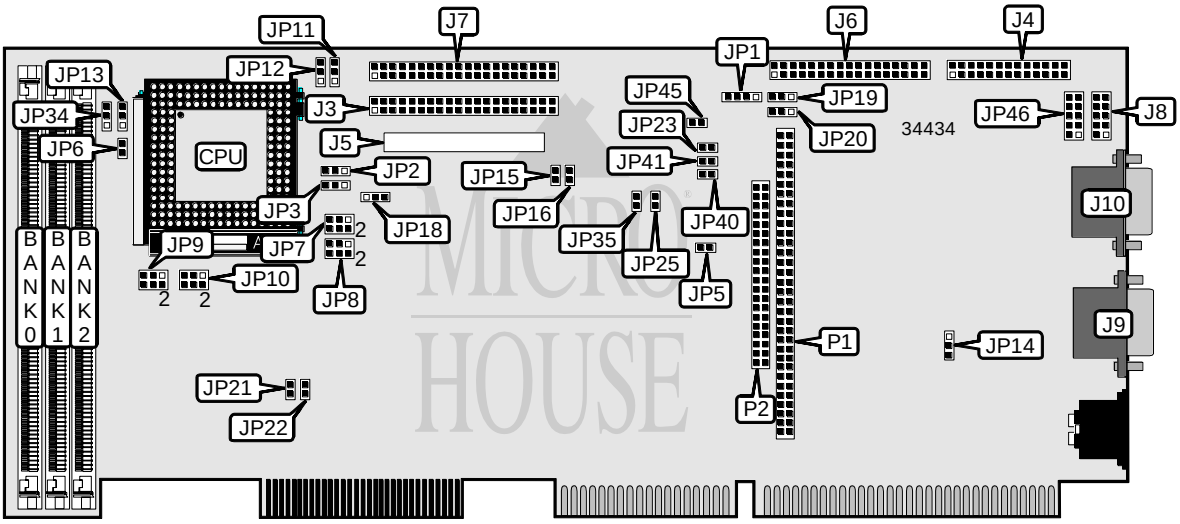
CSS LABORATORIES, INC.
M S - 4 8 6 1

Processor	80486SX/SL80486SX/UMCU5/80486DX/SL80486DX/CXM7/ AM486DX2/AM486DX2+/80486DX2/SL80486DX2/SL80486DX4/ AM486DX5/P24D/CX M1SC/P24T
Processor Speed	33/40/66(internal)80(internal)/100(internal)/133(internal)MHz
Chip Set	ALI
Video Chip Set	Unidentified
Maximum Onboard Memory	128MB
Maximum Video Memory	1MB
Cache	128/256/512KB
BIOS	AMI
Dimensions	Unidentified
I/O Options	Floppy drive interface, IDE interfaces (2), parallel port, serial ports (2), VGA port, PC/104 connectors (2)
NPU Options	None



CONNECTIONS			
Purpose	**Location**	**Purpose**	**Location**
IDE interface 1	J3	Serial port 2	J8
Parallel port	J4	Serial port 1	J9
On board IDE disk connector	J5	VGA port	J10
Floppy drive interface	J6	PC/104 connector	P1
IDE interface 2	J7	PC/104 connector	P2

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USER CONFIGURABLE SETTINGS		
Function	**Label**	**Position**
í Factory configured - do not alter	JP1	Unidentified
í Factory configured - do not alter (flash BIOS select)	JP14	Unidentified
í Factory configured - do not alter	JP23	Unidentified
í Factory configured - do not alter (IDE master)	JP35	Unidentified
í Factory configured - do not alter	JP40	Unidentified
í Factory configured - do not alter	JP41	Unidentified
í Factory configured - do not alter	JP45	Unidentified
í Factory configured - do not alter	JP46	Unidentified

