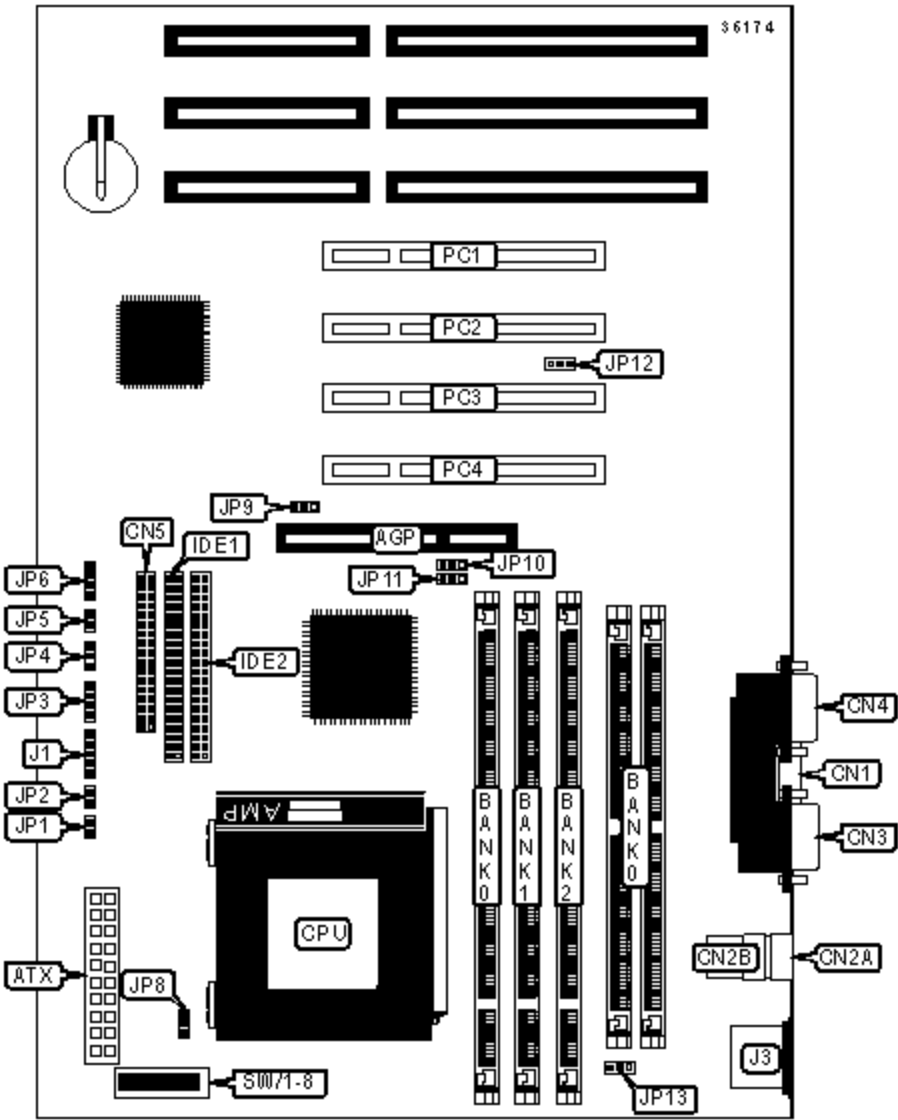


GIGA-BYTE TECHNOLOGY CO., LTD.

GA-586SGX

| | |
|--------------------------------|---|
| Device Type | Mainboard |
| Processor | CX 6x86/IBM 6x86/CX 6x86L/IBM 6x86L/CX 6x86MX/IBM 6x86MX/AM K5/AM K6/Pentium/Pentium MMX |
| Processor Speed | 90/100/120/133/150/166/180/200/233/266MHz |
| Chip Set | SIS |
| Maximum Onboard Memory | 768MB (EDO & SDRAM supported) |
| Cache | 512KB |
| BIOS | Award |
| Dimensions | 305mm x 170mm |
| I/O Options (backplane) | 32-bit PCI slots (4), floppy drive interface, green PC connector, IDE interfaces (2), parallel port, PS/2 mouse port, serial ports (2), IR connector, USB connectors (2), ATX power connector, AGP slot |



