ASUS DIY GUIDE

Building your PC is fast and easy

Contents

01 Parts and tools

1. Check your motherboard box for the following items in addition to the board itself.

2. ASUS Motherboard *Accessories may vary by model.

3. Tools you need for building a PC:
Screwdriver and screws of various sizes.
*Some devices will enclosed a bag of screws.

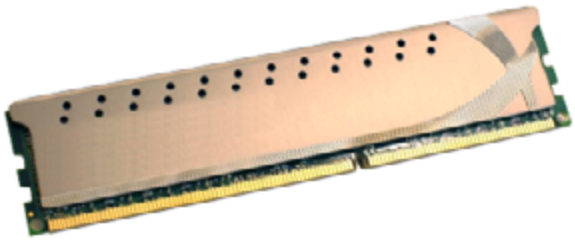
4. CPU *Please refer to the CPU/Fan installation guide according to your motherboard.

01 Parts and tools

5. CPU fan/cooler

*Please refer to the CPU/Fan installation guide according to your motherboard.

6. Memory



7. Case

8. Power supply unit

9. Hard drive or SSD

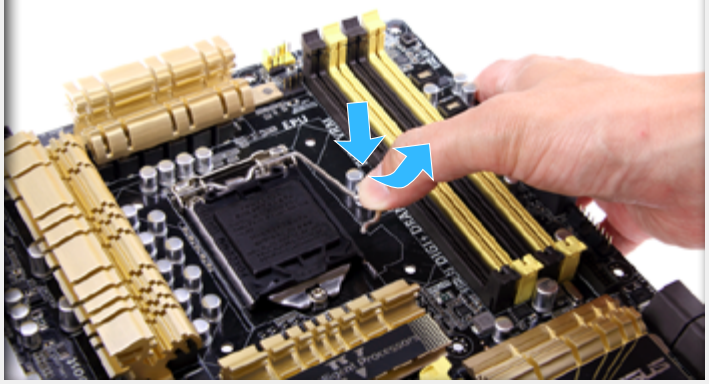
10. Graphics card *Optional

02 CPU/Fan

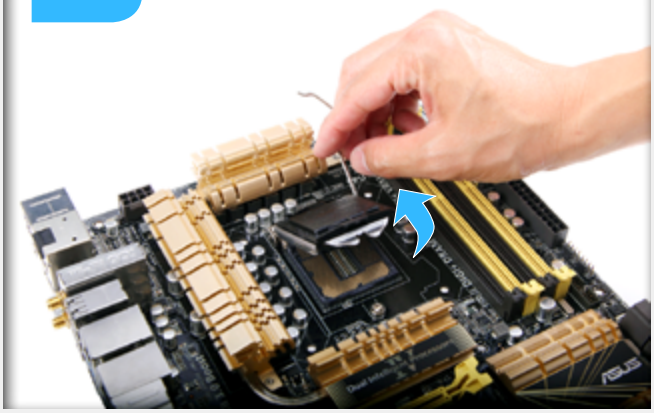
2-1 Intel® Socket LGA 1150/1155 processors

*Please refer to the CPU/Fan installation guide according to your motherboard.

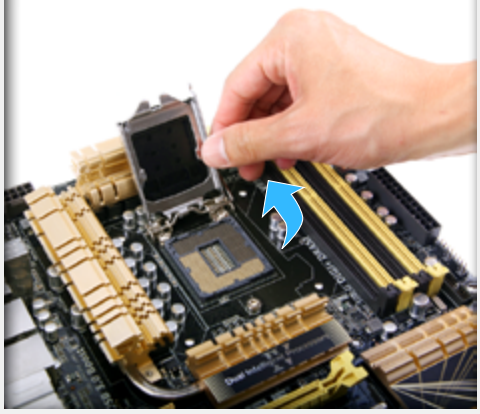
1 Press down and swing the load lever out.



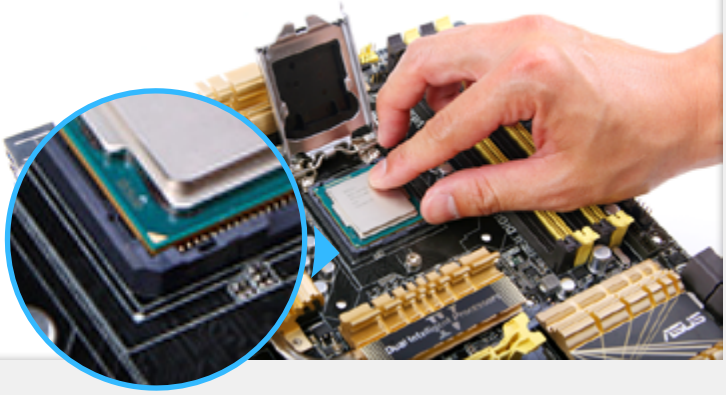
2 Lift the lever.



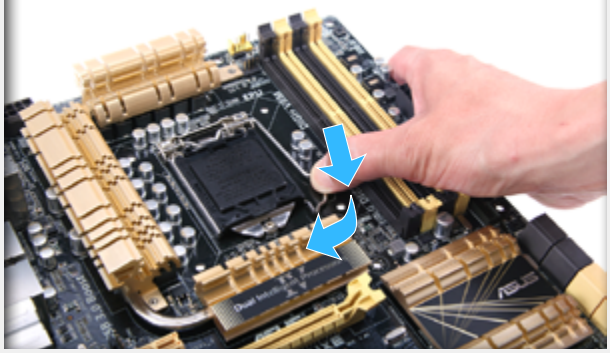
3 Lift the CPU socket cover.



4 Note the 2 triangle marks, one should be on the bottom-left corner of the socket and the other should be on the top-facing side of the CPU. Make sure the two triangles align.



5 Install the CPU. Cautiously avoid bending any of the socket pins.



6 The plastic cover will pop out once the CPU is in place and properly secured with the lever.

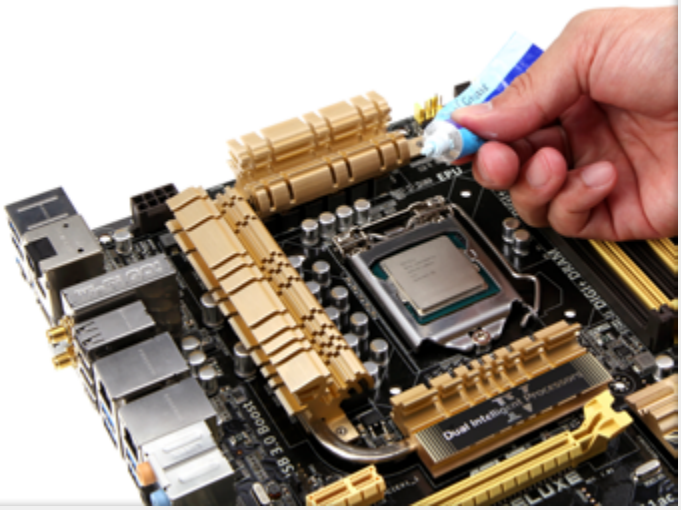
02 CPU/Fan

2-1 Intel® Socket LGA 1150/1155 processors

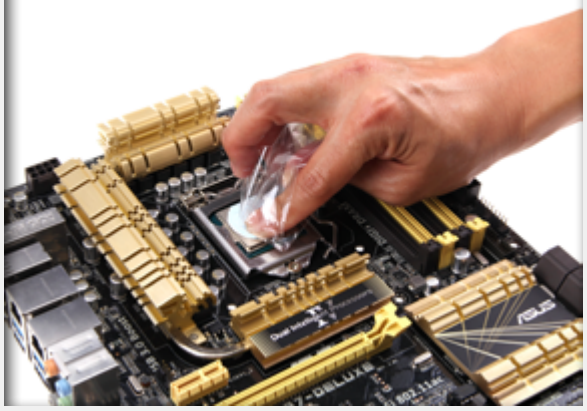
*Please refer to the CPU/Fan installation guide according to your motherboard.

