.

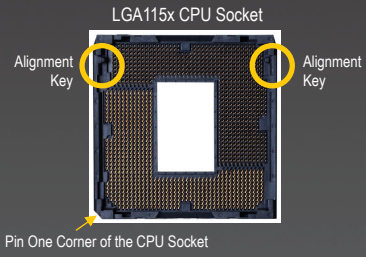


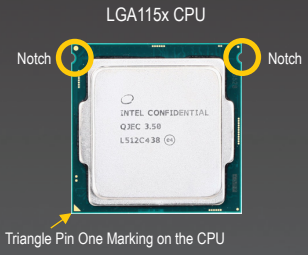
A-2 LGA1200, LGA115x Socket

Locate the alignment keys on the motherboard CPU socket and the notches on the CPU.

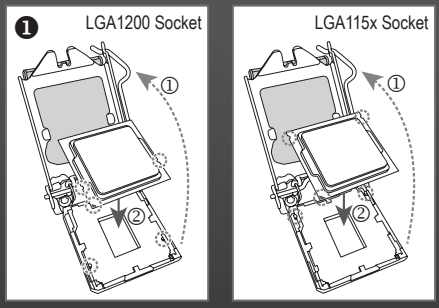




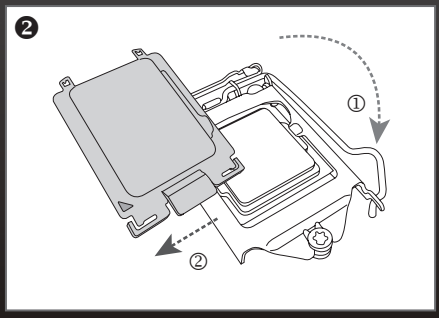




Lift the CPU socket lever and the metal load plate will be lifted as well.
(If the protective socket cover is fastened on the CPU socket, remove it first.)

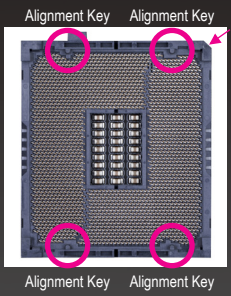


If the protective socket cover is fastened on the metal load plate, do not remove it at this stage. The socket cover may pop off from the load plate automatically during the process of re-engaging the lever after you insert the CPU.

