How to fix a PC with powers up but no display?

October 3.2019

When pressing the power button to power up the computer, the fan and LED indicators perform normally, but nothing gets displayed on monitor at all, please follow the instructions below to troubleshoot:

1. Check CPU compatibility
2. Check CPU power connector is in position
3. Perform a POST test
4. Reset BIOS
5. Check EZ Debug LED indicator

Check CPU compatibility

To check if your CPU is compatible with the motherboard, please refer to the compatibility report on MSI.com

Type in your model on the top right corner's search bar of MSI official website, hit [Enter] to find the matching result.

boot no display
Select [Compatibility] down below the model name

boot no display
Select [CPU] tab to find the compatible CPU models.

If your CPU is not listed on the compatibility report, that means it has not passed MSI's recommended requirements, we suggest to use the compatible CPU models to receive the best experience.

boot no display

Check CPU power connector is in position

If your CPU is compatible, please make sure the CPU power connector has been well attached.

Perform a POST test

Remain the motherboard with CPU, CPU radiator fan and a single RAM memory (installing on the second RAM's DIMM slots up by the CPU socket)

Remove all the external peripherals such as USB devices, USB flash drive, Hard drives and PCI-e cards

Try booting the computer; if it can be powered on normally, then the problem may come from other peripherals. Please add the peripherals one at a time to reconnect each device until you determine which device or cable is causing the issue

If the problem still persists, please continue the troubleshooting process below

Reset BIOS

Disconnect the main AC power by either shutting off the power button on the back of your power supply or simply pulling out the power cable.

Clear the BIOS data by moving JBAT1 from its original 1-2 position to 2-3 position after discharge the computer

You can also remove the CMOS battery for about five minutes from your motherboard.

boot no display

Check EZ Debug LED indicator

EZ Debug LED is located on the side of 24pin ATX power connector. These LED indicator lights show the status of the key components during the boot process. When the error occurs, the corresponding LED stays lit until the problem is solved.

CPU-LED lit on: please reinstall the CPU and check if there is bending CPU pins or other abnormal on the CPU and CPU socket.

DRAM-LED lit on: The RAM or CPU is not detected or fail or be incompatible with the motherboard.

VGA-LED lit on: the graphics card or the CPU with integrated graphics is not detected or fail

BOOT-LED lit on: Indicates the booting device is not detected or fail

Note: For the Intel platform, please check your external monitor, cables or graphics card, if you have a spare one, try cross-testing with them to confirm the issue.

How to fix a PC that shows no sign of power?

October 3,2019

When pressing down the power button to start up the PC, the fan is not running, LED indicators don't light, the PC is not getting power at all. It is recommended to test the front panel power connector is in the right position, and next, to test the CPU – check whether the CPU is compatible to the motherboard, CPU is installed correctly, and CPU power supply. To reset BIOS is also a good choice to troubleshoot the problem. If the problem still persist, we would recommend you perform a POST test. And the last step is to cross testing the parts and peripherals to see whether the hardware works normally.

1. Front panel power connectors

2. Check CPU compatibility

3. CPU installation

4. CPU power supply

5. Reset BIOS

6. Perform a POST test

7. Cross-testing parts and peripherals

Front panel power connectors

Check the JFP1 port well inserted or to boot up the PC by short circuit the 6th and 8th Pins on JPF1 with metal equipment such as a screwdriver.
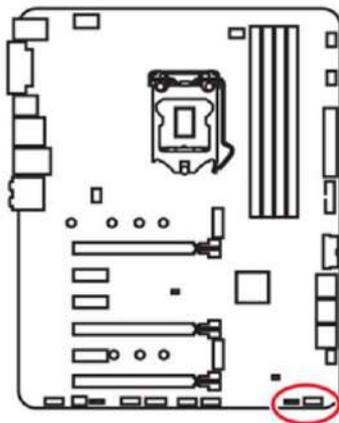
| 1	HDD LED +	2	Power LED +
3	HDD LED -	4	Power LED -
5	Reset Switch	6	Power Switch
7	Reset Switch	8	Power Switch
9	Reserved	10	No Pin

Check CPU compatibility

To check if your CPU is compatible with the motherboard, please refer to the compatibility report on MSI official website.

