

## BIOS Beep Codes

### Beep Codes for these BIOS Versions

- AMI (American Megatrends') BIOS
- AST Research BIOS
- Award BIOS
- Compaq BIOS
- IBM BIOS
- Mylex BIOS
- Mylex 386 BIOS
- Phoenix BIOS
- Quadtel BIOS

AMI (American Megatrends') BIOS	
Beep Codes	Message
one short	DRAM refresh failure (Problem with memory)
two short	Parity circuit failure
three short	Base 64K RAM failure
four short	System Timer failure
five short	Processor failure
six short	Keyboard Controller / Gate A20 failure
seven short	Virtual Mode Exception error
eight short	Display Memory Read/Write failure (fault with video card)
nine short	ROM BIOS Checksum error (fault with BIOS chip)
ten short	CMOS Shutdown Read/Write error
eleven short	Cache memory
one long	Passed (no errors)
one long, two short	Video failure
one long, three short	Base / Extended Memory failure
one long, eight short	Display / Retrace Test failure

## A-2-B COMPUTER SERVICES

AST Research BIOS	
Beep Codes	Message
one short	Low level processor verification test failed (POST 1)
two short	Clearing keyboard controller buffers failed (POST 2)
three short	Keyboard controller reset failed (POST 3)
four short	Low level keyboard controller interface test (POST 4)
five short	Reading data from keyboard controller failed (POST 5)
six short	System board support chip initialization failed (POST 6)
seven short	Processor register read/write verify test failed (POST 7)
eight short	CMOS timer initialization failed (POST 8)
nine short	ROM BIOS checksum test failed (POST 9)
ten short	Initialize primary video (POST 10)
eleven short	8254 timer channel 0 test failed (POST 11)
twelve short	8254 timer channel 1 test failed (POST 12)
thirteen short	8254 timer channel 2 test failed (POST 13)
fourteen short	CMOS power-on and time test failed (POST 14)
fifteen short	CMOS shutdown byte test failed (POST 15)
one long	DMA channel 0 test failed (POST 16)
one long, one short	DMA channel 1 test failed (POST 17)
one long, two short	DMA page register test failed (POST 18)
one long, three short	Keyboard controller interface test failed (POST 19)
one long, four short	Memory refresh toggle test failed (POST 20)
one long, five short	First 64 KB memory test failed (POST 21)
one long, six short	Setup interrupt vector table failed (POST 22)
one long, seven short	Video initialization failed (POST 23)
one long, eight short	Video memory test failed (POST 24)
Award BIOS	
Beep Codes	Message
one short	Passed (no errors)
two short	Any non-fatal error
one long, two short	Video failure

## A-2-B COMPUTER SERVICES

one long, three short	Keyboard Controller failure (applies to 286, 386 and 486)
<b>Compaq BIOS</b>	
Beep Codes	Message
one short	Indicates that the system is booting properly
two short	General BIOS error - remedy unknown
one short, two long	Memory Module
one long, one short	BIOS ROM checksum error
one long, two short	Video error
7 Beeps: one long, one short, one long, one short, pause, one long, two short	AGP Video
one long continuous tone	Memory Module
<b>IBM BIOS</b>	
Beep Codes	Message
none	Power Supply or System Board failure (possible short)
one short	Passed (no errors)
one short (blank screen)	Video error (check cable)
one short (no boot)	Floppy Drive error
two short	Configuration Error (displayed on screen)
repeating short	Power Supply or System Board failure
continuous	Power Supply or System Board / Keyboard stuck
one long, one short	System Board failure
one long, two short	Video (Mono/CGA) failure (check cable)
one long, three short	Video (EGA) failure (check cable)
three long	Keyboard Card error
<b>Mylex BIOS</b>	
Beep Codes	Message
one	Normal boot
two	Video adapter error
three	Keyboard controller error
four	Keyboard error
five	PIC 0 error

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six	PIC 1 error
seven	DMA page register error
eight	RAM refresh error
nine	RAM data error
ten	RAM parity error
eleven	DMA controller 0 error
twelve	CMOS RAM error
thirteen	DMA controller 1 error
fourteen	CMOS RAM battery error
fifteen	CMOS RAM checksum error
sixteen	BIOS ROM checksum error
<b>Mylex 386 BIOS</b>	
Beep Codes	Message
one long	Normal boot
two long	Video adapter error
one long, one short, one long	Keyboard controller error
one long, two short, one long	Keyboard error
one long, three short, one long	PIC 0 error
one long four short, one long	PIC 1 error
one long, five short, one long	DMA page register error
one long, six short, one long	RAM refresh error
one long, seven short, one long	RAM data error
one long, eight short, one long	RAM parity error
one long, nine short, one long	DMA controller 0 error
one long, ten short, one long	CMOS RAM error
one long, eleven short, one long	DMA controller 1 error
one long, twelve short, one long	CMOS RAM battery error
one long, thirteen short, one long	CMOS RAM checksum error
one long fourteen short, one long	BIOS ROM checksum error
<b>Phoenix BIOS</b>	
Beep Codes	Message

## A-2-B COMPUTER SERVICES

one, one, three	CMOS Read/Write
one, one, four	ROM BIOS Checksum failure
one, two, one	Programmable Interval Timer failure
one, two, two	DMA Initialisation failure
one, two, three	DMA Page Register Read/Write failure
one, three, one	RAM Refresh Verification error
one, three, three	First 64K RAM Chip/Data Line failure
one, three, four	First 64K RAM Odd/Even Logic
one, four, one	First 64K RAM: Address Line
one, four, two	First 64K RAM: Parity failure
one, four, three	Fail-Safe Timer Feature (EISA only)
one, four, four	Software NMI Port failure (EISA only)
two (followed by various combinations)	First 64K RAM Chip/Data Line failure (combinations indicate which bit)
three, one, one	Slave DMA Register failure
three, one, two	Master DMA Register failure
three, one, three	Master Interrupt Mask Register failure
three, one, four	Slave Interrupt Mask Register failure
three, two, four	Keyboard Controller failure
three, three, four	Display Memory failure
three, four, one	Display Retrace failure
three, four, two	Video ROM search proceeding
four, two, one	Timer Tick failure
four, two, two	Shutdown failure
four, two, three	Gate A20 failure
four, two, four	Unexpected Interrupt in Protected Mode
four, three, one	RAM test above 64K failure
four, three, two/three	Programmable Interval Timer, Channel 2 failure
four, three, four	Realtime Clock failure
four, four, one	Serial Port error
four, four, two	Parallel Port error

## A-2-B COMPUTER SERVICES

four, four, three	Math Co-processor failure
(tone) one, one, two	System Board Select
(tone) one, one, three	Extender CMOS RAM
<b>Quadtel BIOS</b>	
<b>Beep Codes</b>	<b>Message</b>
one short	Indicates that the system is booting properly
two short	CMOS IC error
one long, two short	Video error
one long, three short	Peripheral controller error

### \*Disclaimer

***A-2-B Computer Services accepts no responsibility for any damage caused to any computer by using this guide.***