GEMLIGHT COMPUTER, LTD.
GMB-486SPS (VER. 1.03)

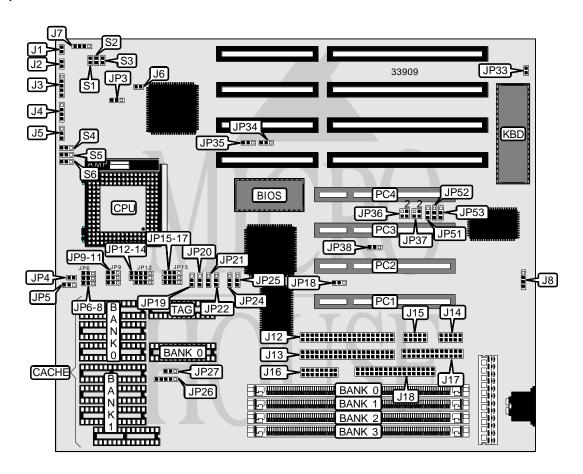|	
Processor	AM486/UMCU5SX/80486SX/SL80486SX/CX486DX/AM486DX/80486DX/CX486DX2/ AM486DX2/(SL)AM486DX2(WB)/(SL)AM486DX2(WT)/ 80486DX2/SL80486DX2/(SL)AM486DX4(WB)/(SL)AM486DX4(WT)/ AM486DX4/ 80486DX4/CXM1SC(WB)/CXM1SC(WT)/P24D/P24T
Processor Speed	20/25/33/40/50(internal)/50/66(internal)/75(internal)/80(internal)/ 100(internal)/120(internal)/133(internal)MHz
Chip Set	Unidentified
Video Chip Set	None
Maximum Onboard Memory	128MB
Maximum Video Memory	None
Cache	64/128/256/512/1024KB
BIOS	Award
Dimensions	250mm x 220mm
I/O Options	32-bit PCI slots (4), floppy drive interface, game interface, green PC connector, IDE interfaces (2), parallel port, serial ports (2)
NPU Options	None

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CONNECTIONS			
Purpose	**Location**	**Purpose**	**Location**
Reset switch	J1	IDE interface 1	J12
Turbo LED	J2	IDE interface 2	J13
Power LED & keylock	J3	Serial port 1	J14
Speaker	J4	Serial port 2	J15
Turbo switch	J5	Game interface	J16
Green PC connector	J6	Parallel port	J17
IDE interface LED	J7	Floppy drive interface	J18
External battery	J8	32-bit PCI slots	PC1 - PC4

USER CONFIGURABLE SETTINGS		
Function	**Label**	**Position**
í Turbo enabled	J5	Pins 2 & 3 closed
Turbo disabled	J5	Pins 1 & 2 closed
í Monitor type select color	JP33	Closed
Monitor type select monochrome	JP33	Open
í CMOS memory normal operation	JP38	Pins 1 & 2 closed
CMOS memory clear	JP38	Pins 2 & 3 closed
í Parallel port IRQ select IRQ7	JP51	Pins 1 & 2 closed
Parallel port IRQ select IRQ5	JP51	Pins 2 & 3 closed

DRAM CONFIGURATION				
Size	**Bank 0**	**Bank 1**	**Bank 2**	**Bank 3**
1MB	(1) 256K x 36	None	None	None
2MB	(1) 256K x 36	(1) 256K x 36	None	None
2MB	(1) 512K x 36	None	None	None
4MB	(1) 256K x 36	(1) 256K x 36	(1) 512K x 36	None
4MB	(1) 512K x 36	(1) 512K x 36	None	None
4MB	(1) 1M x 36	None	None	None
5MB	(1) 256K x 36	(1) 1M x 36	None	None
6MB	(1) 256K x 36	(1) 256K x 36	(1) 1M x 36	None
6MB	(1) 512K x 36	(1) 1M x 36	None	None
8MB	(1) 256K x 36	(1) 256K x 36	(1) 512K x 36	(1) 1M x 36
8MB	(1) 512K x 36	(1) 512K x 36	(1) 1M x 36	None
8MB	(1) 1M x 36	(1) 1M x 36	None	None
8MB	(1) 2M x 36	None	None	None
10MB	(1) 256K x 36	(1) 256K x 36	(1) 1M x 36	(1) 1M x 36
12MB	(1) 512K x 36	(1) 512K x 36	(1) 1M x 36	(1) 1M x 36
12MB	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36	None
12MB	(1) 1M x 36	(1) 2M x 36	None	None
16MB	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36	(1) 1M x 36
16MB	(1) 2M x 36	(1) 2M x 36	None	None
16MB	(1) 4M x 36	None	None	None