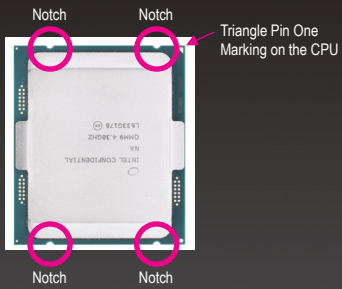


A-3 LGA2066, LGA2011-3 Socket

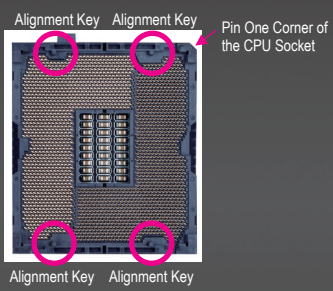
LGA2066 CPU Socket



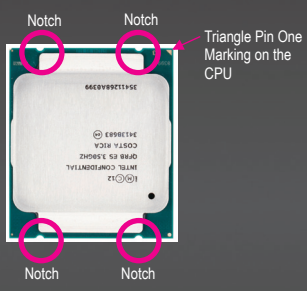
LGA2066 CPU

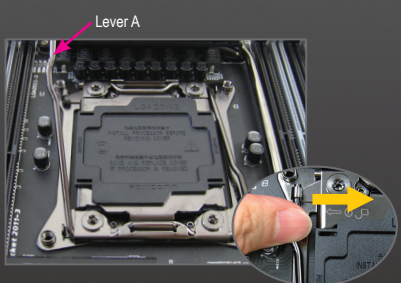


LGA2011-3 CPU Socket

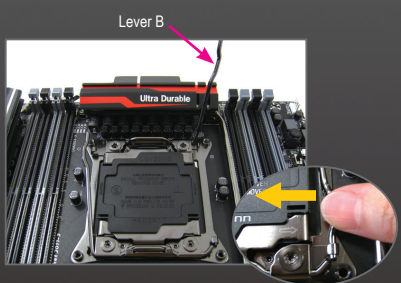


LGA2011-3 CPU



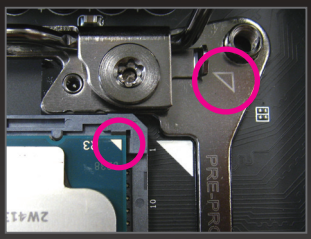


Step 1:
Push the lever closest to the "unlock" mark "🔓" (below referred as lever A) down and away from the socket to release it.



Step 2:
Push the lever closest to the "lock" mark "🔒" (below referred as lever B) down and away from the socket. Then lift the lever.

Step 3:
Gently press lever A to allow the load plate to rise. Open the load plate. NOTE: DO NOT touch the socket contacts after the load plate is opened.



Step 4:
Hold the CPU with your thumb and index fingers. Align the CPU pin one mark (triangle) with the triangle mark on metal socket frame and carefully insert the CPU into the socket vertically.

Step 5:
Once the CPU is properly inserted, carefully replace the load plate. Then secure lever B under its retention tab.

Step 6:
Finally, secure lever A under its retention tab to complete the installation of the CPU. Then carefully remove the plastic cover. Save it properly and always replace it when the CPU is not installed.

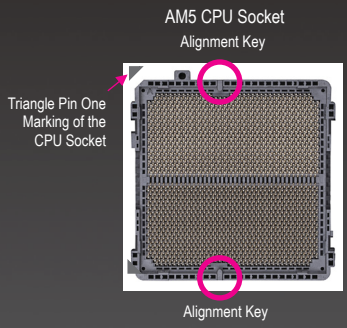
- Do not force the CPU into the CPU socket. The CPU cannot fit in if oriented incorrectly. Adjust the CPU orientation if this occurs.
- DO NOT touch socket contacts. To protect the CPU socket, always replace the protective socket cover when the CPU is not installed.

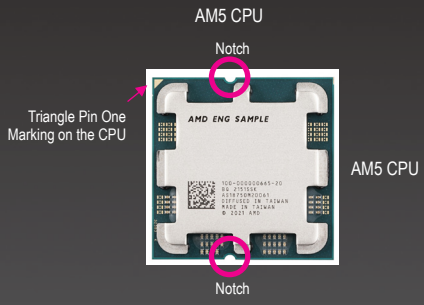
B. Installing an AMD CPU

Refer to the following instructions based on your CPU specifications. Skip this step if the motherboard has a built-in CPU.

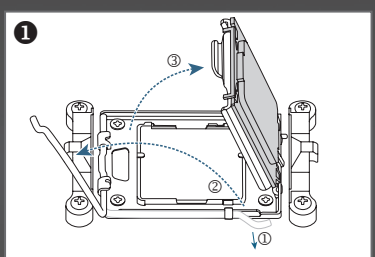
B-1 AM5 Socket

1. Follow the steps below to correctly install the CPU into the motherboard CPU socket.

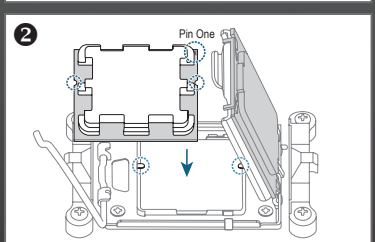




①Gently press the CPU socket lever handle down and away from the socket.
②Completely lift up the CPU socket locking lever.
③With your fingers, hold the plastic protective cover attached to the metal load plate to lift open the metal load plate.

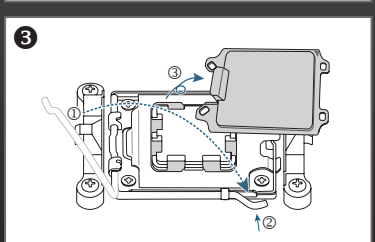


Hold the CPU with your fingers by the edges. Align the CPU pin one marking (triangle) with the pin one corner of the CPU socket (or you may align the CPU notches with the socket alignment keys) and gently insert the CPU into position.