Type in your model on the top right corner's search bar of MSI official website, hit [Enter] to find the matching result.
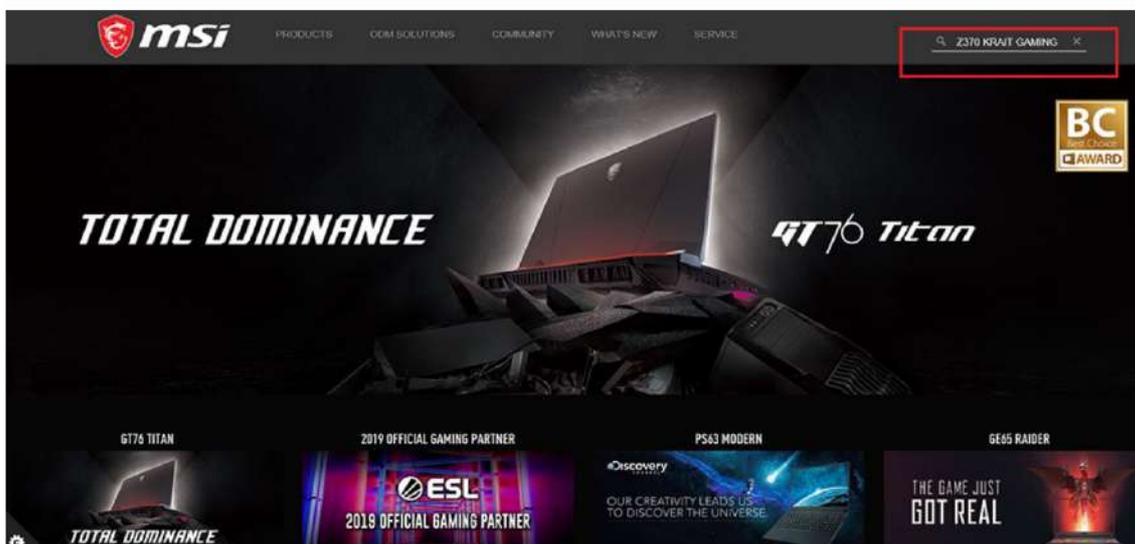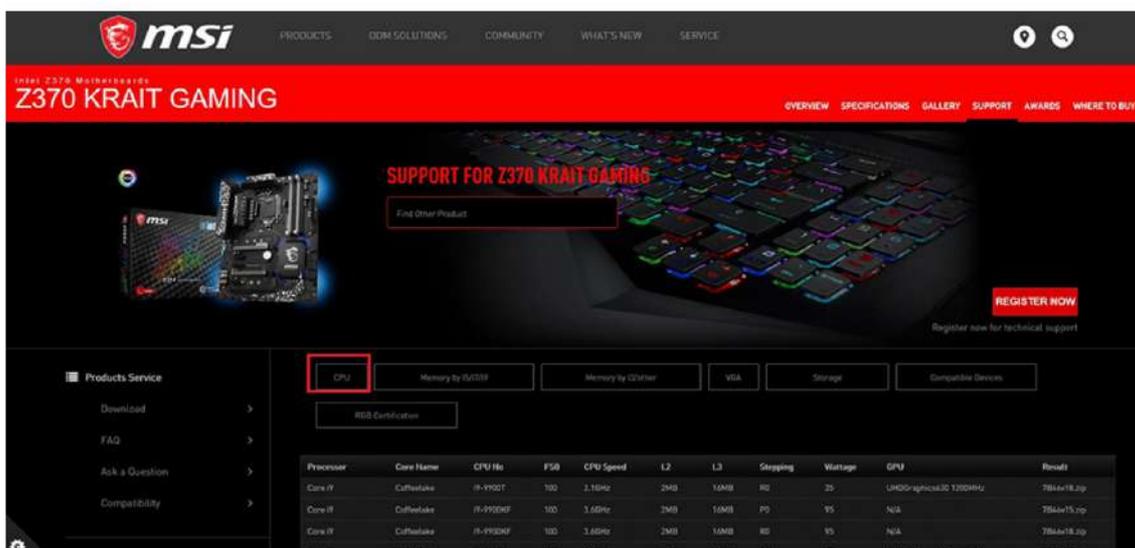

Select [Compatibility] down below the model name
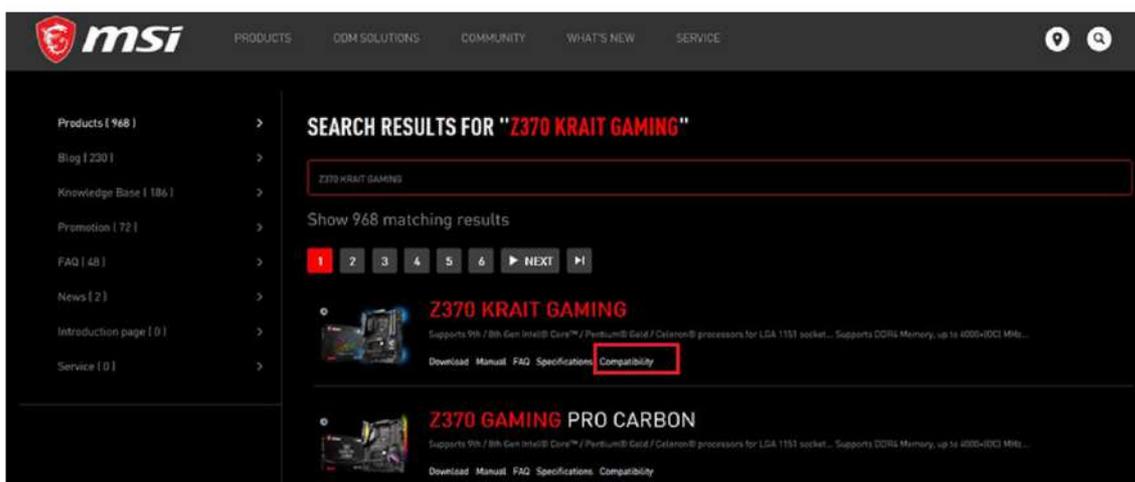
Select [CPU] tab to find the compatible CPU models.

