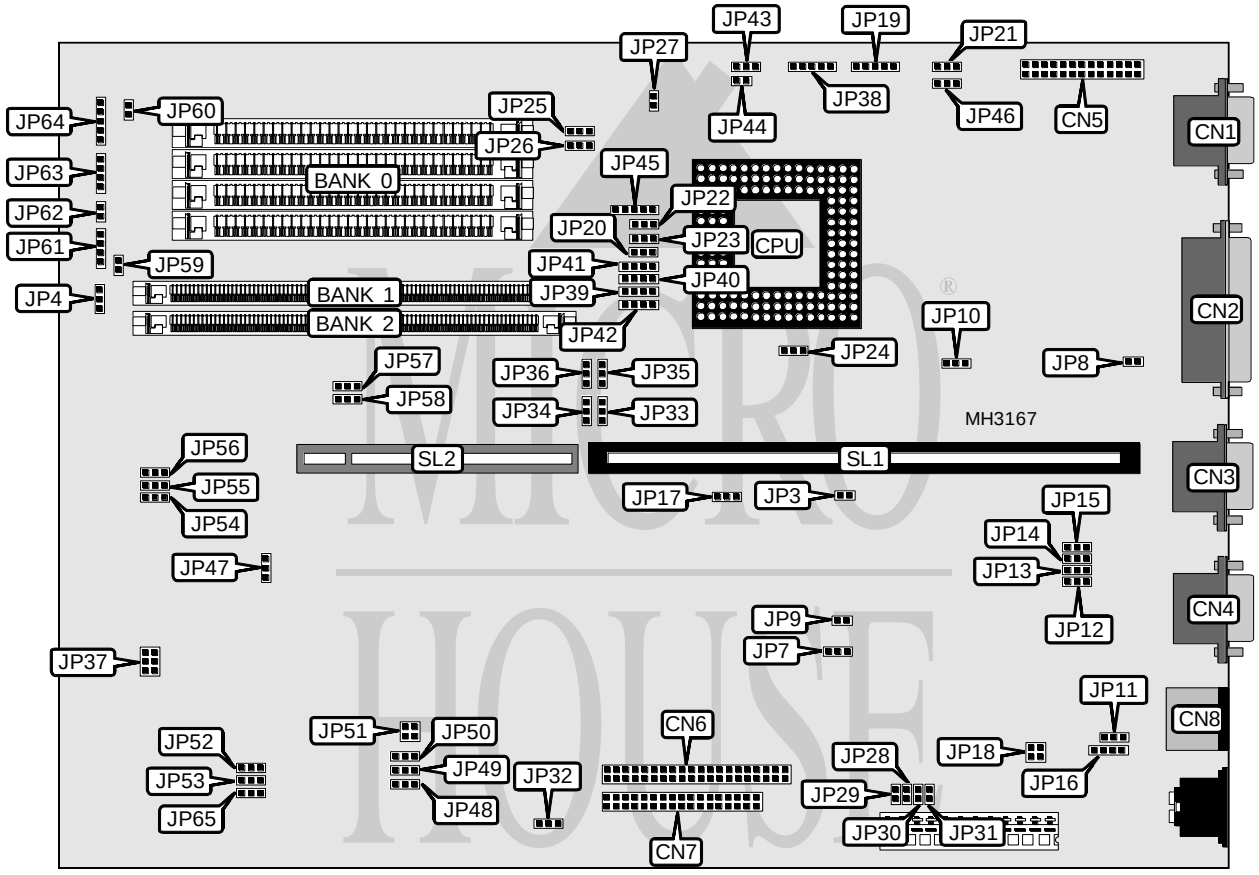
# ATC/UNITRON COMPUTER & COMPUTER PARTS
# 4 8 6 W L

| | |
|---|---|
| **Processor** | CX486M6/CX486M7/AM486SXL/AM486SX(PLUS)/80486SX/AM486DXL/ 80486DX/ 80486DX2/AM486DX4(PLUS)/80486DX4/P23S/P24D/Pentium Overdrive |
| **Processor Speed** | 25/33/40/50(internal)/50/66(internal)/75(internal)/80(internal)/100(internal)/ 120(internal)MHz |
| **Chip Set** | SIS |
| **Max. Onboard DRAM** | 128MB |
| **Cache** | 128/256/512/1024KB |
| **BIOS** | AMI/Award |
| **Dimensions** | 330mm x 198mm |
| **I/O Options** | 32-bit VESA local bus slot, PS/2 mouse port, floppy drive interface, green PC connector, IDE interface, parallel port, serial ports (2), VGA feature connector, VGA port, riser slot |
| **NPU Options** | None |

