Common Problems and Solutions for Motherboards and Internal Components

Identify the Problem	Probable Causes	Possible Solutions
The clock on the computer is no longer keeping the correct time or the BIOS settings are changing when the computer is rebooted.	The CMOS battery may be loose.	Secure the battery.
The clock on the computer is no longer keeping the correct time or the BIOS settings are changing when the computer is rebooted.	The CMOS battery may be drained.	Replace the battery.
After updating the BIOS firmware, the computer will not start.	The BIOS firmware update did not install correctly.	Contact the motherboard manufacturer to obtain a new BIOS chip. (If the motherboard has two BIOS chips, the second BIOS chip can be used.)
The computer displays the incorrect CPU information when the computer boots.	The CPU settings are not correct in the advanced BIOS settings.	Set the advanced BIOS settings correctly for the CPU.
The computer displays the incorrect CPU information when the computer boots.	BIOS does not properly recognize the CPU.	Update the BIOS.
The hard drive LED on the front of the computer does not light.	The hard drive LED cable is not connected or is loose.	Reconnect hard drive LED cable to motherboard.
The hard drive LED on the front of the computer does not light.	The hard drive LED cable is incorrectly oriented to the front case panel connections.	Correctly orient the hard drive LED cable to the front case panel connection and reconnect.
The built-in NIC has stopped working.	The NIC hardware has failed.	Add a new NIC to an open expansion slot.
The computer does not display any video after installing a new PCIe video card.	BIOS settings are set to use the built-in video.	Disable the built-in video in the BIOS settings.
The computer does not display any video after installing a new PCIe video card.	The monitor cable is still connected to the built-in video.	Connect the monitor cable to the new video card.

www.netacad.com

Common Problems and Solutions for Motherboards and Internal Components

Identify the Problem	Probable Causes	Possible Solutions
The computer does not display any video after installing a new PCIe video card.	The new video card needs auxiliary power.	Connect any required power connectors to the video card.
The computer does not display any video after installing a new PCIe video card.	The new video card is faulty.	Install a known good video card.
The new sound card does not work.	The speakers are not connected to the correct jack.	Connect the speakers to the correct jack.
The new sound card does not work.	The audio is muted.	Unmute the audio.
The new sound card does not work.	The sound card is faulty.	Install a known good sound card.
The new sound card does not work.	BIOS settings are set to use the on-board sound device.	Disable the on-board audio device in the BIOS settings.
System attempts to boot to an incorrect device.	Media was left in a removable drive.	Check that the removable drives do not contain media that is interfering with the boot process and check that the boot order is configured correctly.
System attempts to boot to an incorrect device.	Boot order configured incorrectly.	Check that the removable drives do not contain media that is interfering with the boot process and check that the boot order is configured correctly.
User can hear fans spinning but the computer does not start and there are no beeps from the speaker.	POST procedure is not executing.	Faulting cabling, damaged or mis-seated CPU, or other motherboard component.
Motherboard capacitors are distended, swollen, emitting residue, or bulging.	Heat, ESP, power surge or spike.	Replace motherboard.

www.netacad.com