80486SL/80486DX/80486DX2/80486DX4/Pentium Overdrive **Processor** 

**Processor Speed** 25/33/40/50(internal)/50/66(internal)MHz

**Chip Set** VIA Max. Onboard DRAM 64MB

Cache 64/128/256KB

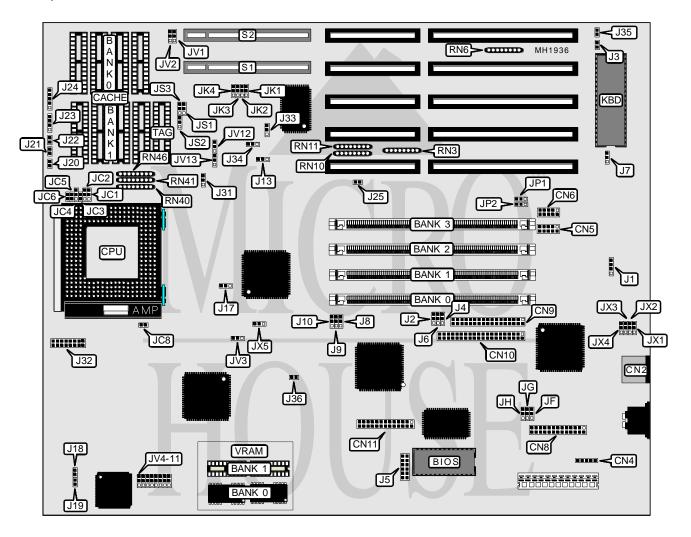
**BIOS** Award

**Dimensions** 330mm x 218mm

32-bit VESA local bus slots (2), floppy drive interface, IDE interface, parallel port, PS/2 I/O Options

mouse port, (2), serial ports (2), VGA feature connector, VGA connector

**NPU Options** None



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CONNECTIONS				
Purpose	Location	Purpose	Location	
PS/2 mouse port (6-pin DIN)	CN2	VGA connector	J5	
PS/2 mouse connector	CN4	Turbo LED	J20	
Serial port 1	CN5	Turbo switch	J21	
Serial port 2	CN6	Reset switch	J22	
Parallel port	CN8	Speaker	J23	
Floppy drive interface	CN9	Power LED & keylock	J24	
IDE interface	CN10	3.3V daughter board (80486DX4 only)	J32	
Video feature connector	CN11	Green status LED	J35	
External battery	J1	Hardware sleep	J36	
Green PC power	J3	32-bit VESA Local bus slot	S1	
IDE interface LED	J4	32-bit VESA Local bus slot	S2	

USER CONFIGURABLE SETTINGS				
Function	Jumper	Position		
í IDE connector pin 27 open	J2	Open		
IDE connector pin 27 linked to IOCHRDY signal	J2	Closed		
í IDE connector pin 28 open	J6	Open		
IDE connector pin 28 linked to BALE signal	J6	Closed		
í CMOS memory normal operation	J7	pins 1 & 2 closed		
CMOS memory clear	J7	pins 2 & 3 closed		
í Factory configured - do not alter	J11	pins 1 & 2 closed		
í Factory configured - do not alter	J25	N/A		
≤ 80486DX4 clock mode 2.5x	J31	pins 1 & 2 closed		
80486DX4 clock mode 2x	J31	pins 2 & 3 closed		
80486DX4 clock mode 3x	J31	Open		
í Factory configured - do not alter	J33	pins 2 & 3 closed		
í Pentium Overdrive write-back	JC8	pins 1 & 2 closed		
Pentium Overdrive write-through	JC8	pins 2 & 3 closed		
í Factory configured - do not alter	JH	pins 2 & 3 closed		
í Factory configured - do not alter	JX6	pins 2 & 3 closed		
1 Video upper physical address decode input select SA (2631)	JV5	pins 1 & 2 closed		
Video upper physical address decode input select SAUP (12)	JV5	pins 2 & 3 closed		
í Video DAC local access enabled	JV6	pins 1 & 2 closed		
Video DAC local access disabled	JV6	pins 2 & 3 closed		
í Video memory address select 256KB	JV11	pins 1 & 2 closed		
Video memory address select 64KB	JV11	pins 2 & 3 closed		
1 Normal operation	JV12	pins 1 & 2 closed		
Other IDE/VGA controller is installed at S1	JV12	pins 2 & 3 closed		
í Normal operation	JV13	pins 1 & 2 closed		
Other IDE/VGA controller is installed at S2	JV13	pins 2 & 3 closed		
1 CPU clock 1x	JX1	pins 1 & 2 closed		
CPU clock 2x	JX1	pins 2 & 3 closed		

