BIOS PostCodes:
Acer BIOS Post Codes
ALR BIOS Post Codes
AMIT/AMI BIOS Post Codes
Arche Legacy BIOS Post Codes
AST BIOS Post Codes
AT&T BIOS Post Codes
Award BIOS Post Codes
Chips & Technologies BIOS Post Codes
Compaq BIOS Post Codes
Dell BIOS Post Codes
DTK BIOS Post Codes
Eurosoft/Mylex BIOS Post Codes

Phoenix ISA/MCA/EISA BIOS Beep Codes:

The beep codes are represented in the number of beeps. E.g. 1-1-2 would mean 1 beep, a pause, 1 beep, a pause, and 2 beeps.

- With a Dell computer, a 1-2 beep code can also indicate that a bootable add-in card is installed but no boot device is attached. For example, in you insert a Promise Ultra-66 card but do not connect a hard drive to it, you will get the beep code. I verified this with a SIIG (crap -- avoid like the plague) Ultra-66 card, and then confirmed the results with Dell. Submitted by John Palmer.

Beeps	Error Message	Description
1-1-2	CPU test failure	The CPU is faulty.

System Specific Diagnostic and POST Error Messages:
IBM Diagnostic Error Codes
Compaq Desktop Systems Diagnostic and POST Errors

BIOS Related Pages:
BIOS Data Area
BiosCentral Forums
BIOS Basics
BIOS and Computer Links
BIOS Int 13 Error Codes
BIOS Services

Faraday A-Tease BIOS Post Codes
HP BIOS Post Codes
IBM BIOS Post Codes
Landmark BIOS Post Codes
Microid Research/Mr BIOS Post Codes
NCR BIOS Post Codes
Olivetti BIOS Post Codes
Phillips BIOS Post Codes
Phoenix BIOS Post Codes
Quadtel BIOS Post Codes
Supersoft BIOS Post Codes
Tandon BIOS Post Codes
Zenith BIOS Post Codes

Intel Motherboards:
CA810E
CC820
SE440BX-2
D810E2CB
D810EMO
D815BN
D815EEA

		Replace the CPU
Low 1-1-2	System board select failure	The motherboard is having an undetermined fault. Replace the motherboard
1-1-3	CMOS read/write error	The real time clock/CMOS is faulty. Replace the CMOS if possible
Low 1-1-3	Extended CMOS RAM failure	The extended portion of the CMOS RAM has failed. Replace the CMOS if possible
1-1-4	BIOS ROM checksum error	The BIOS ROM has failed. Replace the BIOS or upgrade if possible
1-2-1	PIT failure	The programmable interrupt timer has failed. Replace if

CMOS Memory Map
Debug Routines
Interrupts

BIOS Beep Codes:
AMI BIOS Beep Codes
AST BIOS Beep Codes
Award BIOS Beep Codes
Compaq BIOS Beep Codes
IBM BIOS Beep Codes
Mylex BIOS Beep Codes
Phoenix BIOS Beep Codes
Quadtel BIOS Beep Codes

Free Stuff:

D815EPEA
D820LP
SE440BX
SR440BX
JN440BX
LB440GX/L440GX
N440BX/NA440BX
OR840
T440BX
RC440BX
VC820

		possible
1-2-2	DMA failure	The DMA controller has failed. Replace the IC if possible
1-2-3	DMA read/write failure	The DMA controller has failed. Replace the IC if possible
1-3-1	RAM refresh failure	The RAM refresh controller has failed
1-3-2	64KB RAM failure	The test of the first 64KB RAM has failed to start
1-3-3	First 64KB RAM failure	The first RAM IC has failed. Replace the IC if possible
1-3-4	First 64KB logic failure	The first RAM control logic has failed
1-4-1	Address line failure	The address line to the first 64KB RAM has failed
1-4-2	Parity RAM failure	The first RAM IC has failed.

