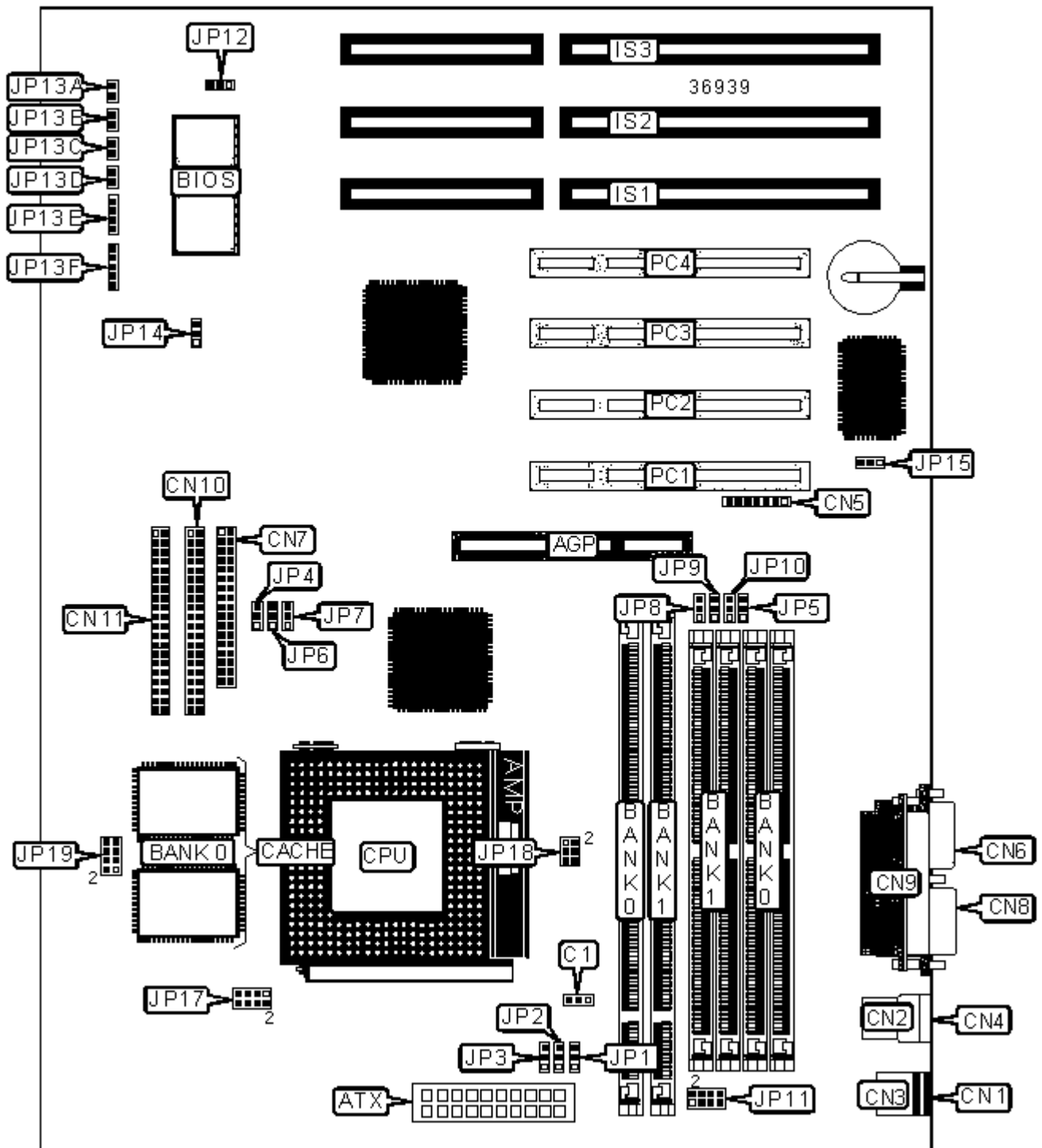


BOARDRUNNER

5AMVP3 (VER. 1.2)

| | |
|-------------------------------|---|
| Device Type | Mainboard |
| Processor | CX 6X86/CX 6X86L/CX 6X86MX/CX M II/AM K5/AM K6/ AM K6-2/Pentium/Pentium MMX |
| Processor Speed | 90/100/120/133/150/166/180/200/233/250/266/300MHz |
| Chip Set | VIA |
| Maximum Onboard Memory | 384MB (EDO & SDRAM supported) |
| Cache | 512/1024KB |
| BIOS | Award |
| Dimensions | 305mm x 210mm |
| I/O Options | 16-bit ISA slots (3), 32-bit PCI slots (4), floppy drive interface, green PC connector, IDE interfaces (2), parallel port, PS/2 mouse port, PS/2 keyboard port, serial ports (2), IR connector, USB ports (2), ATX power connector, AGP slot, Wake-on-LAN connector |