Make sure the CPU is properly installed and then close the load plate. Secure the socket lever under its retention tab. The plastic protective cover will pop off by itself and can be removed.

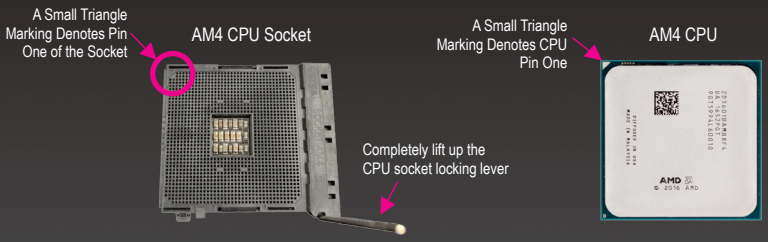
* Always replace the plastic protective cover when the CPU is not installed to protect the CPU socket.



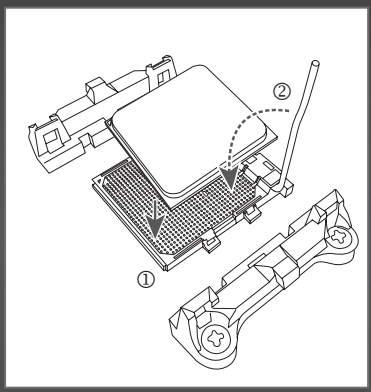
Do not force to engage the CPU socket locking lever when the CPU is not installed correctly as this would damage the CPU and CPU socket.

B-2 AM4 Socket

Completely lift up the CPU socket locking lever. Locate the pin one (denoted by a small triangle) of the CPU socket and the CPU.

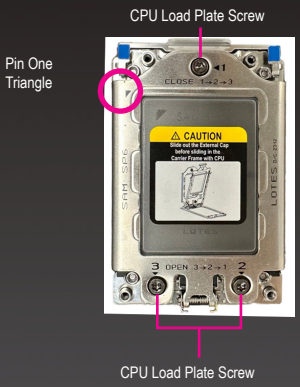


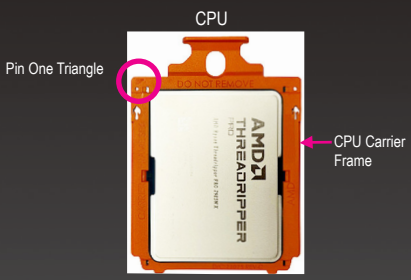
Once the CPU is positioned into its socket, place one finger down on the middle of the CPU, lowering the locking lever and latching it into the fully locked position.



Do not force to engage the CPU socket locking lever when the CPU is not installed correctly as this would damage the CPU and CPU socket.

B-3 TR4/sTR4/sTR5 Socket



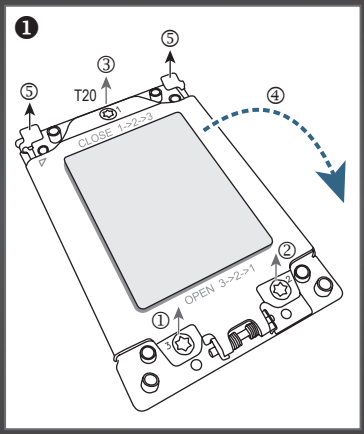


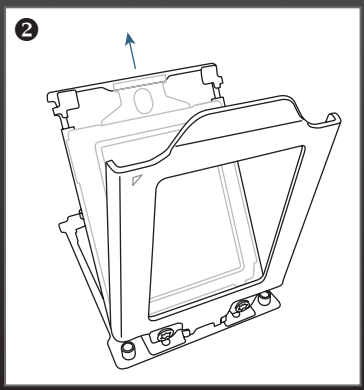
Step 1:
On the CPU metal load plate, there are three screws marked as 1, 2, 3. To loosen/tighten these screws, you need a T20 star screwdriver.
The OPEN and CLOSE markings indicate in what order to loosen/tighten the screws.
To open the CPU metal load plate, loosen the screws in 3>2>1 sequence.
To close the CPU metal load plate, tighten the screws in 1>2>3 sequence.