DRAM CONFIGURATION			
Size	**Bank 0**	**Bank 1**	**Bank 2**
4MB	(1) 1M x 36	None	None
8MB	(1) 1M x 36	(1) 1M x 36	None
8MB	(1) 2M x 36	None	None
10MB	(1) 1M x 36	(1) 1M x 36	(1) 512K x 36
10MB	(1) 2M x 36	(1) 512K x 36	None
12MB	(1) 2M x 36	(1) 1M x 36	None
12MB	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36
14MB	(1) 2M x 36	(1) 1M x 36	(1) 512K x 36
16MB	(1) 4M x 36	None	None
16MB	(1) 2M x 36	(1) 2M x 36	None
20MB	(1) 4M x 36	(1) 1M x 36	None
20MB	(1) 4M x 36	(1) 512K x 36	(1) 512K x 36
22MB	(1) 4M x 36	(1) 1M x 36	(1) 512K x 36
24MB	(1) 4M x 36	(1) 2M x 36	None
24MB	(1) 4M x 36	(1) 1M x 36	(1) 1M x 36
26MB	(1) 4M x 36	(1) 2M x 36	(1) 512K x 36
28MB	(1) 4M x 36	(1) 2M x 36	(1) 1M x 36
32MB	(1) 8M x 36	None	None
32MB	(1) 4M x 36	(1) 4M x 36	None
34MB	(1) 8M x 36	(1) 512K x 36	None
34MB	(1) 4M x 36	(1) 4M x 36	(1) 512K x 36
36MB	(1) 8M x 36	(1) 512K x 36	(1) 512K x 36
38MB	(1) 8M x 36	(1) 512K x 36	(1) 1M x 36
40MB	(1) 8M x 36	(1) 2M x 36	None
40MB	(1) 8M x 36	(1) 1M x 36	(1) 1M x 36
42MB	(1) 8M x 36	(1) 2M x 36	(1) 512K x 36
44MB	(1) 8M x 36	(1) 2M x 36	(1) 1M x 36
48MB	(1) 8M x 36	(1) 4M x 36	None
48MB	(1) 4M x 36	(1) 4M x 36	(1) 4M x 36
48MB	(1) 8M x 36	(1) 2M x 36	(1) 2M x 36
50MB	(1) 8M x 36	(1) 4M x 36	(1) 512K x 36

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DRAM CONFIGURATION			
Size	**Bank 0**	**Bank 1**	**Bank 2**
52MB	(1) 8M x 36	(1) 4M x 36	(1) 1M x 36
56MB	(1) 8M x 36	(1) 4M x 36	(1) 2M x 36
64MB	(1) 8M x 36	(1) 4M x 36	(1) 4M x 36
64MB	(1) 16M x 36	None	None
64MB	(1) 8M x 36	(1) 8M x 36	None
66MB	(1) 8M x 36	(1) 8M x 36	(1) 512K x 36
68MB	(1) 8M x 36	(1) 8M x 36	(1) 1M x 36
68MB	(1) 16M x 36	(1) 1M x 36	None
70MB	(1) 16M x 36	(1) 1M x 36	(1) 512K x 36
72MB	(1) 16M x 36	(1) 2M x 36	None
72MB	(1) 16M x 36	(1) 1M x 36	(1) 1M x 36
74MB	(1) 16M x 36	(1) 2M x 36	(1) 512K x 36
76MB	(1) 16M x 36	(1) 2M x 36	(1) 1M x 36
80MB	(1) 16M x 36	(1) 4M x 36	None
80MB	(1) 16M x 36	(1) 2M x 36	(1) 2M x 36
82MB	(1) 16M x 36	(1) 4M x 36	(1) 512K x 36
84MB	(1) 16M x 36	(1) 4M x 36	(1) 1M x 36
88MB	(1) 16M x 36	(1) 4M x 36	(1) 2M x 36
96MB	(1) 16M x 36	(1) 8M x 36	None
96MB	(1) 16M x 36	(1) 4M x 36	(1) 4M x 36
98MB	(1) 16M x 36	(1) 8M x 36	(1) 512K x 36
100MB	(1) 16M x 36	(1) 8M x 36	(1) 1M x 36
104MB	(1) 16M x 36	(1) 8M x 36	(1) 2M x 36
112MB	(1) 16M x 36	(1) 8M x 36	(1) 4M x 36
128MB	(1) 16M x 36	(1) 16M x 36	None
128MB	(1) 16M x 36	(1) 8M x 36	(1) 8M x 36
Note: Board accepts x 32 SIMMs. 512KB x 32/36 is not recommended.			

CACHE CONFIGURATION		
Size	**Bank 0**	**TAG**
128KB	(4) 32K x 8	(1) 32K x 8
256KB	(4) 64K x 8	(1) 32K x 8
512KB	(4) 128K x 8	(1) 32K x 8
Note: The location of bank 0 & the TAG is unidentified.		

CACHE JUMPER CONFIGURATION		
Size	**JP21**	**JP22**
128KB	Open	Open
256KB	Open	Closed
512KB	Closed	Closed

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VIDEO MEMORY CONFIGURATION	
Size	**Bank 0**
1MB	(2) 256K x 16
Note: The location of bank 0 is unidentified.	