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DRAM CONFIGURATION (CON'T)				
Size	**Bank 0**	**Bank 1**	**Bank 2**	**Bank 3**
16MB	(1) 4M x 36	None	None	None
17MB	(1) 256K x 36	(1) 4M x 36	None	None
18MB	(1) 256K x 36	(1) 256K x 36	(1) 4M x 36	None
18MB	(1) 512K x 36	(1) 4M x 36	None	None
20MB	(1) 512K x 36	(1) 512K x 36	(1) 4M x 36	None
20MB	(1) 1M x 36	(1) 4M x 36	None	None
20MB	(1) 1M x 36	(1) 2M x 36	(1) 2M x 36	None
24MB	(1) 512K x 36	(1) 512K x 36	(1) 1M x 36	(1) 4M x 36
24MB	(1) 1M x 36	(1) 1M x 36	(1) 4M x 36	None
24MB	(1) 2M x 36	(1) 2M x 36	(1) 2M x 36	None
24MB	(1) 1M x 36	(1) 1M x 36	(1) 2M x 36	(1) 2M x 36
24MB	(1) 2M x 36	(1) 4M x 36	None	None
28MB	(1) 1M x 36	(1) 2M x 36	(1) 2M x 36	(1) 2M x 36
32MB	(1) 4M x 36	(1) 4M x 36	None	None
32MB	(1) 8M x 36	None	None	None
32MB	(1) 2M x 36	(1) 2M x 36	(1) 4M x 36	None
32MB	(1) 2M x 36	(1) 2M x 36	(1) 2M x 36	(1) 2M x 36
36MB	(1) 512K x 36	(1) 512K x 36	(1) 4M x 36	(1) 4M x 36
36MB	(1) 1M x 36	(1) 4M x 36	(1) 4M x 36	None
36MB	(1) 1M x 36	(1) 8M x 36	None	None
40MB	(1) 1M x 36	(1) 1M x 36	(1) 4M x 36	(1) 4M x 36
40MB	(1) 1M x 36	(1) 1M x 36	(1) 8M x 36	None
40MB	(1) 2M x 36	(1) 2M x 36	(1) 2M x 36	(1) 4M x 36
48MB	(1) 4M x 36	(1) 4M x 36	(1) 4M x 36	None
48MB	(1) 4M x 36	(1) 8M x 36	None	None
48MB	(1) 2M x 36	(1) 2M x 36	(1) 4M x 36	(1) 4M x 36
48MB	(1) 2M x 36	(1) 2M x 36	(1) 8M x 36	None
64MB	(1) 4M x 36	(1) 4M x 36	(1) 4M x 36	(1) 4M x 36
64MB	(1) 16M x 36	None	None	None
64MB	(1) 4M x 36	(1) 4M x 36	(1) 8M x 36	None
64MB	(1) 8M x 36	(1) 8M x 36	None	None
65MB	(1) 256K x 36	(1) 16M x 36	None	None
68MB	(1) 1M x 36	(1) 16M x 36	None	None
68MB	(1) 1M x 36	(1) 8M x 36	(1) 8M x 36	None
72MB	(1) 1M x 36	(1) 1M x 36	(1) 16M x 36	None
72MB	(1) 1M x 36	(1) 1M x 36	(1) 8M x 36	(1) 8M x 36
80MB	(1) 4M x 36	(1) 16M x 36	None	None
80MB	(1) 4M x 36	(1) 8M x 36	(1) 8M x 36	None
80MB	(1) 2M x 36	(1) 2M x 36	(1) 8M x 36	(1) 8M x 36
96MB	(1) 4M x 36	(1) 4M x 36	(1) 16M x 36	None
96MB	(1) 4M x 36	(1) 4M x 36	(1) 8M x 36	(1) 8M x 36
96MB	(1) 8M x 36	(1) 8M x 36	(1) 8M x 36	None
128MB	(1) 16M x 36	(1) 16M x 36	None	None
128MB	(1) 8M x 36	(1) 8M x 36	(1) 8M x 36	(1) 8M x 36

