

A POST and Boot Error Messages

Table A-1 lists Power On Self Test (POST) messages, possible causes, and solutions.

Table A-1. POST Messages

Number/Message	Possible Cause	Solution
NO DISKETTE CONTROLLER	If Floppy controller is not found.	Change the configuration.
DISKETTE DRIVE RESET FAILED	The diskette adapter has failed.	Check the diskette adapter.
DISKETTE DRIVE B FAILURE	The B drive failed or is missing.	Check the B drive.
DISKETTE DRIVE A FAILURE	The A drive failed or is missing.	Check the A drive.
DISKETTE READ FAILURE; STRIKE F1 TO RETRY BOOT	The diskette is not formatted or is defective.	Replace the diskette with a formatted diskette and retry.
DISPLAY ADAPTER FAILED USING ALTERNATE	The color/monochrome switch is not set correctly, or the primary video adapter failed.	Change the switch to the correct setting, or check the primary video adapter.
ERRORS FOUND; DISK X FAILED INITIALIZATION	The POST reports hard disk configuration information is incorrect.	Rerun SETUP and enter the correct hard disk information.

Table A-1. POST Messages (Cont'd)

Number/Message	Possible Cause	Solution
ERRORS FOUND; INCORRECT CONFIGURATION INFORMATION; MEMORY SIZE MISCOMPARE	The POST reports the size of base, or the expansion memory, does not agree with configuration information.	Enter correct memory size and rerun SETUP procedure.
FIXED DISK CONFIGURATION FAILURE	The specified configuration is not supported.	Correct the hard disk configuration.
FIXED DISK CONTROLLER FAILURE	The controller card has failed.	Replace controller card.
FIXED DISK X FAILURE (where X =0 or 1)	The hard disk crashed.	Press F1 to reboot or rerun Setup. If this does not work, replace hard disk.
HARD READ FAILURE- STRIKE F1 TO RETRY BOOT	The hard disk failed.	Press F1 to reboot or rerun Setup. If this does not work, replace hard disk.
FDD CONTROLLER FAILURE	Diskette controller failed.	Replace controller card.
FDD A IS NOT INSTALLED	Cannot find diskette controller for drive A.	Install or replace controller card.
FDD B IS NOT INSTALLED	Cannot find diskette controller for drive B.	Install or replace controller card.

Table A-1. POST Messages (Cont'd)

Number/Message	Possible Cause	Solution
KEYBOARD CLOCK LINE FAILURE or KEYBOARD DATA LINE FAILURE	The Keyboard logic failed.	Make sure the kybrd cable is connected correctly.
KEYBOARD STUCK KEY FAILURE	The Key(s) is jammed.	Make sure the keyboard is not dirty.
REAL TIME CLOCK FAILURE	The Real-time clock logic failed.	Check battery or field service is required.
TIME-OF-DAY NOT SET- RUN SETUP PROGRAM	The Real-time clock time-of-day is not running.	Run SETUP utility.
BIOS XXXX ROM BAD CHECKSUM (where XXXX=C8000 to E0000)	The optional ROM checksum is bad.	Replace Add-on card.
DISKETTE READ FAILURE, or NOT A BOOT DISKETTE, or NO BOOT DEVICE AVAILABLE	If Boot from floppy diskette failed.	Replace the diskette with a bootable diskette and retry.
DECREASING AVAILABLE MEMORY, or MEMORY FAILURE AT AAAAAAAA READ XXXX EXPECTING YYYYY (where AAAAAAAA = failing address, XXXX=data read, and YYYYY=data written)	The memory data integrity failed.	Check contact points between memory modules and system board. Replace memory modules if necessary.

B Beep Codes

Beep codes are a series of beeps sent through the speaker that indicate a problem during POST. If text appears on the video screen, the JX30WB has completed POST; any other tone from the speaker indicates something other than a POST error. These tones **are not** described in Table B-1.