CONNECTIONS

| Purpose | Location | Purpose | Location |
|---------------------|----------|--------------------|----------|
| AGP slot | AGP | IDE interface 1 | CN10 |
| ATX power connector | ATX | IDE interface 2 | CN11 |
| CPU fan power | C1 | 16-bit ISA slots | IS1-IS3 |
| PS/2 keyboard port | CN1 | IDE interface LED | JP13A |
| USB port 1 | CN2 | Green PC connector | JP13B |

| | | | |
|------------------------|-----|-----------------------|-----------|
| PS/2 mouse port | CN3 | Turbo LED | JP13C |
| USB port 2 | CN4 | Reset switch | JP13D |
| IR connector | CN5 | Speaker | JP13E |
| Serial port 2 | CN6 | Power LED & keylock | JP13F |
| Floppy drive interface | CN7 | Wake-on-LAN connector | JP15 |
| Serial port 1 | CN8 | 32-bit PCI slots | PC1 – PC4 |
| Parallel port | CN9 | | |

USER CONFIGURABLE SETTINGS

| Function | | Label | Position |
|----------|-------------------------------|-------|-------------------|
| | Flash BIOS voltage select 5v | JP12 | Pins 1 & 2 closed |
| | Flash BIOS voltage select 12v | JP12 | Pins 2 & 3 closed |
| » | CMOS memory normal operation | JP14 | Pins 1 & 2 closed |
| | CMOS memory clear | JP14 | 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 |
| 36MB | (2) 8M x 36 | None |
| 36MB | (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 |
| 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.
Note: DIMM Bank 0 and SIMM Bank 1 cannot be used simultaneously.

| DIMM CONFIGURATION | | |
|---------------------------|---------------|---------------|
| Size | Bank 0 | Bank 1 |
| 8MB | (1) 1M x 64 | None |
| 16MB | (1) 1M x 64 | (1) 1M x 64 |
| 16MB | (1) 2M x 64 | None |
| 24MB | (1) 2M x 64 | (1) 1M x 64 |
| 32MB | (1) 2M x 64 | (1) 2M x 64 |
| 32MB | (1) 4M x 64 | None |
| 40MB | (1) 4M x 64 | (1) 1M x 64 |
| 48MB | (1) 4M x 64 | (1) 2M x 64 |
| 64MB | (1) 4M x 64 | (1) 4M x 64 |
| 64MB | (1) 8M x 64 | None |
| 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 |
| 128MB | (1) 16M x 64 | None |

| | | |
|-------|--------------|--------------|
| 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 supports EDO & SDRAM memory.

Note: DIMM Bank 0 and SIMM Bank 1 cannot be used simultaneously.

DIMM FREQUENCY CONFIGURATION

| Frequency | JP4 | JP5 |
|-------------------|-------------------|-------------------|
| Same as CPU clock | Pins 2 & 3 closed | Pins 1 & 2 closed |
| 66MHz | Pins 1 & 2 closed | Pins 2 & 3 closed |

DIMM VOLTAGE CONFIGURATION

| Voltage | JP11 |
|---------|--------------------------|
| 3.3v | Pins 1 & 2, 3 & 4 closed |
| 5v | Pins 5 & 6, 7 & 8 closed |

CACHE CONFIGURATION

| Size | Bank 0 |
|-------|--------------|
| 512KB | (2) 36K x 32 |
| 1MB | (2) 128 x 32 |

CPU SPEED SELECTION (CX 6X86)

| CPU speed | Clock speed | Multiplier | JP1 | JP2 | JP3 | JP6 | JP7 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|
| 150MHz | 60MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 166MHz | 66MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX 6X86, CON'T)

| CPU speed | Clock speed | Multiplier | JP8 | JP9 | JP10 | JP18 |
|-----------|-------------|------------|-------|-------|-------|------|
| 150MHz | 60MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 | Open |
| 166MHz | 66MHz | 2x | 1 & 2 | 1 & 2 | 1 & 2 | Open |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX 6X86L)

| CPU speed | Clock speed | Multiplier | JP1 | JP2 | JP3 | JP6 | JP7 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|
| 150MHz | 60MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 166MHz | 66MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 200MHz | 75MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX 6X86L, CON'T)

