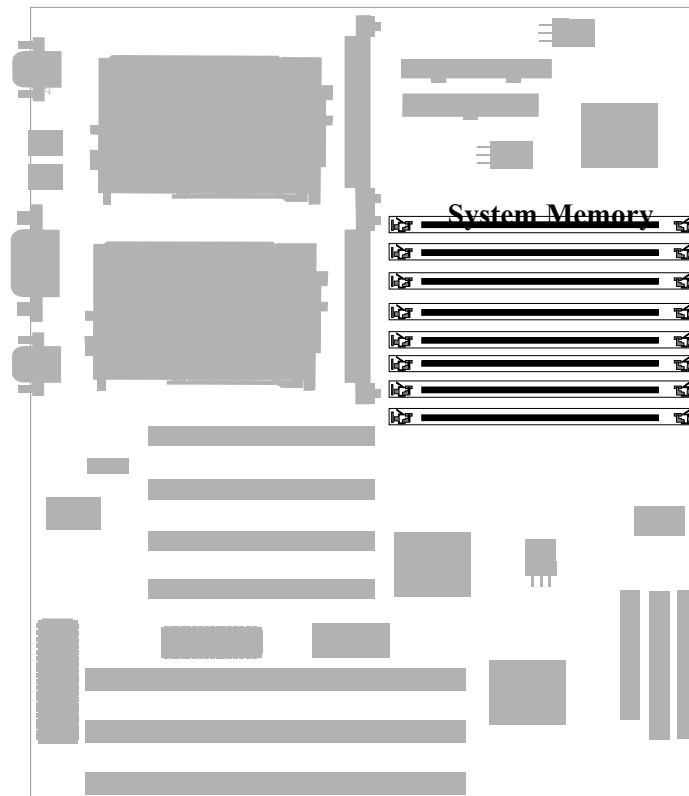


2 Memory Configurations

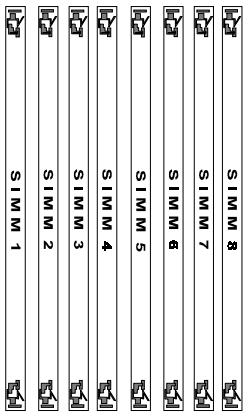
This chapter contains the detailed memory configuration: **System Memory and Cache Memory.**



The diagram above displays the location of SIMM Sockets on P6FX2-A motherboard.

System Memory

Bank 0 Bank 1 Bank 2 Bank 3



SIMM:

P6FX2-A provides tremendous flexibility DRAM configurations. It accepts a maximum 512MB memory size. The on-board DRAM is installed with 72-Pin SIMM.

There are four memory banks which support the 4M/8M/16M/32M/64M type, single and/or double-Sided modules.



The type of SIMM must be same if they exist at the same bank.

The following table lists a number of possible DRAM combinations.

Bank 0		Bank 1		Bank 2		Bank 3		Total
SIMM 1	SIMM 2	SIMM 3	SIMM 4	SIMM 5	SIMM 6	SIMM 7	SIMM 8	Memory Size
4MB	4MB	----	----	----	----	----	----	8MB
4MB	4MB	4MB	4MB	----	----	----	----	16MB
4MB	4MB	4MB	4MB	4MB	4MB	----	----	24MB
4MB	4MB	4MB	4MB	4MB	4MB	4MB	4MB	32MB
8MB	8MB	----	----	----	----	----	----	16MB
8MB	8MB	4MB	4MB	----	----	----	----	24MB
8MB	8MB	4MB	4MB	4MB	4MB	----	----	32MB
8MB	8MB	4MB	4MB	4MB	4MB	4MB	4MB	40MB
8MB	8MB	8MB	8MB	----	----	----	----	32MB
8MB	8MB	8MB	8MB	8MB	8MB	----	----	48MB
8MB	8MB	8MB	8MB	8MB	8MB	8MB	8MB	64MB

Continued.....