Site Comments
Utility Downloads

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My Systems
Site Comments
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		Replace if possible
1-4-3	EISA fail-safe timer test	Replace the motherboard
1-4-4	EISA NMI port 462 test	Replace the motherboard
2-1-1	64KB RAM failure	Bit 0; This data bit on the first RAM IC has failed. Replace the IC if possible
2-1-2	64KB RAM failure	Bit 1; This data bit on the first RAM IC has failed. Replace the IC if possible
2-1-3	64KB RAM failure	Bit 2; This data bit on the first RAM IC has failed. Replace the IC if possible
2-1-4	64KB RAM failure	Bit 3; This data bit on the first RAM IC has failed. Replace the IC if possible

2-2-1	64KB RAM failure	Bit 4; This data bit on the first RAM IC has failed. Replace the IC if possible
2-2-2	64KB RAM failure	Bit 5; This data bit on the first RAM IC has failed. Replace the IC if possible
2-2-3	64KB RAM failure	Bit 6; This data bit on the first RAM IC has failed. Replace the IC if possible
2-2-4	64KB RAM failure	Bit 7; This data bit on the first RAM IC has failed. Replace the IC if possible
2-3-1	64KB RAM failure	Bit 8; This data bit on the first RAM IC has failed. Replace the IC if possible
2-3-2	64KB RAM failure	Bit 9; This data bit on the first RAM IC

		has failed. Replace the IC if possible
2-3-3	64KB RAM failure	Bit 10; This data bit on the first RAM IC has failed. Replace the IC if possible
2-3-4	64KB RAM failure	Bit 11; This data bit on the first RAM IC has failed. Replace the IC if possible
2-4-1	64KB RAM failure	Bit 12; This data bit on the first RAM IC has failed. Replace the IC if possible
2-4-2	64KB RAM failure	Bit 13; This data bit on the first RAM IC has failed. Replace the IC if possible
2-4-3	64KB RAM failure	Bit 14; This data bit on the first RAM IC has failed. Replace the IC if possible

2-4-4	64KB RAM failure	Bit 15; This data bit on the first RAM IC has failed. Replace the IC if possible
3-1-1	Slave DMA register failure	The DMA controller has failed. Replace the controller if possible
3-1-2	Master DMA register failure	The DMA controller had failed. Replace the controller if possible
3-1-3	Master interrupt mask register failure	The interrupt controller IC has failed
3-1-4	Slave interrupt mask register failure	The interrupt controller IC has failed
3-2-2	Interrupt vector error	The BIOS was unable to load the interrupt vectors into memory.

		Replace the motherboard
3-2-3	Reserved	
3-2-4	Keyboard controller failure	The keyboard controller has failed. Replace the IC if possible
3-3-1	CMOS RAM power bad	Replace the CMOS battery or CMOS RAM if possible
3-3-2	CMOS configuration error	The CMOS configuration has failed. Restore the configuration or replace the battery if possible
3-3-3	Reserved	
3-3-4	Video memory failure	There is a problem with the video memory. Replace the video adapter if possible
3-4-1	Video initialization failure	There is a problem with the video adapter.

		Reseat the adapter or replace the adapter if possible
4-2-1	Timer failure	The system's timer IC has failed. Replace the IC if possible
4-2-2	Shutdown failure	The CMOS has failed. Replace the CMOS IC if possible
4-2-3	Gate A20 failure	The keyboard controller has failed. Replace the IC if possible
4-2-4	Unexpected interrupt in protected mode	This is a CPU problem. Replace the CPU and retest
4-3-1	RAM test failure	System RAM addressing circuitry is faulty. Replace the motherboard
4-3-3	Interval timer	The system timer IC has

	channel 2 failure	failed. Replace the IC if possible
4-3-4	Time of day clock failure	The real time clock/CMOS has failed. Replace the CMOS if possible
4-4-1	Serial port failure	A error has occurred in the serial port circuitry
4-4-2	Parallel port failure	A error has occurred in the parallel port circuitry
4-4-3	Math coprocessor failure	The math coprocessor has failed. If possible, replace the MPU

Beeps	**Description**
1-1-1-3	Verify real mode
1-1-2-1	Get CPU type
1-1-2-3	Initialize system hardware
1-1-3-1	Initialize chipset registers with initial values
1-1-3-2	Set in POST flag

1-1-3-3	Initialize CPU registers
1-1-4-1	Initialize cache to initial values
1-1-4-3	Initialize I/O
1-2-1-1	Initialize power management
1-2-1-2	Load alternative registers with initial POST values
1-2-1-3	Jump to UserPatch0
1-2-2-1	Initialize timer initialization
1-2-3-1	8254 timer initialization
1-2-3-3	8237 DMA controller initialization
1-2-4-1	Reset Programmable Interrupt Controller
1-3-1-1	Test DRAM refresh
1-3-1-3	Test 8742 Keyboard Controller
1-3-2-1	Set ES segment register to 4GB
1-3-3-1	Autosize DRAM
1-3-3-3	Clear 512K base memory
1-3-4-1	Test 512K base address lines
1-3-4-3	Test 51K base memory
1-4-1-3	Test CPU bus-clock frequency
1-4-2-1	CMOS RAM read/write failure (this commonly indicates a problem on the ISA bus such as a card not