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		IDE CONFIGURATION		
IDE	Speed	J8	J9	J10
Enabled	0	pins 2 & 3 closed	pins 2 & 3 closed	pins 1 & 2 closed
Enabled	1	pins 2 & 3 closed	pins 1 & 2 closed	pins 1 & 2 closed
Enabled	2	pins 1 & 2 closed	pins 1 & 2 closed	pins 1 & 2 closed
Disabled	N/A	N/A	N/A	pins 2 & 3 closed

PARALLEL PORT CONFIGURATION				
Port	JG	JH		
Input	pins 1 & 2 closed	pins 1 & 2 closed		
Output	pins 1 & 2 closed	pins 2 & 3 closed		
Bi-directional	pins 2 & 3 closed	N/A		

VRAM CONFIGURATION				
Video IRQ9 JV3 JV4				
í Enabled	í Disabled	pins 2 & 3 closed	pins 1 & 2 closed	
Disabled	Enabled	pins 1 & 2 closed	pins 2 & 3 closed	

VRAM MEMORY CONFIGURATION				
Size Bank 0 Bank 1				
1MB	(2) 512K x 4	NONE		
2MB	(2) 512K x 4	(2) 512K x 4		

	VIDEO MCLK SELECT	
MCLK	J18	J19
í 50MHz	Open	Open
52MHz	Open	Closed
45MHz	Closed	Closed
38MHz	Closed	Open

	MONITOR REFRESH RATE	
Rate	JV7	JV8
í 43Hz interlaced	pins 2 & 3 closed	pins 2 & 3 closed
56Hz non-interlaced	pins 2 & 3 closed	pins 1 & 2 closed
60Hz non-interlaced	pins 1 & 2 closed	pins 2 & 3 closed
70/72Hz non-interlaced	pins 1 & 2 closed	pins 1 & 2 closed

VIDEO INTERLEAVE TIMING				
Select	JV9	JV10		
í 1 NanoSeconds	pins 1 & 2 closed	pins 1 & 2 closed		
2 NanoSeconds	pins 1 & 2 closed	pins 2 & 3 closed		
3 NanoSeconds	pins 2 & 3 closed	pins 1 & 2 closed		
4 NanoSeconds	pins 2 & 3 closed	pins 2 & 3 closed		

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DRAM CONFIGURATION				
Size	Bank 0	Bank 1	Bank 2	Bank 3
1MB	(1) 256K x 36	NONE	NONE	NONE
1MB	NONE	(1) 256K x 36	NONE	NONE
1MB	NONE	NONE	(1) 256K x 36	NONE
2MB	(1) 256K x 36	(1) 256K x 36	NONE	NONE
2MB	(1) 256K x 36	NONE	(1) 256K x 36	NONE
2MB	NONE	NONE	(1) 256K x 36	(1) 256K x 36
3MB	(1) 256K x 36	(1) 256K x 36	(1) 256K x 36	NONE
3MB	NONE	(1) 256K x 36	(1) 256K x 36	(1) 256K x 36
3MB	(1) 256K x 36	NONE	(1) 256K x 36	(1) 256K x 36
4MB	(1) 256K x 36			
4MB	(1) 1M x 36	NONE	NONE	NONE
4MB	NONE	(1) 1M x 36	NONE	NONE
4MB	NONE	NONE	(1) 1M x 36	NONE
5MB	(1) 1M x 36	(1) 256K x 36	NONE	NONE
5MB	(1) 256K x 36	(1) 1M x 36	NONE	NONE
5MB	(1) 256K x 36	NONE	(1) 1M x 36	NONE
5MB	(1) 1M x 36	NONE	(1) 256K x 36	NONE
5MB	NONE	(1) 256K x 36	(1) 4M x 36	NONE
5MB	NONE	(1) 4M x 36	(1) 256K x 36	NONE
6MB	(1) 4M x 36	(1) 256K x 36	(1) 256K x 36	NONE
6MB	(1) 256K x 36	(1) 256K x 36	(1) 1M x 36	NONE
6MB	(1) 1M x 36	(1) 256K x 36	(1) 256K x 36	NONE
6MB	NONE	(1) 1M x 36	(1) 256K x 36	(1) 256K x 36
6MB	(1) 1M x 36	NONE	(1) 256K x 36	(1) 256K x 36
7MB	(1) 1M x 36	(1) 256K x 36	(1) 256K x 36	(1) 256K x 36
7MB	(1) 256K x 36	(1) 1M x 36	(1) 256K x 36	(1) 256K x 36
8MB	(1) 1M x 36	(1) 1M x 36	NONE	NONE
8MB	(1) 1M x 36	NONE	(1) 1M x 36	NONE
8MB	NONE	NONE	(1) 1M x 36	(1) 1M x 36
8MB	NONE	(1) 1M x 36	NONE	(1) 1M x 36
9MB	(1) 256K x 36	(1) 1M x 36	(1) 1M x 36	NONE
9MB	(1) 1M x 36	(1) 256K x 36	(1) 1M x 36	NONE
9MB	(1) 1M x 36	(1) 1M x 36	(1) 256K x 36	NONE
9MB	NONE	(1) 256K x 36	(1) 1M x 36	(1) 1M x 36
9MB	(1) 256K x 36	NONE	(1) 1M x 36	(1) 1M x 36
10MB	(1) 256K x 36	(1) 256K x 36	(1) 1M x 36	(1) 1M x 36
10MB	(1) 1M x 36	(1) 1M x 36	(1) 256K x 36	(1) 256K x 36
12MB	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36	NONE
12MB	NONE	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36

