## SHUTTLE COMPUTER INTERNATIONAL, INC.

## HOT-591P

Device Type Mainboard

Processor CX 6X86/IBM 6X86/CX 6X86L/IBM 6X86L/CX 686MX/IBM 6X86MX/IDT C6/AM K5/AM K6/AM

K6-2/Pentium/Pentium MMX

**Processor Speed** 90/100/120/133/150/166/200/233/266/300MHz

Chip Set VIA MVP3

Maximum Onboard Memory 256MB (EDO & SDRAM supported)

Cache 512KB

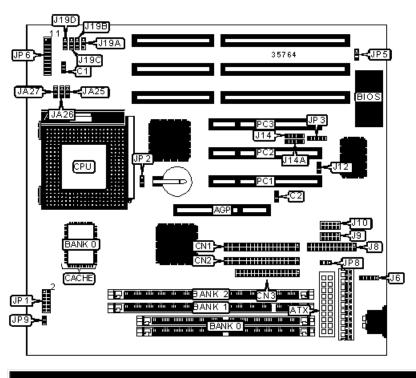
**BIOS** Award

**Dimensions** 220mm x 220mm

I/O Options 32-bit PCI slots (3), floppy drive interface, green PC connector, IDE interfaces (2), parallel

port, PS/2 mouse interface, serial ports (2), IR connector, USB connectors (2), ATX power

connector, AGP slot, wake on LAN connector



CONNECTIONS							
Purpose	Location						
AGP slot	AGP	USB connector 1	J14				
ATX power connector	ATX	USB connector 2	J14A				
CPU fan power	C1	IR connector	JP3				
Chassis fan power	C2	Reset switch	JP6/pins 1 & 2				
IDE interface 2	CN1	IDE interface LED	JP6/pins 3 & 4				

IDE interface 1	CN2	Green PC LED	JP6/pins 5 & 6
Floppy drive interface	CN3	Green PC connector	JP6/pins 7 & 8
PS/2 mouse interface	J6	Soft off power supply	JP6/pins 9 & 10
Parallel port	J8	Speaker	JP6/pins 11 - 15
Serial port 2	19	Power LED & keylock	JP6/pins 17 - 20
Serial port 1	J10	32-bit PCI slots	PC1 – PC3
Wake on LAN connector	J12		

	USER CONFIGURABLE SETTINGS						
	Function	Label	Position				
»	CMOS memory normal operation	JP2	Pins 1 & 2 closed				
	CMOS memory clear	JP2	Pins 2 & 3 closed				
	Flash BIOS voltage select 12v	JP5	Pins 2 & 3 closed				
	Flash BIOS voltage select 5v	JP5	Pins 1 & 2 closed				
	Power supply select AT	JP8	Pins 2 & 3 closed				
	Power supply select ATX	JP8	Pins 1 & 2 closed				

SIMM CONFIGURATION					
Size	Bank 0				
8MB	(2) 1M x 36				
16MB	(2) 2M x 36				
32MB	(2) 4M x 36				
64MB	(2) 8M x 36				
128MB (2) 16M x 36					
Note: Board accepts EDO memory.					

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				

Note: Board accepts SDRAM memory.

Setting	JA25	JP9
Synchronous with system clock	Pins 2 & 3 closed	Open
Synchronous with AGP clock	Pins 1 & 2 closed	Closed

CACHE CONFIGURATION				
Size	Bank 0			
512KB	(1) 64K x 64			

CPU SPEED SELECTION (CX 6X86)						
Clock speed	Multiplier	JA26	JA27	JP1		
60MHz	2x	2 & 3	2 & 3	1 & 2, 3 & 4, 5 & 6, 7 & 8		
66MHz	2x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8		
75MHz	2x	2 & 3	2 & 3	5 & 6, 7 & 8		
	60MHz 66MHz	Clock speed Multiplier 60MHz 2x 66MHz 2x	Clock speed Multiplier JA26  60MHz 2x 2 & 3  66MHz 2x 2 & 3	Clock speed         Multiplier         JA26         JA27           60MHz         2x         2 & 3         2 & 3           66MHz         2x         2 & 3         2 & 3		