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| CONNECTIONS | | | |
|---|---|---|---|
| Purpose | Location | Purpose | Location |
| VGA port | CN1 | Green PC connector | JP59 |
| Parallel port | CN2 | IDE interface LED | JP60 |
| Serial port 2 | CN3 | Turbo LED | JP61 pins 1 & 2 |
| Serial port 1 | CN4 | Turbo switch | JP61 pins 3 & 4 |
| VGA feature connector | CN5 | Reset switch | JP62 |
| IDE interface | CN6 | Speaker | JP63 |
| Floppy drive interface | CN7 | Power LED & keylock | JP64 |
| PS/2 mouse port | CN8 | Riser Card | SL1 |
| External battery | JP16 | 32-bit VESA local bus slot | SL2 |
| Green PC connector | JP51 | | |

| USER CONFIGURABLE SETTINGS | | |
|---|---|---|
| Function | Jumper | Position |
| PS/2 mouse enabled | JP3 | Closed |
| PS/2 mouse disabled | JP3 | Open |
| í Power good signal detect from power supply | JP4 | pins 1 & 2 closed |
| Power good signal detect from board | JP4 | pins 2 & 3 closed |
| í VGA BIOS enabled | JP7 | pins 1 & 2 closed |
| VGA BIOS disabled | JP7 | pins 2 & 3 closed |
| í Factory configured - do not alter | JP8 | N/A |
| Monitor type select color | JP9 | Closed |
| Monitor type select monochrome | JP9 | Open |
| í On board VGA enabled | JP10 | pins 1 & 2 closed |
| On board VGA disabled | JP10 | pins 2 & 3 closed |
| í CMOS memory normal operation | JP11 | pins 1 & 2 closed |
| CMOS memory clear | JP11 | pins 2 & 3 closed |
| í ECP DRQ enabled | JP12 | pins 1 & 2 closed |
| ECP DRQ disabled | JP12 | pins 2 & 3 closed |
| í ECP A10 enabled | JP15 | pins 1 & 2 closed |
| ECP A10 disabled | JP15 | pins 2 & 3 closed |
| í Parallel port IRQ select IRQ7 | JP17 | pins 2 & 3 closed |
| Parallel port IRQ select IRQ5 | JP17 | pins 1 & 2 closed |
| í Serial port IRQ select IRQ4 | JP18 | pins 3 & 4 closed |
| Serial port IRQ select IRQ3 | JP18 | pins 1 & 2 closed |
| í Factory configured - do not alter | JP24 | N/A |
| CPU voltage regulator type select LT1085 | JP25 | pins 1 & 2 closed |
| CPU voltage regulator type select LT1085-3.3 | JP25 | pins 2 & 3 closed |
| CPU voltage regulator type select auto | JP27 | Closed |
| CPU voltage regulator type select manual | JP27 | Open |
| í IDE interface enabled | JP32 | Open |
| IDE interface disabled | JP32 | Closed |

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| USER CONFIGURABLE SETTINGS (CON'T) | | |
|---|---|---|
| Function | Jumper | Position |
| í CPU clock = CLKIN | JP47 | pins 1 & 2 closed |
| CPU clock delayed for CLKIN | JP47 | pins 2 & 3 closed |
| í Internal clock select CLKIN | JP50 | pins 1 & 2 closed |
| Internal clock select 1/2 CLKIN | JP50 | pins 2 & 3 closed |
| í Factory configured - do not alter | JP65 | N/A |