7 Cleanly apply a fresh layer of thermal paste to the top of the CPU before installing the CPU fan/cooler.

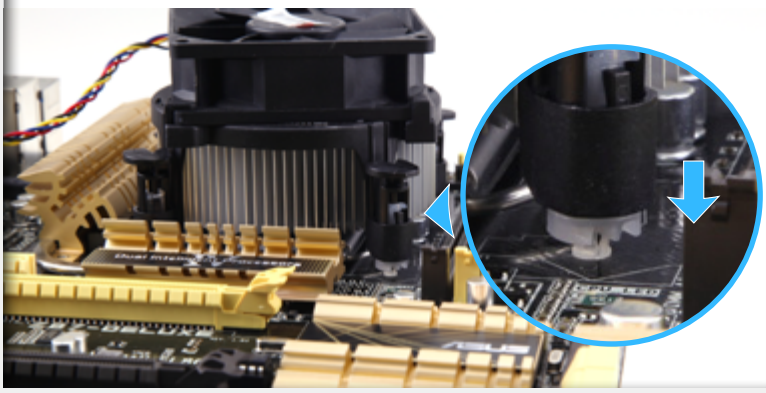
*This step is optional as CPU fan/coolers provided with CPUs have thermal paste pre-applied.



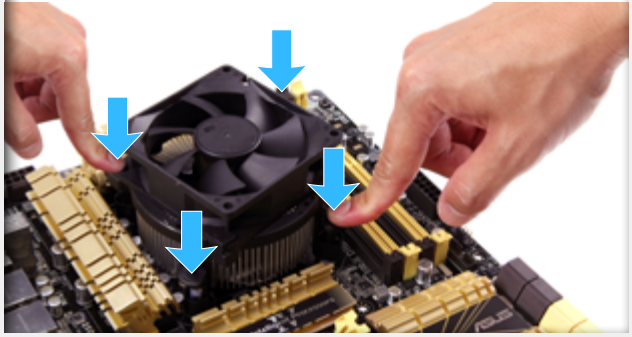
8 Spread the thermal paste. Make sure application is even, with no gaps.



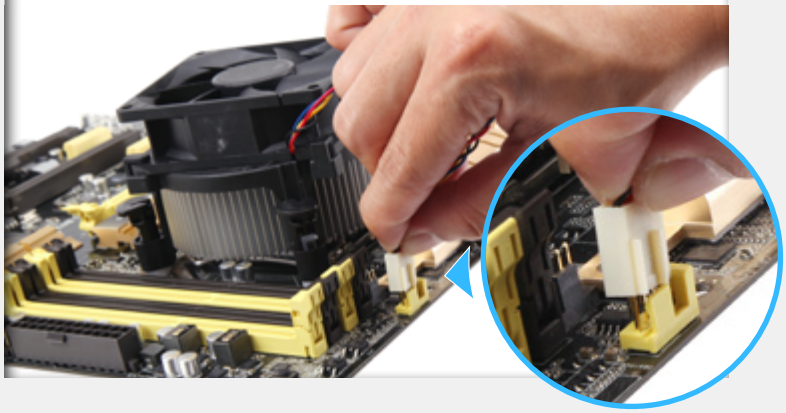
9 Place the heatsink on top of the installed CPU, ensuring that the four fasteners match the holes on the motherboard.



10 Push the four fasteners into their corresponding holes then lock down the post or screw diagonally opposite.



11 Connect the CPU fan cable to the connector on the motherboard marked CPU_FAN.

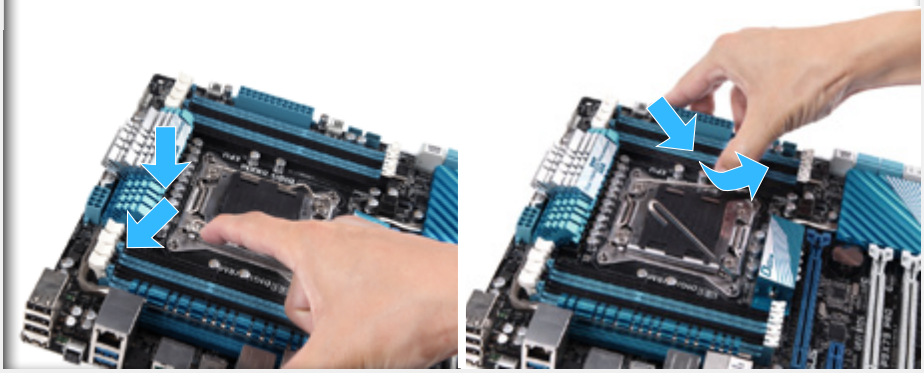


02 CPU/Fan

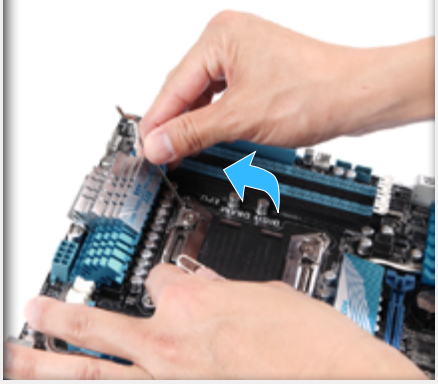
2-2 Intel® Socket LGA2011 processors

*Please refer to the CPU/Fan installation guide according to your motherboard.