If your CPU is not listed on the compatibility report, that means it has not passed MSI's recommended requirements, we suggest to use the compatible CPU models to receive the best experience.

If the CPU is compatible, please check if the CPU is installed correctly

Steps for installing Intel CPU:
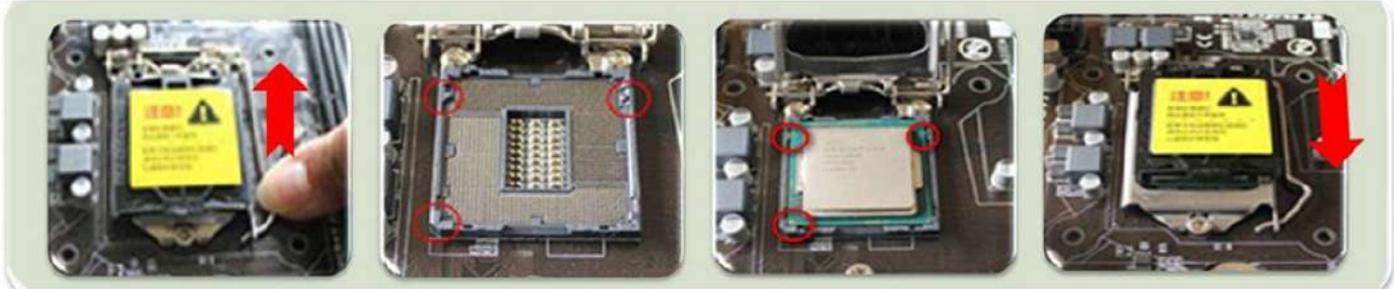
Step1:Press the fixed wrench with your fingers and push outward until the wrench is off the buckle

Step 2:Make sure the triangle on the mainboard is in the same position as the triangle on the CPU

Step3:After aligning the two slots in the foot seat, gently place the CPU on it

Step4:Pushed back in the original direction and fastened on the retaining buckle. At this time, the protection cover will automatically pop up

Steps for installing AMD CPU:
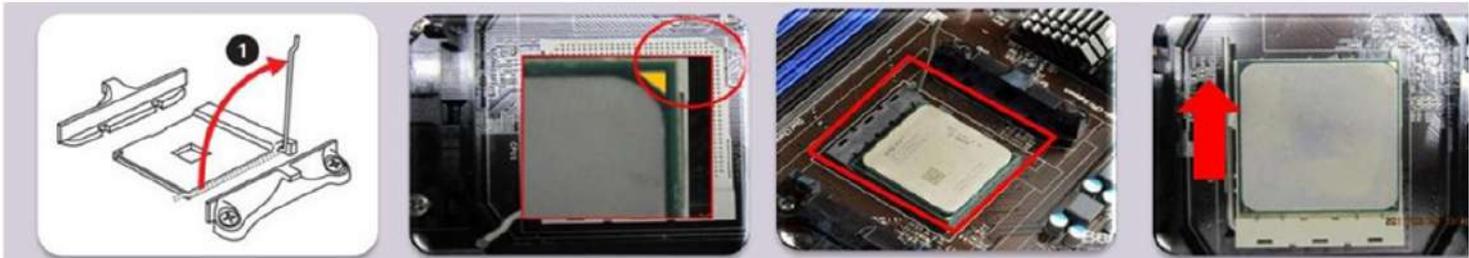
Step1:Pull up the lever on the mainboard's processor slot, as shown.Pull to about 90 degrees and stop.

Step2:Match the golden triangle on the CPU with the logo on the base

Step3:Check that all sides of the CPU are in place

Step4:Close the lever and tighten the CPU after installing the CPU into the slot

CPU power supply

If the CPU installed in a right way, please check the CPU power supply and 24PIN power supply is well connected

Reset BIOS

Disconnect the main AC power by either shutting off the power button on the back of your power supply or simply pulling out the power cable.

Clear the BIOS data by moving JBAT1 from its original 1-2 position to 2-3 position after discharge the computer.

You can also remove the CMOS battery for about five minutes from your motherboard.

Perform a POST Test

Remain the motherboard with CPU, CPU radiator fan and a single RAM memory (installing on the second RAM's DIMM slots up by the CPU socket).

Remove all the external peripherals such as USB devices, USB flash drive, Hard drives and PCI-e cards.

Try booting the computer; if it can be powered on normally, then the problem may come from other peripherals. Please add the peripherals one at a time to reconnect each device until you determine which device or cable is causing the issue.

If the problem still persists, please continue the troubleshooting process below.

Cross testing the parts and peripherals

If possible, please conduct cross-test to replace the CPU, motherboard and power supply device respectively. If replacing a power supply solved the issue, it indicates that there may be some problems with the replaced device.