| DRAM CONFIGURATION 1 | | | |
|---|---|---|---|
| Size | Bank 0 | Bank 1 | Bank 2 |
| 1MB | (4) 256K x 9 | NONE | NONE |
| 2MB | (4) 256K x 9 | (1) 256K x 36 | NONE |
| 4MB | (4) 1M x 9 | NONE | NONE |
| 5MB | (4) 256K x 9 | (1) 1M x 36 | NONE |
| 6MB | (4) 256K x 9 | (1) 256K x 36 | (1) 1M x 36 |
| 8MB | (4) 1M x 9 | (1) 1M x 36 | NONE |
| 12MB | (4) 1M x 9 | (1) 1M x 36 | (1) 1M x 36 |
| 16MB | (4) 4M x 9 | NONE | NONE |
| 17MB | (4) 256K x 9 | (1) 4M x 36 | NONE |
| 18MB | (4) 256K x 9 | (1) 256K x 36 | (1) 4M x 36 |
| 20MB | (4) 1M x 9 | (1) 4M x 36 | NONE |
| 24MB | (4) 1M x 9 | (1) 1M x 36 | (1) 4M x 36 |
| 32MB | (4) 4M x 9 | (1) 4M x 36 | NONE |
| 36MB | (4) 1M x 9 | (1) 4M x 36 | (1) 4M x 36 |
| 48MB | (4) 4M x 9 | (1) 4M x 36 | (1) 4M x 36 |
| 64MB | (4) 16M x 9 | NONE | NONE |
| 65MB | (4) 256K x 9 | (1) 16M x 36 | NONE |
| 68MB | (4) 1M x 9 | (1) 16M x 36 | NONE |
| 72MB | (4) 1M x 9 | (1) 1M x 36 | (1) 16M x 36 |
| 80MB | (4) 4M x 9 | (1) 16M x 36 | NONE |
| 96MB | (4) 4M x 9 | (1) 4M x 36 | (1) 16M x 36 |
| 128MB | (4) 16M x 9 | (1) 16M x 36 | NONE |

| DRAM CONFIGURATION 2 | | | |
|---|---|---|---|
| Size | Bank 0 | Bank 1 | Bank 2 |
| 1MB | NONE | (1) 256K x 36 | NONE |
| 2MB | NONE | (1) 256K x 36 | (1) 256K x 36 |
| 4MB | NONE | (1) 1M x 36 | NONE |
| 5MB | NONE | (1) 256K x 36 | (1) 1M x 36 |
| 6MB | (4) 1M x 9 | (1) 256K x 36 | (1) 256K x 36 |
| 8MB | NONE | (1) 1M x 36 | (1) 1M x 36 |
| 12MB | (4) 1M x 9 | (1) 1M x 36 | (1) 1M x 36 |
| 16MB | NONE | (1) 4M x 36 | NONE |
| 17MB | NONE | (1) 256K x 36 | (1) 4M x 36 |
| 18MB | (4) 4M x 9 | (1) 256K x 36 | (1) 256K x 36 |

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| DRAM CONFIGURATION 2 (CON'T) | | | |
|---|---|---|---|
| Size | Bank 0 | Bank 1 | Bank 2 |
| 20MB | NONE | (1) 1M x 36 | (1) 4M x 36 |
| 24MB | (4) 4M x 9 | (1) 1M x 36 | (1) 1M x 36 |
| 32MB | NONE | (1) 4M x 36 | (1) 4M x 36 |
| 32MB | NONE | (1) 8M x 36 | NONE |
| 36MB | (4) 4M x 9 | (1) 1M x 36 | (1) 4M x 36 |
| 36MB | NONE | (1) 1M x 36 | (1) 8M x 36 |
| 48MB | (4) 4M x 9 | (1) 4M x 36 | (1) 4M x 36 |
| 48MB | NONE | (1) 4M x 36 | (1) 8M x 36 |
| 64MB | NONE | (1) 8M x 36 | (1) 8M x 36 |
| 64MB | NONE | (1) 16M x 36 | NONE |
| 65MB | NONE | (1) 256K x 36 | (1) 16M x 36 |
| 68MB | NONE | (1) 1M x 36 | (1) 16M x 36 |
| 72MB | (4) 16M x 9 | (4) 1M x 9 | (4) 1M x 9 |
| 80MB | NONE | (4) 4M x 9 | (4) 16M x 9 |
| 96MB | (4) 16M x 9 | (4) 4M x 9 | (4) 4M x 9 |
| 128MB | NONE | (4) 16M x 9 | (4) 16M x 9 |

| DRAM JUMPER CONFIGURATION | | | |
|---|---|---|---|
| Configuration | JP54 | JP55 | JP56 |
| 1 | pins 1 & 2 closed | pins 1 & 2 closed | pins 1 & 2 closed |
| 2 | pins 2 & 3 closed | pins 2 & 3 closed | pins 2 & 3 closed |

