Advanced/MA Error Messages and Beep Codes

PLEASE NOTE: This motherboard product is no longer being manufactured by Intel. THESE DOCUMENTS ARE PROVIDED FOR HISTORICAL REFERENCE PURPOSES ONLY AND ARE SUBJECT TO THE TERMS SET FORTH IN THE "LEGAL INFORMATION" LINK ON THE INTEL WEBSITE. For information on currently available Intel products, please see http://www.intel.com and/or http://developer.intel.com.

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 AMIBIOS Setup.

BEEP CODES

Beeps	Error Message	Description
1 long, 2 short	No video card found	Applies only to baseboards with no on-bd video.
1 long, 3 short	No Monitor connected	Applies only to baseboards with on-bd video present.
1 long, x short	Video related failure	Other video beep codes may exist and are tied to specific video BIOS implementations. Contact the vendor for details should the need arise.
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	The 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.

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.
INTR #2 Error	Interrupt channel 2 failed POST.

ERROR MESSAGES (cont.)

Invalid Boot Diskette	The BIOS can read the disk in floppy drive A:, but cannot boot the system. Use another boot disk.
Keyboard Is LockedUnlock 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 Keyboard option in Standard CMOS Setup to Not Installed 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:
	OFF BOARD PARITY ERROR ADDR (HEX) = (XXXX)
	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.

PLUG AND PLAY ERROR MESSAGES

Bad PNP Serial ID Checksum	The serial ID checksum of a Plug and Play card was invalid.
Floppy Disk Controller Resource Conflict	The floppy disk controller has requested a resource that is already in use.
NVRAM Checksum Error, NVRAM	The ESCD data was reinitialized because of an NVRAM checksum error. Try rerunning the ICU.
Cleared	
NVRAM Cleared by Jumper	The "Clear CMOS" jumper has been moved to the ON position and CMOS RAM has been
	cleared.
NVRAM Data Invalid, NVRAM Cleared	Invalid entry in the ESCD area.
Parallel Port Resource Conflict	The parallel port has requested a resource that is already in use.
PCI Error Log is Full	This message is displayed when more than 15 PCI conflict errors are detected. No additional PCI errors can be logged.
PCI I/O Port Conflict	Two devices requested the same resource, resulting in a conflict.
PCI IRQ Conflict	Two devices requested the same resource, resulting in a conflict.
Primary Memory Conflict	Two devices requested the same resource, resulting in a conflict.
Primary Boot Device Not Found	The designated primary boot device (hard disk drive, diskette drive, or CD-ROM drive) could not be found.
Primary IDE Controller Resource Conflict	The primary IDE controller has requested a resource that is already in use.
Primary Input Device not Found	The designated primary input device (keyboard, mouse, or other, if input is redirected) could not be found.
Secondary IDE Controller Resource Conflict	The secondary IDE controller has requested a resource that is already in use.
Serial Port 1 Resource Conflict	Serial port 1 has requested a resource that is already in use.
Serial Port 2 Resource Conflict	Serial port 2 has requested a resource that is already in use.
Static Device Resource Conflict	A non-Plug and Play ISA card has requested a resource that is already in use.
System Board Device Resource Conflict	A non Plug and Play system resource has requested a resource that is already in use.

ISA NMI MESSAGES

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

Intel Corporation disclaims all warranties and liabilities for the use of this document and the information contained herein, and assumes no responsibility for any errors which may appear in this document. Intel makes no commitment to update the information contained herein, and may make changes at any time without notice. There are no express or implied licenses granted hereunder to any intellectual property rights of Intel Corporation or others to design or fabricate Intel integrated circuits or integrated circuits based on the information in this document. Contact your local sales office to obtain the latest specifications before placing your order.

Information in this document is provided in connection with Intel products. Intel assumes no liability whatsoever, including infringement of any patent or copyright, for sale and use of Intel products except as provided in Intel's Terms and Conditions of Sale for such products. Intel retains the right to make changes to these specifications at any time, without notice. Microcomputer Products may have minor variations to this specification known as errata.

*Other product and corporate names may be trademarks or registered trademarks of other companies, and are used only for explanation and to the owners' benefit, without intent to infringe.

© INTEL CORPORATION, 1995