

# Advanced/ATX Error Messages

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## ***PCI CONFIGURATION ERROR MESSAGES***

The following PCI messages are displayed as a group with bus, device and function information.

```
<'NVRAM Checksum Error, NVRAM Cleared'>, \ ; String  
<'System Board Device Resource Conflict'>, \ ; String  
<'Primary Output Device Not Found'>, \ ; String  
<'Primary Input Device Not Found'>, \ ; String  
<'Primary Boot Device Not Found'>, \ ; String  
<'NVRAM Cleared By Jumper'>, \ ; String  
<'NVRAM Data Invalid, NVRAM Cleared'>, \ ; String  
<'Static Device Resource Conflict'>, \ ; String
```

The following messages chain together to give a message such as:

```
"PCI I/O Port Conflict: Bus: 00, Device 0D, Function: 01".
```

If and when more than 15 PCI conflict errors are detected, the log full message is displayed.

```
<'PCI I/O Port Conflict:'>, \ ; String  
<'PCI Memory Conflict: '>, \ ; String  
<'PCI IRQ Conflict: '>, \ ; String  
<' Bus '>, \ ; String  
<' Device '>, \ ; String  
<' Function '>, \ ; String  
<'PCI Error Log is Full.'>, \ ; String  
<'Floppy Disk Controller Resource Conflict '>, \ ; Text  
<'Primary IDE Controller Resource Conflict '>, \ ; Text  
<'Secondary IDE Controller Resource Conflict '>, \ ; Text  
<'Parallel Port Resource Conflict '>, \ ; Text  
<'Serial Port 1 Resource Conflict '>, \ ; Text  
<'Serial Port 2 Resource Conflict '>, \ ; Text
```

## AMIBIOS ERROR MESSAGES AND BEEP CODES

Errors can occur during POST (Power On Self Test) which is performed every time the system is powered on. Fatal errors, which prevent the system from continuing the boot process, are communicated through a series of audible beeps. Other errors are displayed in the following format:

ERROR Message Line 1

ERROR Message Line 2

For most displayed error messages, there is only one message. If a second message appears, it is "RUN SETUP". If this message occurs, press <F1> to run Setup Utility.

### BEEP CODES

| Beeps              | Error Message                       | Description  |
|--------------------|-------------------------------------|--|
| 1 long,<br>3 short | Video failure                       | A connection to a monitor was not detected.  |
| 1                  | Refresh Failure                     | The memory refresh circuitry on the baseboard is faulty.                                     |
| 2                  | Parity Error                        | Parity is not supported on this product, will not occur.                                     |
| 3                  | Base 64 KB Memory Failure           | Memory failure in the first 64 KB.   |
| 4                  | Timer Not Operational               | Memory failure in the first 64 KB of memory, or Timer 1 on the baseboard is not functioning. |
| 5                  | Processor Error                     | The CPU on the baseboard generated an error.   |
| 6                  | 8042 - Gate A20 Failure             | The keyboard controller (8042) may be bad. The BIOS cannot switch to protected mode.         |
| 7                  | Processor Exception Interrupt Error | The CPU generated an exception interrupt.  |
| 8                  | Display Memory Read/Write Error     | System video adapter is either missing or its memory is faulty. This is not a fatal error.   |
| 9                  | ROM Checksum Error                  | ROM checksum value does not match the value encoded in BIOS.                                 |
| 10                 | CMOS Shutdown Register Rd/Wrt Error | The shutdown register for CMOS RAM failed.   |
| 11                 | Cache Error / External Cache Bad    | The external cache is faulty.  |

### ERROR MESSAGES

| Error Message                          | Explanation   |
|--|---|
| 8042 Gate - A20 Error                  | Gate A20 on the keyboard controller (8042) is not working. Replace the 8042.  |
| Address Line Short!                    | Error in the address decoding circuitry on the baseboard.   |
| Cache Memory Bad, Do Not Enable Cache! | Cache memory is defective. Replace it.  |
| CH-2 Timer Error                       | Most AT systems include two timers. There is an error in timer 2.   |
| CMOS Battery State Low                 | CMOS RAM is powered by a battery. The battery power is low. Replace the battery.  |
| CMOS Checksum Failure                  | After CMOS RAM values are saved, a checksum value is generated for error checking. The previous value is different from the current value. Run AMIBIOS Setup. |
| CMOS System Options Not Set            | The values stored in CMOS RAM are either corrupt or nonexistent. Run Setup.   |
| CMOS Display Type Mismatch             | The video type in CMOS RAM does not match the type detected by the BIOS. Run AMIBIOS Setup.   |
| CMOS Memory Size Mismatch              | The amount of memory on the baseboard is different than the amount in CMOS RAM. Run AMIBIOS Setup.  |
| CMOS Time and Date Not Set             | Run Standard CMOS Setup to set the date and time in CMOS RAM.   |
| Diskette Boot Failure                  | The boot disk in floppy drive A: is corrupt. It cannot be used to boot the system. Use another boot disk and follow the screen instructions.                  |
| Display Switch Not Proper              | The display jumper is not implemented on this product, this error will not occur.   |
| DMA Error                              | Error in the DMA controller.  |
| DMA #1 Error                           | Error in the first DMA channel.   |
| DMA #2 Error                           | Error in the second DMA channel.  |
| FDD Controller Failure                 | The BIOS cannot communicate with the floppy disk drive controller. Check all appropriate connections after the system is powered down.                        |
| HDD Controller Failure                 | The BIOS cannot communicate with the hard disk drive controller. Check all appropriate connections after the system is powered down.                          |
| INTR #1 Error                          | Interrupt channel 1 failed POST.  |

## **ERROR MESSAGES (CONT.)**

|                                |  |
|--------------------------------|--|
| INTR #2 Error                  | Interrupt channel 2 failed POST.   |
| Invalid Boot Diskette          | The BIOS can read the disk in floppy drive A:, but cannot boot the system. Use another boot disk.  |
| Keyboard Is Locked...Unlock It | The keyboard lock on the system is engaged. The system must be unlocked to continue.   |
| Keyboard Error                 | There is a timing problem with the keyboard. Set the <i>Keyboard</i> option in Standard CMOS Setup to <i>Not Installed</i> to skip the keyboard POST routines.           |
| KB/Interface Error             | There is an error in the keyboard connector.   |
| Off Board Parity Error         | Parity error in memory installed in an expansion slot. The format is:<br>OFF BOARD PARITY ERROR ADDR (HEX) = (XXXX)<br>XXXX is the hex address where the error occurred. |
| On Board Parity Error          | Parity is not supported on this product, this error will not occur.  |
| Parity Error ????              | Parity error in system memory at an unknown address.   |

## **ISA NMI MESSAGES**

| <i>ISA NMI Message</i>         | <i>Explanation</i>   |
|--------------------------------|--|
| Memory Parity Error at xxxxx   | Memory failed. If the memory location can be determined, it is displayed as xxxxx. If not, the message is <i>Memory Parity Error ????</i> .      |
| I/O Card Parity Error at xxxxx | An expansion card failed. If the address can be determined, it is displayed as xxxxx. If not, the message is <i>I/O Card Parity Error ????</i> . |
| DMA Bus Time-out               | A device has driven the bus signal for more than 7.8 microseconds.   |

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