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DRAM CONFIGURATION (continued)				
Size	Bank 0	Bank 1	Bank 2	Bank 3
12MB	(1) 1M x 36	NONE	(1) 1M x 36	(1) 1M x 36
13MB	(1) 256K x 36	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36
13MB	(1) 1M x 36	(1) 256K x 36	(1) 1M x 36	(1) 1M x 36
16MB	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36
16MB	(1) 4M x 36	NONE	NONE	NONE
16MB	NONE	(1) 4M x 36	NONE	NONE
16MB	NONE	NONE	(1) 4M x 36	NONE
17MB	(1) 4M x 36	(1) 256K x 36	NONE	NONE
17MB	(1) 256K x 36	(1) 4M x 36	NONE	NONE
17MB	(1) 256K x 36	NONE	(1) 4M x 36	NONE
17MB	NONE	(1) 4M x 36	(1) 256K x 36	NONE
17MB	NONE	(1) 256K x 36	(1) 4M x 36	NONE
18MB	(1) 4M x 36	(1) 256K x 36	(1) 256K x 36	NONE
18MB	(1) 256K x 36	(1) 256K x 36	(1) 4M x 36	NONE
18MB	(1) 256K x 36	(1) 4M x 36	(1) 256K x 36	NONE
18MB	NONE	(1) 4M x 36	(1) 256K x 36	(1) 256K x 36
19MB	(1) 4M x 36	(1) 256K x 36	(1) 256K x 36	(1) 256K x 36
19MB	(1) 256K x 36	(1) 4M x 36	(1) 256K x 36	(1) 256K x 36
20MB	(1) 4M x 36	(1) 1M x 36	NONE	NONE
20MB	(1) 1M x 36	(1) 4M x 36	NONE	NONE
20MB	(1) 1M x 36	NONE	(1) 4M x 36	NONE
20MB	NONE	(1) 1M x 36	(1) 4M x 36	NONE
20MB	NONE	(1) 4M x 36	(1) 1M x 36	NONE
21MB	(1) 4M x 36	(1) 1M x 36	(1) 256K x 36	NONE
21MB	(1) 256K x 36	(1) 1M x 36	(1) 4M x 36	NONE
21MB	(1) 256K x 36	(1) 4M x 36	(1) 4W x 36	NONE
21MB	(1) 1M x 36	(1) 256K x 36	(1) 4M x 36	NONE
21MB	(1) 1M x 36	(1) 4M x 36	(1) 256K x 36	NONE
22MB	(1) 4M x 36	(1) 1M x 36	(1) 256K x 36	(1) 256K x 36
22MB	(1) 1M x 36	(1) 4M x 36	(1) 256K x 36	(1) 256K x 36
24MB	(1) 4M x 36	(1) 1M x 36	(1) 230K x 30 (1) 1M x 36	NONE
24MB	(1) 4W x 36	(1) 1M x 36	(1) 4M x 36	NONE
24MB	(1) 1M x 36	(1) 4M x 36	(1) 1M x 36	NONE
			: :	
24MB	NONE (1) 256K × 26	(1) 4M x 36	(1) 1M x 36	(1) 1M x 36
25MB	(1) 256K x 36	(1) 4M x 36	(1) 1M x 36	(1) 1M x 36
28MB	(1) 4M x 36	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36
28MB	(1) 1M x 36	(1) 4M x 36	(1) 1M x 36	(1) 1M x 36
32MB	(1) 4M x 36	(1) 4M x 36	NONE	NONE
32MB	NONE	(1) 4M x 36	(1) 4M x 36	NONE
32MB	NONE	NONE	(1) 4M x 36	(1) 4M x 36
33MB	(1) 4M x 36	(1) 4M x 36	(1) 256K x 36	NONE