Step 2:
To open the CPU metal load plate, start by loosening Screw 3, then Screw 2, and finally Screw 1. After all three screws are loosened, gently lift the load plate to its fully open position.

Step 3:
Use your fingers to pull up the tabs on the two sides of the CPU rail frame to release the CPU rail frame from the CPU socket. Then lift the rail frame.

Step 4:
Use one hand to hold the rail frame and the other to slide the external cap out of the rail frame.



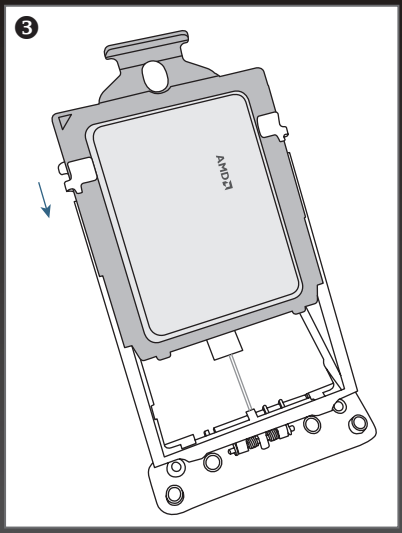


The CPU carrier frame must be slided into the CPU rail frame with the CPU. Do not remove the CPU from the CPU carrier frame.

Step 5:
Grasp the top portion of the CPU carrier frame and align the edges of the CPU carrier frame with the rails of the CPU rail frame. Then slide the carrier frame into the rails until the it stops sliding in.

Make sure the edges of the CPU carrier frame are installed correctly on the rails.

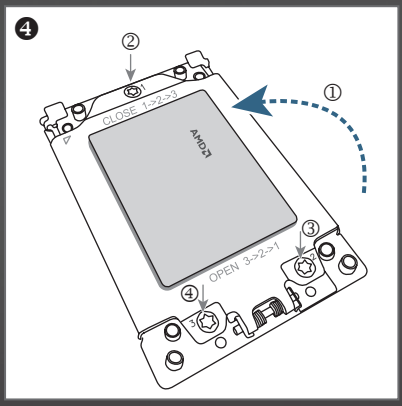
Step 6:
Push the carrier frame into place and you will hear a "click" sound when it is pushed to the bottom.



Step 7:
Remove the CPU socket cap.

Step 8:
After installing the CPU, use two fingers to push down on the upper portion of the sides of the CPU carrier frame to fasten the rail frame back to the CPU socket.

Step 9:
Close the metal load plate. With one finger pressing down on the load plate, begin tightening Screw 1 slightly. Then do the same to Screw 2 and Screw 3. Next, fully tighten the three screws. Make sure the motherboard is placed on a stable surface during the tightening process.

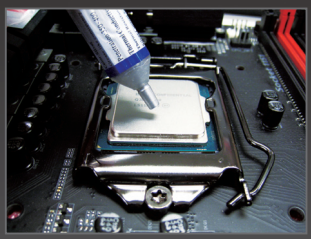


C. Installing the CPU Cooler

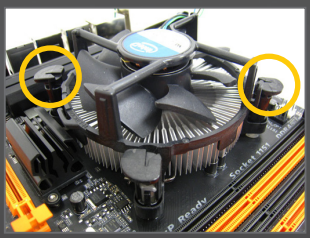
Follow the steps below to correctly install the CPU cooler on the motherboard.
(The following procedure uses the GIGABYTE cooler as the example. Refer to your CPU cooler installation manual for instructions on installing the cooler.)

