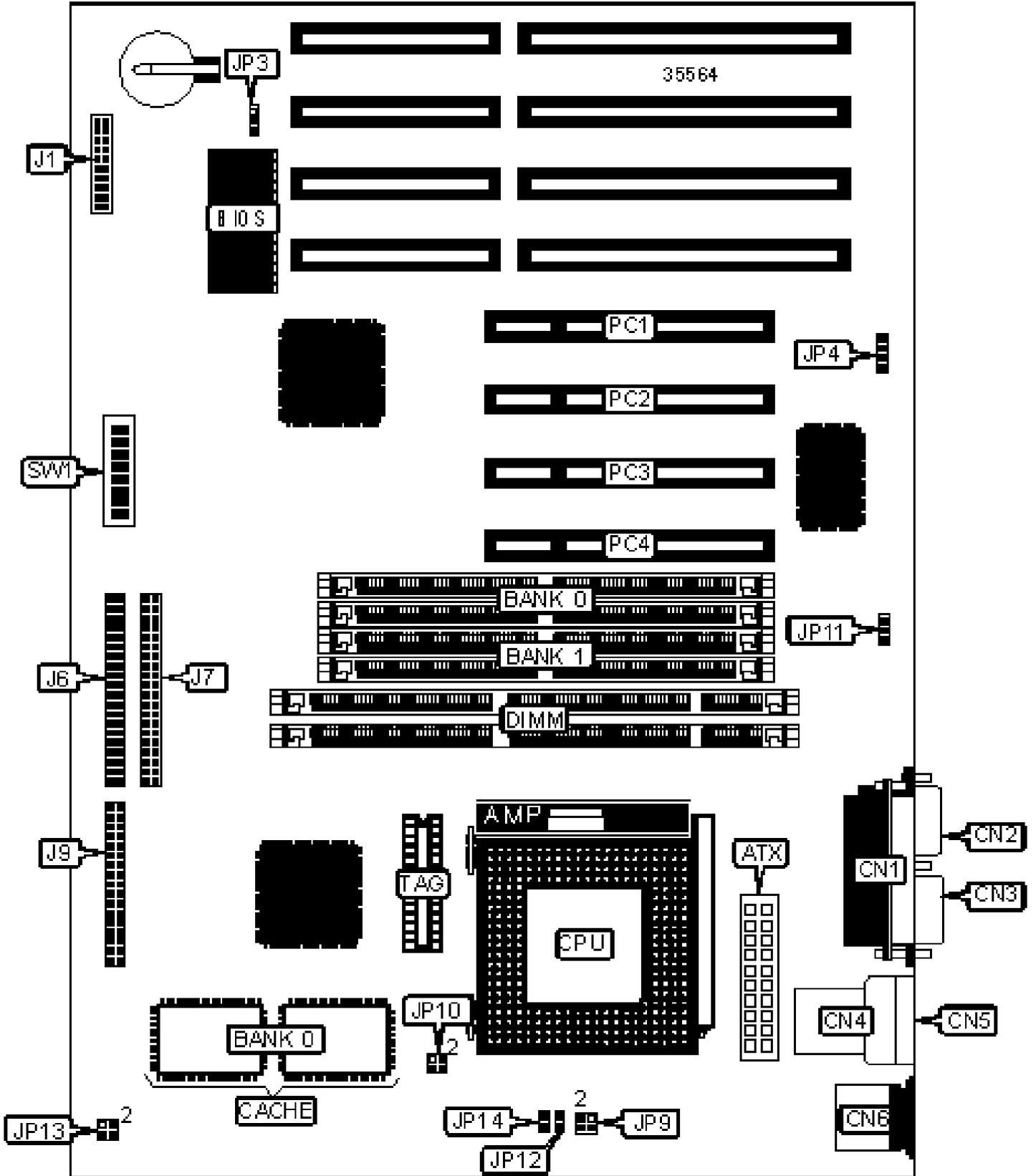


GEMLIGHT COMPUTER, LTD.