CPU SPEED SELECTION				
Speed	**JP15**	**JP16**	**JP18**	**JP25**
33MHz	Closed	Open	Pins 1 & 2 closed	Open
40MHz	Open	Closed	Pins 2 & 3 closed	Closed
66iMHz	Closed	Open	Pins 1 & 2 closed	Open
80iMHz	Open	Closed	Pins 2 & 3 closed	Closed
100iMHz	Closed	Open	Pins 1 & 2 closed	Open
133iMHz	Closed	Open	Pins 1 & 2 closed	Open

CPU TYPE SELECTION					
Type	**JP5**	**JP6**	**JP7**	**JP8**	**JP9**
80486SX	Open	Open	1 & 2	Open	Open
SL80486SX	Closed	Open	3 & 4	3 & 4	3 & 4
UMC U5	Open	Open	1 & 2	1 & 2	1 & 2
80486DX	Open	Open	1 & 2	Open	Open
SL80486DX	Closed	Open	3 & 4	3 & 4	3 & 4
CX M7	Closed	Open	5 & 6	5 & 6	5 & 6
AM486DX2	Open	Closed	1 & 2	Open	Open
AM486DX2-66	Open	Closed	1 & 2	Open	Open
AM486DX2-80	Open	Closed	1 & 2	Open	Open
AM486DX2-100	Open	Closed	1 & 2	Open	Open
AM486DX2+-66	Closed	Open	3 & 4	3 & 4	3 & 4
AM486DX2+-80	Closed	Open	3 & 4	3 & 4	3 & 4
AM486DX2+-100	Closed	Open	3 & 4	3 & 4	3 & 4
80486DX2	Open	Open	1 & 2	Open	Open
SL80486DX2	Closed	Open	3 & 4	3 & 4	3 & 4
SL80486DX4	Closed	Open	3 & 4	3 & 4	3 & 4
AM486DX5	Open	Open	1 & 2	Open	Open
P24D	Closed	Open	3 & 4	3 & 4	3 & 4
CX M1SC	Closed	Open	3 & 4	3 & 4	3 & 4
P24T	Closed	Open	3 & 4	3 & 4	3 & 4
Note: Pins designated should be in the closed position.					

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CPU TYPE SELECTION (CON'T)					
Type	**JP10**	**JP11**	**JP12**	**JP13**	**JP34**
80486SX	Open	1 & 2	1 & 2	Open	Open
SL80486SX	Open	1 & 2	1 & 2	Open	Open
UMC U5	Open	1 & 2	1 & 2	Open	Open
80486DX	Open	1 & 2	2 & 3	2 & 3	Open
SL80486DX	Open	1 & 2	2 & 3	2 & 3	Open
CX M7	1 & 2	1 & 2	2 & 3	2 & 3	1 & 2
AM486DX2	Open	1 & 2	2 & 3	2 & 3	Open
AM486DX2-66	Open	1 & 2	2 & 3	2 & 3	Open
AM486DX2-80	Open	1 & 2	2 & 3	2 & 3	Open
AM486DX2-100	Open	1 & 2	2 & 3	2 & 3	Open
AM486DX2+-66	1 & 3, 5 & 6	2 & 3	2 & 3	2 & 3	2 & 3
AM486DX2+-80	1 & 3, 5 & 6	2 & 3	2 & 3	2 & 3	2 & 3
AM486DX2+-100	5 & 6	2 & 3	2 & 3	2 & 3	2 & 3
80486DX2	Open	1 & 2	2 & 3	2 & 3	Open
SL80486DX2	Open	1 & 2	2 & 3	2 & 3	Open
SL80486DX4	Open	1 & 2	2 & 3	2 & 3	Open
AM486DX5	Open	1 & 2	2 & 3	2 & 3	Open
P24D	5 & 6	2 & 3	2 & 3	2 & 3	2 & 3
CX M1SC	5 & 6	2 & 3	2 & 3	2 & 3	2 & 3
P24T	Open	2 & 3	2 & 3	1 & 2	2 & 3
Note: Pins designated should be in the closed position.					

CPU VOLTAGE SELECTION		
Voltage	**JP2**	**JP3**
3.3v	Pins 2 & 3 closed	Pins 2 & 3 closed
3.45v	Pins 2 & 3 closed	Pins 2 & 3 closed
3.6v	Pins 2 & 3 closed	Pins 2 & 3 closed
4v	Pins 2 & 3 closed	Pins 2 & 3 closed
5v	Pins 1 & 2 closed	Pins 1 & 2 closed

DMA CHANNEL SELECTION		
Channel	**JP19**	**JP20**
í 1	Pins 2 & 3 closed	Pins 2 & 3 closed
3	Pins 1 & 2 closed	Pins 1 & 2 closed