1 Press down and swing both load levers out.

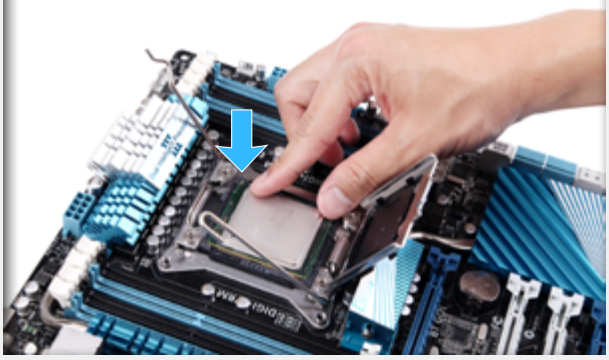


2 Lift the levers.



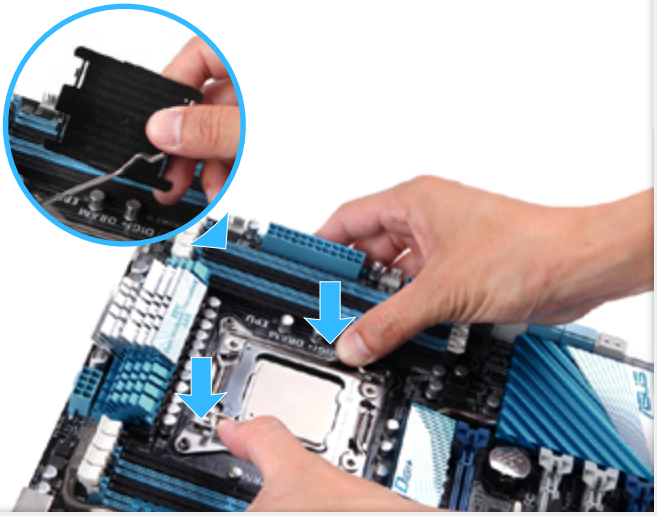
3 Note the 2 triangle marks, one should be on the upper-right corner of the socket and the other should be on the top-facing side of the CPU. Make sure the two triangles align.

4 Gently place the CPU in the socket. Be careful to avoid bending any of the socket pins.



5 Push down on the load levers.

The plastic socket cover will pop out once the CPU is properly inserted and secured into place.



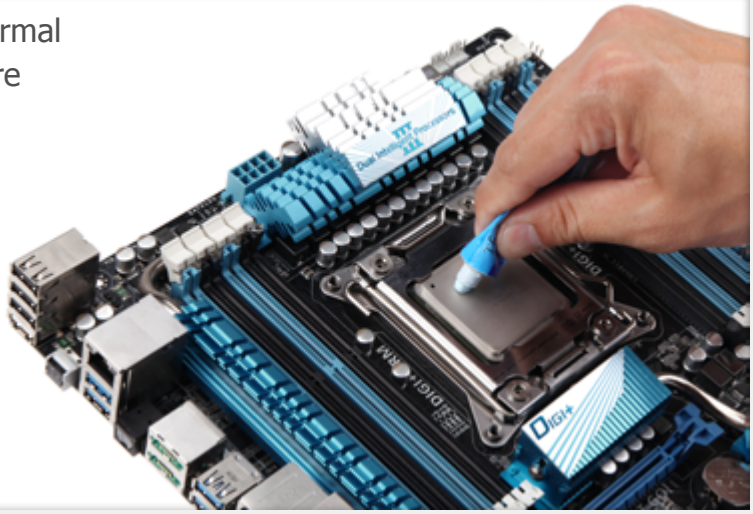
02 CPU/Fan

2-2 Intel® Socket LGA2011 processors

*Please refer to the CPU/Fan installation guide according to your motherboard.

6 Cleanly apply a fresh layer of thermal paste to the top of the CPU before installing the CPU fan/cooler.

*This step is optional as CPU fan/coolers provided with CPUs have thermal paste pre-applied.

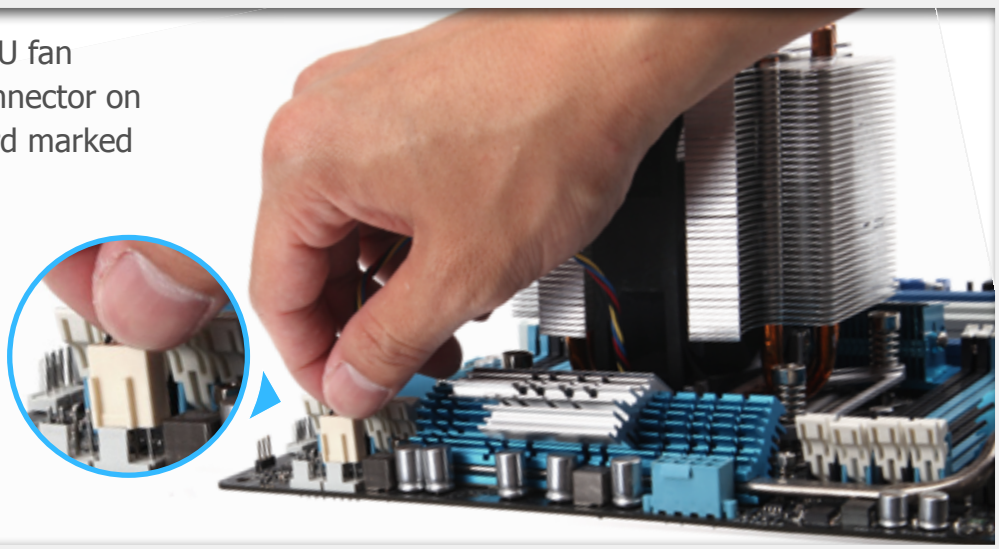


7 Spread the thermal paste. Make sure application is even, with no gaps.

8 Fasten your four-poster CPU cooler in one corner, then lock down the post or screw diagonally opposite.

don't screw it too tight.

9 Connect the CPU fan cable to the connector on the motherboard marked CPU_FAN.

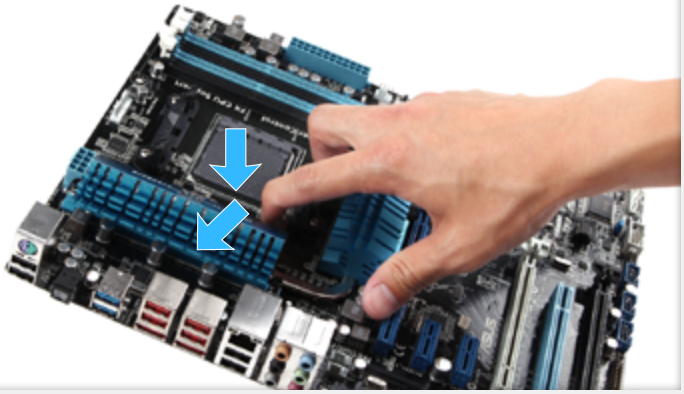


02 CPU/Fan

2-3 AMD processors

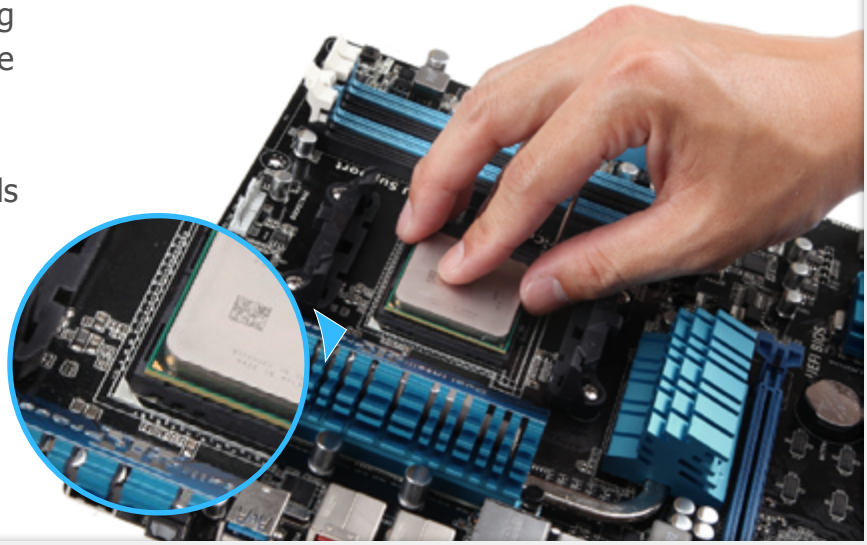
*Please refer to the CPU/Fan installation guide according to your motherboard.