| CONNECTIONS | | | |
|---------------------|----------|-----------------------|----------|
| Purpose | Location | Purpose | Location |
| AGP slot | AGP | PS/2 mouse port | J3 |
| ATX power connector | ATX | Soft off power supply | JP1 |
| | | | |

| | | | |
|------------------------|------|----------------------|--------------|
| Parallel port | CN1 | Green PC connector | JP2 |
| USB connector 1 | CN2A | IDE interface LED | JP3 |
| USB connector 2 | CN2B | Power LED | JP4 |
| Serial port 2 | CN3 | Reset switch | JP5 |
| Serial port 1 | CN4 | Speaker | JP6 |
| Floppy drive interface | CN5 | CPU fan power | JP8 |
| IDE interface 1 | IDE1 | Wak-on-lan connector | JP9 |
| IDE interface 2 | IDE2 | 32-bit PCI slots | PC1 - PC4 |
| IR connector | J1 | | |

USER CONFIGURABLE SETTINGS

| Function | | Label | Position |
|----------|-----------------------------------|-------|-------------------|
| » | Factory configured - do not alter | JP12 | Unidentified |
| » | Keyboard power on disabled | JP13 | Pins 2 & 3 closed |
| | Keyboard power on enabled | JP13 | Pins 1 & 2 closed |

SIMM CONFIGURATION

| Size | Bank 0 |
|-------|--------------|
| 8MB | (2) 1M x 36 |
| 16MB | (2) 2M x 36 |
| 32MB | (2) 4M x 36 |
| 64MB | (2) 8M x 36 |
| 128MB | (2) 16M x 36 |

DIMM CONFIGURATION

| Size | Bank 0 | Bank 1 | Bank 2 |
|------|-------------|--------|--------|
| 8MB | (1) 1M x 64 | None | None |

| | | | |
|-------|-------------|-------------|-------------|
| 16MB | (1) 1M x 64 | (1) 1M x 64 | None |
| 24MB | (1) 1M x 64 | (1) 1M x 64 | (1) 1M x 64 |
| 24MB | (1) 2M x 64 | (1) 1M x 64 | None |
| 32MB | (1) 4M x 64 | None | None |
| 32MB | (1) 1M x 64 | (1) 2M x 64 | (1) 1M x 64 |
| 32MB | (1) 2M x 64 | (1) 2M x 64 | None |
| 40MB | (1) 2M x 64 | (1) 2M x 64 | (1) 1M x 64 |
| 40MB | (1) 4M x 64 | (1) 1M x 64 | None |
| 48MB | (1) 4M x 64 | (1) 1M x 64 | (1) 1M x 64 |
| 48MB | (1) 4M x 64 | (1) 2M x 64 | None |
| 48MB | (1) 2M x 64 | (1) 2M x 64 | (1) 2M x 64 |
| 56MB | (1) 4M x 64 | (1) 2M x 64 | (1) 1M x 64 |
| 64MB | (1) 8M x 64 | None | None |
| 64MB | (1) 4M x 64 | (1) 4M x 64 | None |
| 64MB | (1) 4M x 64 | (1) 2M x 64 | (1) 2M x 64 |
| 72MB | (1) 4M x 64 | (1) 1M x 64 | (1) 4M x 64 |
| 72MB | (1) 8M x 64 | (1) 1M x 64 | None |
| 80MB | (1) 8M x 64 | (1) 2M x 64 | None |
| 80MB | (1) 8M x 64 | (1) 1M x 64 | (1) 1M x 64 |
| 80MB | (1) 4M x 64 | (1) 4M x 64 | (1) 2M x 64 |
| 88MB | (1) 8M x 64 | (1) 2M x 64 | (1) 1M x 64 |
| 96MB | (1) 4M x 64 | (1) 4M x 64 | (1) 4M x 64 |
| 96MB | (1) 8M x 64 | (1) 4M x 64 | None |
| 96MB | (1) 8M x 64 | (1) 2M x 64 | (1) 2M x 64 |
| 104MB | (1) 8M x 64 | (1) 4M x 64 | (1) 1M x 64 |
| 112MB | (1) 8M x 64 | (1) 4M x 64 | (1) 2M x 64 |
| 128MB | (1) 8M x 64 | (1) 8M x 64 | None |
| 128MB | (1) 8M x 64 | (1) 4M x 64 | (1) 4M x 64 |
| | | | |

| | | | |
|-------|-------------|-------------|-------------|
| 136MB | (1) 8M x 64 | (1) 8M x 64 | (1) 1M x 64 |
| 144MB | (1) 8M x 64 | (1) 8M x 64 | (1) 2M x 64 |
| 160MB | (1) 8M x 64 | (1) 8M x 64 | (1) 4M x 64 |
| 192MB | (1) 8M x 64 | (1) 8M x 64 | (1) 8M x 64 |

