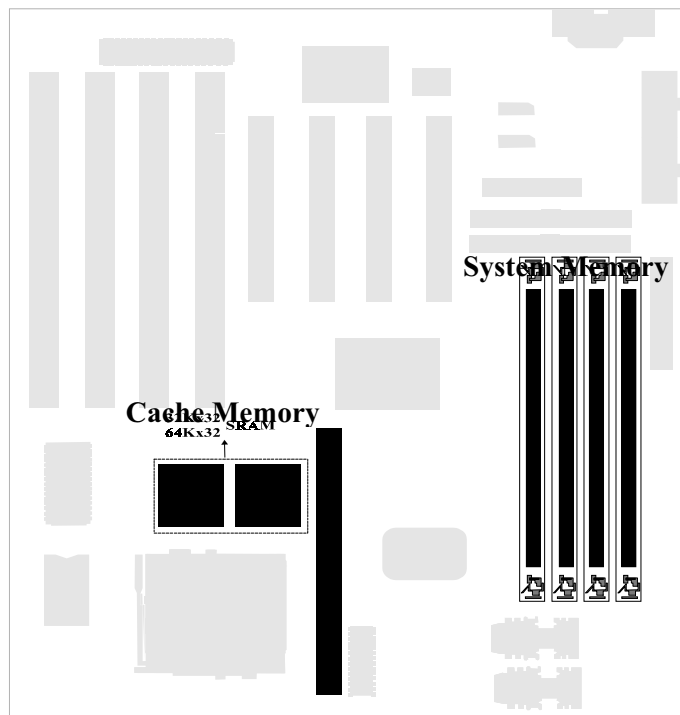


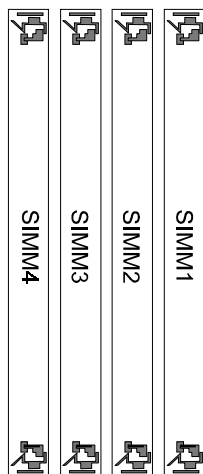
2 Memory Configurations

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



The diagram above displays the location of SIMM Sockets, Pipelined Burst SRAM and Cache Socket on P5HX-B motherboard.

System Memory



SIMM:

P5HX-B provides tremendous flexibility DRAM configurations. It accepts a maximum of 256MB memory size. The on-board DRAM is installed with SIMM (Single-In-line-Memory Module).

There are two memory banks which support the 4M/8M/16M/32M/64M type, single and/or double-density modules. The DRAM type of SIMM1 /SIMM2 is independent of SIMM3/SIMM4.



The type of SIMM1 and SIMM2 must be same if they exist at the same time.

The following table lists a number of possible DRAM combinations.

Bank 0		Bank 1		Total
SIMM1	SIMM2	SIMM3	SIMM4	Memory Size
4MB	4MB	----	----	8MB
8MB	8MB	----	----	16MB
16MB	16MB	----	----	32MB
32MB	32MB	----	----	64MB
64MB	64MB	----	----	128MB
4MB	4MB	4MB	4MB	16MB
4MB	4MB	8MB	8MB	24MB
4MB	4MB	16MB	16MB	40MB
4MB	4MB	32MB	32MB	72MB
4MB	4MB	64MB	64MB	136MB
8MB	8MB	8MB	8MB	32MB
8MB	8MB	16MB	16MB	48MB
8MB	8MB	32MB	32MB	80MB
8MB	8MB	64MB☆	64MB☆	144MB

Continued.....

Bank 0		Bank 1		Total
SIMM1	SIMM2	SIMM3	SIMM4	Memory Size
16MB	16MB	16MB	16MB	64MB
16MB	16MB	32MB	32MB	96MB
16MB	16MB	64MB☆	64MB☆	160MB
32MB	32MB	32MB	32MB	128MB
32MB	32MB	64MB☆	64MB☆	192MB
64MB☆	64MB☆	64MB☆	64MB☆	256MB

Table 2 -1. System Memory Configurations

☆ : means the memory size is not available for testing now.

Cache Memory Subsystem

Level 1 Cache

16 KB Level 1 Cache that builds in Pentium CPU includes Data Cache and Code Cache.

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

Level 2 Cache

L2 Cache On-board	Cache Module	Total Memory Size
0 KB	256KB	256KB
0 KB	512KB	512KB
256KB	256KB	512KB
512KB	0KB	512KB

- If there is an “On-board 256KB L2 Cache” in the motherboard, users may either upgrade to 512KB by inserting an ECS “CM161” or COASt (2.0 or later)

P5HX-B

upgrade cache module of 256KB.

2. If there is not any “On-board 256KB L2 Cache” in the motherboard, users may either upgrade to 256KB or 512KB by inserting an ECS “CM161” or COASt (2.0 or later) upgrade cache module of 256KB or 512KB.