The beep error codes are a series of three sets of beeps. The duration of the beep tones are constant, but the length of the pauses between the beeps varies. For example, a 1-3-3 beep code will sound like one beep, a pause, three beeps consecutively, another pause, and then three more beeps.

One beep code is often misunderstood. With no video card installed, or if the video card is failing, the system board will generate a long-short-long-short beep code. This is often interpreted as a 1-2-1 beep code. But POST errors always vary in the length of the pause, and not the duration of the beep tone.

Another way of identifying a POST error is to use a device called a POST-card. This peripheral card is inserted into one of the ISA slots and has an LED (or LCD) read out showing the contents of port 80h.

Table B-1 lists all beep codes and probable causes.

Table B-1. Beep Codes

Beep Code	Contents Port 80h	Description
None	01h	CPU register test in progress.
1-1-3	02h	CMOS read/write failure.
1-1-4	03h	ROM BIOS check failure.
1-2-1	04h	Programmable interval timer failure.
1-2-2	05h	DMA initialization failure.
1-2-3	06h	DMA page register write/read failure.
1-3-1	08h	RAM refresh verification failure.
None	09h	First 64K RAM test in progress.
1-3-3	0Ah	First 64K RAM chip or data line failure (multi-bit).
1-3-4	0Bh	First 64K RAM odd/even logic failure.
1-4-1	0Ch	Address line failure first 64K RAM.
1-4-2	0Dh	Parity failure first 64K RAM.
2-1-1	10h	Bit 0 first 64K RAM failure.
2-1-2	11h	Bit 1 first 64K RAM failure.
2-1-3	12h	Bit 2 first 64K RAM failure.
2-1-4	13h	Bit 3 first 64K RAM failure.
2-2-1	14h	Bit 4 first 64K RAM failure.
2-2-2	15h	Bit 5 first 64K RAM failure.
2-2-3	16h	Bit 6 first 64K RAM failure.

Table B-1. Beep Codes (Cont'd)

Beep Code	Contents Port 80h	Description
2-2-4	17h	Bit 7 first 64K RAM failure.
2-3-1	18h	Bit 8 first 64K RAM failure.
2-3-2	19h	Bit 9 first 64K RAM failure.
2-3-3	1Ah	Bit 10 first 64K RAM failure.
2-2-4	1Bh	Bit 11 first 64K RAM failure.
2-3-1	1Ch	Bit 12 first 64K RAM failure.
2-4-2	1Dh	Bit 13 first 64K RAM failure.
2-4-3	1Eh	Bit 14 first 64K RAM failure.
2-4-4	1Fh	Bit 15 first 64K RAM failure.
3-1-1	20h	Slave DMA register failure.
3-1-2	21h	Master DMA register failure.
3-1-3	22h	Master interrupt mask register failure.
3-1-4	23h	Slave interrupt mask register failure.
None	25h	Interrupt vector loading in progress.
3-2-4	27h	Keyboard controller test failure.
None	28h	CMOS power failure and checks calculation in progress.
None	29h	CMOS configuration validation in progress.
3-3-4	2Bh	Screen initialization failure.
3-4-1	2Ch	Screen retrace test failure.

Table B-1. Beep Codes (Cont'd)

Beep Code	Contents Port 80h	Description
3-4-2	2Dh	Search for video ROM in progress.
None	2Eh	Screen running with video ROM.
None	30h	Screen operable.
None	30h	Screen running with video ROM.
None	31h	Monochrome monitor operable.
None	32h	Color monitor (40 column) operable.
None	33h	Color monitor (80 column) operable.

C Hard Disk Types

Table C-1 lists the hard disk types compatible with the JX30WB.