	seated)
1-4-2-4	Reinitialize the chipset
1-4-3-1	Shadow system BIOS ROM
1-4-3-2	Reinitialize the cache
1-4-3-3	Autosize the cache
1-4-4-1	Configure advanced chipset registers
1-4-4-2	Load alternate registers with CMOS values
2-1-1-1	Set initial CPU speed
2-1-1-3	Initialize interrupt vectors
2-1-2-1	Initialize BIOS interrupts
2-1-2-3	Check ROM copyright notice
2-1-2-4	Initialize manager for PCI Options ROMs
2-1-3-1	Check video configuration against CMOS
2-1-3-2	Initialize PCI bus and devices
2-1-3-3	initialize all video adapters in system
2-1-4-1	Shadow video BIOS ROM
2-1-4-3	Display copyright notice
2-2-1-1	Display CPU type and speed
2-2-1-3	Test keyboard
2-2-2-1	Set key click if enabled
2-2-2-3	Enable keyboard
2-2-3-1	Test for unexpected interrupts

2-2-3-3	Display prompt "Press F2 to enter setup"
2-2-4-1	Test RAM between 512K and 640K
2-3-1-1	Test expanded memory
2-3-1-3	Test extended memory address lines
2-3-2-1	Jump to UserPatch1
2-3-2-3	Enable external and CPU caches
2-3-2-3	Configure advanced cache registers
2-3-3-1	Enable external and CPU caches
2-3-3-2	Initialize SMI handler
2-3-3-3	Display external cache size
2-3-4-1	Display shadow message
2-3-4-3	Display non-disposable segments
2-4-1-1	Display error messages
2-4-1-3	Check for configuration errors
2-4-2-1	Test real-time clock
2-4-2-3	Check for keyboard errors
2-4-4-1	Setup hardware interrupt vectors
2-4-4-3	Test coprocessor if present
3-1-1-1	Disable onboard I/O ports
3-1-1-3	Detect and install external RS232 ports

3-1-2-1	Detect and install external parallel ports
3-1-2-3	Reinitialize onboard I/O ports
3-1-3-1	Initialize BIOS Data Area
3-1-3-3	Initialize Extended BIOS Data Area
3-1-4-1	Initialize floppy controller
3-2-1-1	Initialize hard disk controller
3-2-1-2	Initialize local bus hard disk controller
3-2-1-3	Jump to UserPatch2
3-2-2-1	Disable A20 address line
3-2-2-3	Clear huge ES segment register
3-2-3-1	Search for option ROMs
3-2-3-3	Shadow option ROMs
3-2-4-1	Setup power management
3-2-4-3	Enable hardware interrupts
3-3-1-1	Set time of day
3-3-1-3	Check key lock
3-3-3-1	Erase F2 prompt
3-3-3-3	Scan for F2 keystroke
3-3-4-1	Enter SETUP
3-3-4-3	Clear in-POST flag
3-4-1-1	Check for errors
3-4-1-3	POST done - prepare to boot operating system
3-4-2-1	One beep
3-4-2-3	Check password (optional)

3-4-3-1	Clear global descriptor table
3-4-4-1	Clear parity checkers
3-4-4-3	Check virus and backup reminders
4-1-1-1	Try to boot with INT 19
4-2-1-1	Interrupt handler error
4-2-1-3	Unknown interrupt error
4-2-2-1	Pending interrupt error
4-2-2-3	Initialize option ROM error
4-2-3-1	Shutdown error
4-2-3-3	Extended Block Move
4-2-4-1	Shutdown 10 error
4-2-4-3	Keyboard Controller failure (most likely problem is with RAM or cache unless no video is present)
4-3-1-3	Initialize the chipset
4-3-1-4	Initialize refresh counter
4-3-2-1	Check for Forced Flash
4-3-2-2	BIOS ROM is OK
4-3-2-4	Do a complete RAM test
4-3-3-1	Do OEM initialization
4-3-3-2	Initialize interrupt controller
4-3-3-3	Read in bootstrap code
4-3-3-4	Initialize all vectors
4-3-4-2	Initialize the boot device
4-3-4-3	Boot code was read OK