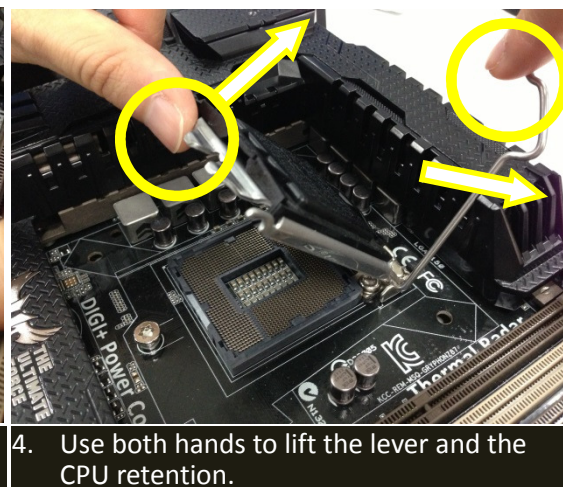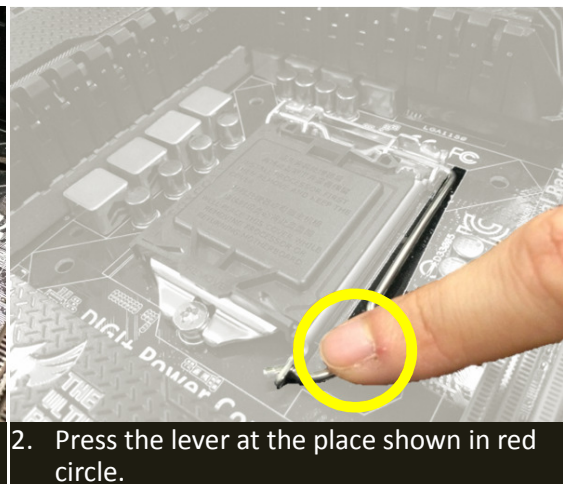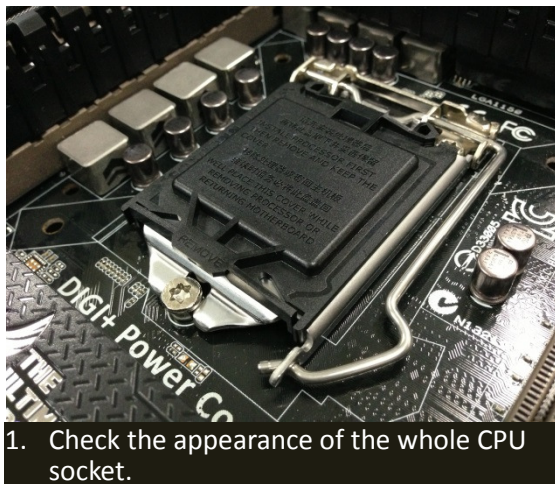# Tips and tricks to LGA1150 CPU installation

The installation of the LGA1150 CPUs may seem easy as it looks, however it stands a risk of bending the CPU socket pins when not done properly, resulting in malfunction of the CPU integrated functionalities such as the basic CPU functions, CPU integrated memory controller, as well as the CPU native PCI Express lane connections.

The guideline below outlines the Do's and Don'ts to help you through this process. It is highly recommended to read through it carefully before beginning with the CPU installation process.

Step 1. Lift the Lever and CPU Retention

Press and hold the lever, and move it away from the lock, then lift the lever and the CPU retention up with both hands as shown in the photo below:

1. Check the appearance of the whole CPU socket.

2. Press the lever at the place shown in red circle.

3. Move the lever away from the lock.

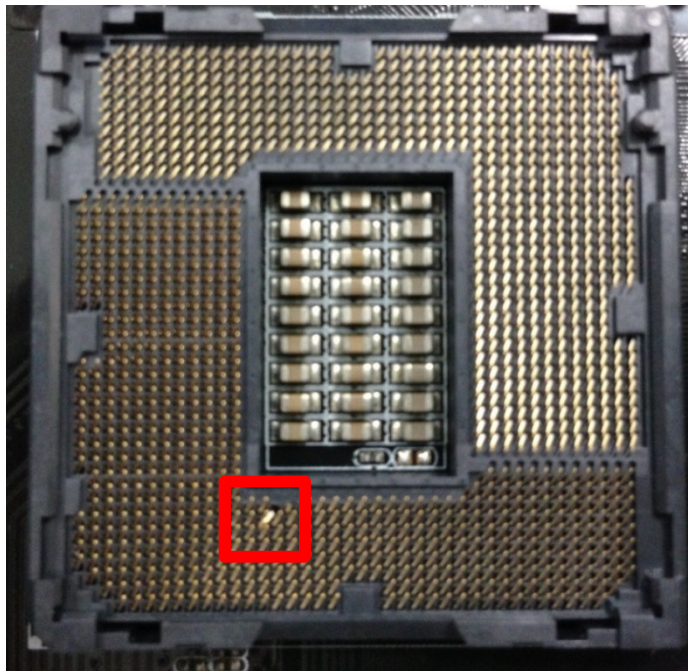4. Use both hands to lift the lever and the CPU retention.