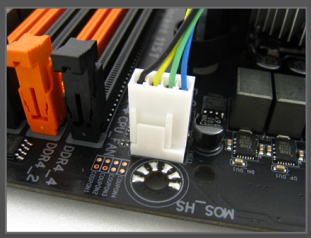
C-1 Intel Platform

1. Before installing the CPU cooler, please first add a thin layer of heat sink paste on the surface of the CPU. Then install the cooler



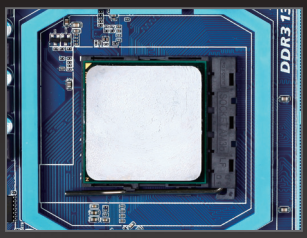
2. Connect the CPU cooler cable to the CPU_FAN connector located on the motherboard so that the cooler can properly function to prevent the CPU from overheating.



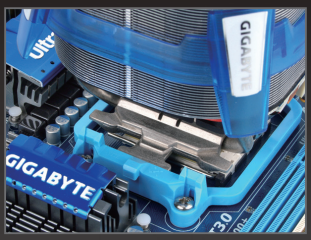


Use extreme care when removing the CPU cooler because the thermal grease/tape between the CPU cooler and CPU may adhere to the CPU. Inadequately removing the CPU cooler may damage the CPU.

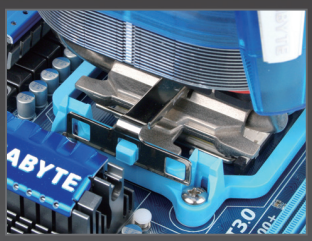
C-2 AMD Platform



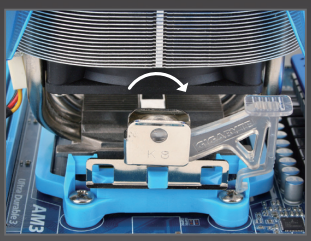
Step 1:
Apply an even and thin layer of thermal grease on the surface of the installed CPU.



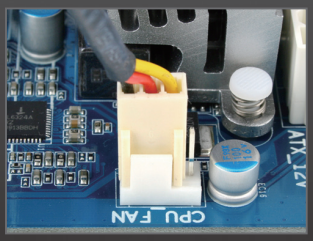
Step 2:
Place the CPU cooler on the CPU.



Step 3:
Hook the CPU cooler clip to the mounting lug on one side of the retention frame. On the other side, push straight down on the CPU cooler clip to hook it to the mounting lug on the retention frame.



Step 4:
Turn the cam handle from the left side to the right side to lock into place. (Refer to your APU cooler installation manual for instructions on installing the cooler.)

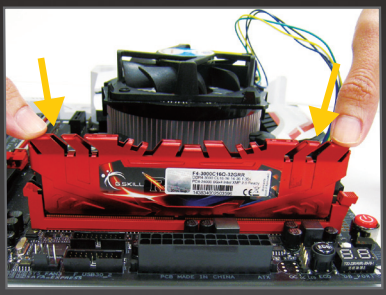


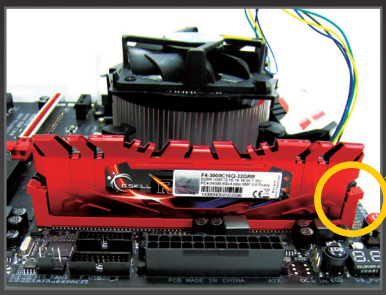
Step 5:
Finally, attach the power connector of the CPU cooler to the CPU fan header (CPU_FAN) on the motherboard.

Use extreme care when removing the CPU cooler because the thermal grease/tape between the CPU cooler and CPU may adhere to the CPU. Inadequately removing the CPU cooler may damage the CPU.

Installing Memory

Note the orientation of the memory module. Spread the retaining clips at both ends of the memory socket. Place the memory module on the socket. Place your fingers on the top edge of the memory, push down on the memory and insert it vertically into the memory socket. The clips at both ends of the socket will snap into place when the memory module is securely inserted.





Installing the Power Supply

Please first remove both sides and the lid of the case in order to install the power supply. Place the power supply in the correct place in the case and secure it with screws. Installation and placement of the power supply may differ depending on the type of case used.

To ensure that sufficient power can be supplied to your system, it is recommended that a power supply of good quality be used. If a power supply is used that does not provide the required power, the result can lead to an unstable or unbootable system.

