Technical Support Information Page

First Power-On Test Checklist

(Or "What to Look for When Nothing Happens")

Over the years, many customers have come to us after assembling their new computers and finding that the system will just not start up. Here are a few of the basic things to double-check that we've found wrong:

- ❑ Did you read the motherboard manual? Are all your jumpers set properly?
- ❑ Is the 115/230 Volt switch on the back of the power supply, set to 115 Volts?
- ❑ Is the system getting power? Do the fans start to spin when you press the power button? Is there a power-indicator on the motherboard that lights up as soon as the power supply is connected and the power supply switch is turned on?
- ❑ Are all of the power supply plugs inserted into the motherboard? Yes? Even that square one next to the processor socket?
- ❑ Is the RAM properly seated?
- ❑ Is it the correct speed RAM?
- ❑ Is the heat sink firmly attached? On Athlon processor based systems, the step in the bottom of the heat sink must align with the raised portion of the ZIF processor socket. (Many no-start or lockup problems have been found due to this error.) Has heat sink compound been properly applied?
- ❑ If your computer uses a separate video card, is it firmly seated in the appropriate PCI or AGP slot? Is there an external power connector on the video card and has it been connected to the power supply?
- ❑ If you are using a separate video card with a motherboard that already has integrated video, and is your monitor attached to the correct video connector? The one on the video card?
- ❑ Did you double-check the front panel switch connections to make sure that they attach to the correct pins on the motherboard?
- ❑ If you have a reset switch, try removing this connection at the motherboard if there are separate connectors. Check for stuck reset or power buttons on the front of the case.
- ❑ Are you getting any beeps? How many and what kind? Check your motherboard manual.
- ❑ Did you skip installing the standoffs and screw the motherboard directly to the chassis pan? (Don't laugh; it's been done more than once.)

Only after thoroughly investigating these issues should you start suspecting one or more bad components.

Power-On-Self-Test beep codes for a motherboard with an Award / Phoenix BIOS

Beep	Meaning
One short beep when displaying logo	No errors during POST (This is normal!)
Long beeps in an endless loop	No DRAM installed, DRAM not detected, or base 64MB memory bad
One long beep followed by three short beeps	Video card not found or video memory bad. (Note: Some video cards can generate this code if the monitor is not attached and/or turned on.)
High frequency beeps when system is working	CPU overheated. System running at a lower frequency.

Is it turned on, plugged in, and set to the correct line voltage?

Are all power cables connected? Is the heatsink installed correctly and seated flat on the CPU with thermal compound? Is memory seated correctly?

Are the front panel connections on correctly? Try removing the reset button connection if these are separate connections.

Check the user manual for troubleshooting tips. Verify that the components like memory and CPU are compatible. Look for a table of POST beep codes if you get startup error signals.