2/24/2020 Simulation Viewer

Lab Report

Your Performance

Your Score: 0 of 1 (0%) Pass Status: Not Passed Elapsed Time: 31 seconds Required Score: 100%

Task Summary

Actions you were required to perform:

X Replace the processorHide Details

Install the processor from the Shelf
Connect the heatsink and fan
Do not disconnect the heatsink fan power

Explanation

In this lab, you task is to diagnose and correct the problem. Because you just replaced the processor, the problem is likely with the processor configuration or the processor itself.

Possible problems include:

- The heat sink and fan not being installed.
- The fan power connector not being connected to the motherboard.
- The CPU not supported by the BIOS.
- The CPU is bad.

For the first two problems, the computer would likely boot, but then it will shut down within a short period of time. For the last two problems, you need to replace the processor. If the processor is not supported by the BIOS, you might be able to perform a BIOS update to make it recognize the new processor. However, you would need to install a supported processor first, flash the BIOS, and then re-install the new processor. (Flashing the BIOS is not supported in this lab, so you will simply need to replace the processor.)

Complete this lab as follows:

- 1. Reproduce the problem as follows:
 - a. Click the **power** button to start the computer.
 - b. Click **OK** to close the message inside the lab.
 - c. Above the computer, select **Motherboard** to switch to the motherboard view of the computer to diagnose the problem.

Can the processor start if there is no CPU installed?

Would the computer start if the additional CPU power connector was not connected to the motherboard?

- d. Select the **motherboard**.
- e. Under Selected Component, identify the **socket type** of the motherboard.
- f. In the Selected Component window, select **Details**.
- g. Select the **Specifications** tab.
- h. Read the motherboard documentation to identify additional requirements for the CPU.
- i. Identify the **location** of the CPU fan connector.
- j. Close the Motherboard Details window.
- 2. Verify that all CPU power cables are connected as follows:
 - a. Select the **CPU heat sink and fan**.
 - b. In the Selected Component window, verify that the fan power connector is connected to the

Because everything is connected properly, you will need to replace the CPU.

- 3. Drag the **heat sink and fan** to the Workspace.
- 4. On the Shelf, expand **Processors**.

- 5. Drag the **CPU** on the motherboard to the Shelf to remove it from the computer.
- 6. From the Shelf, drag the **CPU**, **AMD AM3** to the CPU socket on the motherboard.
- 7. From the Workspace, drag the **heat sink and fan** to the motherboard.
- 8. In the Selected Component window, verify that the **fan power connector** is still connected to the motherboard.
- 9. Above the computer, select **Front** to switch to the front view of the computer.
- 10. Click the **power** button to verify that it boots into Windows.