## M TECHNOLOGY, INC.

## R 534

Processor
Processor Speed
Chip Set
Video Chip Set
Maximum Onboard Memory
Maximum Video Memory
Cache
BIOS
Dimensions
I/O Options

CX M1/IBM/AM K5/Pentium
75/90/100/120/133/150/166/180/200MHz
SIS
None
384MB (EDO supported)
None
256/512KB
Award
$280 \mathrm{~mm} \times 220 \mathrm{~mm}$
32-bit PCI slots (3), floppy drive interface, IDE interfaces (2), parallel port, PS/2 mouse interface, serial ports (2), USB connectors (2), IR connector
None


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| CONNECTIONS |  |  |  |
| :--- | :---: | :--- | :---: |
| Purpose | Location | Purpose | Location |
| Floppy drive interface | CN1 | Speaker | J 2 |
| IDE interface 2 | CN2 | PS/2 mouse interface | J 3 |
| IDE interface 1 | CN3 | Turbo LED | J 4 |
| Parallel port | CN4 | Reset switch | J 5 |
| Serial port 2 | CN5 | IDE interface LED | J 6 |
| Serial port 1 | CN6 | Green PC LED | J 7 |
| USB connector 2 | CN7 | Turbo switch | J 8 |
| USB connector 1 | CN8 | 32-bit PCI slots | PC1 - PC3 |
| Power LED \& keylock | J1 | IR connector | XJP1 |


| USER CONFIGURABLE SETTINGS |  |  |
| :---: | :---: | :---: |
| Function | Label | Position |
| Cyrix \& IBM linear mode enabled | JP5 | Closed |
| P54C \& P55C togger mode enabled | JP5 | Open |
| í CMOS memory normal operation | JP25 | Pins 1 \& 2 closed |
| CMOS memory clear | JP25 | Pins 2 \& 3 closed |


| DIMM/DRAM CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Size | Bank 0 | Bank 1 | Bank 2 | Bank 3 |
| 8MB | (2) $1 \mathrm{M} \times 36$ | None | None | None |
| 16MB | (2) $2 \mathrm{M} \times 36$ | None | None | None |
| 16MB | (2) $1 \mathrm{M} \times 36$ | (2) $1 \mathrm{M} \times 36$ | None | None |
| 16MB | None | None | (1) $2 \mathrm{M} \times 64$ | None |
| 24MB | (2) $2 \mathrm{M} \times 36$ | (2) $1 \mathrm{M} \times 36$ | None | None |
| 24MB | (2) $1 \mathrm{M} \times 36$ | None | (1) $2 \mathrm{M} \times 64$ | None |
| 32 MB | (2) $4 \mathrm{M} \times 36$ | None | None | None |
| 32 MB | (2) $2 \mathrm{M} \times 36$ | (2) $2 \mathrm{M} \times 36$ | None | None |
| 32 MB | None | None | (1) $2 \mathrm{M} \times 64$ | (1) $2 \mathrm{M} \times 64$ |
| 32 MB | None | None | (1) $4 \mathrm{M} \times 64$ | None |
| 32 MB | (2) $2 \mathrm{M} \times 36$ | None | (1) $2 \mathrm{M} \times 64$ | None |
| 40MB | (2) $4 \mathrm{M} \times 36$ | (2) $1 \mathrm{M} \times 36$ | None | None |
| 40MB | (2) $1 \mathrm{M} \times 36$ | None | (1) $4 \mathrm{M} \times 64$ | None |
| 48 MB | (2) $4 \mathrm{M} \times 36$ | (2) $2 \mathrm{M} \times 36$ | None | None |
| 48 MB | None | None | (1) $2 \mathrm{M} \times 64$ | (1) $4 \mathrm{M} \times 64$ |
| 48 MB | (2) $4 \mathrm{M} \times 36$ | None | (1) $2 \mathrm{M} \times 64$ | None |
| 48 MB | (2) $2 \mathrm{M} \times 36$ | None | (1) $4 \mathrm{M} \times 64$ | None |
| 64MB | (2) $8 \mathrm{M} \times 36$ | None | None | None |
| 64 MB | (2) $4 \mathrm{M} \times 36$ | (2) $4 \mathrm{M} \times 36$ | None | None |
| 64 MB | None | None | (1) $4 \mathrm{M} \times 64$ | (1) $4 \mathrm{M} \times 64$ |
| 64MB | (2) $4 \mathrm{M} \times 36$ | None | (1) $4 \mathrm{M} \times 64$ | None |
| 72 MB | (2) $8 \mathrm{M} \times 36$ | (2) $1 \mathrm{M} \times 36$ | None | None |

