

## **Common Problems and Solutions for CPUs and Memory**

Identify the Problem	Probable Causes	Possible Solutions
The computer will not boot or it locks up.	The CPU has overheated.	<ul><li>Reinstall the CPU.</li><li>Replace the CPU fan.</li><li>Add fan(s) to the case.</li></ul>
The computer will not boot or it locks up.	The CPU fan is failing.	Replace the CPU fan.
The computer will not boot or it locks up.	The CPU has failed.	Replace the CPU.
The CPU fan is making an unusual noise.	The CPU fan is failing.	Replace the CPU fan.
The computer reboots without warning, locks up, or displays error messages.	The front-side bus is set too high.	<ul> <li>Reset to the factory default settings for the motherboard.</li> <li>Lower the front-side bus settings.</li> </ul>
The computer reboots without warning, locks up, or displays error messages.	The CPU multiplier is set too high.	Lower the multiplier settings.
The computer reboots without warning, locks up, or displays error messages.	The CPU voltage is set too high.	Lower the CPU voltage settings.
After upgrading from a single core CPU to a dual core CPU, the computer runs more slowly and only shows one CPU graph in the Task Manager.	The BIOS does not recognize the dual core CPU.	Update the BIOS firmware to support the dual core CPU.
A CPU will not install onto the motherboard.	The CPU is the incorrect type.	Replace the CPU with a CPU that matches the motherboard socket type.
The computer does not recognize the RAM that was added.	The new RAM is faulty.	Replace the RAM.
The computer does not recognize the RAM that was added.	The incorrect type of RAM was installed.	Install the correct type of RAM.
The computer does not recognize the RAM that was added.	The RAM that has been added is not the same type of RAM that is already installed.	Install the correct type of RAM.

Identify the Problem	Probable Causes	Possible Solutions
The computer does not recognize the RAM that was added.	The new RAM is loose in the memory slot.	Secure the RAM in the memory slot.
After upgrading Windows, the computer runs very slowly.	The computer does not have enough RAM.	Install additional RAM.
After upgrading Windows, the computer runs very slowly.	The video card does not have enough memory.	Install a video card that has more memory.