| CACHE CONFIGURATION | | | |
|---|---|---|---|
| Size | Bank 0 | Bank 1 | TAG |
| 128KB | (4) 32K x 8 | NONE | (1) 8K x 8 |
| 256KB (A) | (4) 32K x 8 | (4) 32K x 8 | (1) 32K x 8 |
| 256KB (B) | (4) 64K x 8 | NONE | (1) 32K x 8 |
| 512KB (A) | (4) 64K x 8 | (4) 64K x 8 | (1) 32K x 8 |
| 512KB (B) | (4) 128K x 8 | NONE | (1) 32K x 8 |
| 1MB | (4) 128K x 8 | (4) 128K x 8 | (1) 64K x 8 |
| Note: The location of Banks 0 & 1 and TAG are unidentified. | | | |

| CACHE JUMPER CONFIGURATION | | | | | | |
|---|---|---|---|---|---|---|
| Size | JP33 | JP34 | JP35 | JP36 | JP52 | JP53 |
| 128KB | 1 & 2 | 1 & 2 | Any setting | Any setting | 1 & 2 | 1 & 2 |
| 256KB (A) | 2 & 3 | 2 & 3 | Any setting | Any setting | 1 & 2 | 2 & 3 |
| 256KB (B) | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2 | 2 & 3 |
| 512KB (A) | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 | 2 & 3 |
| 512KB (B) | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 |
| 1MB | 2 & 3 | 2 & 3 | 2 & 3 | 1 & 2 | 2 & 3 | 2 & 3 |
| Note: Pins designated should be in the closed position. | | | | | | |

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| CPU TYPE CONFIGURATION | | | | | |
|---|---|---|---|---|---|
| Type | JP19 | JP20 | JP21 | JP22 | JP23 |
| CX486M6 | N/A | 2 & 3 | 1 & 2 | 2 & 3 | N/A |
| AM486SXL | 1 & 2 | N/A | 2 & 3 | 2 & 3 | N/A |
| AM486SX(PLUS) | 4 & 5 | N/A | 1 & 2 | 2 & 3 | 2 & 3 |
| 80486SX | 1 & 2 | N/A | 1 & 2 | 2 & 3 | N/A |
| AM486DXL | 1 & 2 | N/A | 2 & 3 | 2 & 3 | N/A |
| CX486M7 | N/A | 2 & 3 | 1 & 2 | 2 & 3 | N/A |
| 80486DX | 1 & 2 | N/A | 1 & 2 | 2 & 3 | N/A |
| 80486DX2 | 1 & 2 | N/A | 1 & 2 | 2 & 3 | N/A |
| AM486DX4(PLUS) | 4 & 5 | N/A | 1 & 2 | 2 & 3 | 2 & 3 |
| 80486DX4 | 1 & 2 | N/A | 1 & 2 | 2 & 3 | N/A |
| P23S | 1 & 2 | N/A | 1 & 2 | 2 & 3 | N/A |
| P24D | 2 & 3 | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2 |
| P24T | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2 | N/A |
| Note: Pins designated should be in the closed position. | | | | | |

| CPU TYPE CONFIGURATION (CON'T) | | | | | |
|---|---|---|---|---|---|
| Type | JP38 | JP39 | JP40 | JP41 | JP42 |
| CX486M6 | 2 & 3 | 2 & 3 | N/A | 1 & 2 | 2 & 3 |
| AM486SXL | N/A | 3 & 4 | 1 & 2 | 3 & 4 | 2 & 3 |
| AM486SX(PLUS) | 4 & 5 | N/A | N/A | 2 & 3 | 2 & 3 |
| 80486SX | 4 & 5 | N/A | N/A | 2 & 3 | 2 & 3 |
| AM486DXL | N/A | 3 & 4 | 1 & 2, 3 & 4 | 3 & 4 | 1 & 2, 3 & 4 |
| CX486M7 | 2 & 3 | 2 & 3 | 3 & 4 | 1 & 2 | 1 & 2, 3 & 4 |
| 80486DX | 4 & 5 | N/A | 3 & 4 | 2 & 3 | 1 & 2, 3 & 4 |
| 80486DX2 | 4 & 5 | N/A | 3 & 4 | 2 & 3 | 1 & 2, 3 & 4 |
| AM486DX4(PLUS) | 4 & 5 | N/A | 3 & 4 | 2 & 3 | 1 & 2, 3 & 4 |
| 80486DX4 | 4 & 5 | N/A | 3 & 4 | 2 & 3 | 1 & 2, 3 & 4 |
| P23S | 4 & 5 | N/A | 3 & 4 | 2 & 3 | 2 & 3 |
| P24D | 4 & 5 | N/A | 3 & 4 | 2 & 3 | 1 & 2, 3 & 4 |
| P24T | 1 & 2 | 1 & 2 | 2 & 3 | 2 & 3 | 1 & 2, 3 & 4 |
| Note: Pins designated should be in the closed position. | | | | | |