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| DIMM/DRAM CONFIGURATION (CON'T) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Size | Bank 0 | Bank 1 | Bank 2 | Bank 3 |
| 80MB | (2) $8 \mathrm{M} \times 36$ | (2) $2 \mathrm{M} \times 36$ | None | None |
| 80MB | (2) $8 \mathrm{M} \times 36$ | None | (1) $2 \mathrm{M} \times 64$ | None |
| 96 MB | (2) $8 \mathrm{M} \times 36$ | (2) $4 \mathrm{M} \times 36$ | None | None |
| 96 MB | (2) $8 \mathrm{M} \times 36$ | None | (1) $4 \mathrm{M} \times 64$ | None |
| 128 MB | (2) $16 \mathrm{M} \times 36$ | None | None | None |
| 128 MB | (2) $8 \mathrm{M} \times 36$ | (2) $8 \mathrm{M} \times 36$ | None | None |
| 136MB | (2) $16 \mathrm{M} \times 36$ | (2) $1 \mathrm{M} \times 36$ | None | None |
| 144MB | (2) $16 \mathrm{M} \times 36$ | (2) $2 \mathrm{M} \times 36$ | None | None |
| 160MB | (2) $16 \mathrm{M} \times 36$ | (2) $4 \mathrm{M} \times 36$ | None | None |
| 192MB | (2) $16 \mathrm{M} \times 36$ | (2) $8 \mathrm{M} \times 36$ | None | None |
| 256MB | (2) $16 \mathrm{M} \times 36$ | (2) $16 \mathrm{M} \times 36$ | None | None |
| 256MB | (2) $32 \mathrm{M} \times 36$ | None | None | None |
| 264MB | (2) $32 \mathrm{M} \times 36$ | (2) $1 \mathrm{M} \times 36$ | None | None |
| 272 MB | (2) $32 \mathrm{M} \times 36$ | (2) $2 \mathrm{M} \times 36$ | None | None |
| 288 MB | (2) $32 \mathrm{M} \times 36$ | (2) $4 \mathrm{M} \times 36$ | None | None |
| 320 MB | (2) $32 \mathrm{M} \times 36$ | (2) $8 \mathrm{M} \times 36$ | None | None |
| 384MB | (2) $32 \mathrm{M} \times 36$ | (2) $16 \mathrm{M} \times 36$ | None | None |
| Note: Board accepts EDO memory. Banks 0 \& 1 are interchangeable. |  |  |  |  |


| DRAM JUMPER CONFIGURATION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| DRAM type | Bank 0 | Bank 1 | Bank 2 | JP14 |
| í FP or EDO | SIMMs 3 \& 4 or DIMM 2 | SIMMs 1 \& 2 or DIMM 1 | None | $1 \& 3,2 \& 4$ |
| í SDRAM | DIMM 2 | DIMM 1 | None | $1 \& 3,2 \& 4$ |
| FP or EDO | SIMMs 3 \& 4 or DIMM 2 | DIMM 1 | SIMMs 1 \& 2 | $3 \& 5,4 \& 6$ |

Note: Bank $0=$ SIMMs 3 \& 4. Bank $1=$ SIMMs $1 \& 2$. DIMM $1=$ Bank 2. DIMM 2 = Bank 3. Pins designated should be in the closed position.

| DRAM VOLTAGE CONFIGURATION |  |  |
| :---: | :---: | :---: |
| Voltage | JP7 | JP8 |
| 3.3 v | Pins $2 \& 3,5 \& 6$ closed | Pins 2 \& 3, $5 \& 6$ closed |
| i 5 v | Pins $1 \& 2,4 \& 5$ closed | Pins $1 \& 2,4 \& 5$ closed |


| CACHE CONFIGURATION |  |  |
| :---: | :---: | :---: |
| Size | Bank 0 | TAG |
| 256 KB | (2) $32 \mathrm{~K} \times 32$ | (1) $32 \mathrm{~K} \times 8$ |
| 512 KB | (2) $64 \mathrm{~K} \times 32$ | (1) $32 \mathrm{~K} \times 8$ |