GMB-P57IAX (VER. 2.00)

Configuration



## CONNECTIONS

| Purpose             | Location      | Purpose                | Location        |
|---------------------|---------------|------------------------|-----------------|
| ATX power connector | ATX           | Power button           | J1/pins 5 & 6   |
| Parallel port       | CN1           | Power LED & keylock    | J1/pins 11 - 15 |
| Serial port 2       | CN2           | Speaker                | J1/pins 17 - 20 |
| Serial port 1       | CN3           | IDE interface 1        | J6              |
| USB connector 1     | CN4           | IDE interface 2        | J7              |
| USB connector 2     | CN5           | Floppy drive interface | J9              |
| PS/2 mouse port     | CN6           | IR connector           | JP4             |
| IDE interface LED   | J1/pins 1 & 2 | 32-bit PCI slots       | PCI – PC4       |

## USER CONFIGURABLE SETTINGS

| Function                          | Label | Position          |
|-----------------------------------|-------|-------------------|
| Flash BIOS voltage select 12v     | JP3   | Pins 1 & 2 closed |
| Flash BIOS voltage select 5v      | JP3   | Pins 2 & 3 closed |
| Factory configured - do not alter | SW1/1 | Off               |
| Factory configured - do not alter | SW1/2 | On                |
| Ring in select COM1               | JP11  | Pins 1 & 2 closed |
| Ring in select COM2               | JP11  | Pins 2 & 3 closed |

## DRAM CONFIGURATION

| Size | Bank 0      | Bank 1      |
|------|-------------|-------------|
| 8MB  | (2) 1M x 32 | None        |
| 16MB | (2) 2M x 32 | None        |
| 16MB | (2) 1M x 32 | (2) 1M x 32 |
| 24MB | (2) 2M x 32 | (2) 1M x 32 |

|       |              |              |
|-------|--------------|--------------|
| 32MB  | (2) 4M x 32  | None         |
| 32MB  | (2) 2M x 32  | (2) 2M x 32  |
| 40MB  | (2) 4M x 32  | (2) 1M x 32  |
| 48MB  | (2) 4M x 32  | (2) 2M x 32  |
| 64MB  | (2) 8M x 32  | None         |
| 64MB  | (2) 4M x 32  | (2) 4M x 32  |
| 72MB  | (2) 8M x 32  | (2) 1M x 32  |
| 80MB  | (2) 8M x 32  | (2) 2M x 32  |
| 96MB  | (2) 8M x 32  | (2) 4M x 32  |
| 128MB | (2) 8M x 32  | (2) 8M x 32  |
| 128MB | (2) 16M x 32 | None         |
| 136MB | (2) 16M x 32 | (2) 1M x 32  |
| 144MB | (2) 16M x 32 | (2) 2M x 32  |
| 160MB | (2) 16M x 32 | (2) 4M x 32  |
| 192MB | (2) 16M x 32 | (2) 8M x 32  |
| 256MB | (2) 16M x 32 | (2) 16M x 32 |

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 |
| 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 |

| <b>CACHE CONFIGURATION</b> |              |              |
|----------------------------|--------------|--------------|
| Size                       | Bank 0       | TAG          |
| 256KB                      | (2) 32K x 32 | Unidentified |
| 512KB                      | (2) 64K x 32 | Unidentified |

| <b>CPU SPEED SELECTION (CX 6X86L)</b> |             |            |       |       |       |
|---------------------------------------|-------------|------------|-------|-------|-------|
| CPU speed                             | Clock speed | Multiplier | SW1/3 | SW1/4 | SW1/5 |
| 150MHz                                | 60MHz       | 2x         | On    | Off   | Off   |
| 166MHz                                | 66MHz       | 2x         | On    | Off   | Off   |
| 200MHz                                | 66MHz       | 2.5x       | On    | Off   | Off   |

| <b>CPU SPEED SELECTION (CX 6X86L, CON'T)</b> |             |            |       |       |       |
|----------------------------------------------|-------------|------------|-------|-------|-------|
| CPU speed                                    | Clock speed | Multiplier | SW1/6 | SW1/7 | SW1/8 |
| 150MHz                                       | 60MHz       | 2x         | On    | Off   | Off   |
| 166MHz                                       | 66MHz       | 2x         | Off   | Off   | Off   |
| 200MHz                                       | 66MHz       | 2.5x       | Off   | On    | Off   |