1 Press down and swing the load lever out.

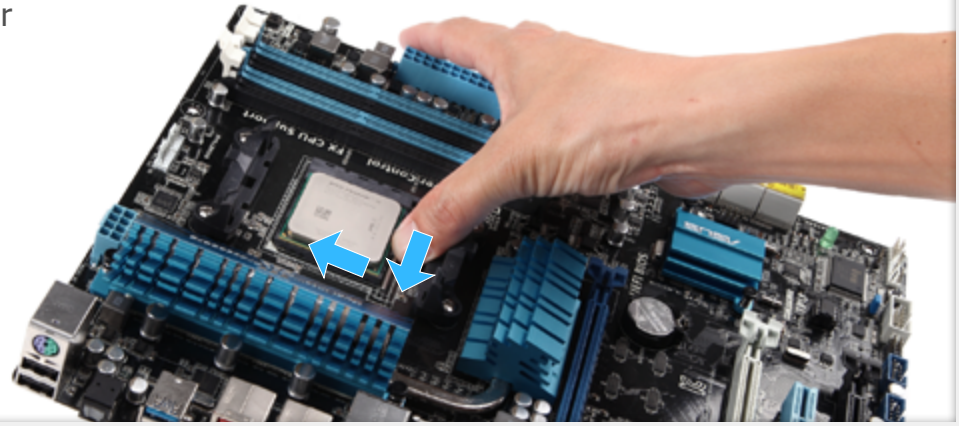


2 Lift the load lever.

3 Gently place the CPU in the socket. Avoid bending any of the CPU pins. Note the triangle marking at the upper-left corner of the socket. It corresponds to a similar marking on the CPU, and the two need to be aligned.



4 Push the load lever down and out.



02 CPU/Fan

2-3 AMD processors

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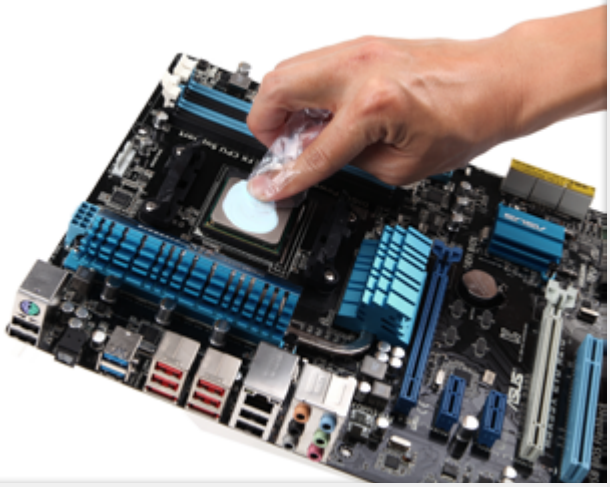
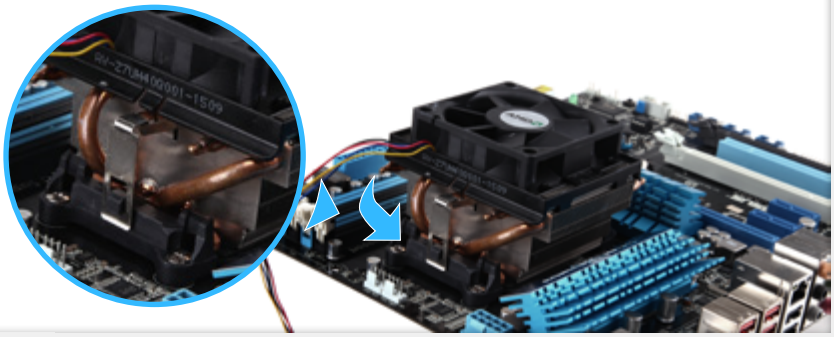
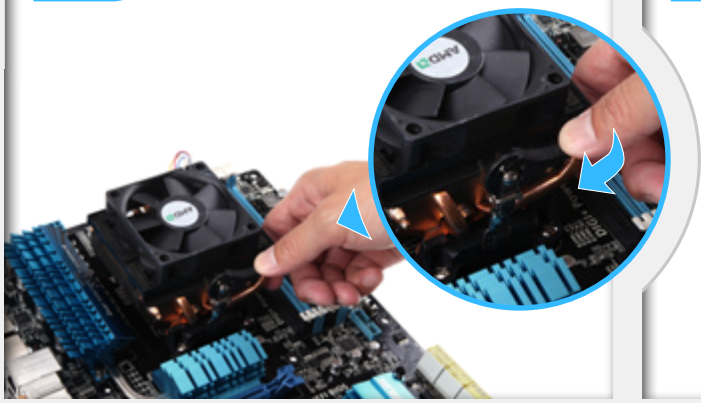
6 Spread the thermal paste. Make sure application is even, with no gaps.



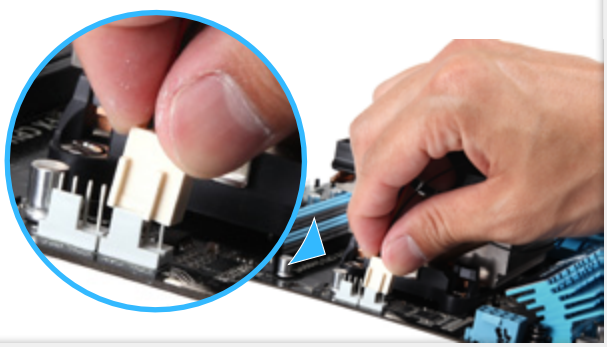
7 Lock the retention bracket.



8 Click to secure the fan/cooler on the retention module.



9 Connect the CPU fan cable to the connector on the motherboard labeled CPU_FAN.



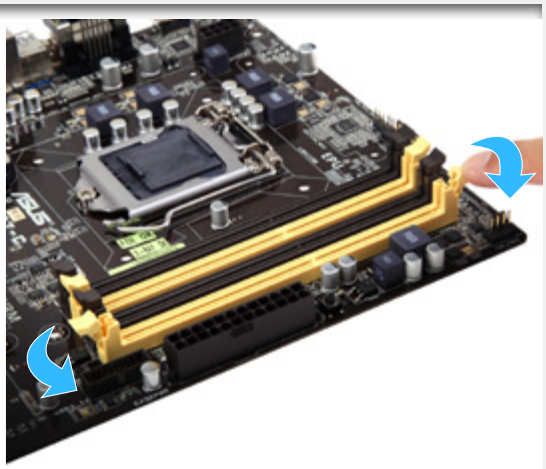
03 Memory

*the number of DRAM slots will vary by your motherboards.