| CPU speed | Clock speed | Multiplier | JP8 | JP9 | JP10 | JP18 |
|-----------|-------------|------------|-------|-------|-------|---------------------|
| 150MHz | 60MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |
| 166MHz | 66MHz | 2x | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |
| 200MHz | 75MHz | 2x | 1 & 2 | 2 & 3 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX 6X86MX)

| CPU speed | Clock speed | Multiplier | JP1 | JP2 | JP3 | JP6 | JP7 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|
| 166MHz | 66MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 166MHz | 60MHz | 2.5x | 2 & 3 | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 |
| 200MHz | 75MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 233MHz | 75MHz | 2.5x | 2 & 3 | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 |
| 266MHz | 83MHz | 2.5x | 2 & 3 | 2 & 3 | 1 & 2 | 1 & 2 | 2 & 3 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX 6X86MX, CON'T)

| CPU speed | Clock speed | Multiplier | JP8 | JP9 | JP10 | JP18 |
|-----------|-------------|------------|-------|-------|-------|---------------------|
| 166MHz | 66MHz | 2x | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |
| 166MHz | 60MHz | 2.5x | 2 & 3 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |
| 200MHz | 75MHz | 2x | 1 & 2 | 2 & 3 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |
| 233MHz | 75MHz | 2.5x | 1 & 2 | 2 & 3 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |
| 266MHz | 83MHz | 2.5x | 2 & 3 | 2 & 3 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX MII)

| CPU speed | Clock speed | Multiplier | JP1 | JP2 | JP3 | JP6 | JP7 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|
| 300MHz | 66MHz | 3.5x | 1 & 2 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX MII, CON'T)

| CPU speed | Clock speed | Multiplier | JP8 | JP9 | JP10 | JP18 |
|-----------|-------------|------------|-------|-------|-------|---------------------|
| 300MHz | 66MHz | 3.5x | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K5)

| CPU speed | Clock speed | Multiplier | JP1 | JP2 | JP3 | JP6 | JP7 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|
| 90MHz | 60MHz | 1.5x | 1 & 2 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 100MHz | 66MHz | 1.5x | 1 & 2 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 120MHz | 60MHz | 1.5x | 1 & 2 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 133MHz | 66MHz | 1.5x | 1 & 2 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |

| | | | | | | | |
|--------|-------|------|-------|-------|-------|-------|-------|
| 166MHz | 66MHz | 2.5x | 2 & 3 | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 |
|--------|-------|------|-------|-------|-------|-------|-------|

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K5, CON'T)

| CPU speed | Clock speed | Multiplier | JP8 | JP9 | JP10 | JP18 |
|-----------|-------------|------------|-------|-------|-------|------|
| 90MHz | 60MHz | 1.5x | 2 & 3 | 1 & 2 | 1 & 2 | Open |
| 100MHz | 66MHz | 1.5x | 1 & 2 | 1 & 2 | 1 & 2 | Open |
| 120MHz | 60MHz | 1.5x | 2 & 3 | 1 & 2 | 1 & 2 | Open |
| 133MHz | 66MHz | 1.5x | 1 & 2 | 1 & 2 | 1 & 2 | Open |
| 166MHz | 66MHz | 2.5x | 1 & 2 | 1 & 2 | 1 & 2 | Open |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K6)

| CPU speed | Clock speed | Multiplier | JP1 | JP2 | JP3 | JP6 | JP7 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|
| 166MHz | 66MHz | 2.5x | 2 & 3 | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 |
| 200MHz | 66MHz | 3x | 1 & 2 | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 |
| 233MHz | 66MHz | 3.5x | 1 & 2 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 266MHz | 66MHz | 4x | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 | 2 & 3 |
| 300MHz | 66MHz | 4.5x | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K6, CON'T)

| CPU speed | Clock speed | Multiplier | JP8 | JP9 | JP10 | JP18 |
|-----------|-------------|------------|-------|-------|-------|---------------------|
| 166MHz | 66MHz | 2.5x | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |
| 200MHz | 66MHz | 3x | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |
| 233MHz | 66MHz | 3.5x | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |
| 266MHz | 66MHz | 4x | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |

| | | | | | | |
|--------|-------|------|-------|-------|-------|---------------------|
| 300MHz | 66MHz | 4.5x | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |
|--------|-------|------|-------|-------|-------|---------------------|