CPU SPEED SELECTION (IBM 6X86)						
Clock speed	Multiplier	JA26	JA27	JP1		
60MHz	2x	2 & 3	2 & 3	1 & 2, 3 & 4, 5 & 6, 7 & 8		
66MHz	2x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8		
75MHz	2x	2 & 3	2 & 3	5 & 6, 7 & 8		
	Clock speed 60MHz 66MHz	Clock speed Multiplier 60MHz 2x 66MHz 2x	Clock speed Multiplier JA26 60MHz 2x 2 & 3 66MHz 2x 2 & 3	Clock speed         Multiplier         JA26         JA27           60MHz         2x         2 & 3         2 & 3           66MHz         2x         2 & 3         2 & 3		

CPU SPEED SELECTION (CX 6X86L)						
CPU speed	Clock speed	Multiplier	JA26	JA27	JP1	
150MHz	60MHz	2x	2 & 3	2 & 3	1 & 2, 3 & 4, 5 & 6, 7 & 8	
166MHz	66MHz	2x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8	
200MHz	75MHz	2x	2 & 3	2 & 3	5 & 6, 7 & 8	

CPU SPEED SELECTION (IBM 6X86L)						
Clock speed	Multiplier	JA26	JA27	JP1		
60MHz	2x	2 & 3	2 & 3	1 & 2, 3 & 4, 5 & 6, 7 & 8		
66MHz	2x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8		
75MHz	2x	2 & 3	2 & 3	5 & 6, 7 & 8		
	Clock speed 60MHz 66MHz	Clock speed Multiplier 60MHz 2x 66MHz 2x	Clock speed Multiplier JA26  60MHz 2x 2 & 3  66MHz 2x 2 & 3	Clock speed         Multiplier         JA26         JA27           60MHz         2x         2 & 3         2 & 3           66MHz         2x         2 & 3         2 & 3		

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX 6X86MX)						
CPU speed	Clock speed	Multiplier	JA26	JA27	JP1	
200MHz	66MHz	2.5x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8, 9 & 10	
200MHz	75MHz	2x	2 & 3	2 & 3	5 & 6, 7 & 8	
233MHz	66MHz	3x	2 & 3	2 & 3	3 & 4, 5 & 6, 9 & 10	
233MHz	75MHz	2.5x	2 & 3	2 & 3	5 & 6, 7 & 8, 9 & 10	
266MHz	66MHz	3.5x	2 & 3	2 & 3	3 & 4, 5 & 6	
266MHz	75MHz	3x	2 & 3	2 & 3	5 & 6, 9 & 10	

CPU SPEED SELECTION (IBM 6X86MX)							
CPU speed	Clock speed	Multiplier	JA26	JA27	JP1		
200MHz	66MHz	2.5x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8, 9 & 10		
200MHz	75MHz	2x	2 & 3	2 & 3	5 & 6, 7 & 8		
233MHz	66MHz	3x	2 & 3	2 & 3	3 & 4, 5 & 6, 9 & 10		
233MHz	75MHz	2.5x	2 & 3	2 & 3	5 & 6, 7 & 8, 9 & 10		
266MHz	66MHz	3.5x	2 & 3	2 & 3	3 & 4, 5 & 6		

266MHz	75MHz	3x	2 & 3	2 & 3	5 & 6, 9 & 10			
Note: Pine designated should be in the closed position								

CPU SPEED SELECTION (IDT C6)							
CPU speed Clock speed Multiplier JA26 JA27 JP1							
150MHz	60MHz	2.5x	2 & 3	2 & 3	1 & 2, 3 & 4, 5 & 6, 7 & 8, 9 & 10		
180MHz	60MHz	3x	2 & 3	2 & 3	1 & 2, 3 & 4, 5 & 6, 9 & 10		
200MHz	66MHz	3x	2 & 3	2 & 3	3 & 4, 5 & 6, 9 & 10		
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CPU SPEED SELECTION (AM K5)							
CPU speed Clock speed Multiplier JA26 JA27 JP1							
90MHz	60MHz	1.5x	2 & 3	2 & 3	1 & 2, 3 & 4, 5 & 6		
100MHz	66MHz	1.5x	2 & 3	2 & 3	3 & 4, 5 & 6		
120MHz	60MHz	1.5x	2 & 3	2 & 3	1 & 2, 3 & 4, 5 & 6		
133MHz	66MHz	1.5x	2 & 3	2 & 3	3 & 4, 5 & 6		
166MHz	66MHz	2.5x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8, 9 & 10		

