# ENPC TECHNOLOGY CORPORATION

## EP-PT21 (REV. 1.3)

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|---|---|
| **Device Type** | Mainboard |
| **Processor** | CX 686MX/CX M2/AM K5/AM K6/Pentium/Pentium MMX/IDT C6 |
| **Processor Speed** | 75/90/100/120/133/150/166/180/200/225/233/240/266/300MHz |
| **Chip Set** | Intel 430TX |
| **Maximum Onboard Memory** | 256MB (EDO, & SDRAM supported) |
| **Cache** | 256/512KB |
| **BIOS** | AMI/Award |
| **Dimensions** | 305mm x 210mm |
| **I/O Options** | 32-bit PCI slots (4), floppy drive interface, green PC connector, IDE interfaces (2), parallel port, PS/2 mouse port, serial ports (2), IR connectors (2), USB ports (2), ATX power connector, Program connector, external battery connector |

| CONNECTIONS | | | |
|---|---|---|---|
| **Purpose** | **Location** | **Purpose** | **Location** |
| ATX power connector | ATX | USB port 1 | J16 |
| Program connector | CN1 | PS/2 mouse port | J17 |
| External battery connector | J1 | USB port 2 | J18 |

| | | | |
|---|---|---|---|
| CPU fan power | J5 | IR connector (front) | J21 |
| IDE interface 1 | J6 | Speaker | J22/Pins 1, 3, 5, 7 |
| IDE interface 2 | J7 | IDE interface LED | J22/Pins 2 & 4 |
| Floppy drive interface | J9 | Turbo LED | J22/Pins 6 & 8 |
| IR connector (rear) | J10 | Power LED | J22/Pins 9, 11, 13 |
| Serial port 1 | J11 | Power switch | J22/Pins 10 & 12 |
| Parallel port | J14 | Reset switch | J22/Pins 18 & 20 |
| Serial port 2 | J15 | 32-bit PCI slots | PC1 - PC4 |

| USER CONFIGURABLE SETTINGS | | |
|---|---|---|
| **Function** | **Label** | **Position** |
| » CMOS memory normal operation | J4 | Pins 2 & 3 closed |
| CMOS memory clear | J4 | Pins 1 & 2 closed |
| SDRAM voltage selection (3.3v/5v) | JP1 | Unidentified |

