

ASUS COMPUTER INTERNATIONAL

SP98AGP-X (VER. 1.01 AUDIO)

Device Type	Mainboard
Processor	CX 6X86/IBM 6X86/CX 686MX/IBM 6X86MX/AM K5/ AM K6/Pentium/Pentium MMX
Processor Speed	90/100/120/133/150/166/200/233/266/300MHz
Chip Set	SIS
Video Chip Set	None
Maximum Onboard Memory	768MB (EDO & SDRAM supported)
Maximum Video Memory	None
Cache	512/1024KB
BIOS	Unidentified
Dimensions	305mm x 244mm
I/O Options	32-bit PCI slots (3), floppy drive interface, game/MIDI port, green PC connector, IDE interfaces (2), parallel port, PS/2 mouse port, serial ports (2), IR connector, USB connectors (2), ATX power connector, AGP slot, line in, line out, microphone in, audio in – CD-ROMs (2)
NPU Options	None

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CONNECTIONS			
Purpose	Location	Purpose	Location
AGP slot	AGP	Game/MIDI port	CN1
ATX power connector	ATX	Microphone in	CN2
Power LED & keylock	C1/pins 1 - 5	Line in	CN3
Speaker	C1/pins 7 - 10	Line out	CN4
Message LED	C1/pins 12 & 13	Serial port 2	CN5
Green PC connector	C1/pins 14 & 15	Serial port 1	CN6
Soft off power supply	C1/pins 16 & 17	Parallel port	CN7
Reset switch	C1/pins 19 & 20	USB connector 1	CN8
IDE interface LED	C2	USB connector 2	CN9
Chassis fan power	C3	PS/2 mouse port	CN10
CPU fan power	C4	Floppy drive interface	CN11
Chassis fan power	C5	IDE interface 2	CN12
Wake on LAN connector	C6	IDE interface 1	CN13
Audio in – CD-ROM	C8	IR connector	IR1
Audio in – CD-ROM	C9	32-bit PCI slots	PC1 – PC3

USER CONFIGURABLE SETTINGS		
Function	Label	Position
í Factory configured – do not alter	C7	Unidentified
í Keyboard power select 5v	KBD	Pins 1 & 2 closed
Keyboard power select 5v SB	KBD	Pins 2 & 3 closed
í CMOS memory normal operation	RTC	Pins 1 & 2 closed
CMOS memory clear	RTC	Pins 2 & 3 closed

DIMM CONFIGURATION			
Size	Bank 0	Bank 1	Bank 2
8MB	(1) 1M x 64	None	None
16MB	(1) 1M x 64	(1) 1M x 64	None
16MB	(1) 2M x 64	None	None
24MB	(1) 1M x 64	(1) 1M x 64	(1) 1M x 64
32MB	(1) 2M x 64	(1) 2M x 64	None
32MB	(1) 4M x 64	None	None
48MB	(1) 2M x 64	(1) 2M x 64	(1) 2M x 64
64MB	(1) 4M x 64	(1) 4M x 64	None
64MB	(1) 8M x 64	None	None
96MB	(1) 4M x 64	(1) 4M x 64	(1) 4M x 64

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DIMM CONFIGURATION (CON'T)			
Size	Bank 0	Bank 1	Bank 2
128MB	(1) 8M x 64	(1) 8M x 64	None
128MB	(1) 16M x 64	None	None
136MB	(1) 16M x 64	(1) 1M x 64	None
144MB	(1) 16M x 64	(1) 1M x 64	(1) 1M x 64
144MB	(1) 16M x 64	(1) 2M x 64	None
160MB	(1) 16M x 64	(1) 2M x 64	(1) 2M x 64
160MB	(1) 16M x 64	(1) 4M x 64	None
192MB	(1) 16M x 64	(1) 4M x 64	(1) 4M x 64
192MB	(1) 16M x 64	(1) 8M x 64	None
192MB	(1) 8M x 64	(1) 8M x 64	(1) 8M x 64
256MB	(1) 16M x 64	(1) 8M x 64	(1) 8M x 64
256MB	(1) 16M x 64	(1) 16M x 64	None
256MB	(1) 32M x 64	None	None
264MB	(1) 32M x 64	(1) 1M x 64	None
272MB	(1) 32M x 64	(1) 1M x 64	(1) 1M x 64
272MB	(1) 32M x 64	(1) 2M x 64	None
288MB	(1) 32M x 64	(1) 2M x 64	(1) 2M x 64
288MB	(1) 32M x 64	(1) 4M x 64	None
320MB	(1) 32M x 64	(1) 4M x 64	(1) 4M x 64
320MB	(1) 32M x 64	(1) 8M x 64	None
384MB	(1) 32M x 64	(1) 8M x 64	(1) 8M x 64
384MB	(1) 32M x 64	(1) 16M x 64	None
384MB	(1) 16M x 64	(1) 16M x 64	(1) 16M x 64
512MB	(1) 32M x 64	(1) 16M x 64	(1) 16M x 64
512MB	(1) 32M x 64	(1) 32M x 64	None
768MB	(1) 32M x 64	(1) 32M x 64	(1) 32M x 64

Note: Board accepts EDO & SDRAM memory.