Note: DIMM Bank 2 can not be used if memory is loaded in the SIMM slots.

CPU SPEED SELECTION (INTEL)

| CPU speed | SW/1 | SW/2 | SW/3 | SW/4 |
|-----------|------|------|------|------|
| 90MHz | On | Off | Off | Off |
| 100MHz | Off | Off | Off | Off |
| 120MHz | On | On | Off | Off |
| 133MHz | Off | On | Off | Off |
| 150MHz | On | On | On | Off |
| 166MHz | Off | On | On | Off |
| 180MHz | On | Off | Off | Off |

CPU SPEED SELECTION (INTEL CON'T)

| CPU speed | SW/5 | SW/6 | SW/7 | SW/8 |
|-----------|------|------|------|------|
| 90MHz | Off | Off | On | Off |
| 100MHz | Off | Off | On | Off |
| 120MHz | Off | Off | On | Off |
| 133MHz | Off | Off | On | Off |
| 150MHz | Off | Off | On | Off |
| 166MHz | Off | Off | On | Off |
| 180MHz | Off | Off | On | Off |

CPU SPEED SELECTION (INTEL CON'T)

| CPU | IP0 | IP10 | IP11 |
|-----|-----|------|------|
|-----|-----|------|------|

| CPU speed | JP9 | JP10 | JP11 |
|-----------|-------|-------|-------|
| 90MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 100MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 120MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 133MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 150MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 166MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 180MHz | 2 & 3 | 1 & 2 | 1 & 2 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (INTEL MMX)

| CPU speed | SW/1 | SW/2 | SW/3 | SW/4 |
|-----------|------|------|------|------|
| 150MHz | On | On | On | Off |
| 166MHz | Off | On | On | Off |
| 200MHz | Off | Off | On | Off |
| 233MHz | Off | Off | Off | Off |

CPU SPEED SELECTION (INTEL MMX CON'T)

| CPU speed | SW/5 | SW/6 | SW/7 | SW/8 |
|-----------|------|------|------|------|
| 150MHz | Off | Off | On | Off |
| 166MHz | Off | Off | On | Off |
| 200MHz | Off | Off | On | Off |
| 233MHz | Off | Off | On | Off |

CPU SPEED SELECTION (INTEL MMX CON'T)

| CPU speed | JP9 | JP10 | JP11 |
|-----------|-------|-------|-------|
| 150MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 166MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 200MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 233MHz | 2 & 3 | 1 & 2 | 1 & 2 |

| | | | |
|--------|-------|-------|-------|
| 166MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 200MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 233MHz | 2 & 3 | 1 & 2 | 1 & 2 |

Note: Pins designated should be in the closed position.

| CPU SPEED SELECTION (P54CT) | | | | |
|-----------------------------|------|------|------|------|
| CPU speed | SW/1 | SW/2 | SW/3 | SW/4 |
| 150MHz | On | On | On | Off |
| 166MHz | Off | On | On | Off |

| CPU SPEED SELECTION (P54CT CON'T) | | | | |
|-----------------------------------|------|------|------|------|
| CPU speed | SW/5 | SW/6 | SW/7 | SW/8 |
| 150MHz | Off | Off | On | Off |
| 166MHz | Off | Off | On | Off |

| CPU SPEED SELECTION (P54CT CON'T) | | | |
|-----------------------------------|-------|-------|-------|
| CPU speed | JP9 | JP10 | JP11 |
| 150MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 166MHz | 2 & 3 | 1 & 2 | 1 & 2 |

Note: Pins designated should be in the closed position.

