When a computer is switched on it runs through a number of tests called POST, Power On Self Test. Normally if all goes well a single beep will sound (depending on BIOS type).

If there are problems then a beep code will sound to indicate what type of error has occurred. This morse code beeping allows you to identify the error without having to rely on the monitor display working.

There are many motherboard manufacturers so these beep codes may vary from machine to machine.

AMI BIOS BEEP CODES
1 short DRAM refresh failure
2 short Parity circuit failure
3 short Base 64K RAM failure
4 short System timer failure
5 short Process failure
6 short Keyboard controller Gate A20 error
7 short Virtual mode exception error
8 short Display memory Read/Write test failure
9 short ROM BIOS checksum failure
10 short CMOS shutdown Read/Write error
11 short Cache Memory error
1 long, 3 short memory failure
1 long, 8 short Display test failed

AWARD BIOS BEEP CODES
1 long, 2 short Video error
Any other beep(s) RAM problem.

Any other hardware issues a message will be displayed on the monitor.

IBM BIOS
No Beeps No Power
1 Short Beep Normal POST, computer is ok.
2 Short Beep POST error, Screen displays error code.
Continuous Beep No Power.
Repeating Short Beep No Power.
One Long and one Short Beep Motherboard issue.
One Long and Two short Beeps Video (Mono/CGA).
One Long and Three Short Beeps. Video (EGA).
Three Long Beeps Keyboard.
One Beep, Blank or Incorrect Display Video.

MACINTOSH STARTUP TONES
Error Tone. (two sets of different tones) Problem with logic board or SCSI bus.
Startup tone, drive spins, no video Problem with video controller.
Powers on, no tone. Logic board problem.
High Tone, four higher tones. Problem with SIMM.

Phoenix BIOS Beep Codes
Phoenix has a more detailed form of beeping codes, 3 sets of beeps with short pauses in between. beep pause beep beep pause beep would be 1-2-1 code.

1-1-3 Your computer can't read the configuration info stored in the CMOS. Replace the motherboard.
1-1-4 Your BIOS needs to be replaced.
1-2-1 You have a bad timer chip on the motherboard. You need a new motherboard.
1-2-2 The motherboard is bad.
1-2-3 The motherboard is bad.
1-3-1 You'll need to replace the motherboard.
1-3-3 You'll need to replace the motherboard.
1-3-4 The motherboard is bad.
1-4-1 The motherboard is bad.
1-4-2 Some of your memory is bad.
2-_-_ Any combo of beeps after two means that some of your memory is bad, and unless you want to get real technical, you should probably have the guys in the lab coats test the memory for you. Take it to the shop.
3-1-_ One of the chips on your motherboard is broken. You'll likely need to get another board.
3-2-4 One of the chips on your motherboard that checks the keyboard is broken. You'll likely need to get another board.
3-3-4 Your computer can't find the video card. Is it there? If so, try swapping it with another one and see if it works.
3-4-_ Your video card isn't working. You'll need to replace it.
4-2-1 There's a bad chip on the motherboard. You need to buy another board.
4-2-2 First check the keyboard for problems. If nothing, you have a bad motherboard.
4-2-3 Same as 4-2-2.
4-2-4 One of the cards is bad. Try yanking out the cards one by one to isolate the culprit. Replace the bad one. The last possibility is to buy another motherboard.
4-3-1 Replace the motherboard.
4-3-2 See 4-3-1
4-3-3 See 4-3-1
4-3-4 Time of day clock failure. Try running the setup program that comes with the computer. Check the date and time. If that doesn't work, replace the battery. If that doesn't work, replace the power supply. You may have to replace the motherboard, but that is rare.
4-4-1 Your serial ports are acting up. Reseat, or replace, the I/O card. If the I/O is on the motherboard itself, disable them with a jumper (consult your manual to know which one) and then add an I/O card.
4-4-2 See 4-4-1, but this time is your Parallel port that's acting up.
4-4-3 You math coprocessor is having problems. Run a test program to double-check it. If it is indeed bad, disable it, or replace it.
Low 1-1-2 Your motherboard is having problems
Low 1-1-3 This is an Extended CMOS RAM problem, check your motherboard battery, and motherboard.

PHOENIX BIOS BEEP CODES
This is another form of Phoenix Bios beep codes, this time with four sets of beeps.

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 POST values.
1-1-3-2 Set in POST flag.
1-1-3-3 Initialize CPU registers.
1-1-4-1 Initialize cache to initial POST values.

1-1-4-3 Initialize I/O.
1-2-1-1 Initialize Power Management.
1-2-1-2 Load alternate registers with initial POST values.
1-2-1-3 Jump to UserPatch0.
1-2-2-1 Initialize keyboard controller.
1-2-2-3 BIOS ROM checksum.
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 to register to 4 GB.
1-3-3-1 28 Autosize DRAM.
1-3-3-3 Clear 512K base RAM.
1-3-4-1 Test 512 base address lines.
1-3-4-3 Test 512K base memory.
1-4-1-3 Test CPU bus-clock frequency.
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 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 56 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 512 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 Configure advanced cache registers.
2-3-3-1 Enable external and CPU caches.
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 Set up hardware interrupts 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 Re-initialize 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 Set up 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 key stroke.
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 Clear screen (optional).
3-4-4-4 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.
4-3-1-3 Initialize the chipset.
4-3-1-4 Initialize refresh counter.
4-3-2-1 Check for Forced Flash.
4-3-2-2 Check HW status of ROM.
4-3-2-3 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.
4-3-4-1 Boot the Flash program.
4-3-4-2 Initialize the boot device.
4-3-4-3 Boot code was read OK.

IBM POST Diagnostic Code Descriptions
100 - 199
System Board
200 - 299 Memory
300 - 399 Keyboard
400 - 499 Monochrome Display
500 - 599 Color/Graphics Display

600 - 699 Floppy-disk drive and/or Adapter
700 - 799 Math Coprocessor
900 - 999 Parallel Printer Port
1000 - 1099 Alternate Printer Adapter
1100 - 1299 Asynchronous Communication Device, Adapter, or Port
1300 - 1399 Game Port
1400 - 1499 Color/Graphics Printer
1500 - 1599 Synchronous Communication Device, Adapter, or Port
1700 - 1799 Hard Drive and/or Adapter
1800 - 1899 Expansion Unit (XT)
2000 - 2199 Bisynchronous Communication Adapter
2400 - 2599 EGA system-board Video (MCA)
3000 - 3199 LAN Adapter
4800 - 4999 Internal Modem
7000 - 7099 Phoenix BIOS Chips
7300 - 7399 3.5" Disk Drive
8900 - 8999 MIDI Adapter
11200 - 11299 SCSI Adapter
21000 - 21099 SCSI Fixed Disk and Controller
21500 - 21599 SCSI CD-ROM System