### MICRO-STAR INTERNATIONAL CO., LTD.

### MS-5156

Processor	CX 6X86/CX 6X86L/CX 6X86MX/AM K5/AM K6/Pentium
Processor Speed	90/100/120/133/150/166/200/233/266MHz
Chip Set	Intel
Video Chip Set	None
Maximum Onboard Memory	256MB (EDO supported)
Maximum Video Memory	None
Cache	512KB
BIOS	Unidentified
Dimensions	250mm x 220mm
/O Options	32-bit PCI slots (5), floppy drive interface, green PC connector, IDE IDE
	interfaces (2), parallel port, PS/2 mouse port, PS/2 mouse interface, serial ports
	(2), IR connector, USB connector, ATX power connector

None

**NPU Options** 



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	CONNECTIONS							
Purpose	Location	Purpose	Location					
ATX power connector	ATX	Turbo switch	JFP1/pins 15 - 17					
Serial port 2	CN1	Reset switch	JFP1/pins 19 & 20					
Serial port 1	CN2	IDE interface LED	JFP1/pins 21 & 22					
Floppy drive interface	CN3	Green PC LED	JGL1					
Parallel port	CN4	Green PC connector	JGS1					
IDE interface 2	CN5	IR connector	JIR1					
IDE interface 1	CN6	PS/2 mouse interface	JMS1					
CPU fan	JFAN1	Power fan	JPFAN					
CPU fan	JFAN2	Chassis fan power	JSFAN					
Power LED & keylock	JFP1/pins 1 - 5	32-bit PCI slots	PC1 – PC5					
Speaker	JFP1/pins 7 - 10	USB connector	USB					
Turbo LED	JFP1/pins 12 & 13							

USER CONFIGURABLE SETTINGS						
Function	Label	Position				
í Factory configured - do not alter	J10	Unidentified				
í CMOS memory normal operation	JBAT1	Pins 1 & 2 closed				
CMOS memory clear	JBAT1	Pins 2 & 3 closed				
í Factory configured - do not alter	JRMC1	Unidentified				
í Factory configured - do not alter	JRMS1	Unidentified				
í Factory configured - do not alter	JRMS2	Unidentified				
í Factory configured - do not alter	JV8	Unidentified				

SIMM CONFIGURATION							
Size	Bank 0	Bank 1					
8MB	(2) 1M x 36	None					
16MB	(2) 2M x 36	None					
16MB	(2) 1M x 36	(2) 1M x 36					
24MB	(2) 2M x 36	(2) 1M x 36					
32MB	(2) 4M x 36	None					
32MB	(2) 2M x 36	(2) 2M x 36					
40MB	(2) 4M x 36	(2) 1M x 36					
48MB	(2) 4M x 36	(2) 2M x 36					
64MB	(2) 8M x 36	None					
64MB	(2) 4M x 36	(2) 4M x 36					
72MB	(2) 8M x 36	(2) 1M x 36					
80MB	(2) 8M x 36	(2) 2M x 36					
96MB	(2) 8M x 36	(2) 4M x 36					
128MB	(2) 8M x 36	(2) 8M x 36					
128MB	(2) 16M x 36	None					
136MB	(2) 16M x 36	(2) 1M x 36					

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SIMM CONFIGURATION (CON'T)						
Size	Bank 0	Bank 1				
144MB	(2) 16M x 36	(2) 2M x 36				
160MB	(2) 16M x 36	(2) 4M x 36				
192MB	(2) 16M x 36	(2) 8M x 36				
256MB	(2) 16M x 36	(2) 16M x 36				
Note: Board accepts EDO memory.	Do not install SIMMs & DIMMs at the s	same time. If both are used, DIMMs				
must be 5v.						

	DIMM CONFIGURATION	
Size	Bank 0	Bank 1
8MB	(1) 1M x 64	None
16MB	(1) 2M x 64	None
16MB	(1) 1M x 64	(1) 1M x 64
24MB	(1) 2M x 64	(1) 1M x 64
32MB	(1) 4M x 64	None
32MB	(1) 2M x 64	(1) 2M x 64
40MB	(1) 4M x 64	(1) 1M x 64
48MB	(1) 4M x 64	(1) 2M x 64
64MB	(1) 8M x 64	None
64MB	(1) 4M x 64	(1) 4M x 64
72MB	(1) 8M x 64	(1) 1M x 64
80MB	(1) 8M x 64	(1) 2M x 64
96MB	(1) 8M x 64	(1) 4M x 64
128MB	(1) 16M x 64	None
128MB	(1) 8M x 64	(1) 8M x 64
136MB	(1) 16M x 64	(1) 1M x 64
144MB	(1) 16M x 64	(1) 2M x 64
160MB	(1) 16M x 64	(1) 4M x 64
192MB	(1) 16M x 64	(1) 8M x 64
256MB	(1) 16M x 64	(1) 16M x 64

DIMM VOLTAGE CONFIGURATION				
Voltage	JV1			
3.3v	Pins 1 & 2, 3 & 4 closed			
5v	Pins 5 & 6, 7 & 8 closed			

CACHE CONFIGURATION				
Size	Bank 0			
512KB	(2) 64K x 32			
Note: The location of bank 0 is unidentified.				