Bank 0		Bank 1		Bank 2		Bank 3		Total
SIMM 1	SIMM 2	SIMM 3	SIMM 4	SIMM 5	SIMM 6	SIMM 7	SIMM 8	Memory Size
16MB	16MB	-----	-----	-----	-----	-----	-----	32MB
16MB	16MB	4MB	4MB	-----	-----	-----	-----	40MB
16MB	16MB	4MB	4MB	4MB	4MB	-----	-----	48MB
16MB	16MB	4MB	4MB	4MB	4MB	4MB	4MB	56MB
16MB	16MB	8MB	8MB	-----	-----	-----	-----	48MB
16MB	16MB	8MB	8MB	8MB	8MB	-----	-----	64MB
16MB	16MB	8MB	8MB	8MB	8MB	8MB	8MB	80MB
16MB	16MB	16MB	16MB	-----	-----	-----	-----	64MB
16MB	16MB	16MB	16MB	16MB	16MB	-----	-----	96MB
16MB	16MB	16MB	16MB	16MB	16MB	16MB	16MB	128MB
32MB	32MB	-----	-----	-----	-----	-----	-----	64MB
32MB	32MB	4MB	4MB	-----	-----	-----	-----	72MB
32MB	32MB	4MB	4MB	4MB	4MB	-----	-----	80MB
32MB	32MB	4MB	4MB	4MB	4MB	4MB	4MB	88MB
32MB	32MB	8MB	8MB	-----	-----	-----	-----	80MB
32MB	32MB	8MB	8MB	8MB	8MB	-----	-----	96MB
32MB	32MB	8MB	8MB	8MB	8MB	8MB	8MB	112MB
32MB	32MB	16MB	16MB	-----	-----	-----	-----	96MB
32MB	32MB	16MB	16MB	16MB	16MB	-----	-----	128MB
32MB	32MB	16MB	16MB	16MB	16MB	16MB	16MB	160MB
32MB	32MB	32MB	32MB	-----	-----	-----	-----	128MB
32MB	32MB	32MB	32MB	32MB	32MB	-----	-----	192MB
32MB	32MB	32MB	32MB	32MB	32MB	32MB	32MB	256MB
64MB*	64MB*	-----	-----	-----	-----	-----	-----	128MB
64MB*	64MB*	4MB	4MB	-----	-----	-----	-----	136MB
64MB*	64MB*	4MB	4MB	4MB	4MB	-----	-----	144MB
64MB*	64MB*	4MB	4MB	4MB	4MB	4MB	4MB	152MB

Continued.....

Bank 0		Bank 1		Bank 2		Bank 3		Total
SIMM 1	SIMM 2	SIMM 3	SIMM 4	SIMM 5	SIMM 6	SIMM 7	SIMM 8	Memory Size
64MB*	64MB*	8MB	8MB	-----	-----	-----	-----	144MB
64MB	64MB*	8MB	8MB	8MB	8MB	-----	-----	160MB
64MB*	64MB*	8MB	8MB	8MB	8MB	8MB	8MB	176MB
64MB*	64MB*	16MB	16MB	-----	-----	-----	-----	160MB
64MB*	64MB*	16MB	16MB	16MB	16MB	-----	-----	192MB
64MB*	64MB*	16MB	16MB	16MB	16MB	16MB	16MB	224MB
64MB*	64MB*	32MB	32MB	-----	-----	-----	-----	192MB
64MB*	64MB*	32MB	32MB	32MB	32MB	-----	-----	256MB
64MB*	64MB*	32MB	32MB	32MB	32MB	32MB	32MB	320MB
64MB*	64MB*	64MB*	64MB*	-----	-----	-----	-----	256MB
64MB*	64MB*	64MB*	64MB*	64MB*	64MB*	-----	-----	384MB
64MB*	64MB*	64MB*	64MB*	64MB*	64MB*	64MB*	64MB*	512MB

Table 2 -1. System Memory Configurations

* : means the memory type is not available for testing when the manual is edited.

Cache Memory Subsystem

The Cache Memory Subsystem of the P6FX2-A mainboard is included in the Pentium Pro CPU. The users **do not** need to add any level 2 cache in the system. The details are described as follows:

Level 1 Cache

8-Kbyte, 4-way set-associative, primary instruction cache; 8-KByte, dual-ported, two-way set-associative, primary data cache; both located on the CPU die.

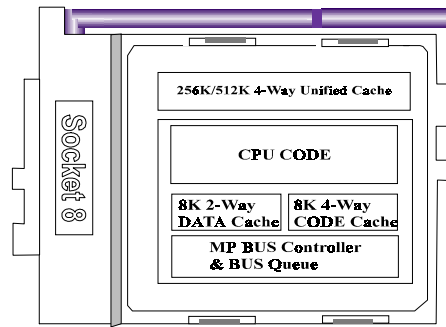
- 1. Data Cache: supports 8KB Write-Through and Write-Back policy.
- 2. Code Cache: supports 8KB Write-Through policy.

Level 2 Cache

Level 2 Cache is included in Pentium Pro CPU. The Size of Level 2 Cache is 256KB or 512KB depending on CPU.

P6FX2-A

Pentium Pro CPU



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