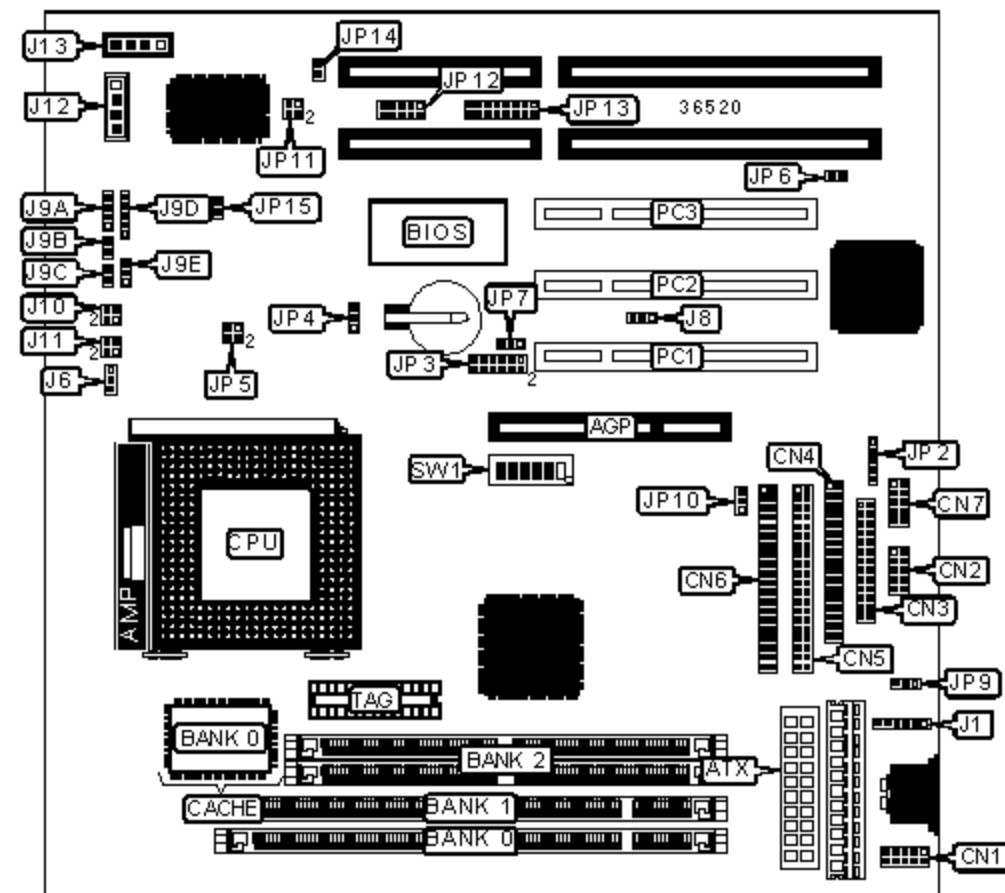


J-MARK COMPUTER CORPORATION

J-542BS

| | |
|-------------------------------|---|
| Device Type | Mainboard |
| Processor | CX 6X86/IBM 6X86/CX 6X86MX/AM K5/AM K6/AM K6-2/ |
| Processor Speed | IDT C6/Pentium/Pentium MMX 90/100/120/133/150/166/200/233/266/300/333/350MHz |
| Chip Set | ALI Aladdin |
| Maximum Onboard Memory | 384MB (EDO & SDRAM supported) |
| Audio Chip Set | Unidentified |
| Cache | 512KB |
| BIOS | Unidentified |
| Dimensions | 220mm x 210mm |
| I/O Options | 32-bit PCI slots (3), floppy drive interface, game interface, green PC connector, IDE interfaces (2), parallel port, PS/2 mouse interface, serial ports (2), IR connector, USB connector, ATX power connector, AGP slot, audio in – CD-ROMs (2) |



