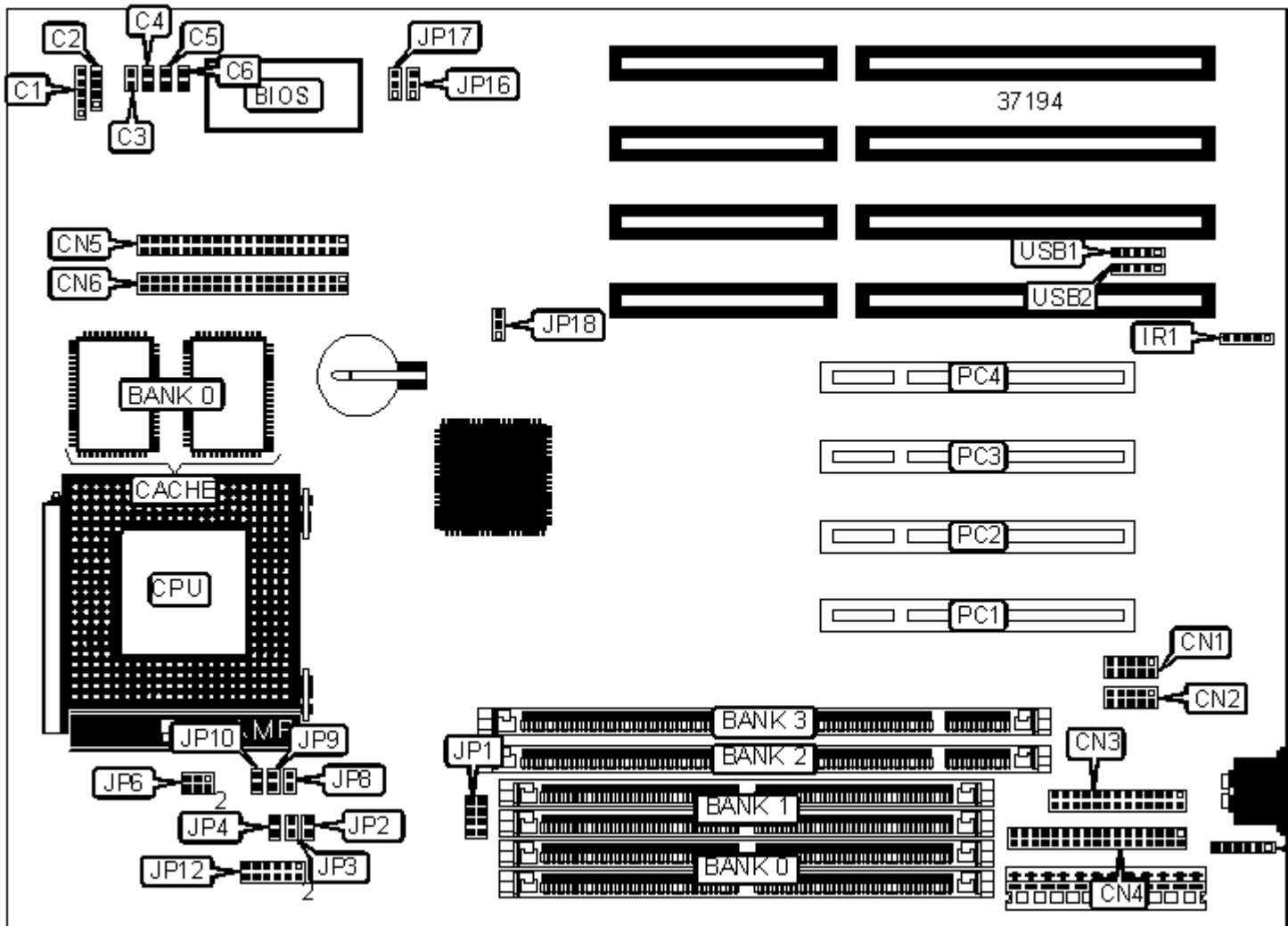


M TECHNOLOGY, INC.

