

System Jumper Setting

J1	<input checked="" type="checkbox"/> Internal Write-Back/Write-Through <input checked="" type="checkbox"/> Write-Through <input type="checkbox"/> Write-Back (Default)
J2	Display Type <input checked="" type="checkbox"/> CGA <input type="checkbox"/> Monochrome/VGA (Default)
J4	Flash EPROM Power Supply <input checked="" type="checkbox"/> +12V <input type="checkbox"/> +5V (Default)
J12	Hardware Reset <input checked="" type="checkbox"/> Enabled <input type="checkbox"/> Disabled (Default)
JCP	Password Clear <input checked="" type="checkbox"/> Enabled <input type="checkbox"/> Disabled (Default)

Processor Jumper Setting

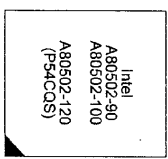
J3	<input checked="" type="checkbox"/> Processor Pipeline Mode Enabled (Default) <input type="checkbox"/> Disabled
J8	Bus to Processor Frequency Ratio <input checked="" type="checkbox"/> 1:2 <input type="checkbox"/> 2:3 (Default)
JV/R	Regular Processor <input checked="" type="checkbox"/> 3.3V (Default) <input type="checkbox"/> 3.45V <input type="checkbox"/> 3.6V
JK3 JK2 JK1	Processor Clock <input checked="" type="checkbox"/> 50 MHz <input type="checkbox"/> 60 MHz (Default) <input type="checkbox"/> 66 MHz

Bus Clock Jumper Setting

P54C-75 MHz : PCLK/3



P54C-90/100/120 MHz : PCLK/4



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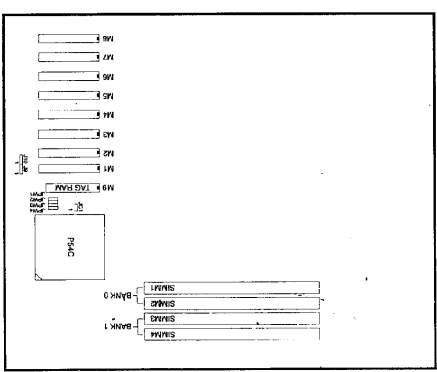
Chapter 3

System Memory

The PT-2000 can be equipped with the necessary memory for running all your applications. Memory comes in the form of DRAM (SIMMs) and cache SRAM. This chapter describes these two types of memory and gives instructions on how to install each type on the mainboard.

Memory Locations

The board layout below shows the locations of the DRAM memory banks and the cache SRAM:



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Installing DRAM

SIMM Banks

The PT-2000 can accommodate onboard memory from 8 to 128MB using SIMMs (Single-In-Line Memory Modules). The mainboard has two memory banks — Bank 0 and Bank 1. Each bank has two SIMM sockets which can accept either a 1MB, 4MB, 8MB, 16MB or 32MB SIMM in each socket.

DRAM Configuration

Memory can be installed in a variety of configurations, as shown in the following table:

TOTAL MEMORY	BANK 0 (72-PIN x 2)	BANK 1 (72-PIN x 2)
8MB	4MB & 4MB	1MB & 1MB
16MB	4MB & 4MB	1MB & 1MB
16MB	8MB & 8MB	4MB & 4MB
24MB	8MB & 8MB	8MB & 8MB
32MB	16MB & 16MB	4MB & 4MB
32MB	16MB & 16MB	8MB & 8MB
40MB	16MB & 16MB	16MB & 16MB
48MB	16MB & 16MB	16MB & 16MB
64MB	32MB & 32MB	16MB & 16MB
64MB	32MB & 32MB	16MB & 16MB
64MB	32MB & 32MB	16MB & 16MB
72MB	32MB & 32MB	16MB & 16MB
80MB	32MB & 32MB	16MB & 16MB
96MB	32MB & 32MB	32MB & 32MB
128MB	32MB & 32MB	32MB & 32MB

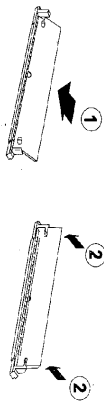
→ **NOTE : All memory banks use 72-pin memory modules.**

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Installation Instructions

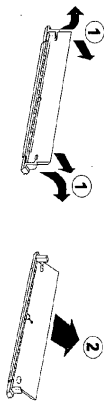
→ **NOTE : Always observe static electricity precautions. See "Handling Precautions" at the start of this manual.**

1. Locate the SIMM banks on the mainboard.
2. Insert the SIMM edge connector at a 90-degree angle onto the socket.



3. Carefully push the SIMM down and back into the socket until the retaining clips of the socket snap, holding the SIMM in place. The holes in the SIMM should match the pins on the socket's retaining clips.

To remove the SIMMs, pull the retaining latch on both ends of the socket and reverse the procedure above.



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Cache Memory

The PT-2000 can accept standard 3.3V or mix voltage cache SRAM of 256/512KB in DIP packages. Every time the CPU wants to write data to the external memory, if the location in SRAM is a "hit", it writes this data to the cache RAM directly, not to the DRAM.

→ **NOTE : Use the correct chips for the amount of cache memory you want to add. Install both the correct Cache and Tag SRAM. Alter RAM type is the same as Tag RAM.**

Installing Cache Memory

→ **NOTE : Always observe static electricity precautions. See "Handling Precautions" at the start of this manual.**

If you do not have the confidence to make the installation, better consult a service technician for assistance.

1. Locate the cache memory on the mainboard.
2. Be guided by the Cache SRAM settings depending on your desired SRAM configuration.

Correct orientation of the chip is necessary for the cache to operate properly. Normally, the chips have either a curved notch or a dot. This marker on the chip must be matched to the marker on the socket for correct alignment.

Install the chips individually as follows:

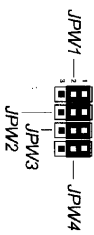
3. Align the chip with the marker on the socket. Press the chip onto the socket, ensuring that the pins on the chip are aligned with the corresponding connections on the socket.
4. Press the chip completely into the socket so that the pins are properly seated.

Cache SRAM Specifications and Settings

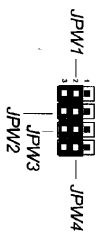
Using Various Voltage SRAM

Cache sockets M1 to M8 can take 3.3V or mix-voltage SRAMs. However, cache socket M9 can only take 5.0V SRAMs. The SRAM jumper settings are shown below.

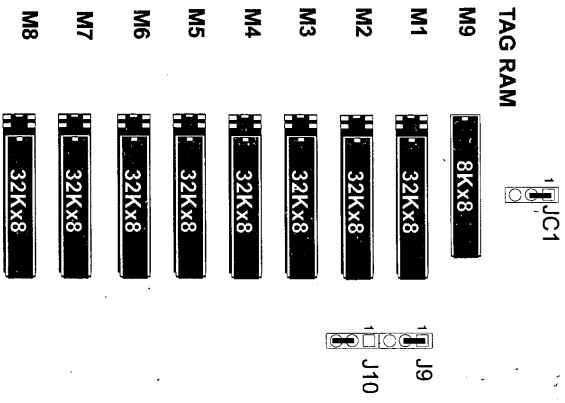
Jumper setting for mix-voltage SRAMs (M1-M8).



Jumper setting for 3.3V SRAMs (M1-M8).



256KB Cache SRAM



512KB Cache SRAM