CPU SPEED SELECTION (AM K6)						
CPU speed Clock speed Multiplier JA26 JA27 JP1						
166MHz	66MHz	2.5x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8, 9 & 10	
200MHz	66MHz	3x	2 & 3	2 & 3	3 & 4, 5 & 6, 9 & 10	
233MHz	66MHz	3.5x	2 & 3	2 & 3	3 & 4, 5 & 6	
266MHz	66MHz	4x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8, 11 & 12	
300MHz	66MHz	4.5x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8, 9 & 10, 11 & 12	

CPU SPEED SELECTION (AM K6-2)							
CPU speed Clock speed Multiplier JA26 JA27 JP1							
266MHz	100MHz	2.5x	1 & 2	2 & 3	7 & 8, 9 & 10		
300MHz	100MHz	3x	1 & 2	2 & 3	9 & 10		

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (INTEL)							
CPU speed	Clock speed	Multiplier	JA26	JA27	JP1		
90MHz	60MHz	1.5x	2 & 3	2 & 3	1 & 2, 3 & 4, 5 & 6		
100MHz	66MHz	1.5x	2 & 3	2 & 3	3 & 4, 5 & 6		
120MHz	60MHz	2x	2 & 3	2 & 3	1 & 2, 3 & 4, 5 & 6, 7 & 8		
133MHz	66MHz	2x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8		
150MHz	60MHz	2.5x	2 & 3	2 & 3	1 & 2, 3 & 4, 5 & 6, 7 & 8, 9 & 10		
166MHz	66MHz	2.5x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8, 9 & 10		
200MHz	66MHz	3x	2 & 3	2 & 3	3 & 4, 5 & 6, 9 & 10		

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (INTEL MMX)							
CPU speed Clock speed Multiplier JA26 JA27 JP1							
166MHz	66MHz	2.5x	2 & 3	2 & 3	3 & 4, 5 & 6, 7 & 8, 9 & 10		
200MHz	66MHz	3x	2 & 3	2 & 3	3 & 4, 5 & 6, 9 & 10		
233MHz	66MHz	3.5x	2 & 3	2 & 3	3 & 4, 5 & 6		

Voltage	J19A	J19B	J19C	J19D
Auto	Pins 2 & 3 closed			
2.0v	Open	Open	Open	Open
2.1v	Pins 1 & 2 closed	Open	Open	Open
2.2v	Open	Pins 1 & 2 closed	Open	Open
2.3v	Pins 1 & 2 closed	Pins 1 & 2 closed	Open	Open
2.4v	Open	Open	Pins 1 & 2 closed	Open
2.5v	Pins 1 & 2 closed	Open	Pins 1 & 2 closed	Open
2.6v	Open	Pins 1 & 2 closed	Pins 1 & 2 closed	Open
2.7v	Pins 1 & 2 closed	Pins 1 & 2 closed	Pins 1 & 2 closed	Open
2.8v	Open	Open	Open	Pins 1 & 2 closed
2.9v	Pins 1 & 2 closed	Open	Open	Pins 1 & 2 closed
3.0v	Open	Pins 1 & 2 closed	Open	Pins 1 & 2 closed
3.1v	Pins 1 & 2 closed	Pins 1 & 2 closed	Open	Pins 1 & 2 closed
3.2v	Open	Open	Pins 1 & 2 closed	Pins 1 & 2 closed
3.3v	Pins 1 & 2 closed	Open	Pins 1 & 2 closed	Pins 1 & 2 closed
3.4v	Open	Pins 1 & 2 closed	Pins 1 & 2 closed	Pins 1 & 2 closed
3.52v	Pins 1 & 2 closed			