R548 MUSTANG-ULTRA

Device Type	Mainboard
Processor	CX 6X86/IBM 6X86/CX 6X86L/IBM 6X86L/CX 686MX/IBM 6X86MX/ AM K5/AM K6/Pentium/Pentium MMX
Processor Speed	90/100/120/133/150/166/180/200/233/266MHz
Chip Set	SIS
Video Chip Set	None
Maximum Onboard Memory	384MB (EDO & SDRAM supported)
Maximum Video Memory	None
Cache	512KB
BIOS	Award
Dimensions	280mm x 220mm
I/O Options	32-bit PCI slots (4), floppy drive interface, IDE interfaces (2), parallel port, PS/2 mouse interface, serial ports (2), IR connector, USB connectors (2)
NPU Options	None



Purpose	Location	Purpose	Location
Power LED & keylock	C1	Floppy drive interface	CN4
Speaker	C2	IDE interface 2	CN5
Turbo switch	C3	IDE interface 1	CN6
Turbo LED	C4	IR connector	IR1
Reset switch	C5	PS/2 mouse interface	J1
IDE interface LED	C6	32-bit PCI slots	PC1 – PC4
Serial port 2	CN1	USB connector 1	USB1
Serial port 1	CN2	USB connector 2	USB2
Parallel port	CN3		

USER CONFIGURABLE SETTINGS

Function		Label	Position
»	Factory configured - do not alter	JP10	Open
»	CMOS memory normal operation	JP18	Pins 1 & 2 closed
	CMOS memory clear	JP18	Pins 2 & 3 closed

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
Note: Board accepts EDO memory.		

DIMM CONFIGURATION		
Size	Bank 2	Bank 3
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) 8M x 64	(1) 8M x 64
Note: Board accepts EDO & SDRAM memory.		

DIMM VOLTAGE CONFIGURATION	
Voltage	JP1
3.3v	Pins 5 & 6, 7 & 8 closed
5v	Pins 1 & 2, 3 & 4 closed

CACHE CONFIGURATION

Size	Bank 0
512KB	(2) 64K x 32

CPU SPEED SELECTION (CX 6X86)

CPU speed	Clock speed	Multiplier	JP2	JP3	JP4	JP8	JP9
150MHz	60MHz	2x	Closed	Open	Open	Closed	Open
166MHz	66MHz	2x	Open	Open	Open	Closed	Open
200MHz	75MHz	2x	Open	Closed	Closed	Closed	Open

CPU SPEED SELECTION (IBM 6X86)

CPU speed	Clock speed	Multiplier	JP2	JP3	JP4	JP8	JP9
150MHz	60MHz	2x	Closed	Open	Open	Closed	Open
166MHz	66MHz	2x	Open	Open	Open	Closed	Open
200MHz	75MHz	2x	Open	Closed	Closed	Closed	Open

CPU SPEED SELECTION (CX 6X86L)

CPU speed	Clock speed	Multiplier	JP2	JP3	JP4	JP8	JP9
150MHz	60MHz	2x	Closed	Open	Open	Closed	Open
166MHz	66MHz	2x	Open	Open	Open	Closed	Open
200MHz	75MHz	2x	Open	Closed	Closed	Closed	Open

CPU SPEED SELECTION (IBM 6X86L)

CPU speed	Clock speed	Multiplier	JP2	JP3	JP4	JP8	JP9
150MHz	60MHz	2x	Closed	Open	Open	Closed	Open
166MHz	66MHz	2x	Open	Open	Open	Closed	Open
200MHz	75MHz	2x	Open	Closed	Closed	Closed	Open

CPU SPEED SELECTION (CX 6X86MX)