CONNECTIONS

| Purpose | Location | Purpose | Location |
|---------------------|----------|---------------------|----------|
| AGP slot | AGP | Turbo LED | J9C |
| ATX power connector | ATX | Power LED & keylock | J9D |
| USB connector | CN1 | Turbo switch | J9E |

| | | | |
|------------------------|-----|-----------------------|-----------------|
| Serial port 1 | CN2 | Green PC connector | J10/pins 1 & 3 |
| Parallel port | CN3 | IDE interface LED | J10/pins 2 & 4 |
| Floppy drive interface | CN4 | Soft off power supply | J11/pins 2 & 4 |
| IDE interface 2 | CN5 | Audio in – CD-ROM | J12 |
| IDE interface 1 | CN6 | Audio in – CD-ROM | J13 |
| Serial port 2 | CN7 | IR connector | JP2 |
| PS/2 mouse interface | J1 | Digital line out | JP11/pins 1 & 2 |
| CPU fan power | J6 | Digital line in | JP11/pins 3 & 4 |
| Chassis fan power | J8 | Audio connector | JP12 |
| Speaker | J9A | Game interface | JP13 |
| Reset switch | J9B | 32-bit PCI slots | PC1 – PC3 |

USER CONFIGURABLE SETTINGS

| Function | | Label | Position |
|----------|-----------------------------------|-------|-------------------|
| » | CMOS memory normal operation | JP4 | Pins 1 & 2 closed |
| | CMOS memory clear | JP4 | Pins 2 & 3 closed |
| » | Factory configured - do not alter | JP6 | Unidentified |
| » | Factory configured - do not alter | JP7 | Unidentified |
| » | Factory configured - do not alter | JP9 | Unidentified |
| » | Factory configured - do not alter | JP10 | Unidentified |
| » | Factory configured - do not alter | JP14 | Unidentified |
| » | Factory configured - do not alter | JP15 | Unidentified |

SIMM CONFIGURATION

| Size | Bank 2 |
|-------|--------------|
| 16MB | (2) 2M x 36 |
| 32MB | (2) 4M x 36 |
| 64MB | (2) 8M x 36 |
| 128MB | (2) 16M x 36 |

Note: Board accepts EDO memory.

DIMM CONFIGURATION

| Size | Bank 0 | Bank 1 |
|------|-------------|-------------|
| 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 |

DIMM CONFIGURATION (CON'T)

| Size | Bank 0 | Bank 1 |
|-------|--------------|--------------|
| 80MB | (1) 8M x 64 | (1) 2M x 64 |
| 96MB | (1) 8M x 64 | (1) 4M x 64 |
| 128MB | (1) 16M x 64 | None |
| 128MB | (1) 8M x 64 | (1) 8M x 64 |
| 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 accepts SDRAM memory.

CACHE CONFIGURATION

| Size | Bank 0 | TAG |
|------|--------|-----|
|------|--------|-----|

| | | |
|-------|--------------|--------------|
| Size | Bank 0 | TAG |
| 512KB | (1) 64K x 64 | Unidentified |

CPU SPEED SELECTION (CX 6X86)

| CPU speed | Clock speed | Multiplier | SW1/1 | SW1/2 | SW1/3 | SW1/4 | SW1/5 | SW1/6 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|-------|
| 200MHz | 75MHz | 2x | On | On | Off | On | Off | Off |

CPU SPEED SELECTION (IBM 6X86)

| CPU speed | Clock speed | Multiplier | SW1/1 | SW1/2 | SW1/3 | SW1/4 | SW1/5 | SW1/6 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|-------|
| 200MHz | 75MHz | 2x | On | On | Off | On | Off | Off |

CPU SPEED SELECTION (CX 6X86MX)

| CPU speed | Clock speed | Multiplier | SW1/1 | SW1/2 | SW1/3 | SW1/4 | SW1/5 | SW1/6 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|-------|
| 166MHz | 60MHz | 2.5x | On | On | On | On | On | Off |
| 200MHz | 75MHz | 2x | On | On | Off | On | Off | Off |
| 233MHz | 66MHz | 3x | Off | On | On | Off | On | Off |
| 300MHz | 66MHz | 3.5x | Off | On | On | Off | Off | Off |
| 233MHz | 75MHz | 2.5x | On | On | Off | On | On | Off |
| 266MHz | 83MHz | 2.5x | Off | On | Off | On | On | Off |
| 333MHz | 100MHz | 2.5x | Off | Off | Off | On | On | Off |