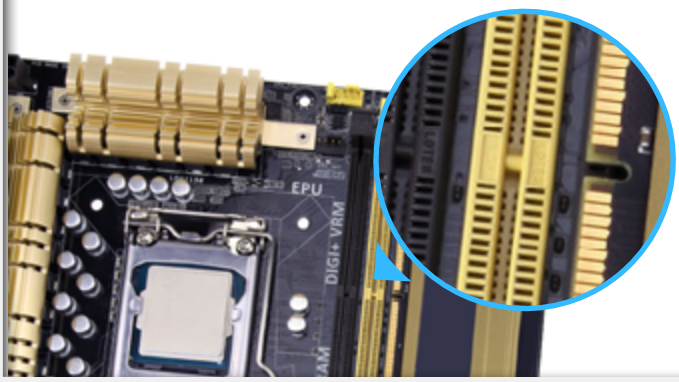
1

Release the retaining clip. If the slot has two clips, press both down simultaneously.

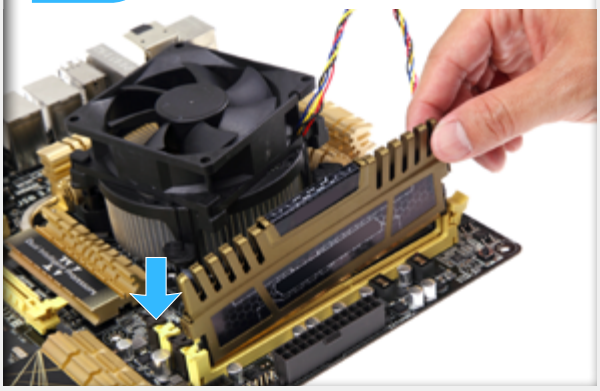
ASUS Q-DIMM enables easy removal of memory.



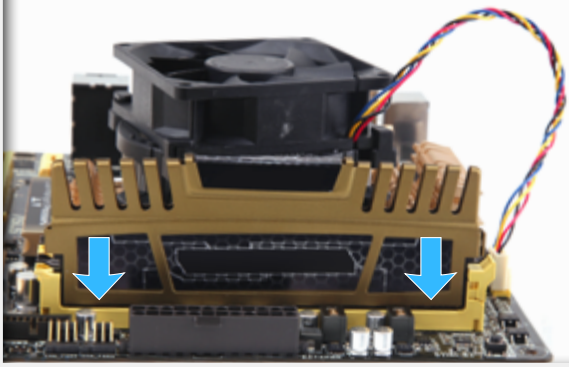
2 Align memory modules with memory slots – ensure the notches are matched.



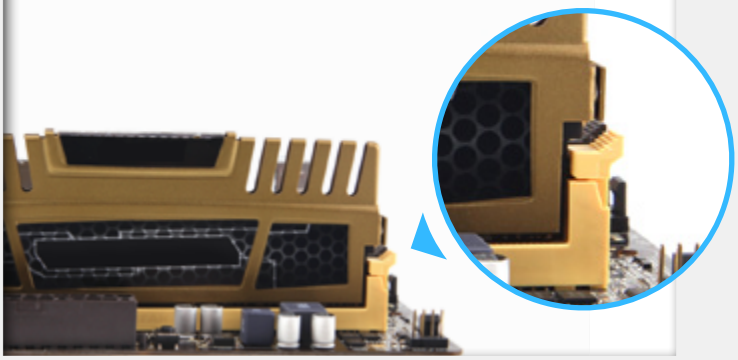
3 Gently insert memory modules into memory slots.



4 Apply gentle force to both ends of memory modules simultaneously with your fingers, and apply even force downwards.



5 Make sure the retaining clip snaps back into place and that the memory module sits tight in the slot, with no wobble.



04 Case preparation

1

Remove the screws on the back of the case that hold its left panel in place. Remove the left panel to open the main case compartment.

2

Slide your power supply into position. Some cases have power supply cages on the bottom, and some on the top of the case.

3

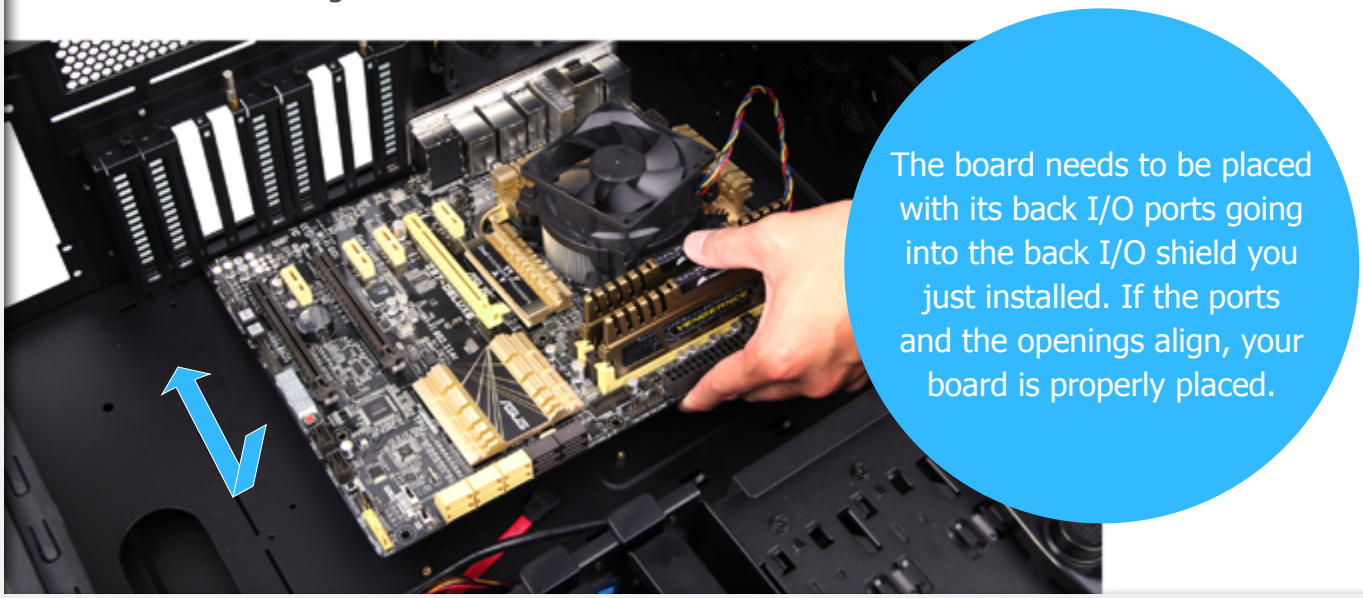
Make sure the power supply is firmly in place, and pushed all the way against the back of the case. Secure it to the case with the screws that came with your power supply.