| CPU SPEED SELECTION (P54CTB) | | | | |
|------------------------------|------|------|------|------|
| CPU speed | SW/1 | SW/2 | SW/3 | SW/4 |
| 150MHz | On | On | On | Off |
| 166MHz | Off | On | On | Off |
| 180MHz | On | Off | On | Off |
| 200MHz | Off | Off | On | Off |

CPU SPEED SELECTION (P54CTB CON'T)

| CPU speed | SW/5 | SW/6 | SW/7 | SW/8 |
|-----------|------|------|------|------|
| 150MHz | Off | Off | On | Off |
| 166MHz | Off | Off | On | Off |
| 180MHz | Off | Off | On | Off |
| 200MHz | Off | Off | On | Off |

CPU SPEED SELECTION (P54CTB CON'T)

| CPU speed | JP9 | JP10 | JP11 |
|-----------|-------|-------|-------|
| 150MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 166MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 180MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 200MHz | 2 & 3 | 1 & 2 | 1 & 2 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K5)

| CPU speed | SW/1 | SW/2 | SW/3 | SW/4 |
|-----------|------|------|------|------|
| 133MHz | Off | On | Off | Off |
| 166MHz | Off | On | On | Off |

CPU SPEED SELECTION (AM K5 CON'T)

| CPU speed | SW/5 | SW/6 | SW/7 | SW/8 |
|-----------|------|------|------|------|
| 133MHz | Off | Off | On | Off |
| 166MHz | Off | Off | On | Off |

CPU SPEED SELECTION (AM K5 CON'T)

| CPU speed | JP9 | JP10 | JP11 |
|-----------|-------|-------|-------|
| 133MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 166MHz | 2 & 3 | 1 & 2 | 1 & 2 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (AM K6)

| CPU speed | SW/1 | SW/2 | SW/3 | SW/4 |
|-----------|------|------|------|------|
| 166MHz | Off | On | On | Off |
| 180MHz | On | Off | On | Off |
| 200MHz | Off | Off | On | Off |
| 233MHz | Off | Off | Off | Off |

CPU SPEED SELECTION (AM K6 CON'T)

| CPU speed | SW/5 | SW/6 | SW/7 | SW/8 |
|-----------|------|------|------|------|
| 166MHz | Off | On | On | Off |
| 180MHz | Off | On | On | Off |
| 200MHz | Off | On | On | Off |
| 233MHz | Off | Off | On | Off |

CPU SPEED SELECTION (AM K6 CON'T)

| CPU speed | JP9 | JP10 | JP11 |
|-----------|-------|-------|-------|
| 166MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 180MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 200MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 233MHz | 2 & 3 | 1 & 2 | 1 & 2 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX/IBM 6X86)

| CPU speed | SW/1 | SW/2 | SW/3 | SW/4 |
|-----------|------|------|------|------|
| 120MHz | On | On | Off | Off |
| 133MHz | Off | On | Off | Off |
| 150MHz | Off | On | Off | Off |

CPU SPEED SELECTION (CX/IBM 6X86 CON'T)

| CPU speed | SW/5 | SW/6 | SW/7 | SW/8 |
|-----------|------|------|------|------|
| 120MHz | Off | Off | On | Off |
| 133MHz | Off | Off | On | Off |
| 150MHz | Off | Off | On | Off |

CPU SPEED SELECTION (CX/IBM 6X86 CON'T)

| CPU speed | JP9 | JP10 | JP11 |
|-----------|-------|-------|-------|
| 120MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 133MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 150MHz | 1 & 2 | 2 & 3 | 1 & 2 |

Note: Pins designated should be in the closed position.

CPU SPEED SELECTION (CX/IBM 6X86L)

| CPU speed | SW/1 | SW/2 | SW/3 | SW/4 |
|-----------|------|------|------|------|
| 150MHz | On | On | Off | Off |
| 166MHz | Off | On | Off | Off |
| 200MHz | Off | On | Off | Off |

CPU SPEED SELECTION (CX/IBM 6X86L CON'T)

| CPU speed | SW/5 | SW/6 | SW/7 | SW/8 |
|-----------|------|------|------|------|
| 150MHz | Off | Off | On | Off |
| 166MHz | Off | Off | On | Off |
| 200MHz | Off | Off | On | Off |

| CPU SPEED SELECTION (CX/IBM 6X86L CON'T) | | | |
|--|-------|-------|-------|
| CPU speed | JP9 | JP10 | JP11 |
| 150MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 166MHz | 2 & 3 | 1 & 2 | 1 & 2 |
| 200MHz | 1 & 2 | 2 & 3 | 1 & 2 |