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DRAM CONFIGURATION (continued)				
Size	Bank 0	Bank 1	Bank 2	Bank 3
33MB	(1) 256K x 36	(1) 4M x 36	(1) 4M x 36	NONE
33MB	NONE	(1) 256K x 36	(1) 4M x 36	(1) 4M x 36
33MB	(1) 256K x 36	NONE	(1) 4M x 36	(1) 4M x 36
34MB	(1) 4M x 36	(1) 4M x 36	(1) 256K x 36	(1) 256K x 36
34MB	(1) 256K x 36	(1) 256K x 36	(1) 4M x 36	(1) 4M x 36
36MB	(1) 4M x 36	(1) 4M x 36	(1) 1M x 36	NONE
36MB	(1) 1M x 36	(1) 4M x 36	(1) 4M x 36	NONE
36MB	NONE	(1) 1M x 36	(1) 4M x 36	(1) 4M x 36
36MB	(1) 1M x 36	NONE	(1) 4M x 36	(1) 4M x 36
37MB	(1) 256K x 36	(1) 1M x 36	(1) 4M x 36	(1) 4M x 36
37MB	(1) 1M x 36	(1) 256K x 36	(1) 4M x 36	(1) 4M x 36
40MB	(1) 4M x 36	(1) 4M x 36	(1) 1M x 36	(1) 1M x 36
40MB	(1) 1M x 36	(1) 1M x 36	(1) 4M x 36	(1) 4M x 36
48MB	(1) 4M x 36	(1) 4M x 36	(1) 4M x 36	NONE
48MB	NONE	(1) 4M x 36	(1) 4M x 36	(1) 4M x 36
49MB	(1) 256K x 36	(1) 4M x 36	(1) 4M x 36	(1) 4M x 36
52MB	(1) 1M x 36	(1) 4M x 36	(1) 4M x 36	(1) 4M x 36
64MB	(1) 4M x 36			
64MB	(1) 8M x 36	NONE	(1) 8M x 36	NONE

CACHE CONFIGURATION					
Size Bank 0 Bank 1 TAG					
64KB	(4) 8K x 8	(4) 8K x 8	(1) 8K x 8		
128KB	NONE	(4) 32K x 8	(1) 8K x 8		
256KB	(4) 32K x 8	(4) 32K x 8	(1) 32K x 8		

CACHE JUMPER CONFIGURATION					
Size JS1 JS2 JS3					
64KB	pins 1 & 2 closed	pins 1 & 2 closed	pins 1 & 2 closed		
128KB	pins 1 & 2 closed	pins 2 & 3 closed	pins 2 & 3 closed		
256KB	pins 2 & 3 closed	pins 2 & 3 closed	pins 1 & 2 closed		

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	CPU SPEED CONFIGURATION					
Speed	JK1	JK2	JK3	JK4		
25MHz	pins 2 & 3 closed	pins 1 & 2 closed	pins 2 & 3 closed	pins 1 & 2 closed		
33MHz	pins 2 & 3 closed	pins 2 & 3 closed	pins 1 & 2 closed	pins 1 & 2 closed		
40MHz	pins 1 & 2 closed	pins 1 & 2 closed	pins 2 & 3 closed	pins 1 & 2 closed		
50iMHz	pins 2 & 3 closed	pins 1 & 2 closed	pins 2 & 3 closed	pins 1 & 2 closed		
50MHz	pins 2 & 3 closed	pins 1 & 2 closed	pins 2 & 3 closed	pins 2 & 3 closed		
66iMHz	pins 2 & 3 closed	pins 2 & 3 closed	pins 1 & 2 closed	pins 1 & 2 closed		