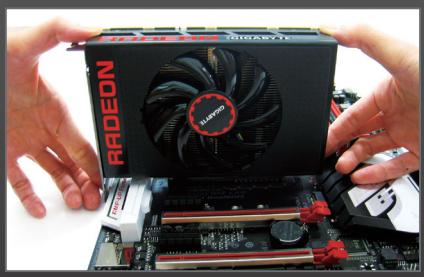
Installing the Motherboard

Remove the original I/O shield from the back of the case and replace it with the motherboard I/O shield. Place the motherboard within the case by positioning it into its I/O shield. Align the mounting screw holes on the motherboard with their corresponding mounting holes on the case. Secure the motherboard in place with screws.

I/O Shield

Installing an Expansion Card

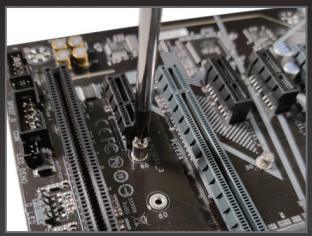
Locate an expansion slot that supports your card and remove the slot cover from the case back panel. Then insert the expansion card into the slot. Secure the expansion card's bracket to the case back panel with a screw.



- Before purchasing an expansion card, check the length of the card, making sure it can fit into your case.
- Make sure that the expansion card is fully seated in its slot.

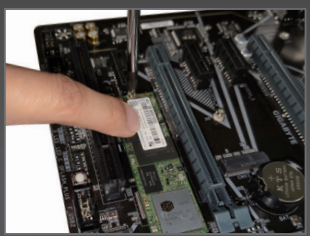
Installing M.2 SSDs

Follow the steps below to correctly install an M.2 SSD in the M.2 connector.

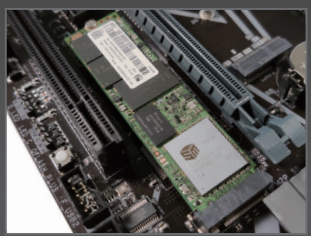


Step 1:
Use a screw driver to unfasten the screw and standoff from the motherboard. Locate the proper mounting hole for the M.2 SSD to be installed and then screw the standoff first.

Step 2:
Slide the M.2 SSD into the connector at an angle.



Step 3:
Press the M.2 SSD down and then secure it with the screw.



Step 4:
The installation is completed, as shown in the picture above.

Select the proper hole for the M.2 SSD to be installed and refasten the screw and standoff.

Installing Hard Drives/Optical Drives

1. Install your optical drives, such as DVD-ROM and CD-ROM drives. Remove the 5.25" drive bay cover from the front of the case. Mount the optical drive in the 5.25" drive bay and secure it with screws.

Installing an Optical Drive

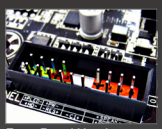
Installing a Hard Drive

2. Install your SATA hard drives.
   Install the hard drive into a drive bay within the case and secure it with screws.

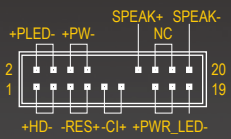
If more than one hard drive is installed, enter system BIOS Setup to set the hard drive boot sequence.

Connecting Cables to Internal Connectors

1. Connect cables to internal connectors and headers on the motherboard, including SATA connectors, and front panel audio, USB headers, etc.
2. Attach the front panel module (differs depending on the case design, consisting of power indicator, hard drive activity indicator, speakers, reset switch, power switch, etc.) from the case to the front panel header (F_PANEL) on the motherboard.



Front Panel Header



PLED/PWR_LED: Power LED
PW: Power Switch
SPEAK: Speaker
HD: Hard Drive Activity LED
RES: Reset Switch
CI: Chassis Intrusion Header
NC: No Connection

The pin assignments for the front panel header may vary by model. Refer to the motherboard user's manual for the actual pin assignments.

Connecting Peripherals

Once the steps above have been completed, connect the peripheral devices to the computer, such as the keyboard, mouse, monitor, etc. Then connect the power, turn on the system, and install all required software.

Back Panel of the Case