Note: Pins designated should be in the closed position.

| CPU SPEED SELECTION (IBM/CX 6X86MX) | | | | | | |
|-------------------------------------|-------------|------------|------|------|------|------|
| CPU speed | Clock speed | Multiplier | SW/1 | SW/2 | SW/3 | SW/4 |
| 150MHz | 60MHz | 2x | On | On | Off | Off |
| 166MHz | 60MHz | 2.5x | On | On | On | Off |
| 166MHz | 66MHz | 2x | Off | On | Off | Off |
| 200MHz | 60MHz | 3x | On | Off | On | Off |
| 200MHz | 66MHz | 2.5x | Off | On | On | Off |
| 200MHz | 75MHz | 2x | Off | On | Off | Off |
| 233MHz | 66MHz | 3x | Off | Off | On | Off |
| 233MHz | 75MHz | 2.5x | Off | On | On | Off |
| 233MHz | 83MHz | 2x | On | On | Off | Off |
| 266MHz | 66MHz | 3.5x | Off | Off | Off | Off |
| 266MHz | 75MHz | 3x | Off | Off | On | Off |
| 266MHz | 83MHz | 2.5x | On | On | On | Off |

CPU SPEED SELECTION (IBM/CX 6X86MX CON'T)

| CPU speed | Clock speed | Multiplier | SW/5 | SW/6 | SW/7 | SW/8 |
|------------------|--------------------|-------------------|-------------|-------------|-------------|-------------|
| 150MHz | 60MHz | 2x | Off | On | On | Off |
| 166MHz | 60MHz | 2.5x | Off | On | On | Off |
| 166MHz | 66MHz | 2x | Off | On | On | Off |
| 200MHz | 60MHz | 3x | Off | On | On | Off |
| 200MHz | 66MHz | 2.5x | Off | On | On | Off |
| 200MHz | 75MHz | 2x | Off | On | On | Off |
| 233MHz | 66MHz | 3x | Off | On | On | Off |
| 233MHz | 75MHz | 2.5x | Off | On | On | Off |
| 233MHz | 83MHz | 2x | Off | On | On | Off |
| 266MHz | 66MHz | 3.5x | Off | On | On | Off |
| 266MHz | 75MHz | 3x | Off | On | On | Off |
| 266MHz | 83MHz | 2.5x | Off | On | On | Off |

CPU SPEED SELECTION (IBM/CX 6X86MX CON'T)

| CPU speed | Clock speed | Multiplier | JP9 | JP10 | JP11 |
|------------------|--------------------|-------------------|------------|-------------|-------------|
| 150MHz | 60MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 |
| 166MHz | 60MHz | 2.5x | 2 & 3 | 1 & 2 | 1 & 2 |
| 166MHz | 66MHz | 2x | 2 & 3 | 1 & 2 | 1 & 2 |
| 200MHz | 60MHz | 3x | 2 & 3 | 1 & 2 | 1 & 2 |
| 200MHz | 66MHz | 2.5x | 2 & 3 | 1 & 2 | 1 & 2 |
| 200MHz | 75MHz | 2x | 1 & 2 | 2 & 3 | 1 & 2 |
| 233MHz | 66MHz | 3x | 2 & 3 | 1 & 2 | 1 & 2 |
| 233MHz | 75MHz | 2.5x | 1 & 2 | 2 & 3 | 1 & 2 |
| 233MHz | 83MHz | 2x | 1 & 2 | 1 & 2 | 2 & 3 |
| 266MHz | 66MHz | 3.5x | 2 & 3 | 1 & 2 | 1 & 2 |
| 266MHz | 75MHz | 3x | 1 & 2 | 2 & 3 | 1 & 2 |

| | | | | | |
|--------|-------|------|-------|-------|-------|
| 266MHz | 83MHz | 2.5x | 1 & 2 | 1 & 2 | 2 & 3 |
|--------|-------|------|-------|-------|-------|

Note: Pins designated should be in the closed position.