Step 2. Check the CPU Grid

Check the CPU grid before installing the CPU onto it. If there is any bent pins on the CPU socket, contact your place of purchase to arrange RMA, or replacement if you have just purchased this motherboard for first use.
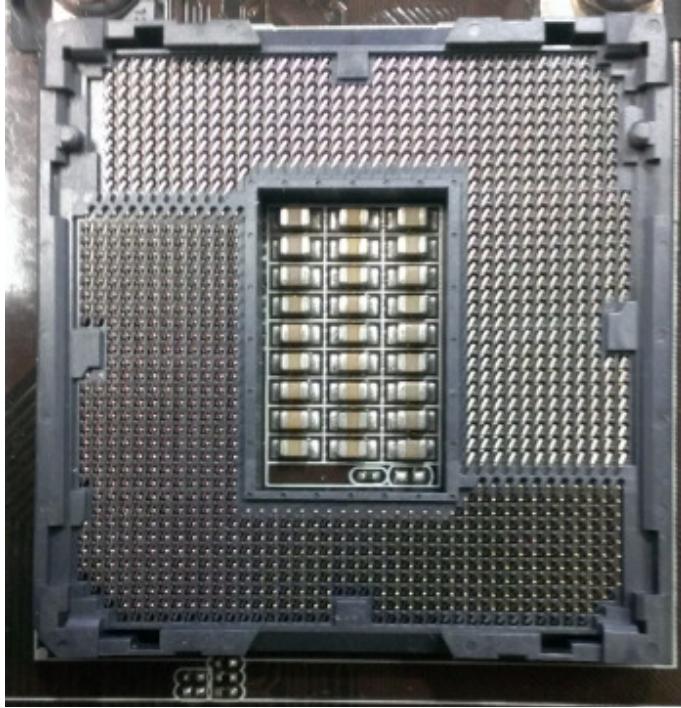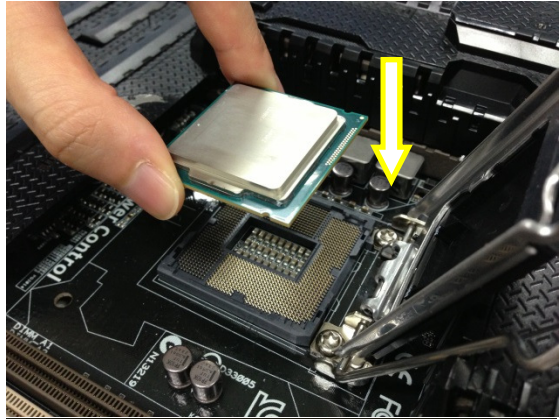

