Gigabyte A320M-S2H Processor Replacement

In this guide we will demonstrate step by step how to replace a desktop’s damaged CPU, Ryzen 3 2200g processor on a Gigabyte A320M-S2H motherboard.

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INTRODUCTION

If your personal computer is experiencing stalled bootup and frozen black screens issues it can be vital to explore your motherboards CPU. Once you have identified the problem to be CPU bound utilize this guide to successfully replace the damaged or worn out part. The CPU is a core aspect of many electronic devices as it handles all the computers desired instructions. As such a damaged CPU will prevent the personal computer from effectively running. It can be noted that in some cases a build up of dust and dirt may interfere with the CPU. As such check and clean the motherboard with a recommended ESD-safe brush. If that does not fix the issue follow our replacement guide utilizing thermal paste and anti-static wristband and mat. Finally, before starting be sure to fully power of the desktop or personal device making sure that no further external power source is connected.

TOOLS:

- Phillips #0 Screwdriver (1)
- Thermal Paste (1)
- Isopropyl Alcohol (1)
- Anti-Static Wrist Strap (1)
- Anti-Static Mat (1)
Step 1 — Ryzen 3 2200g processor

- Turn off the computer by unplugging the power cord from the wall outlet.
- Remove the power supply cable from the computer.
- Change the power switch on the back of the computer to the “off” position.

Step 2

- Place the computer on its right side and unclamp the left panel by turning the screws.
- Remove the side panel.
In order to access the CPU, the CPU cooler fan must be removed.

- Using a Phillips #0 screwdriver, carefully remove the four screws located in each of the CPU cooler's four corners.

- Disconnect the fan's power cable from the motherboard.

  If you are having difficulty please refer to your motherboard's user manual for assistance.

- Gently lift and removed the CPU fan from the motherboard.
  - Be sure to clean off the portion of the underside of the fan that was in contact with the CPU off using isopropyl alcohol. This will remove any old thermal paste to ensure a clean connection during reinstallation.

You should now be able to fully see and access the CPU. If not, you may have done a step wrong and should revisit a previous step.
Step 4

- Lift the retention arm to unsecure the CPU.
- Carefully remove the CPU from the socket.

Step 5

- Find the right way to plug in the processor and gently place it in the slot.

ℹ️ Check to see if the processor fits tightly and is not tilted.
- Lock the retention arm to secure the CPU.
- Apply a small amount of thermal paste onto the new processor.
Step 6

- Place the CPU cooler on top of the CPU and using a Phillips #0 screwdriver to tighten the four 10 mm screws in place.

- Reconnect the fan connector to the motherboard.

Step 7

- Place back the side panel and attach the screws in their proper spaces.

- Place the computer upright.
Step 8

- Attach the power cord and plug it in.
- Change the power switch to “on” position.

When complete, the computer should boot and display the appropriate operating system.