Table C-1. Hard Disk Types

Type	Cyl	Hd	Pre	Lz	Sec	Size
1	306	4	128	305	17	10
2	980	5	-1	-1	17	40
3	980	10	-1	-1	17	81
4	872	8	-1	-1	35	119
5	1010	6	-1	-1	55	162
6	987	12	-1	-1	35	202
7	989	12	-1	-1	35	202
8	1010	9	-1	-1	55	244
9	1010	12	-1	-1	55	325
10	989	15	-1	-1	56	405
11	903	4	0	0	46	81
12	903	8	0	0	46	162
13	659	16	0	0	46	236
14	702	16	0	0	63	345
15	Not Valid (Unusable Parameters)					
16	987	16	0	0	63	485
17	1023	16	0	0	63	503
18	895	5	0	0	55	120

Table C-1. Hard Disk Types (Cont'd)

Type	Cyl	Hd	Pre	Lz	Sec	Size
19	904	8	0	0	46	162
20	683	16	0	0	58	309
21	895	10	0	0	55	240
22	904	16	0	0	46	324
23	1023	16	0	0	63	503
24	1024	12	0	0	17	102
25	1001	15	0	0	17	124
26	978	14	0	0	35	233
27	1018	14	0	0	62	431
28	1024	12	0	0	34	204
29	768	14	0	0	62	325
30	1024	16	0	0	63	504
31	1001	15	0	0	34	249
32	936	16	0	0	17	124
33	883	16	0	0	38	262
34	967	16	0	0	63	475
35	790	16	0	0	57	351
36	615	4	-1	615	17	20
37	1024	4	-1	1023	17	34
38	1024	5	-1	1023	17	42
39	989	5	0	989	17	41

Table C-1. Hard Disk Types (Cont'd)

Type	Cyl	Hd	Pre	Lz	Sec	Size
40	1024	8	1024	1024	17	68
41	820	6	-1	820	17	40
42	823	10	256	824	17	68
43	615	8	128	664	17	40
44	1023	15	-1	1023	17	127
45	1024	8	-1	1024	17	68
46	925	9	-1	925	17	69
47	699	7	256	700	17	40
48	User Config.					
49	Auto Config.					

D Specifications

Processor Options	486 SX 25 & 33MHz 486 DX 25 & 33MHz 486 DX2 50 & 66MHz 486 DX4 75 & 100MHz Pentium OverDrive
Chip Set	Micronics X30WB single chip Opti 611A Mode 3 VL IDE controller SMC 665 Super I/O controller
CPU Clock Select	Frequency synthesizer chip for easy upgrade CPU clock selection
Form Factor	Baby AT footprint (8.5" x 13") 4 Layer PCB
Expansion	Two 32-bit VL-Bus/16-bit ISA Five 16-bit ISA slots
RAM Capacity	Four 72-pin (x36 type) SIMM sockets, which accommodate up to 128MB of RAM (using 8Mx36 SIMMs)

Keyboard	Standard AT style DIN connector
BIOS	Phoenix BIOS on 1MB Flash EPROM Mode 3 IDE driver support Auto detection of memory size Auto configuration of IDE hard disk drive types
Cache	8K/16K of on-chip level 1 write-back cache memory
Read Policy	Look aside
Cache Upgrade	Optional 128K, 256K, 512K, or 1MB of secondary cache memory (write-through or write-back)
I/O Ports	Two serial ports One parallel port
Connectors	One floppy interface One keyboard interface
Local Bus IDE	Two resident 40-pin IDE connectors (primary and secondary IDE) Mode 3 support Auto detection of add-in IDE cards Multiple sector transfer support

Battery Disposal

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

ATTENTION: Il y a danger d'explosion s'il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du meme type ou d'un type recommande par le constructeur. Mettre au rebut les batteries usages conforement aux instructions du fabricant.

Environmental Specifications

The environment in which the JX30WB is located is critical. Micronics recommends the following environmental specifications:

Temperature Range

Operating: 50 degrees to 104 degrees Fahrenheit (10 degrees to 50 degrees Celsius).

Non-Operating: 50 degrees to 140 degrees Fahrenheit (10 degrees to 60 degrees Celsius).

