

Note: Refer to Faxback Doc. # 1512 for Main Logic Board Layout.

## 256K SIMMS

√25-5135 consists of two 256K x 9 SIMMS at 80 nanoseconds.

## 1MB SIMMS

25-5137 consists of two 1MB x 9 SIMMS at 70 nanoseconds.

## 4MB SIMMS

√25-5136 consists of two 4MB x 9 SIMMS at 60 nanoseconds. This item is available through Tandy National Parts. Contact your local Radio Shack to order this special item.

√ = Discontinued Radio Shack product.

Expand from 4MB to:	
Add to Main Logic Board	
5MB	(2) 25-5135 Move (4) 1MB in Bank 0 to Bank 1
6MB	(4) 25-5135 Move (4) 1MB in Bank 0 to Bank 2
8MB	(2) 25-5137
9MB	(2) 25-5137 and (2) 25-5135
10MB	(2) 25-5137 and (4) 25-5135 Move (4) 1MB from Bank 0 to Bank 2
12MB	(4) 25-5137
16MB	(6) 25-5137
16MB	(2) 25-5136 Remove (4) 1MB in Bank 0 and discard
17MB	(2) 25-5135 and (2) 25-5136 Remove (4) 1MB in Bank 0 and discard
18MB	(4) 25-5135 and (2) 25-5136 Remove (4) 1MB in Bank 0 and discard
20MB	(2) 25-5137 and (2) 25-5136
24MB	(4) 25-5137 and (2) 25-5136
32MB	(4) 25-5136 Remove (4) 1MB in Bank 0 and discard
33MB	(2) 25-5135 and (4) 25-5136 Remove (4) 1MB in Bank 0 and discard

34MB	(4) 25-5135 and (4) 25-5136 Remove (4) 1MB in Bank 0 and discard
36MB	(2) 25-5137 and (4) 25-5136 Remove (4) 1MB in Bank 0 to Bank 2
40MB	(4) 25-5137 and (4) 25-5136
48MB	(6) 25-5136 Remove (4) 1MB in Bank 0 and discard
64MB	(8) 25-5136 Remove (4) 1MB in Bank 0 and discard

#### INSTALLING ADDITIONAL MEMORY

You can increase internal memory from its standard 4MB to as much as 64MB by installing SIMMs, circuit boards containing RAM (Random Access Memory) chips. SIMM boards are available in three densities; each board can contain 256KB, 1MB, or 4MB of RAM. SIMMs insert into sockets located on the main logic board, or on a memory expansion board designed for SIMMs.

NOTE: The computer requires SIMMs rated at 80ns or faster.

#### MEMORY CONFIGURATIONS

Before installing additional memory, determine how much memory you need. Then, consult the following table to determine the type and number of SIMMs necessary to achieve that amount. For example, if you want a total of 5MB of memory, you should add 1MB to the standard configuration of 4MB.

Keep these points in mind:

- \* Don't use more than two types of SIMMs. For example, the computer can recognize four 1MB SIMMs in Bank 0 and four 256KB SIMMs in Bank 1, but it can not recognize a combination of 1 MB SIMMs in Bank 0, 256KB SIMMs in Bank 1 and 4MB SIMMs in Bank 2.
- \* Install the same type of SIMMs within a bank. Don't mix SIMMs in one bank.

#### SIMM CONFIGURATIONS

SIMM TYPE USED TO FILL EACH BANK				TOTAL MEMORY (MB)
BANK 0 (4 sockets)	BANK 1 (4 sockets)	BANK 2 (4 sockets)	BANK 3 (4 sockets)	
256 KB	(none)	(none)	(none)	1
256 KB	256 KB	(none)	(none)	2
256 KB	256 KB	256 KB	(none)	3
256 KB	256 KB	256 KB	256 KB	4

1 MB	(none)	(none)	(none)	4*
256 KB	1 MB	(none)	(none)	5
256 KB	256 KB	1 MB	(none)	6
1 MB	1 MB	(none)	(none)	8
1 MB	1 MB	256 KB	(none)	9
256 KB	256 KB	1 MB	1 MB	10
1 MB	1 MB	1 MB	(none)	12
1 MB	1 MB	1 MB	1 MB	16
4 MB	(none)	(none)	(none)	16
256 KB	4 MB	(none)	(none)	17
256 KB	256 KB	4 MB	(none)	18
1 MB	4 MB	(none)	(none)	20
1 MB	1 MB	4 MB	(none)	24
4 MB	4 MB	(none)	(none)	32
4 MB	4 MB	256 KB	(none)	33
256 KB	256 KB	4 MB	4 MB	34
4 MB	4 MB	1 MB	(none)	36
1 MB	1 MB	4 MB	4 MB	40
4 MB	4 MB	4 MB	(none)	48
4 MB	4 MB	4 MB	4 MB	64
* Indicates factory configuration.				

#### INSTALLING SIMMs

In the vertical sockets (Banks 0 and 1), add SIMMs from left to right, installing the first SIMM in the left-most open socket of the bank.

In the slanted sockets (Banks 2 and 3), add SIMMs from right to left, installing the first SIMM in the right-most open socket of the bank. The SIMMs overlap like shingles.

Follow these steps to install the SIMMs:

1. Open the computer.
2. Remove the lower 3 1/2" drive pan and lay the drive pan on the drive

tower.

NOTE: If a drive is installed in the drive pan, you might need to remove some or all drive cables connected to the drive. Take care not to topple the drive while removing the SIMMs.

3. Study the alignment of the SIMMs already installed. Notice that one lower corner of the SIMM board is notched so that the board fits only one way in the socket.
4. Press the metal-edged connector on the SIMM into the socket. The SIMM should be seated evenly in the socket.
5. In the vertical sockets, press the top edge of the SIMM forward so that it latches into place. In the slanted sockets, press the top edge of the SIMM backward so that it latches into place and overlaps any previously installed SIMMs. On both types of sockets, be sure the retaining latches snap the SIMM in place.
6. Perform any other SIMM installations as needed.
7. Reinstall the drive pan.
8. Close the computer.
9. Run the setup utility to record the new memory configuration. It won't be necessary to run the setup utility for the drive if you've done that previously. Faxback Document # 1177 will provide specific information on using the SETUP486 utility.

#### REMOVING SIMMs

Be sure to read "Installing SIMMs" and "Memory Configurations" before moving SIMMs around.

1. Open the computer.
2. Remove the lower 3 1/2" drive pan and lay the pan on the drive tower.
3. Study the orientation of the SIMMs in their sockets. The SIMMs stand closely or overlap like shingles. You must remove the outermost SIMM first. In the vertical sockets (Banks 0 and 1), this is the right most SIMM. In the slanted sockets (Banks 2 and 3), this is the left-most SIMM.
4. Carefully push apart the retaining latches on the SIMM socket.

NOTE: If a drive is installed in the drive pan, you might need to remove some or all drive cables connected to the drive. Take care not to topple the drive while removing the SIMMs.

5. While holding the latches apart, tip the SIMM until it clears the retaining latches.
6. Pull the SIMM up and out of the socket.
7. Install or remove any other SIMMs as needed.

8. Reinstall the drive pan.
9. Close the computer.
10. Run the setup utility to record the new memory configuration. It won't be necessary to run the setup utility for the drive if you've done that previously. Faxback Document # 1177 will provide specific information on using the SETUP486 utility.