**CPU SPEED SELECTION (CX 6X86MX)**

| CPU speed | Clock speed | Multiplier | SW1/3 | SW1/4 | SW1/5 |
|-----------|-------------|------------|-------|-------|-------|
| 166MHz    | 66MHz       | 2x         | On    | On    | Off   |
| 200MHz    | 75MHz       | 2x         | On    | Off   | Off   |
| 200MHz    | 66MHz       | 2.5x       | On    | On    | Off   |
| 233MHz    | 75MHz       | 2.5x       | On    | On    | Off   |
| 233MHz    | 66MHz       | 3x         | Off   | On    | Off   |

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

| CPU speed | Clock speed | Multiplier | SW1/6 | SW1/7 | SW1/8 |
|-----------|-------------|------------|-------|-------|-------|
| 166MHz    | 66MHz       | 2x         | On    | Off   | Off   |
| 200MHz    | 75MHz       | 2x         | Off   | On    | Off   |
| 200MHz    | 66MHz       | 2.5x       | Off   | Off   | Off   |
| 233MHz    | 75MHz       | 2.5x       | Off   | On    | Off   |
| 233MHz    | 66MHz       | 3x         | Off   | Off   | Off   |

**CPU SPEED SELECTION (CX M II)**

| CPU speed | Clock speed | Multiplier | SW1/3 | SW1/4 | SW1/5 |
|-----------|-------------|------------|-------|-------|-------|
| 300MHz    | 75MHz       | 3x         | Off   | On    | Off   |
| 300MHz    | 66MHz       | 3.5x       | Off   | Off   | Off   |

**CPU SPEED SELECTION (CX M II, CON'T)**

| CPU speed | Clock speed | Multiplier | SW1/6 | SW1/7 | SW1/8 |
|-----------|-------------|------------|-------|-------|-------|
| 300MHz    | 75MHz       | 2.5x       | Off   | On    | Off   |
| 300MHz    | 66MHz       | 3x         | Off   | Off   | Off   |

**CPU SPEED SELECTION (AM K5)**

| CPU speed | Clock speed | Multiplier | SW1/3 | SW1/4 | SW1/5 |
|-----------|-------------|------------|-------|-------|-------|
| 120MHz    | 60MHz       | 1.5x       | On    | Off   | Off   |
| 133MHz    | 66MHz       | 2x         | On    | Off   | Off   |
| 166MHz    | 66MHz       | 2.5x       | On    | On    | Off   |

**CPU SPEED SELECTION (AM K5, CON'T)**

| CPU speed | Clock speed | Multiplier | SW1/6 | SW1/7 | SW1/8 |
|-----------|-------------|------------|-------|-------|-------|
| 120MHz    | 60MHz       | 1.5x       | On    | Off   | Off   |
| 133MHz    | 66MHz       | 2x         | Off   | Off   | Off   |
| 166MHz    | 66MHz       | 2.5x       | Off   | Off   | Off   |

**CPU SPEED SELECTION (AM K6)**

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

**CPU SPEED SELECTION (AM K6, CON'T)**

| CPU speed | Clock speed | Multiplier | SW1/6 | SW1/7 | SW1/8 |
|-----------|-------------|------------|-------|-------|-------|
| 166MHz    | 66MHz       | 2.5x       | Off   | Off   | Off   |
| 200MHz    | 66MHz       | 3x         | Off   | Off   | Off   |
| 233MHz    | 66MHz       | 3.5x       | Off   | Off   | Off   |
| 266MHz    | 66MHz       | 4x         | Off   | Off   | Off   |

|        |       |      |     |     |     |
|--------|-------|------|-----|-----|-----|
| 300MHz | 66MHz | 4.5x | Off | Off | Off |
|--------|-------|------|-----|-----|-----|

**CPU SPEED SELECTION (AM K6-2)**

| CPU speed | Clock speed | Multiplier | SW1/3 | SW1/4 | SW1/5 |
|-----------|-------------|------------|-------|-------|-------|
| 266MHz    | 66MHz       | 4x         | On    | Off   | On    |