Shipping: -22 degrees to 140 degrees Fahrenheit (-30 to 60 degrees Celsius).

Relative Humidity (Non-Condensing)

Operating: 20% to 80%.

Non-Operating: 5% to 90%

Glossary

- BIOS:** Basic Input Output System. Maintains and controls the entire functions of the computer.
- Cache:** Fast memory used to enhance the efficiency and speed of the computer.
- CPU:** Central Processing Unit. Essentially, the “brains” of the computer.
- Disk Drive:** Either a hard disk or a floppy diskette.
- DRAM:** Dynamic Random Access Memory.
- EISA:** Extended Industry Standard Architecture.
- ISA:** Industry Standard Architecture.
- Jumpers:** A device on the system board used to configure certain information on the board.
- POST:** Power On Self Test. The computer’s self-diagnostic test, which is executed whenever the system is booted.
- Setup:** Steps used to configure the system board.
- SIMM:** Single In-line Memory Module. SIMMs are banks of memory used to increase the performance of the computer.
- SRAM:** Static Random Access Memory.

Limited Warranty

Except as described below, Micronics warrants the products to be free from defects in material and workmanship in normal use for a period of one (1) year after date of purchase. Should any product fail to perform according to this warranty at any time during the warranty period, except as provided below, Micronics or its authorized service centers will, at Micronics' option, repair or replace the product at no additional charge.

The warranty does not cover loss or damage which occurs in shipment or which is due to: (1) improper installation or maintenance, misuse, neglect or any cause other than ordinary commercial application, including without limitation, accidents or acts of God; (2) adjustment, repair or modification by other than a Micronics authorized service center; (3) improper environment, excessive or inadequate heating or air conditioning or electrical power failures, surges or other irregularities; (4) any statement about the product other than those set forth in this warranty; or (5) nonconformity to models or samples shown to the purchaser. Any models or samples were for the sole purpose of suggesting the character of the product and are not intended to form the basis of the bargain.

A receipt or copy of the invoice with the date of purchase from a Micronics reseller is required before any warranty service can be rendered. Service can be obtained by calling Micronics for a Return Merchandise Authorization (RMA) Number.

The RMA Number should be prominently displayed on the outside of the shipping carton of the returned product. Returned product should be shipped prepaid or hand carried to Micronics. The purchaser assumes risk of loss or damage in transit and, unless otherwise agreed to in writing by Micronics, will pay inbound shipping charges.

Limited Warranty (Cont'd.)

The exclusive remedy of the purchaser under this warranty above will be repair or replace at Micronics option, but if for any reason that remedy should fail of its essential purpose, the exclusive remedy of the purchaser shall then be actual damages up to amounts paid for the defective product by the purchaser. This limited warranty shall be deemed to “fail of its essential purpose” if, after repeated efforts, Micronics is unable to make the product operate as warranted. Micronics’ liability for damages to the purchaser for any cause whatsoever, regardless of the form of action and whether in contract or in tort, shall be limited to the purchase price in effect when the cause of action arose for the product that is the basis of the claim.

Micronics will not be liable for any lost profits or any indirect, special incidental or consequential damages in connection with the product, even if Micronics has been advised of the possibility of such damages.

Micronics makes no warranties or representations as to performance of products or as to service to distributor or to any person, except as set forth in Micronics; limited warranty accompanying delivery of product.

Micronics disclaims all other warranties whether oral, written, expressed, or implied, including without limitation, the warranties of design, merchantability, or fitness for a particular purpose, if applicable, or arising from a course of dealing, usage or trade practice.

Non-Warranty Service

After the one year warranty service is no longer in effect, service is still available for Micronics products. For more information, contact Micronics' RMA department at (510) 651-2300. The RMA department is open between 8:30 A.M. and 5 P.M. Pacific Standard time.

User's Comment Form: JX30WB

What do you like about this manual?

What would you change in this manual?

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