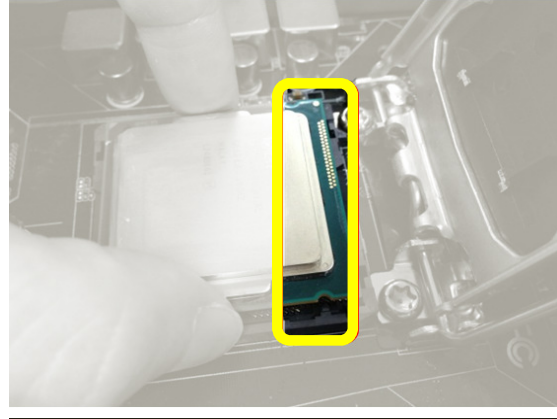The appearance of a normal CPU socket

The appearance of a **damaged** CPU socket

Step 3. Install the CPU

Hold the CPU with two fingers, then place it firmly and **vertically** onto the CPU socket as shown in the picture below. Check and ensure both **latches** on the CPU socket fits into the side latches on the CPU.
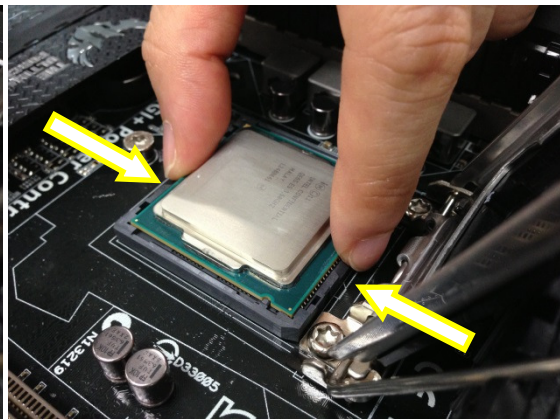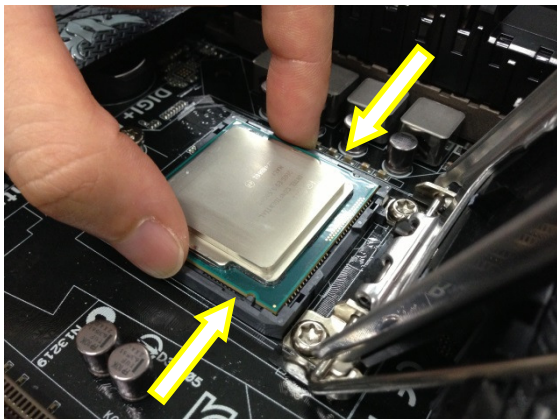

| 1. Place the CPU **vertically** onto the CPU socket. | 2. Check both **latches** of CPU and CPU socket are matched. |

Step 4. Confirm the Stability of CPU

Check from both ends of the CPU softly with two fingers to ensure the CPU sits properly on the CPU socket.


Check from both ends of the CPU to confirm the stability.

Note: If you feel abnormal force feedbacks from under the CPU when checking the stability, remove the CPU and try sitting the CPU back into the CPU socket again. Without doing so may result in the damage of CPU pins after locking the CPU retention in place.
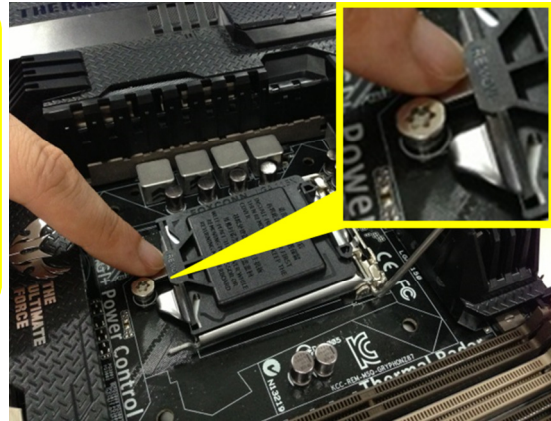
Step 5. Close the CPU Retention

Hold both the lever and the CPU retention with **both hands**, and firmly lower the CPU retention to fit into the screw latch as shown below, and then secure the lever. The CPU cap will **pop out** once the lever is secured in place. Then remove the CPU cover, and you now have your CPU properly installed.
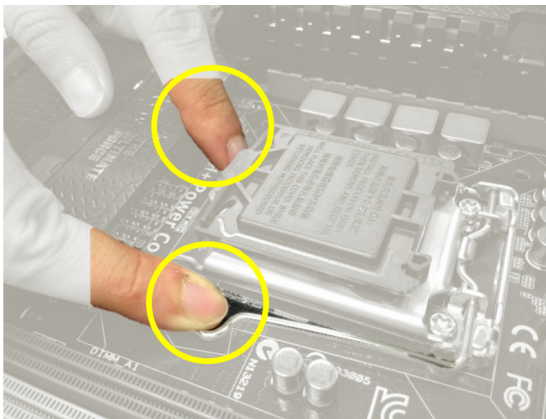
Note: Do not press on the CPU cap when holding the CPU retention. This will stop the CPU cap from popping out and the CPU may be damaged.
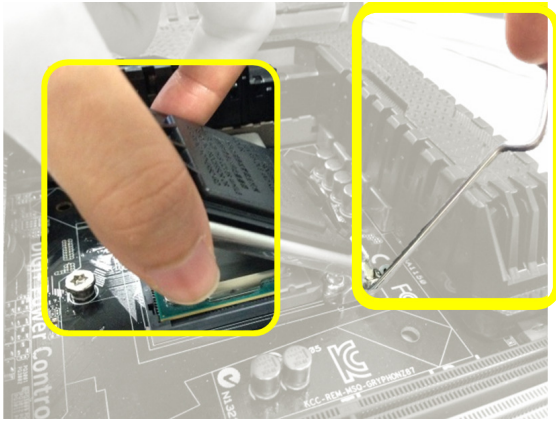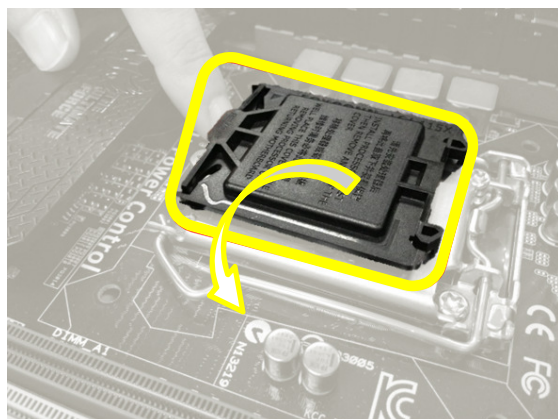