CPU TYPE CONFIGURATION						
Туре	JC1	JC2	JC3	JC4	JC6	
80486SX	pins 2 & 3	pins 2 & 3	Open	pins 1 & 2	Open	
CX486S	pins 2 & 3	pins 2 & 3	Open	pins 1 & 2	Closed	
CX486S+	pins 1 & 2	pins 1 & 2	Open	pins 1 & 2	Open	
CX487S	pins 1 & 2	pins 1 & 2	Open	pins 1 & 2	Open	
AM486DXL	pins 1 & 2	pins 1 & 2	Open	pins 1 & 2	Closed	
CX486DX	pins 1 & 2	pins 1 & 2	Open	pins 1 & 2	Open	
80486DX	pins 1 & 2	pins 1 & 2	Open	pins 1 & 2	Closed	
80486DX2	pins 1 & 2	pins 1 & 2	Open	pins 1 & 2	Closed	
80486DX4	pins 1 & 2	pins 1 & 2	Open	pins 1 & 2	Closed	
Pentium Overdrive	pins 1 & 2	pins 1 & 2	Closed	pins 2 & 3	Closed	
Note: Pins designat	ed should be in th	e closed position.				

CPU TYPE CONFIGURATION (continued)						
Туре	Type JC5 RN40 RN41					
80486SX	Open	Not installed	Not installed	Not installed		
CX486S	Open	Installed	Not installed	Not installed		
CX486S+	Open	Installed	Not installed	Not installed		
CX487S	Open	Installed	Not installed	Not installed		
AM486DXL	Open	Not installed	Not installed	Installed		
CX486DX	Open	Installed	Not installed	Not installed		
80486DX	Open	Not installed	Not installed	Not installed		
80486DX2	Open	Not installed	Not installed	Not installed		
80486DX4	Closed	Not installed	Installed	Not installed		
Pentium Overdrive	Closed	Not installed	Not installed	Not installed		

CPU TYPE CONFIGURATION (manufacturer)					
Type J17 J34					
Intel	Intel pins 1 & 2 closed pins 1 & 2 closed				
Cyrix pins 2 & 3 closed pins 2 & 3 closed					

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CPU TYPE IRQ SELECTION						
Select J13 JX2 JX5						
IRQ15	IRQ15 pins 2 & 3 closed pins 1 & 2 closed pins 1 & 2 closed					
SMI pins 1 & 2 closed pins 2 & 3 closed pins 2 & 3 closed						
Note: Jumper pins 1 & 2 of J13 if JX2 and JX5 are set at SMI and you wish to use the IRQ15 function.						

	KEYBOARD CONFIGURATION					
Select	Select JX3 JX4 RN3 RN6 RN10 RN11					
External	External pins 1 & 2 pins 1 & 2 Not installed Installed Not installed Installed					
Internal pins 2 & 3 pins 2 & 3 Installed Not installed Installed Not installed						
Note: Pins de	Note: Pins designated should be in the closed position.					

VESA WAIT STATE/BUS SPEED CONFIGURATION					
CPU speed Wait states JV1 JV2					
< 33MHz	0 wait states	pins 2 & 3 closed	pins 2 & 3 closed		
> 33MHz	1 wait state	pins 1 & 2 closed	pins 1 & 2 closed		

PC87332 ECP DMA CHANNEL SELECT					
DREQ DACK JP1 JP2					
1 1 pins 2 & 3 closed pins 2 & 3 closed					
3	3	pins 1 & 2 closed	pins 1 & 2 closed		

NSS87311/312 BASE I/O ADDRESS SELECT				
Index Address Data Address JF				
26Eh 26Fh pins 1 & 2 closed				
398h 399h pins 2 & 3 closed				

NSS87332 BASE I/O ADDRESS SELECT					
Index Address JF JG					
2Eh	2Fh	pins 1 & 2 closed	pins 1 & 2 closed		
26Eh	26Fh	pins 1 & 2 closed	pins 2 & 3 closed		
15Ch	15Dh	pins 2 & 3 closed	pins 1 & 2 closed		
398h	399h	pins 2 & 3 closed	pins 2 & 3 closed		