CACHE CONFIGURATION	
Size	Bank 0
512KB	(2) 64K x 32
1MB	(2) 128K x 32

CPU SPEED SELECTION (CX 6X86)								
CPU speed	Clock speed	Multiplier	BF0	BF1	BF2	FS0	FS1	FS2
166MHz	66MHz	2x	2 & 3	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3

Note: Pins designated should be in the closed position.

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CPU SPEED SELECTION (IBM 6X86)								
CPU speed	Clock speed	Multiplier	BF0	BF1	BF2	FS0	FS1	FS2
166MHz	66MHz	2x	2 & 3	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX 6X86MX)								
CPU speed	Clock speed	Multiplier	BF0	BF1	BF2	FS0	FS1	FS2
166MHz	60MHz	2.5x	2 & 3	2 & 3	1 & 2	2 & 3	2 & 3	2 & 3
200MHz	66MHz	2.5x	2 & 3	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3
233MHz	66MHz	3x	1 & 2	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (IBM 6X86MX)								
CPU speed	Clock speed	Multiplier	BF0	BF1	BF2	FS0	FS1	FS2
166MHz	60MHz	2.5x	2 & 3	2 & 3	1 & 2	2 & 3	2 & 3	2 & 3
200MHz	66MHz	2.5x	2 & 3	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3
233MHz	66MHz	3x	1 & 2	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K5)								
CPU speed	Clock speed	Multiplier	BF0	BF1	BF2	FS0	FS1	FS2
90MHz	60MHz	1.5x	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3	2 & 3
100MHz	66MHz	1.5x	1 & 2	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3
120MHz	60MHz	1.5x	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3	2 & 3
133MHz	66MHz	1.5x	1 & 2	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K6)								
CPU speed	Clock speed	Multiplier	BF0	BF1	BF2	FS0	FS1	FS2
166MHz	66MHz	2.5x	2 & 3	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3
200MHz	66MHz	3x	1 & 2	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3
233MHz	66MHz	3.5x	1 & 2	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3
266MHz	66MHz	4x	2 & 3	1 & 2	2 & 3	1 & 2	2 & 3	2 & 3
300MHz	66MHz	4.5x	2 & 3	2 & 3	2 & 3	1 & 2	2 & 3	2 & 3

Note: Pins designated should be in the closed position.

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CPU SPEED SELECTION (INTEL)								
CPU speed	Clock speed	Multiplier	BF0	BF1	BF2	FS0	FS1	FS2
90MHz	60MHz	1.5x	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3	2 & 3
100MHz	66MHz	1.5x	1 & 2	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3
120MHz	60MHz	2x	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3	2 & 3
133MHz	66MHz	2x	2 & 3	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3
150MHz	60MHz	2.5x	2 & 3	2 & 3	1 & 2	2 & 3	2 & 3	2 & 3
166MHz	66MHz	2.5x	2 & 3	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (INTEL MMX)								
CPU speed	Clock speed	Multiplier	BF0	BF1	BF2	FS0	FS1	FS2
166MHz	66MHz	2.5x	2 & 3	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3
200MHz	66MHz	3x	1 & 2	2 & 3	1 & 2	1 & 2	2 & 3	2 & 3
233MHz	66MHz	3.5x	1 & 2	1 & 2	1 & 2	1 & 2	2 & 3	2 & 3

Note: Pins designated should be in the closed position.

CPU VOLTAGE SELECTION (SINGLE)				
Voltage	VID0	VID1	VID2	VID3
3.4v	Pins 2 & 3 closed	Pins 1 & 2 closed	Pins 1 & 2 closed	Pins 1 & 2 closed
3.5v	Pins 1 & 2 closed	Pins 1 & 2 closed	Pins 1 & 2 closed	Pins 1 & 2 closed

CPU VOLTAGE SELECTION (DUAL)				
Voltage	VID0	VID1	VID2	VID3
2.2v	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 1 & 2 closed	Pins 2 & 3 closed
2.8v	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 1 & 2 closed
2.9v	Pins 1 & 2 closed	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 1 & 2 closed
3.2v	Pins 2 & 3 closed	Pins 2 & 3 closed	Pins 1 & 2 closed	Pins 1 & 2 closed