1. Use **both hands** to hold the lever and the CPU retention.

2. Lower the CPU retention and fit it into the screw latch.

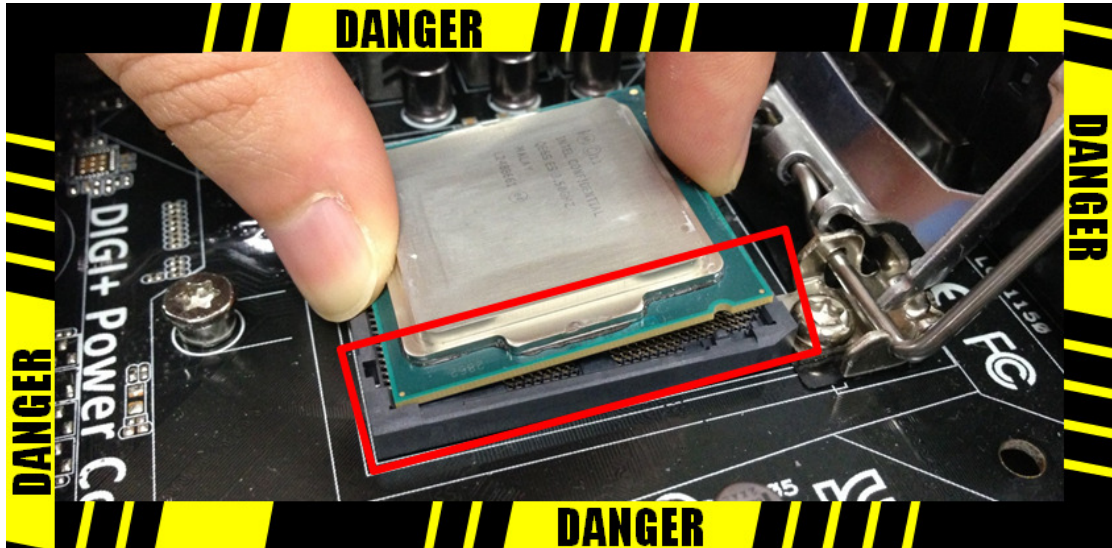3. Secure the lever back in the lock.