CPU speed	Clock speed	Multiplier	JP2	JP3	JP4	JP8	JP9
166MHz	60MHz	2.5x	Closed	Open	Open	Closed	Closed
200MHz	66MHz	2.5x	Open	Open	Open	Closed	Closed
200MHz	75MHz	3x	Open	Open	Closed	Closed	Open
233MHz	66MHz	3x	Open	Open	Open	Closed	Open
233MHz	75MHz	2.5x	Open	Closed	Closed	Closed	Closed
266MHz	66MHz	3.5x	Open	Open	Open	Closed	Open
266MHz	75MHz	3x	Open	Closed	Closed	Closed	Closed

CPU SPEED SELECTION (IBM 6X86MX)

CPU speed	Clock speed	Multiplier	JP2	JP3	JP4	JP8	JP9
166MHz	60MHz	2.5x	Closed	Open	Open	Closed	Closed
200MHz	66MHz	2.5x	Open	Open	Open	Closed	Closed
200MHz	75MHz	3x	Open	Open	Closed	Closed	Open
233MHz	66MHz	3x	Open	Open	Open	Closed	Open
233MHz	75MHz	2.5x	Open	Closed	Closed	Closed	Closed
266MHz	66MHz	3.5x	Open	Open	Open	Closed	Open
266MHz	75MHz	3x	Open	Closed	Closed	Closed	Closed

CPU SPEED SELECTION (AM K5)

CPU speed	Clock speed	Multiplier	JP2	JP3	JP4	JP8	JP9
90MHz	60MHz	1.5x	Closed	Open	Open	Open	Open
100MHz	66MHz	1.5x	Open	Open	Open	Open	Open
166MHz	66MHz	2.5x	Open	Open	Open	Closed	Open

CPU SPEED SELECTION (AM K6)

CPU speed	Clock speed	Multiplier	JP2	JP3	JP4	JP8	JP9
166MHz	66MHz	2.5x	Open	Open	Open	Closed	Closed
200MHz	66MHz	3x	Open	Open	Open	Open	Closed

233MHz	66MHz	3.5x	Open	Open	Open	Open	Open
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CPU SPEED SELECTION (INTEL)

CPU speed	Clock speed	Multiplier	JP2	JP3	JP4	JP8	JP9
90MHz	60MHz	1.5x	Closed	Open	Open	Open	Open
100MHz	66MHz	1.5x	Open	Open	Open	Open	Open
120MHz	60MHz	2x	Closed	Open	Open	Closed	Open
133MHz	66MHz	2x	Open	Open	Open	Closed	Open
150MHz	60MHz	2.5x	Closed	Open	Open	Closed	Closed
166MHz	66MHz	2.5x	Open	Open	Open	Closed	Closed
180MHz	60MHz	3x	Closed	Open	Open	Open	Closed
200MHz	66MHz	3x	Open	Open	Open	Open	Closed

CPU SPEED SELECTION (INTEL MMX)

CPU speed	Clock speed	Multiplier	JP2	JP3	JP4	JP8	JP9
166MHz	66MHz	2.5x	Open	Open	Open	Closed	Closed
200MHz	66MHz	3x	Open	Open	Open	Open	Closed
233MHz	66MHz	3.5x	Open	Open	Open	Open	Open

CPU VOLTAGE SELECTION (SINGLE)

Voltage	JP6	JP12
3.4v	Pins 3 & 5, 4 & 6 closed	Pins 3 & 4 closed
3.5v	Pins 3 & 5, 4 & 6 closed	Pins 1 & 2 closed

CPU VOLTAGE SELECTION (DUAL)

Voltage	V core	JP6	JP12
3.4v	2.1v	Pins 1 & 3, 2 & 4 closed	Pins 11 & 12 closed
3.4v	2.8v	Pins 1 & 3, 2 & 4 closed	Pins 9 & 10 closed
3.4v	2.9v	Pins 1 & 3, 2 & 4 closed	Pins 7 & 8 closed

3.4v	3.2v	Pins 1 & 3, 2 & 4 closed	Pins 5 & 6 closed
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BIOS SELECTION		
Type	JP16	JP17
1M/12v	Pins 1 & 2 closed	Pins 1 & 2 closed
1M/5v	Pins 1 & 2 closed	Pins 2 & 3 closed