4

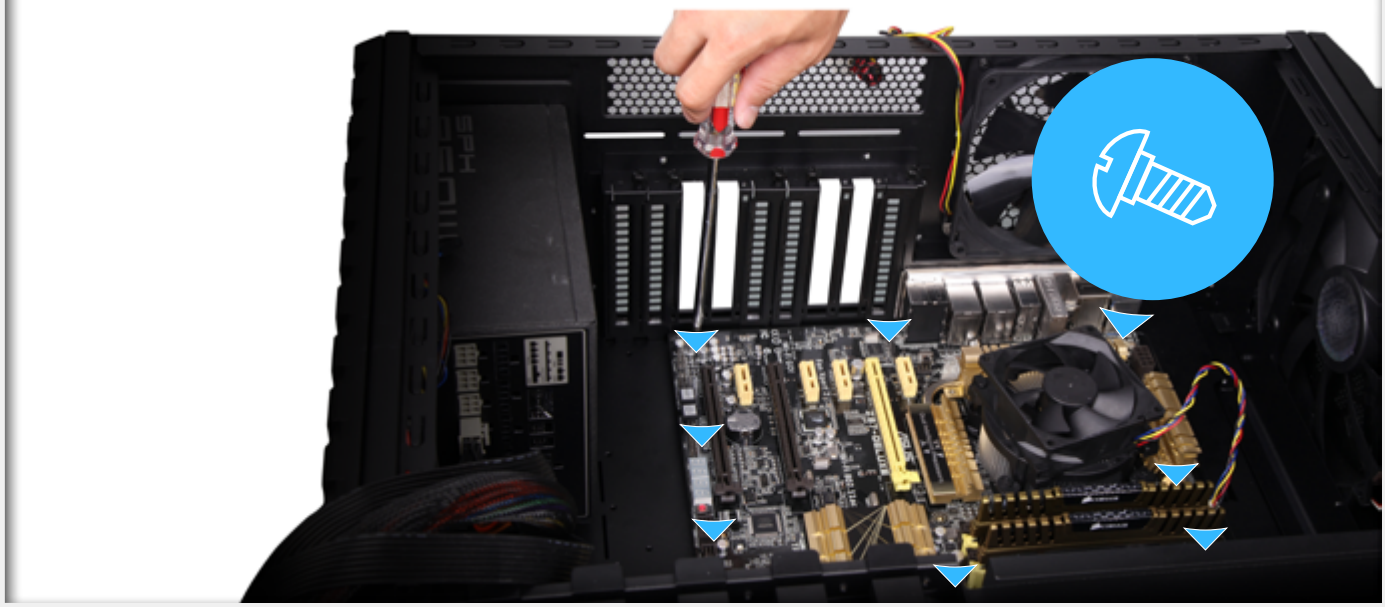
Carefully push the back I/O shield into the matching rectangular opening in the back of the case.

04 Case preparation

5 Make sure the brass risers supplied with the case are installed. Gently place the motherboard in the case, so that it rests on top of the risers . Do not allow the motherboard to directly touch the side of the case. Look for circular openings on the motherboard. These need to match the risers, and are where screws will go in later.



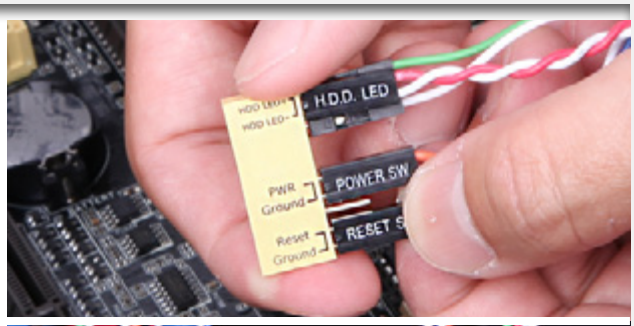
6 You should have a set of screws and fittings bundled with the case. Look for round-headed screws that fit the brass risers. Be careful not to over tighten them. As a general PC DIY rule, never over-tighten screws or try to force components into place. This can easily damage hardware.

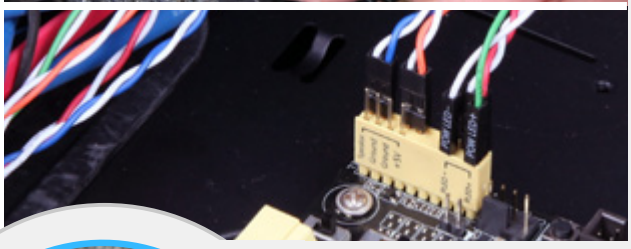


05 Front I/O connectors

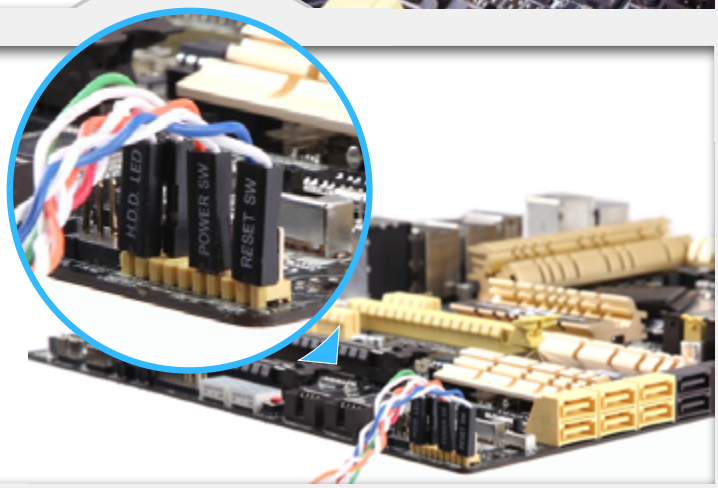
1 The Q-Connector directly indicates which pin corresponds to which device and which polarity wire needs to be connected to it. Simply slot it over the motherboard's front panel connector.

*The Q-Connector is bundled with selected models.

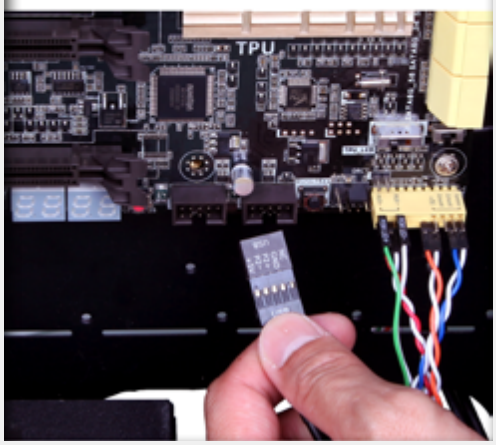




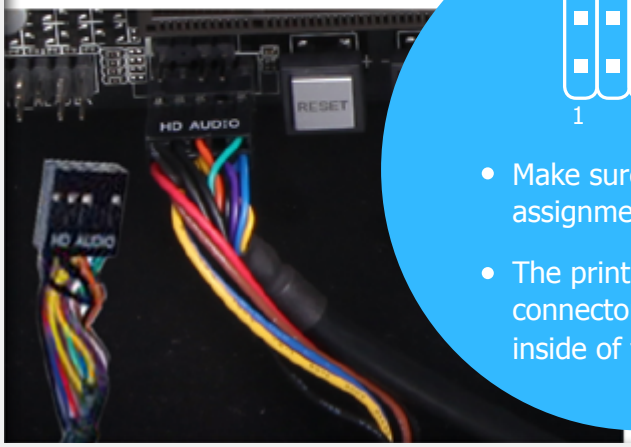
2 If you don't have a Q-Connector, the words on the connectors should face outside of the board.