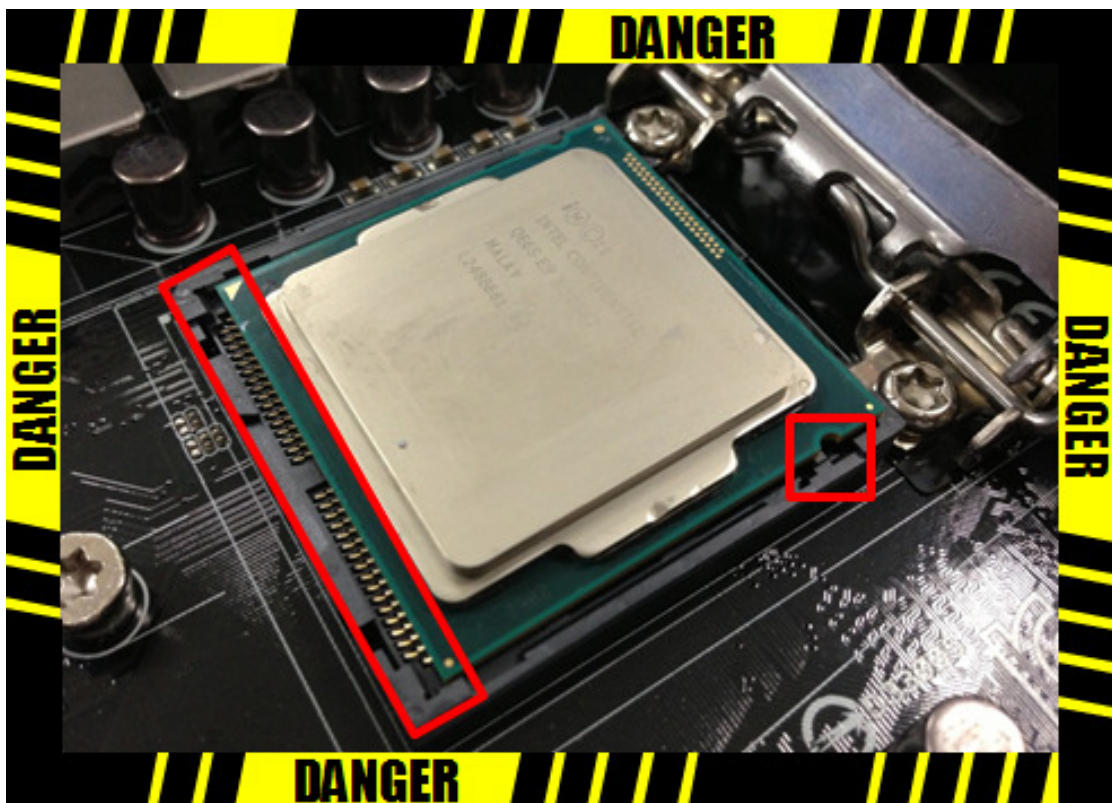4. The CPU cover will **pop out** once the lever is secured.

Caution!!

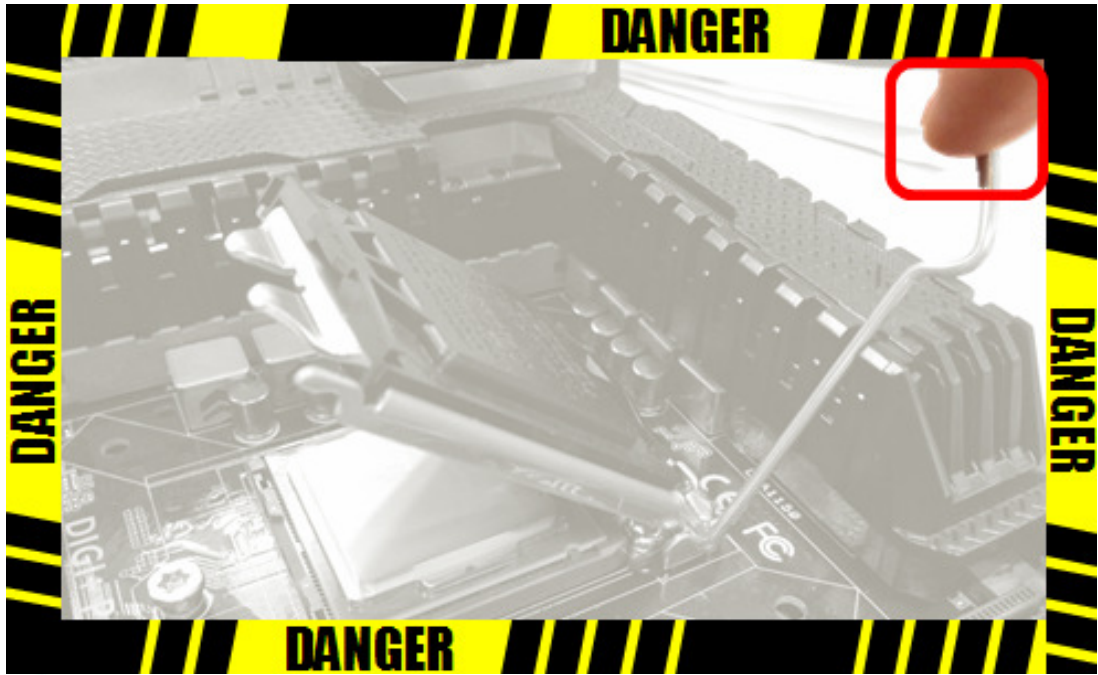## These common mistakes may damage the CPU socket pins

These actions may easily cause the CPU to be not aligned with the CPU pins, resulting in the damage the CPU pins after securing the lever in place.

⚠️ Place the CPU in the socket with an angle instead of vertically.

⚠️ The CPU latches are not aligned with the CPU socket latches.

⚠️ Secure the lever and CPU retention with only one hand.