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CACHE CONFIGURATION			
Size	**Bank 0**	**Bank 1**	**TAG**
64KB	(4) 8K x 8	(4) 8K x 8	Unidentified
128KB	(4) 32K x 8	None	Unidentified
256KB (A)	(4) 32K x 8	(4) 32K x 8	Unidentified
256KB (B)	(4) 64K x 8	None	Unidentified
512KB (A)	(4) 64K x 8	(4) 64K x 8	Unidentified
512KB (B)	(4) 128K x 8	None	Unidentified
1MB	(4) 128K x 8	(4) 128K x 8	Unidentified

CACHE JUMPER CONFIGURATION				
Size	**JP19**	**JP24**	**JP25**	**JP26**
64KB	1 & 2	1 & 2	Open	Open
128KB	1 & 2	2 & 3	Open	1 & 2
256KB (A)	1 & 2	2 & 3	Open	2 & 3
256KB (B)	1 & 2	2 & 3	Open	1 & 2, 3 & 4
512KB (A)	2 & 3	2 & 3	Open	2 & 3, 4 & 5
512KB (B)	2 & 3	2 & 3	1 & 2	1 & 2, 4 & 5
1MB	2 & 3	2 & 3	2 & 3	2 & 3, 4 & 5
Note: Pins designated should be in the closed position.				

TAG JUMPER CONFIGURATION				
Size	**JP20**	**JP21**	**JP22**	**JP27**
64KB	Pins 1 & 2 closed	Pins 2 & 3 closed	Pins 1 & 2 closed	Pins 2 & 3 closed
128KB	Pins 2 & 3 closed	Pins 1 & 2 closed	Pins 1 & 2 closed	Pins 2 & 3 closed
256KB (A)	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 2 & 3 closed
256KB (B)	Pins 2 & 3 closed	Pins 1 & 2 closed	Pins 2 & 3 closed	Pins 2 & 3 closed
512KB (A)	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 2 & 3 closed
512KB (B)	Pins 2 & 3 closed	Pins 1 & 2 closed	Pins 2 & 3 closed	Pins 1 & 2 closed
1MB	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 1 & 2 closed

CPU SPEED SELECTION					
Speed	**JP3**	**JP18**	**S1**	**S2**	**S3**
20MHz	1 & 2	1 & 2	Open	Open	Open
25MHz	1 & 2	1 & 2	Closed	Open	Open
33MHz	1 & 2	1 & 2	Closed	Closed	Closed
40MHz	1 & 2	1 & 2	Closed	Closed	Open
50iMHz	1 & 2	1 & 2	Closed	Open	Open
50MHz	2 & 3	1 & 2	Open	Open	Closed
66iMHz	1 & 2	1 & 2	Closed	Closed	Closed
75iMHz	1 & 2	1 & 2	Closed	Open	Open

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CPU SPEED SELECTION (CON'T)					
Speed	**JP3**	**JP18**	**S1**	**S2**	**S3**
80iMHz	1 & 2	1 & 2	Closed	Closed	Open
83iMHz	1 & 2	1 & 2	Closed	Closed	Closed
100iMHz	1 & 2	1 & 2	Closed	Closed	Closed
120iMHz	1 & 2	1 & 2	Closed	Closed	Open
133iMHz	1 & 2	1 & 2	Closed	Closed	Closed
Note: Pins designated should be in the closed position.					

