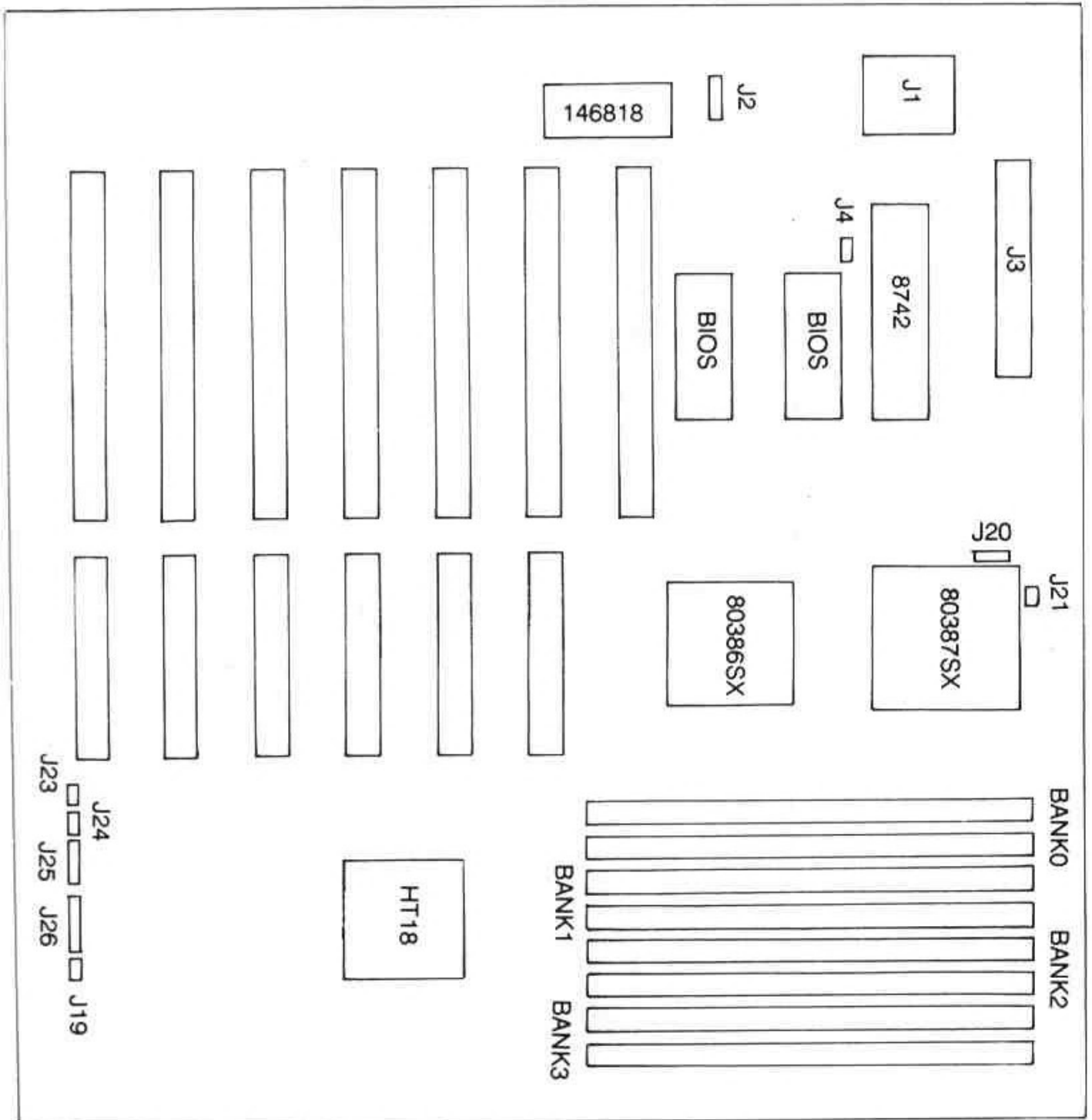


2-2 Hardware Installation

The figure below shows the location of the connectors and jumpers on the Mini-386SX/AT mainboard:



A jumper is a type of switch which can be turned on or off by using a "shorting cap".

The mainboard has the following jumpers:

- Display Type Jumper (J4)
- Turbo Switch Jumper (J19)
- Math Coprocessor Clock Jumper (J20)
- Math Coprocessor Mode Jumper (J21)

A. Display Type Jumper (J4)

During system boot-up, the display type jumper, J4, tells the Basic Input/Output System (BIOS) the type of display adapter present in the system. The jumper positions and their respective display types are:

Position	Display Type
OFF	monochrome adapter (default)
ON	others

B. Turbo Switch Jumper (J19)

The turbo switch jumper, J19, changes the CPU speed between high and low.

Position	CPU Speed
OFF	high speed (default)
ON	low speed

The 3-pin J20 is used to configure the clock frequency of 80387SX coprocessor.

Position	Speed
close 1-2	same as CPU speed (synchronous)
close 2-3	80387SX will run at 16 MHz

D. Math Coprocessor Mode Jumper (J21)

Position	Speed
OFF	same as CPU speed (synchronous)
ON	80387SX will run at 16 MHz

2-3 Math Coprocessor Installation

The mainboard has a socket for installing an 80387SX math coprocessor. The math coprocessor allows the computer to perform high speed arithmetic, logarithmic and trigonometric functions with extreme accuracy.

After you have plugged the 80387SX into the socket, please make sure that the connectors between the CPU board and the mainboard are still in good contact. Remember that J20 and J21 must be set, depending on your speed.

2-4 Battery

A 3.6 Vdc lithium battery pack is provided with the mainboard. This battery pack has a normal life span of 3500 days. Connect it to the J1 connector. The battery provides power for the following devices:

- o memory device containing system setup data
- » **NOTE:** *The real time clock is accurate to within 3 seconds a day.*

2-5 Memory Configuration

The Mini-386SX/AT mainboard uses space-saving DRAM modules instead of normal DRAM chips. Each DRAM module holds eight data bits and one parity bit. There are eight sockets (8MB) on the mainboard for installing eight modules (i.e., four banks: Bank0, Bank1, Bank2 and Bank3). You may install either 256Kb or 1Mb modules. Be sure to plug in the modules with the side holding the IC chips facing the other ICs on the mainboard. Incorrect installation will damage the modules.

The Mini-386SX/AT mainboard provides tremendous flexibility in the configurations of the memory. The table below lists the possible memory configurations.

Bank0	Bank1	Bank2	Bank3	Interleave	Total Memory
256Kb	0	0	0	0	512KB
256Kb	256Kb	0	0	2	1MB
256Kb	256Kb	256Kb	256Kb	4	2MB
256Kb	256Kb	1Mb	1Mb	0	3MB
256Kb	256Kb	1Mb	1Mb	2	5MB
1Mb	0	0	0	0	2MB
1Mb	1Mb	0	0	2	4MB
1Mb	1Mb	1Mb	0	0	6MB
1Mb	1Mb	1Mb	1Mb	4	8MB