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| CPU SPEED SELECTION (CYRIX) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CPU speed | Clock speed | Multiplier | JP9 | JP10 | JP11 | JP12 | JP18 | JP19 |
| 120 MHz | 50 MHz | 2x | Open | Open | Open | Closed | Closed | Open |
| 133 MHz | 55 MHz | 2x | Closed | Open | Open | Closed | Closed | Open |
| 150 MHz | 60 MHz | 2x | Open | Closed | Open | Closed | Closed | Open |
| 166 MHz | 66 MHz | 2x | Open | Open | Closed | Closed | Closed | Open |
| 200 MHz | 75 MHz | 2x | Closed | Closed | Open | Open | Closed | Open |


| CPU SPEED SELECTION (IBM) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CPU speed | Clock speed | Multiplier | JP9 | JP10 | JP11 | JP12 | JP18 | JP19 |
| 120 MHz | 50 MHz | 2 x | Open | Open | Open | Closed | Closed | Open |
| 133 MHz | 55 MHz | 2x | Closed | Open | Open | Closed | Closed | Open |
| 150 MHz | 60 MHz | 2x | Open | Closed | Open | Closed | Closed | Open |
| 166 MHz | 66 MHz | 2x | Open | Open | Closed | Closed | Closed | Open |
| 200 MHz | 75 MHz | 2x | Closed | Closed | Open | Open | Closed | Open |


| CPU SPEED SELECTION (AMD) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CPU speed | Clock speed | Multiplier | JP9 | JP10 | JP11 | JP12 | JP18 | JP19 |
| 75 MHz | 50 MHz | 1.5x | Open | Open | Open | Closed | Open | Open |
| 90 MHz | 60 MHz | 1.5 x | Open | Closed | Open | Closed | Open | Open |
| 100 MHz | 66 MHz | 1.5x | Open | Open | Closed | Closed | Open | Open |


| CPU SPEED SELECTION (INTEL) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CPU speed | Clock speed | Multiplier | JP9 | JP10 | JP11 | JP12 | JP18 | JP19 |
| 75 MHz | 50 MHz | 1.5x | Open | Open | Open | Closed | Open | Open |
| 90 MHz | 60 MHz | $1.5 x$ | Open | Closed | Open | Closed | Open | Open |
| 100 MHz | 66 MHz | $1.5 x$ | Open | Open | Closed | Closed | Open | Open |
| 120 MHz | 60 MHz | 2 x | Open | Closed | Open | Closed | Closed | Open |
| 133 MHz | 66 MHz | 2x | Open | Open | Closed | Closed | Closed | Open |
| 150 MHz | 60 MHz | 2.5x | Open | Closed | Open | Closed | Closed | Closed |
| 166 MHz | 66 MHz | 2.5 x | Open | Open | Closed | Closed | Closed | Closed |
| 180 MHz | 60 MHz | 3 x | Open | Closed | Open | Closed | Open | Closed |
| 200 MHz | 66 MHz | 3 x | Open | Open | Closed | Closed | Open | Closed |


| CPU VOLTAGE SELECTION (SINGLE) |  |  |  |
| :---: | :---: | :---: | :---: |
| Voltage | JP13 | JP26 |  |
| 3.4 v | Pins $1 \& 2,3 \& 4,5 \& 6$ closed | Pins 3 \& 4 closed |  |
| 3.5 v | Pins $1 \& 2,3 \& 4,5 \& 6$ closed | Pins 1 \& 2 closed |  |


| CPU VOLTAGE SELECTION (DUAL) |  |  |  |
| :---: | :---: | :---: | :---: |
| Voltage | V core | JP13 | JP26 |
| 3.4 v | 2.5 v | Open | Pins 7 \& 8 closed |
| 3.4 v | 2.8 v | Open | Pins 56 closed |
| 3.5 v | 2.5 v | Open | Pins 7 \& 8 closed |
| 3.5 v | 2.8 v | Open | Pins 5 \& closed |

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FLASH BIOS SELECTION

| Setting | JP23 | JP24 |
| :---: | :---: | :---: |
| $5 v$ | Pins 1 \& 2 closed | Pins 2 \& 3 closed |
| $12 v$ | Pins 2 \& 3 closed | Pins 2 \& 3 closed |
| None | Pins 1 \& 2 closed | Pins 1 \& 2 closed |

