Award Software International®

EliteBIOSTM Version 4.51PG

POST Codes

NOTE:	EISA POST codes are typically output to port address 300h. ISA POST codes are output to port address 80h.		
Code (hex)	Name	Description	
C0	Turn Off Chipset Cache	OEM Specific-Cache control	
1	Processor Test 1	Processor Status (1FLAGS) Verification. Tests the following processor status flags: carry, zero, sign, overflow, The BIOS sets each flag, verifies they are set, then turns each flag off and verifies it is off.	
2	Processor Test 2	Read/Write/Verify all CPU registers except SS, SP, and BP with data pattern FF and 00.	
3	Initialize Chips	Disable NMI, PIE, AIE, UEI, SQWV Disable video, parity checking, DMA Reset math coprocessor	
byte		Clear all page registers, CMOS shutdown Initialize timer 0, 1, and 2, including set EISA timer to a known state Initialize DMA controllers 0 and 1 Initialize interrupt controllers 0 and 1 Initialize EISA extended registers.	
4	Test Memory Refresh Toggle	RAM must be periodically refreshed to keep the memory from decaying. This function ensures that the memory refresh function is working properly.	
5	Blank video, Initialize keyboard	Keyboard controller initialization.	
6	Reserved		
7	Test CMOS Interface and Battery Status	Verifies CMOS is working correctly, detects bad battery.	
BE	Chipset Default Initialization	Program chipset registers with power on BIOS defaults.	
C1	Memory presence test	OEM Specific-Test to size on-board memory	

C5	Early Shadow	OEM Specific-Early Shadow enable for fast boot.
С6	Cache presence test	External cache size detection
8	Setup low memory	Early chip set initialization Memory presence test OEM chip set routines Clear low 64K of memory Test first 64K memory.
9	Early Cache Initialization	Cyrix CPU initialization Cache initialization
А	Setup Interrupt Vector Table	Initialize first 120 interrupt vectors with SPURIOUS_INT_HDLR and initialize INT 00h-1Fh according to INT_TBL
В	Test CMOS RAM Checksum	Test CMOS RAM Checksum, if bad, or insert key pressed, load defaults.
С	Initialize keyboard	Detect type of keyboard controller (optional) Set NUM_LOCK status.
D	Initialize Video Interface	Detect CPU clock. Read CMOS location 14h to find out type of video in use. Detect and Initialize Video Adapter.
E	Test Video Memory	Test video memory, write sign-on message to screen. Setup shadow RAM - Enable shadow
		according to Setup.
F	Test DMA Controller 0	according to Setup. BIOS checksum test. Keyboard detect and initialization
F 10		BIOS checksum test.
	Controller 0 Test DMA	BIOS checksum test.
10	Controller 0 Test DMA Controller 1 Test DMA Page	BIOS checksum test. Keyboard detect and initialization
10	Controller 0 Test DMA Controller 1 Test DMA Page Registers	BIOS checksum test. Keyboard detect and initialization
10 11 12-13	Controller 0 Test DMA Controller 1 Test DMA Page Registers Reserved Test Timer Counter 2	BIOS checksum test. Keyboard detect and initialization Test DMA Page Registers.
10 11 12-13 14	Controller 0 Test DMA Controller 1 Test DMA Page Registers Reserved Test Timer Counter 2 Test 8259-1 Mask	BIOS checksum test. Keyboard detect and initialization Test DMA Page Registers. Test 8254 Timer 0 Counter 2. Verify 8259 Channel 1 masked interrupts by alternately turning off and on the interrupt lines.
10 11 12-13 14 15	Controller 0 Test DMA Controller 1 Test DMA Page Registers Reserved Test Timer Counter 2 Test 8259-1 Mask Bits Test 8259-2 Mask Bits Test Stuck	BIOS checksum test. Keyboard detect and initialization Test DMA Page Registers. Test 8254 Timer 0 Counter 2. Verify 8259 Channel 1 masked interrupts by alternately turning off and on the interrupt lines. Verify 8259 Channel 2 masked interrupts by alternately turning off

	Interrupt Functionality	interrupt occurred.
19	Test Stuck NMI Bits (Parity/IO Check)	Verify NMI can be cleared.
1A		Display CPU clock
1B-1E	Reserved	
1F	Set EISA Mode	If EISA non-volatile memory checksum is good, execute EISA initialization. If not, execute ISA tests an clear EISA mode flag. Test EISA Configuration Memory Integrity (checksum & communication interface).
20	Enable Slot 0	Initialize slot 0 (System Board).
21-2F	Enable Slots 1-15	Initialize slots 1 through 15.
30	Size Base and Extended Memory	Size base memory from 256K to 640K and extended memory above 1MB.
31	Test Base and Extended Memory	Test base memory from 256K to 640K and extended memory above 1MB using various patterns. NOTE: This test is skipped in EISA mode and can be skipped with ESC key in ISA mode.
32	Test EISA Extended Memory	If EISA Mode flag is set then test EISA memory found in slots initialization. NOTE: This test is skipped in ISA mode and can be skipped with ESC key in EISA mode.
33-3B	Reserved	
3C	Setup Enabled	
3D	Initialize & Install Mouse	Detect if mouse is present, initialize mouse, install interrupt vectors.
3E	Setup Cache Controller	Initialize cache controller.
3F	Reserved	
BF	Chipset Initialization	Program chipset registers with Setup values
40		Display virus protect disable or enable
41	Initialize Floppy Drive & Controller	Initialize floppy disk drive controller and any drives.

42	Initialize Hard Drive & Controller	initialize hard drive controller and any drives.
43	Detect & Initialize Serial/Parallel Ports	Initialize any serial and parallel ports (also game port).
44	Reserved	
45	Detect & Initialize Math Coprocessor	Initialize math coprocessor.
46	Reserved	
47	Reserved	
48-4D	Reserved	
4E	Manufacturing POST Loop or Display Messages	Reboot if Manufacturing POST Loop pin is set. Otherwise display any messages (i.e., any non-fatal errors that were detected during POST) and enter Setup.
4F	Security Check	Ask password security (optional).
50	Write CMOS	Write all CMOS values back to RAM and clear screen.
51	Pre-boot Enable	Enable parity checker Enable NMI, Enable cache before boot.
52	Initialize Option ROMs	Initialize any option ROMs present from C8000h to EFFFFh. NOTE: When FSCAN option is enabled, ROMs initialize from C8000h to F7FFFh.
53	Initialize Time Value	Initialize time value in 40h: BIOS area.
60	Setup Virus Protect	Setup virus protect according to Setup
61	Set Boot Speed	Set system speed for boot
62	Setup NumLock	Setup NumLock status according to Setup
63	Boot Attempt	Set low stack Boot via INT 19h.
В0	Spurious	If interrupt occurs in protected mode.
В1	Unclaimed NMI	If unmasked NMI occurs, display Press F1 to disable NMI, F2 reboot.
E1-EF	Setup Pages	E1- Page 1, E2 - Page 2, etc.
FF	Boot	

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Document Revision 1.3; August 1996. Last updated 11 September 96.