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CPU SPEED SELECTION (CX 6X86/6X86L)								
CPU speed Clock speed Multiplier SW1/1 SW1/2 SW1/3 SW1/4 SW1/5						SW1/6		
133MHz	55MHz	2x	On	Off	Off	On	On	Off
150MHz	60MHz	2x	On	Off	Off	On	Off	Off
166MHz	66MHz	2x	On	Off	Off	Off	Off	Off

	CPU SPEED SELECTION (CX 6X86MX)							
CPU speed	Clock speed	Multiplier	SW1/1	SW1/2	SW1/3	SW1/4	SW1/5	SW1/6
166MHz	60MHz	2.5x	On	On	Off	On	Off	Off
166MHz	66MHz	2x	On	Off	Off	Off	Off	Off
200MHz	75MHz	2x	On	Off	Off	Off	On	Off
200MHz	66MHz	2.5x	On	On	Off	Off	Off	Off
233MHz	66MHz	3x	Off	On	Off	Off	Off	Off
233MHz	75MHz	2.5x	On	On	Off	Off	On	Off
266MHz	66MHz	3.5x	Off	Off	Off	Off	Off	Off
266MHz	75MHz	3x	Off	On	Off	Off	On	Off

CPU SPEED SELECTION (AM K6)								
CPU speed Clock speed Multiplier SW1/1 SW1/2 SW1/3 SW1/4 SW1/5						SW1/6		
166MHz	66MHz	2.5x	On	On	Off	Off	Off	Off
200MHz	66MHz	3x	Off	On	Off	Off	Off	Off
233MHz	66MHz	3.5x	Off	Off	Off	Off	Off	Off

CPU SPEED SELECTION (AM K5)								
CPU speed	Clock speed	Multiplier	SW1/1	SW1/2	SW1/3	SW1/4	SW1/5	SW1/6
90MHz	60MHz	1.5x	Off	Off	Off	On	Off	Off
100MHz	66MHz	1.5x	Off	Off	Off	Off	Off	Off
120MHz	60MHz	2x	On	Off	Off	On	Off	Off
133MHz	66MHz	2x	On	Off	Off	Off	Off	Off
150MHz	66MHz	2x	On	Off	Off	Off	Off	Off
166MHz	66MHz	2.5x	On	On	Off	Off	Off	Off

CPU SPEED SELECTION (INTEL)								
CPU speed	Clock speed	Multiplier	SW1/1	SW1/2	SW1/3	SW1/4	SW1/5	SW1/6
90MHz	60MHz	1.5x	Off	Off	Off	On	Off	Off
100MHz	66MHz	1.5x	Off	Off	Off	Off	Off	Off
120MHz	60MHz	2x	On	Off	Off	On	Off	Off
133MHz	66MHz	2x	On	Off	Off	Off	Off	Off
150MHz	60MHz	2.5x	On	On	Off	On	Off	Off
166MHz	66MHz	2.5x	On	On	Off	Off	Off	Off
200MHz	66MHz	3x	Off	On	Off	Off	Off	Off
233MHz	66MHz	3.5x	Off	Off	Off	Off	Off	Off

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CPU VOLTAGE SELECTION (SINGLE)				
Voltage	JV2	JV3	JV4	JV5
3.3v	Closed	Open	Closed	Closed
3.5v	Closed	Closed	Closed	Closed

CPU VOLTAGE SELECTION (DUAL)					
Voltage	V core	JV2	JV3	JV4	JV5
3.3v	2.1v	Closed	Open	Open	Open
3.3v	2.2v	Open	Closed	Open	Open
3.3v	2.3v	Closed	Closed	Open	Open
3.3v	2.4v	Open	Open	Closed	Open
3.3v	2.5v	Closed	Open	Closed	Open
3.3v	2.6v	Open	Closed	Closed	Open
3.3v	2.7v	Closed	Closed	Closed	Open
3.3v	2.8v	Open	Open	Closed	Closed
3.3v	2.9v	Closed	Open	Open	Closed
3.3v	3.2v	Open	Open	Closed	Closed

FLASH BIOS SELECTION					
Setting	JP1	JP2			
5v	Pins 1 & 2 closed	Pins 1 & 2 closed			
í12v	Pins 2 & 3 closed	Pins 2 & 3 closed			