| 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 |
| 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 |
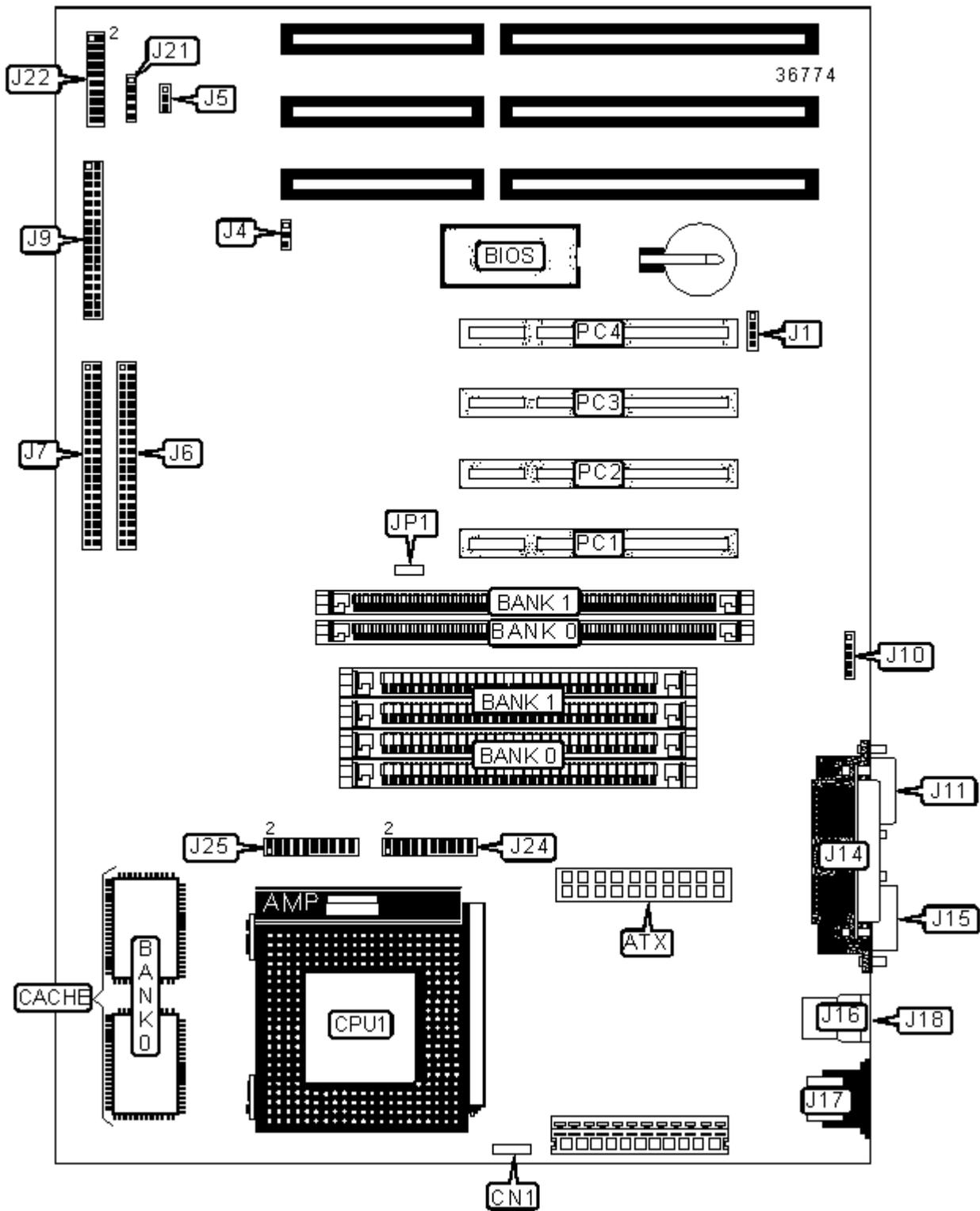
Note:  Board accepts EDO & SDRAM memory.
Note:  If using both SIMM and DIMM memory, only one bank of each may be filled simultaneously.

| 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: If using both SIMM and DIMM memory, only one bank of each may be filled simultaneously.

| CLOCK SPEED SELECTION | |
|---|---|
| **Speed** | **J24** |
| » 66MHz | Pins 17-20 open |
| 75MHz | Pins 17 & 18 closed |
| 83.3MHz | Pins 19 & 20 closed |

| CPU TYPE SELECTION | |
|---|---|
| **Type** | **J25** |
| Pentium | Pins 1 & 2 closed |
| Pentium MMX | Pins 3 & 4 closed |
| AM K5 | Pins 5 & 6 closed |
| AM K6 | Pins 7 & 8 closed |
| CX 6X86MX | Pins 9 & 10 closed |
| CX M2 | Pins 11 & 12 closed |
| IDT C6 | Pins 13 & 14 closed |

| CPU MULTIPLIER SELECTION | |
|---|---|
| **Multiplier** | **J24** |
| 1.5x | Pins 1 & 2 closed |
| 2x | Pins 3 & 4 closed |
| 2.5x | Pins 5 & 6 closed |
| 3x | Pins 7 & 8 closed |
| 3.5x | Pins 9 & 10 closed |

| | |
|---|---|
| 4x | Pins 11 & 12 closed |
| 4.5x | Pins 13 & 14 closed |
| 5x | Pins 15 & 16 closed |

## MISCELLANEOUS TECHNICAL NOTES

Processor speeds listed include the speeds available for the Cyrix 6X86MX CPU, which is synonymous with the Cyrix M2 CPU.