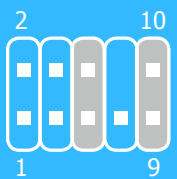


3 Connect front panel USB wires.



4 Connect front panel audio wires to the onboard AAFP header.





- Make sure the pin assignments do align.
- The printings on the connectors do face inside of the board.

06 Power

1 Tidying up the cables

A. SATA power cable

A long, thin connector, each hard drive or optical drive requires one of these power cables plugged in next to the data cable above.

B. ATX-12V / EPS - 12V auxiliary

Designed to provide extra power to the CPU, this four or eight pin adaptor fits into the slot beside the processor socket.

C. PCI Express power

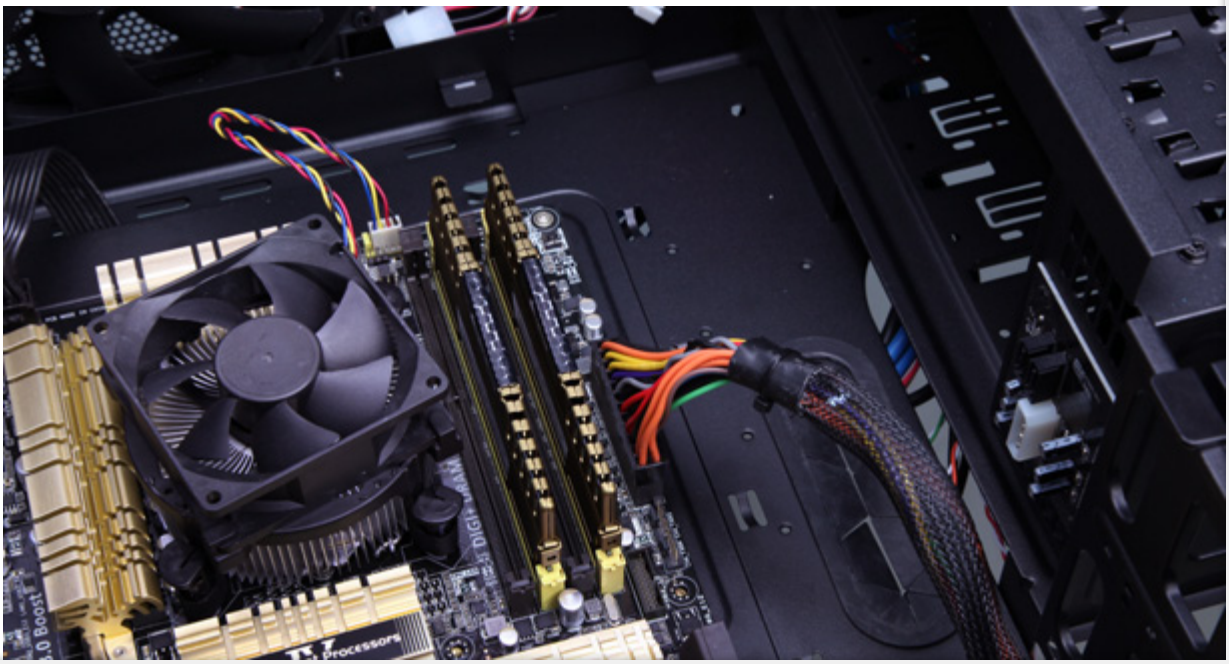
Not to be confused with the similar-looking CPU power cables. While low-power graphics cards can directly get power from the motherboard with no connectors, performance graphics cards need at least one six-pin connector. The more performance you want, the more power you need to supply, so high end cards typically need one six-pin and one eight-pin or even 2-8 pin powers connector. Make sure your power supply can accommodate these.

D. ATX 24/20+4-pin power

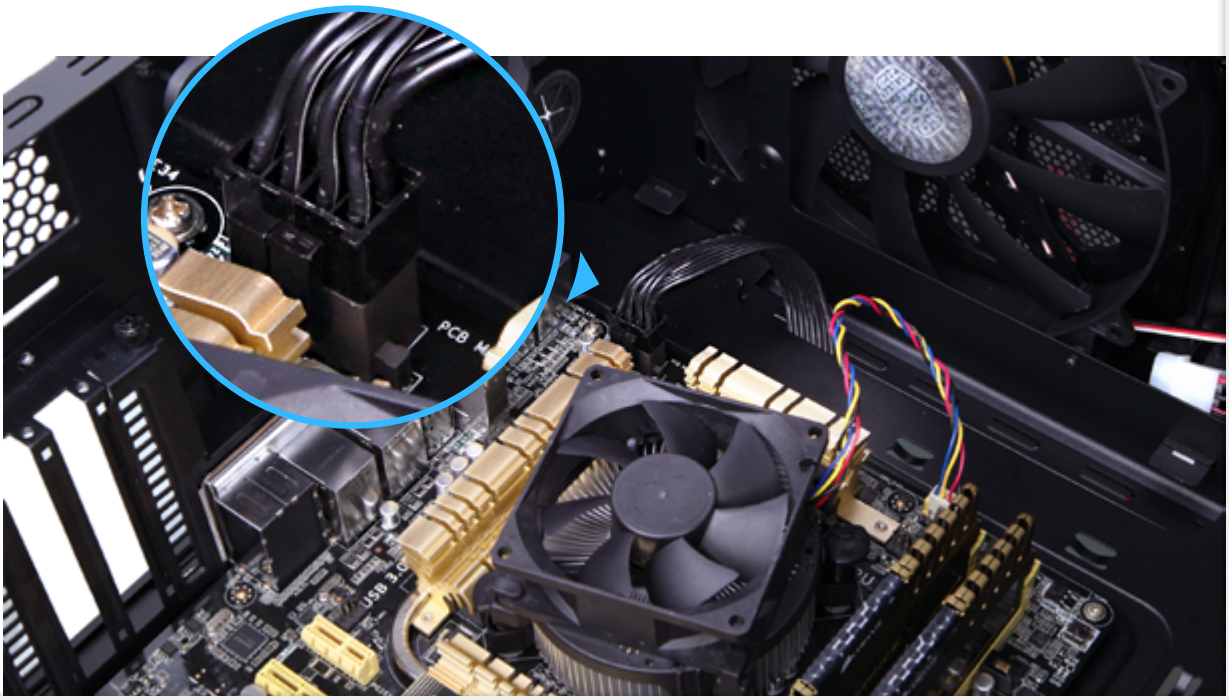
It's the biggest cable connector in your PC. This large plug fits into a similarly-sized black socket on the motherboard. Like all power cables, it only fits one way.