CPU TYPE SELECTION					
Type	**JP4**	**JP5**	**JP6**	**JP7**	**JP8**
AM486	Open	1 & 2	1 & 2	1 & 2	1 & 2
UMC U5SX	Open	Open	2 & 3	Open	2 & 3
80486SX	Open	Open	Open	Open	2 & 3
SL80486SX	Open	Open	1 & 2	Open	2 & 3
CX486DX	Open	Open	1 & 2	2 & 3	2 & 3
AM486DX	Open	2 & 3	1 & 2	1 & 2	2 & 3
80486DX	Open	Open	Open	Open	2 & 3
CX486DX2	Open	Open	1 & 2	2 & 3	2 & 3
AM486DX2	Open	2 & 3	1 & 2	1 & 2	2 & 3
(SL)AM486DX2 (WB)	Open	1 & 2	1 & 2	1 & 2	2 & 3
(SL)AM486DX2 (WT)	Open	2 & 3	1 & 2	1 & 2	2 & 3
80486DX2	Open	Open	Open	Open	2 & 3
SL80486DX2	Open	Open	1 & 2	1 & 2	2 & 3
(SL)AM486DX4 (WB)	Open	1 & 2	1 & 2	1 & 2	2 & 3
(SL)AM486DX4 (WT)	Open	2 & 3	1 & 2	1 & 2	2 & 3
AM486DX4	Open	1 & 2	1 & 2	1 & 2	2 & 3
80486DX4	Open	1 & 2	1 & 2	1 & 2	2 & 3
CX M1SC (WB)	Open	1 & 2	1 & 2	1 & 2	1 & 2
CX M1SC (WT)	Open	2 & 3	1 & 2	1 & 2	1 & 2
P24D	Open	Open	1 & 2	1 & 2	2 & 3
P24T	Open	Open	1 & 2	1 & 2	1 & 2
Note: Pins designated should be in the closed position.					

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CPU TYPE SELECTION (CON'T)				
Type	**JP9**	**JP11**	**JP12**	**JP13**
AM486	Pins 2 & 3 closed	Pins 1 & 2 closed	Pins 2 & 3 closed	Pins 4 & 5 closed
UMC U5SX	Open	Open	Open	Open
80486SX	Open	Open	Open	Open
SL80486SX	Pins 2 & 3 closed	Open	Pins 1 & 2 closed	Pins 4 & 5 closed
CX486DX	Pins 1 & 2 closed	Open	Open	Pins 2 & 3 closed
AM486DX	Pins 2 & 3 closed	Open	Pins 1 & 2 closed	Pins 4 & 5 closed
80486DX	Open	Open	Open	Open
CX486DX2	Pins 1 & 2 closed	Open	Open	Pins 2 & 3 closed
AM486DX2	Pins 2 & 3 closed	Open	Pins 1 & 2 closed	Pins 4 & 5 closed
(SL)AM486DX2 (WB)	Pins 2 & 3 closed	Open	Pins 1 & 2 closed	Pins 4 & 5 closed
(SL)AM486DX2 (WT)	Pins 2 & 3 closed	Open	Pins 1 & 2 closed	Pins 4 & 5 closed
80486DX2	Open	Open	Open	Open
SL80486DX2	Pins 2 & 3 closed	Open	Pins 1 & 2 closed	Pins 4 & 5 closed
(SL)AM486DX4 (WB)	Pins 2 & 3 closed	Open	Pins 1 & 2 closed	Pins 4 & 5 closed
(SL)AM486DX4 (WT)	Pins 2 & 3 closed	Open	Pins 1 & 2 closed	Pins 4 & 5 closed
AM486DX4	Pins 2 & 3 closed	Open	Pins 1 & 2 closed	Pins 4 & 5 closed
80486DX4	Pins 2 & 3 closed	Open	Pins 1 & 2 closed	Pins 4 & 5 closed
CX M1SC (WB)	Pins 2 & 3 closed	Pins 1 & 2 closed	Pins 2 & 3 closed	Pins 4 & 5 closed
CX M1SC (WT)	Pins 2 & 3 closed	Pins 1 & 2 closed	Pins 2 & 3 closed	Pins 4 & 5 closed
P24D	Pins 2 & 3 closed	Open	Pins 1 & 2 closed	Pins 4 & 5 closed
P24T	Pins 2 & 3 closed	Open	Open	Pins 1 & 2 closed
Note: Pins designated should be in the closed position.				

