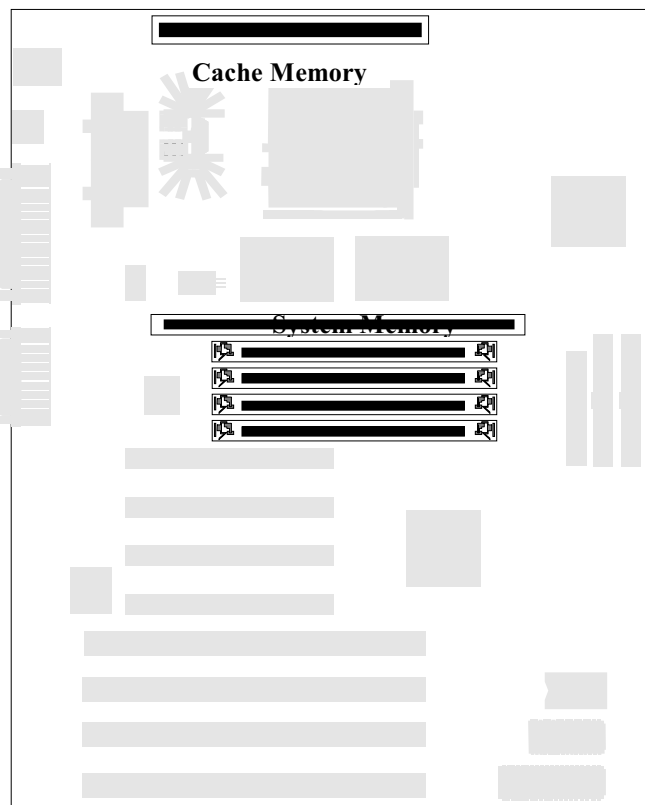


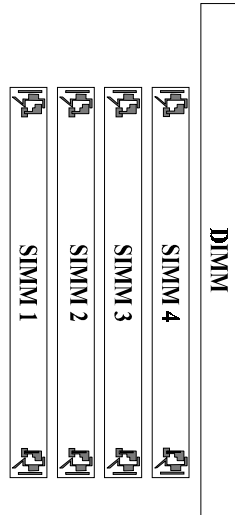
2 Memory Configurations

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



The diagram above displays the location of SIMM Sockets, DIMM Socket and Cache Socket on P5VX-A motherboard.

System Memory



SIMM:

P5VX-A provides tremendous flexibility DRAM configurations. It accepts a maximum of 128MB memory size. The on-board DRAM can be installed with four SIMMs (Single-In-line-Memory Module), and/or one DIMM (Dual-In-line-Memory Module).

There are two memory banks which support the 2M/4M/8M/16M/32M type, single and/or double-density modules.



The type of SIMM1 and SIMM2 must be same if they exist at the same time; the type of SIMM3 and SIMM4 also must be same if they exist at the same time.

The different type of SIMM1 / SIMM2 and SIMM3 / SIMM4 can exist at the same time.

DIMM:

The DIMM Socket is in compliance with JEDEC specifications for 3.3V unbuffered SDRAM Module. A DIMM connector is provided to support up to 32MB synchronous DRAM (SDRAM).



*To populate both 5V SIMM Modules and 3.3V DIMM module at the same time on the existing Intel 430VX PCIsset-based mainboard **are not recommended**. Please also make sure the DIMM module is 3.3V and unbuffered DIMM.*



According to new JEDEC Spec. , the new 32MB DIMMs will not be compatible with the existing Intel 430VX PCIsset-based mainboards.

The following table lists a number of possible DRAM combinations.

Bank 0		Bank 1		DIMM	Total Memory Size
SIMM1	SIMM2	SIMM3	SIMM4	DIMM1	
----	----	----	----	8MB/16MB/32MB	8MB/16MB/32MB
2MB(S)★	2MB(S)	----	----	----	4MB
2MB(S)	2MB(S)	2MB(S)	2MB(S)	----	8MB
4MB	4MB	----	----	----	8MB
4MB	4MB	2MB(S)	2MB(S)	----	12MB
4MB	4MB	4MB	4MB	----	16MB
8MB(S)	8MB(S)	----	----	----	16MB
8MB(S)	8MB(S)	2MB(S)	2MB(S)	----	20MB
8MB(S)	8MB(S)	4MB	4MB	----	24MB
8MB(S)	8MB(S)	8MB(S)	8MB(S)	----	32MB
8MB(D)	8MB(D)	----	----	----	16MB
8MB(D)	8MB(D)	2MB(S)	2MB(S)	----	20MB
8MB(D)	8MB(D)	4MB	4MB	----	24MB
8MB(D)	8MB(D)	8MB(S)	8MB(S)	----	32MB
8MB(D)	8MB(D)	8MB(D)	8MB(D)	----	32MB
16MB	16MB	----	----	----	32MB
16MB	16MB	2MB	2MB	----	36MB
16MB	16MB	4MB	4MB	----	40MB
16MB	16MB	8MB(S)	8MB(S)	----	48MB
16MB	16MB	8MB(D)	8MB(D)	----	48MB
16MB	16MB	16MB	16MB	----	64MB

Continued.....

Bank 0		Bank 1		DIMM	Total
SIMM1	SIMM2	SIMM3	SIMM4	DIMM1	Memory Size
32MB(D)	32MB(D)	----	----	----	64MB
32MB(D)	32MB(D)	2MB(S)	2MB(S)	----	68MB
32MB(D)	32MB(D)	4MB	4MB	----	72MB
32MB(D)	32MB(D)	8MB(S)	8MB(S)	----	80MB
32MB(D)	32MB(D)	8MB(D)	8MB(D)	----	80MB
32MB(D)	32MB(D)	16MB	16MB	----	96MB
32MB(D)	32MB(D)	32MB(D)	32MB(D)	----	128MB

Table 2 -1. System Memory Configurations

☆ : (S) means : Single Side

☆ : (D) means : Double Side



If DIMM Module is installed on board, users only can install single-density SIMMs on SIMM 1 and SIMM2.

Cache Memory Subsystem

Level 1 Cache

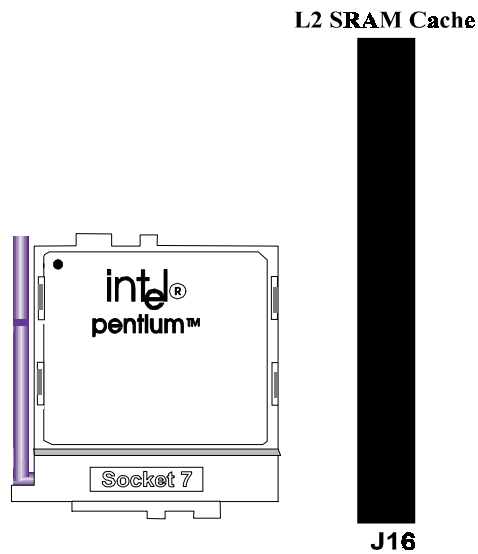
8-Kbyte, 4-way set-associative, primary instruction cache; 8-KByte, dual-ported, two-way set-associative, primary data cache; both located on the CPU die.

16KB 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 External Static RAM (SRAM) Cache

Users may either upgrade to 256KB or 512KB by inserting an ECS “CM161” or COASi (2.1 or later) upgrade cache module of 256KB or 512KB.



P5VX-A

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