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| CPU TYPE CONFIGURATION (CON'T) | | | | | | |
|---|---|---|---|---|---|---|
| Type | JP43 | JP44 | JP45 | JP46 | JP48 | JP49 |
| CX486M6 | N/A | N/A | 2 & 3 | N/A | N/A | N/A |
| AM486SXL | N/A | N/A | 4 & 5 | N/A | N/A | N/A |
| AM486SX(PLUS) | N/A | N/A | 3 & 4 | N/A | N/A | N/A |
| 80486SX | N/A | N/A | 3 & 4 | N/A | 2 & 3 | 1 & 2 |
| AM486DXL | N/A | N/A | 4 & 5 | N/A | 1 & 2 | 2 & 3 |
| CX486M7 | N/A | N/A | 2 & 3 | N/A | 1 & 2 | 2 & 3 |
| 80486DX | 2 & 3 | N/A | 3 & 4 | N/A | 2 & 3 | 1 & 2 |
| 80486DX2 | 2 & 3 | N/A | 3 & 4 | N/A | 2 & 3 | 1 & 2 |
| AM486DX4(PLUS) | 2 & 3 | N/A | 3 & 4 | N/A | 1 & 2 | 1 & 2 |
| 80486DX4 | 1 & 2 | N/A | 3 & 4 | N/A | 2 & 3 | 1 & 2 |
| P23S | N/A | N/A | 3 & 4 | N/A | N/A | N/A |
| P24D | 1 & 2, or 2 & 3 | N/A | 1 & 2, 3 & 4 | N/A | 1 & 2 | 1 & 2 |
| P24T | N/A | N/A | 3 & 4 | 1 & 2, or 2 & 3 | 1 & 2 | 1 & 2 |
| Note: Pins designated should be in the closed position. This board also accepts SL-series CPUs & AM486DXL2, but no jumper settings are listed. | | | | | | |

| CPU SPEED CONFIGURATION | |
|---|---|
| Speed | JP37 |
| 25MHz | pins 1 & 2, 5 & 6 closed |
| 33MHz | pins 1 & 2, 3 & 4 closed |
| 40MHz | pins 5 & 6 closed |
| 50iMHz | pins 1 & 2, 5 & 6 closed |
| 50MHz | pins 3 & 4 closed |
| 66iMHz | pins 1 & 2, 3 & 4 closed |
| 75iMHz | pins 1 & 2, 5 & 6 closed |
| 80iMHz | pins 5 & 6 closed |
| 100iMHz | pins 1 & 2, 3 & 4 closed |
| 120iMHz | pins 5 & 6 closed |

| CPU VOLTAGE CONFIGURATION | |
|---|---|
| Voltage | JP26 |
| Auto detect | Open |
| 3.3v | pins 2 & 3 closed |
| 5v | pins 1 & 2 closed |

| VL BUS WAIT STATE CONFIGURATION | |
|---|---|
| Wait states | JP58 |
| í 0 wait states | pins 1 & 2 closed |
| 1 wait state | pins 2 & 3 closed |

| VL BUS SPEED CONFIGURATION | |
|---|---|
| CPU speed | JP57 |
| í <= 33MHz | pins 1 & 2 closed |
| > 33MHz | pins 2 & 3 closed |

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| DMA CONFIGURATION | | |
|---|---|---|
| DMA | JP13 | JP14 |
| DMA 1 | pins 2 & 3 closed | pins 2 & 3 closed |
| í DMA 3 | pins 1 & 2 closed | pins 1 & 2 closed |

| FLOPPY ENHANCED MODE CONFIGURATION | | |
|---|---|---|
| Setting | JP28 | JP29 |
| í Enabled | Closed | Closed |
| Disabled | Open | Open |

| MEDIA DETECT CONFIGURATION | | |
|---|---|---|
| Setting | JP30 | JP31 |
| Enabled | Closed | Closed |
| í Disabled | Open | Open |

| MISCELLANEOUS TECHNICAL NOTE |
|---|
| Note: The location of pin 1 is unidentified. |