CPU SPEED SELECTION (IDT C6)

| CPU speed | Clock speed | Multiplier | SW1/1 | SW1/2 | SW1/3 | SW1/4 | SW1/5 | SW1/6 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|-------|
| 150MHz | 75MHz | 2x | On | On | Off | On | Off | Off |
| 180MHz | 60MHz | 3x | On | On | On | Off | On | Off |
| 200MHz | 66MHz | 3x | Off | On | On | Off | On | Off |

CPU SPEED SELECTION (AM K5)

| CPU speed | Clock speed | Multiplier | SW1/1 | SW1/2 | SW1/3 | SW1/4 | SW1/5 | SW1/6 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|-------|
|-----------|-------------|------------|-------|-------|-------|-------|-------|-------|

| | | | | | | | | |
|--------|-------|------|-----|----|----|-----|-----|-----|
| 90MHz | 60MHz | 1.5x | On | On | On | Off | Off | Off |
| 166MHz | 66MHz | 2.5x | Off | On | On | On | On | Off |

CPU SPEED SELECTION (AM K6)

| CPU speed | Clock speed | Multiplier | SW1/1 | SW1/2 | SW1/3 | SW1/4 | SW1/5 | SW1/6 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|-------|
| 166MHz | 66MHz | 2.5x | Off | On | On | On | On | Off |
| 200MHz | 66MHz | 3x | Off | On | On | Off | On | Off |
| 233MHz | 66MHz | 3.5x | Off | On | On | Off | Off | Off |
| 266MHz | 66MHz | 4x | Off | On | On | On | Off | On |
| 300MHz | 66MHz | 4.5x | Off | On | On | On | On | On |

CPU SPEED SELECTION (AM K6-2)

| CPU speed | Clock speed | Multiplier | SW1/1 | SW1/2 | SW1/3 | SW1/4 | SW1/5 | SW1/6 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|-------|
| 300MHz | 100MHz | 3x | Off | Off | Off | Off | On | Off |
| 333MHz | 95MHz | 3.5x | On | Off | Off | Off | On | Off |
| 350MHz | 100MHz | 3.5x | Off | Off | Off | Off | Off | Off |

CPU SPEED SELECTION (INTEL)

| CPU speed | Clock speed | Multiplier | SW1/1 | SW1/2 | SW1/3 | SW1/4 | SW1/5 | SW1/6 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|-------|
| 90MHz | 60MHz | 1.5x | On | On | On | Off | Off | Off |
| 100MHz | 66MHz | 1.5x | Off | On | On | Off | Off | Off |
| 120MHz | 60MHz | 2x | On | On | On | On | Off | Off |
| 133MHz | 66MHz | 2x | Off | On | On | On | Off | Off |
| 150MHz | 60MHz | 2.5x | On | On | On | On | On | Off |
| 166MHz | 66MHz | 2.5x | Off | On | On | On | On | Off |
| 200MHz | 66MHz | 3x | Off | On | On | Off | On | Off |

CPU SPEED SELECTION (INTEL MMX)

| CPU speed | Clock speed | Multiplier | SW1/1 | SW1/2 | SW1/3 | SW1/4 | SW1/5 | SW1/6 |
|-----------|-------------|------------|-------|-------|-------|-------|-------|-------|
|-----------|-------------|------------|-------|-------|-------|-------|-------|-------|

| | | | | | | | | |
|--------|-------|------|-----|----|----|-----|-----|-----|
| | | | | | | | | |
| 166MHz | 66MHz | 2.5x | Off | On | On | On | On | Off |
| 200MHz | 66MHz | 3x | Off | On | On | Off | On | Off |
| 233MHz | 66MHz | 3.5x | Off | On | On | Off | Off | Off |

| CPU VOLTAGE SELECTION | |
|------------------------------|---------------------|
| Voltage | JP3 |
| 2.2v | Pins 1 & 2 closed |
| 2.8v | Pins 3 & 4 closed |
| 2.9v | Pins 5 & 6 closed |
| 3.2v | Pins 7 & 8 closed |
| 3.45v | Pins 9 & 10 closed |
| 3.52v | Pins 11 & 12 closed |

| I/O VOLTAGE SELECTION | |
|------------------------------|-------------------|
| Voltage | JP5 |
| 3.45v | Pins 1 & 2 closed |
| 3.52v | Pins 3 & 4 closed |