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CPU TYPE SELECTION (CON'T)				
Type	**JP14**	**JP15**	**JP16**	**JP17**
AM486	1 & 2, 3 & 4	3 & 4	1 & 2, 3 & 4	Open
UMC U5SX	1 & 2, 3 & 4	1 & 2, 3 & 4	Open	3 & 4
80486SX	2 & 3	Open	Open	Open
SL80486SX	2 & 3	Open	3 & 4	Open
CX486DX	1 & 2, 3 & 4	3 & 4	2 & 3	2 & 3
AM486DX	1 & 2, 3 & 4	3 & 4	3 & 4	Open
80486DX	1 & 2, 3 & 4	3 & 4	Open	Open
CX486DX2	1 & 2, 3 & 4	3 & 4	2 & 3	2 & 3
AM486DX2	1 & 2, 3 & 4	3 & 4	3 & 4	Open
(SL)AM486DX2 (WB)	1 & 2, 3 & 4	3 & 4	3 & 4	Open
(SL)AM486DX2 (WT)	1 & 2, 3 & 4	3 & 4	3 & 4	Open
80486DX2	1 & 2, 3 & 4	3 & 4	Open	Open
SL80486DX2	1 & 2, 3 & 4	3 & 4	3 & 4	Open
(SL)AM486DX4 (WB)	1 & 2, 3 & 4	3 & 4	3 & 4	Open
(SL)AM486DX4 (WT)	1 & 2, 3 & 4	3 & 4	3 & 4	Open
AM486DX4	1 & 2, 3 & 4	3 & 4	3 & 4	Open
80486DX4	1 & 2, 3 & 4	3 & 4	3 & 4	Open
CX M1SC (WB)	1 & 2, 3 & 4	3 & 4	1 & 2	Open
CX M1SC (WT)	1 & 2, 3 & 4	3 & 4	1 & 2	Open
P24D	1 & 2, 3 & 4	3 & 4	3 & 4	Open
P24T	1 & 2, 3 & 4	2 & 3	3 & 4	1 & 2
Note: Pins designated should be in the closed position.				

CPU MULTIPLIER SELECTION (DX4 ONLY)	
Multiplier	**JP10**
2x	Pins 2 & 3 closed
3x	Open

CPU VOLTAGE SELECTION			
Voltage	**S4**	**S5**	**S6**
3.3v	Pins 1 & 2 closed	Open	Open
3.45v	Open	Pins 1 & 2 closed	Open
3.6v	Open	Open	Pins 1 & 2 closed
4v	Open	Open	Open
5v	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 2 & 3 closed

DMA CHANNEL SELECTION			
Channel	**JP36**	**JP37**	**JP52**	**JP53**
í Printer	Open	Open	Pins 1 & 2 closed	Pins 1 & 2 closed
1	Pins 1 & 3 closed	Pins 1 & 3 closed	Pins 1 & 2 closed	Pins 1 & 2 closed
3	Pins 2 & 4 closed	Pins 2 & 4 closed	Pins 1 & 2 closed	Pins 1 & 2 closed

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FLASH BIOS SELECTION		
Setting	**JP34**	**JP35**
í EPROM	Pins 2 & 3 closed	Pins 2 & 3 closed
5v flash	Pins 2 & 3 closed	Pins 1 & 2 closed
12v flash	Pins 1 & 2 closed	Pins 1 & 2 closed