06 Power

2 Connect the ATX 24/20+4-pin power cable. Make sure it snaps into place firmly.



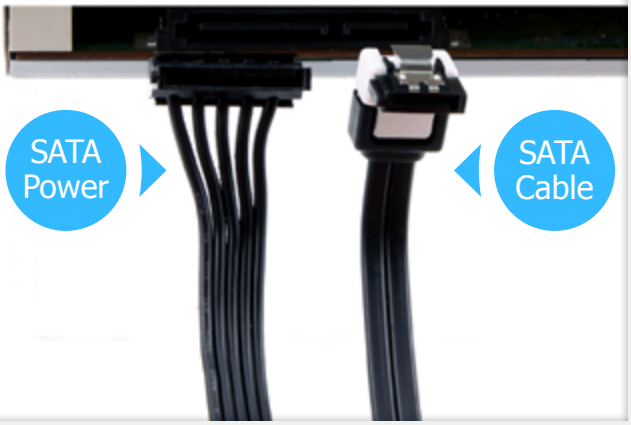
3 Connect the CPU Power 8-pin(4+4 pin or native 8 pin) cable.
If you're using 4 pin, please plug the cable by the left side.



07 SATA

1 Fit hard drives into their cages and ensure they are firmly secured in place by screws.

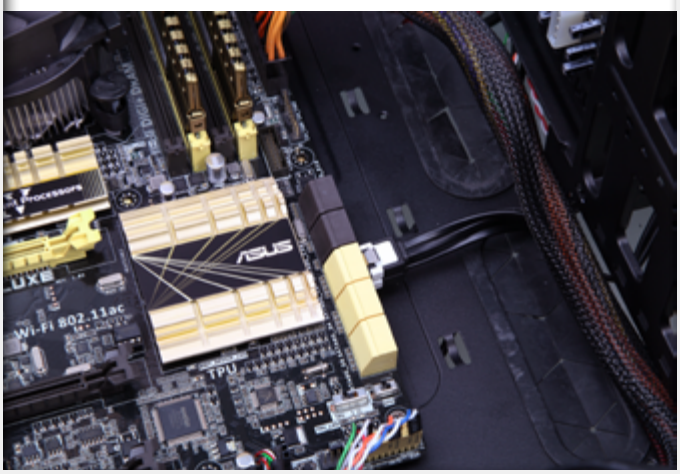
2 Attach SATA cable and SATA power cables to each hard drive.



3 Fit the optical drive into the top 5.25” bay and make sure it is also locked into place.

4 Attach SATA cable and SATA power cables to your optical drive.

5 Connect all SATA cables to SATA ports on the motherboard.

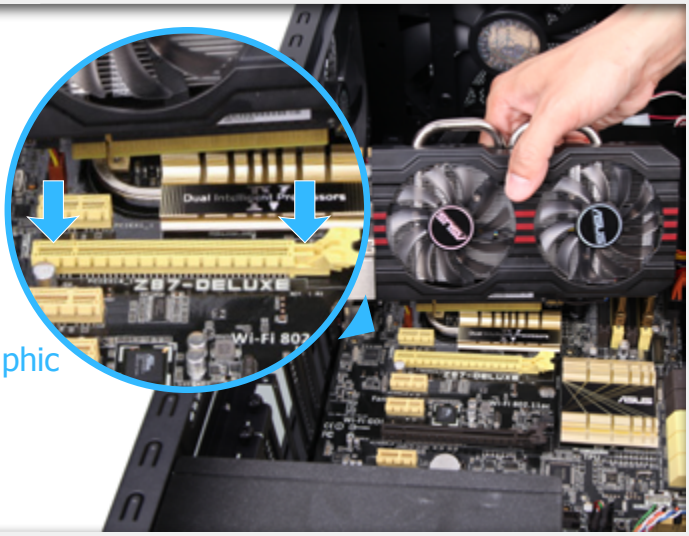


08 Expansion cards

1 To open expansion slots by removing their metal plate coverings, you will most likely need to do this for a PCI Express slot in order to install a graphics card. Simply unscrew or unclip the metal coverings from the inside to remove them.

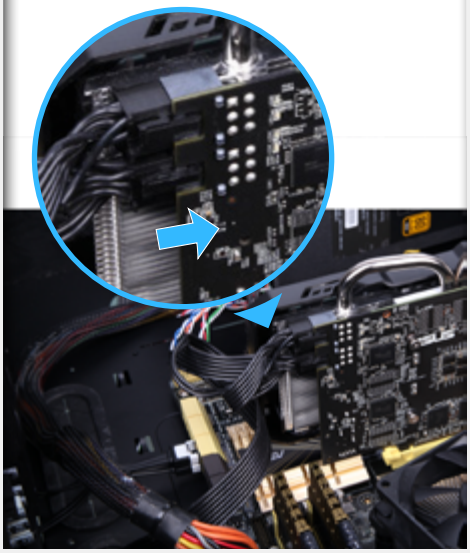
2 Insert a PCI Express graphics card into the PCI X16 Express slot that is closest to the CPU socket. Cards can only go in one way – with the fan facing the bottom of the case. Do not try to force a card into place.

*Ensure the fool proof notches of Graphic card and PCIex16 slot are aligned.



3 Make sure the clip on the inner side of the PCI Express slot snaps into place, indicating that the graphics card is secured. Screw the graphics card on the expansion slot of your chassis.

4 Plug graphics card power cables from the power supply (6-pin or 8-pin).



09 Powering on

1 Tie cables together to keep as much of the case interior clear for better airflow. One can also try to move all cables to the back of the chassis if the chassis allows that.

2 Connect the graphics card to a monitor using HDMI, DVI, DisplayPort, or VGA.

3 Connect the PC power cable to the power supply and to a power outlet. Flip the switch on the back of the power supply to the "I" (on) position.

*check the AC power rating matches your house power before powering up if switch is available.

4 Connect a keyboard and mouse.

5 Close the case and lock the screws.

6 Turn the PC on.

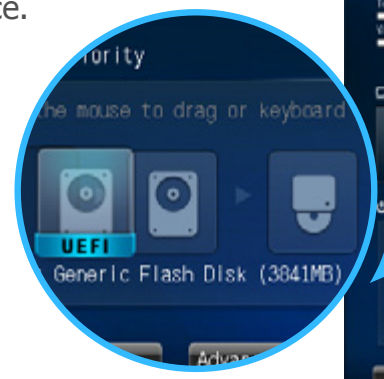
09 Powering on

7 Press"DEL"or"F2"during the power up sequence to get in to the ASUS UEFI BIOS, which offers a user-friendly interface that goes beyond traditional keyboard-only BIOS controls to enable more flexible and convenient mouse input.

8 EZ Mode displays frequently-accessed setup info.

09 Powering on

9 Drag and drop priority settings help you to adjust according to your OS sequence.



10 For experienced performance enthusiasts that demand intricate system settings, press "F7" key to enter the Advanced Mode.

11 You just built your own PC! Now enjoy it!