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

| CPU speed | Clock speed | Multiplier | SW1/6 | SW1/7 | SW1/8 |
|-----------|-------------|------------|-------|-------|-------|
| 266MHz    | 66MHz       | 4x         | Off   | Off   | Off   |

**CPU SPEED SELECTION (INTEL)**

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

**CPU SPEED SELECTION (INTEL, CON'T)**

| CPU speed | Clock speed | Multiplier | SW1/6 | SW1/7 | SW1/8 |
|-----------|-------------|------------|-------|-------|-------|
| 90MHz     | 60MHz       | 1.5x       | On    | Off   | Off   |
| 100MHz    | 66MHz       | 1.5x       | Off   | Off   | Off   |
| 120MHz    | 60MHz       | 2x         | On    | Off   | Off   |
| 133MHz    | 66MHz       | 2x         | Off   | Off   | Off   |

|        |       |      |     |     |     |
|--------|-------|------|-----|-----|-----|
| 150MHz | 60MHz | 2.5x | On  | Off | Off |
| 166MHz | 66MHz | 2.5x | Off | Off | Off |
| 200MHz | 66MHz | 3x   | Off | Off | Off |

**CPU SPEED SELECTION (INTEL MMX)**

| CPU speed | Clock speed | Multiplier | SW1/3 | SW1/4 | SW1/5 |
|-----------|-------------|------------|-------|-------|-------|
| 166MHz    | 66MHz       | 2.5x       | On    | On    | Off   |
| 200MHz    | 66MHz       | 3x         | Off   | On    | Off   |
| 233MHz    | 66MHz       | 3.5x       | Off   | Off   | Off   |

**CPU SPEED SELECTION (INTEL MMX, CON'T)**

| CPU speed | Clock speed | Multiplier | SW1/6 | SW1/7 | SW1/8 |
|-----------|-------------|------------|-------|-------|-------|
| 166MHz    | 66MHz       | 2.5x       | Off   | Off   | Off   |
| 200MHz    | 66MHz       | 3x         | Off   | Off   | Off   |
| 233MHz    | 66MHz       | 3.5x       | Off   | Off   | Off   |

**CPU SPEED SELECTION (IDT C6)**

| CPU speed | Clock speed | Multiplier | SW1/3 | SW1/4 | SW1/5 |
|-----------|-------------|------------|-------|-------|-------|
| 180MHz    | 60MHz       | 3x         | Off   | On    | Off   |
| 200MHz    | 66MHz       | 3x         | Off   | On    | Off   |

**CPU SPEED SELECTION (IDT C6, CON'T)**

| CPU speed | Clock speed | Multiplier | SW1/6 | SW1/7 | SW1/8 |
|-----------|-------------|------------|-------|-------|-------|
| 180MHz    | 60MHz       | 3x         | On    | Off   | Off   |
| 200MHz    | 66MHz       | 3x         | Off   | Off   | Off   |

### CPU VOLTAGE SELECTION (SINGLE)

| Voltage | JP9          | JP10         | JP12   | JP13 | JP14   |
|---------|--------------|--------------|--------|------|--------|
| 3.3v    | 1 & 2        | 1 & 2, 3 & 4 | Closed | Open | Closed |
| 3.5v    | 1 & 2, 3 & 4 | 1 & 2, 3 & 4 | Closed | Open | Closed |

Note: Pins designated should be in the closed position.

### CPU VOLTAGE SELECTION (DUAL)

| Voltage | V core | JP9   | JP10 | JP12   | JP13         | JP14   |
|---------|--------|-------|------|--------|--------------|--------|
| 3.3v    | 2.2v   | 1 & 2 | Open | Open   | 1 & 3, 2 & 4 | Open   |
| 3.3v    | 2.8v   | Open  | Open | Open   | 1 & 3, 2 & 4 | Closed |
| 3.3v    | 2.9v   | 3 & 4 | Open | Open   | 1 & 3, 2 & 4 | Closed |
| 3.3v    | 3.2v   | Open  | Open | Closed | 1 & 3, 2 & 4 | Closed |

Note: Pins designated should be in the closed position.