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K6-2)

| CPU speed | Clock speed | Multiplier | JP1 | JP2 | JP3 | JP6 | JP7 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|
| 250MHz | 100MHz | 2.5x | 2 & 3 | 2 & 3 | 1 & 2 | 1 & 2 | 2 & 3 |
| 300MHz | 100MHz | 3x | 1 & 2 | 2 & 3 | 1 & 2 | 1 & 2 | 2 & 3 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K6-2, CON'T)

| CPU speed | Clock speed | Multiplier | JP8 | JP9 | JP10 | JP18 |
|-----------|-------------|------------|-------|-------|-------|---------------------|
| 250MHz | 100MHz | 2.5x | 1 & 2 | 1 & 2 | 2 & 3 | 1 & 2, 3 & 4, 5 & 6 |
| 300MHz | 100MHz | 3x | 1 & 2 | 1 & 2 | 2 & 3 | 1 & 2, 3 & 4, 5 & 6 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (PENTIUM)

| CPU speed | Clock speed | Multiplier | JP1 | JP2 | JP3 | JP6 | JP7 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|
| 90MHz | 60MHz | 1.5x | 1 & 2 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 100MHz | 66MHz | 1.5x | 1 & 2 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 120MHz | 60MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 133MHz | 66MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 150MHz | 60MHz | 2.5x | 2 & 3 | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 |
| 166MHz | 66MHz | 2.5x | 2 & 3 | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 |
| 180MHz | 60MHz | 3x | 1 & 2 | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 |
| 200MHz | 66MHz | 3x | 1 & 2 | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (PENTIUM, CON'T)

| CPU speed | Clock speed | Multiplier | JP8 | JP9 | JP10 | JP18 |
|-----------|-------------|------------|-------|-------|-------|------|
| 90MHz | 60MHz | 1.5x | 2 & 3 | 1 & 2 | 1 & 2 | Open |
| 100MHz | 66MHz | 1.5x | 1 & 2 | 1 & 2 | 1 & 2 | Open |
| 120MHz | 60MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 | Open |
| 133MHz | 66MHz | 2x | 1 & 2 | 1 & 2 | 1 & 2 | Open |
| 150MHz | 60MHz | 2.5x | 2 & 3 | 1 & 2 | 1 & 2 | Open |
| 166MHz | 66MHz | 2.5x | 1 & 2 | 1 & 2 | 1 & 2 | Open |
| 180MHz | 60MHz | 3x | 2 & 3 | 1 & 2 | 1 & 2 | Open |
| 200MHz | 66MHz | 3x | 1 & 2 | 1 & 2 | 1 & 2 | Open |

Note: Pins designated should be in the closed position.

| CPU SPEED SELECTION (PENTIUM MMX) | | | | | | | |
|-----------------------------------|-------------|------------|-------|-------|-------|-------|-------|
| CPU speed | Clock speed | Multiplier | JP1 | JP2 | JP3 | JP6 | JP7 |
| 166MHz | 66MHz | 2.5x | 2 & 3 | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 |
| 200MHz | 66MHz | 3x | 1 & 2 | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 |
| 233MHz | 66MHz | 3.5x | 1 & 2 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |

Note: Pins designated should be in the closed position.

| CPU SPEED SELECTION (INTEL MMX, CON'T) | | | | | | |
|--|-------------|------------|-------|-------|-------|---------------------|
| CPU speed | Clock speed | Multiplier | JP8 | JP9 | JP10 | JP18 |
| 166MHz | 66MHz | 2.5x | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |
| 200MHz | 66MHz | 3x | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |
| 233MHz | 66MHz | 3.5x | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2, 3 & 4, 5 & 6 |

Note: Pins designated should be in the closed position.

| VIO VOLTAGE SELECTION | | | | |
|-----------------------|-----------------|-----------------|-----------------|-----------------|
| Voltage | JP19/Pins 1 & 2 | JP19/Pins 3 & 4 | JP19/Pins 5 & 6 | JP19/Pins 7 & 8 |

| | | | | |
|-------|--------|--------|--------|--------|
| 3.3v | Closed | Open | Closed | Closed |
| 3.45v | Closed | Closed | Closed | Closed |

CPU VOLTAGE SELECTION (SINGLE)

| Voltage | JP17/Pins 1 & 2 | JP17/Pins 3 & 4 | JP17/Pins 5 & 6 | JP17/Pins 7 & 8 |
|----------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 3.3v | Closed | Open | Closed | Closed |
| 3.5v | Closed | Closed | Closed | Closed |

CPU VOLTAGE SELECTION (DUAL)

| V core | JP17/Pins 1 & 2 | JP17/Pins 3 & 4 | JP17/Pins 5 & 6 | JP17/Pins 7 & 8 |
|---------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 2.1v | Closed | Open | Open | Open |
| 2.2v | Open | Closed | Open | Open |
| 2.7v | Closed | Closed | Closed | Open |
| 2.8v | Open | Open | Open | Closed |
| 2.9v | Closed | Open | Open | Closed |
| 3.2v | Open | Open | Closed | Closed |