Cache Configuration

The mainboard has a write-back caching scheme. You can configure the mainboard's cache by installing cache chips in the sockets noted below and then set jumpers JP10 to set the size of SRAM you installed.

Cache Size and RAM Locations

| Cache Size	Cache RAM	TAG RAM	Cacheable Range
256KB	32K x 32, 2pcs (for 256K module) on U21, U28(or J9)	16K x 8 on U17	64MB
512KB	32K x 32, 2pcs + 256K module on U29, U30, and U25	16K x 8 on U17	128MB

256K Pipelined Burst Cache Configuration

1. Insert Jumper into JP10 2,3pin & JP12 2,3pin when you have 256K Pipelined Burst SRAM CHIPs onboard.
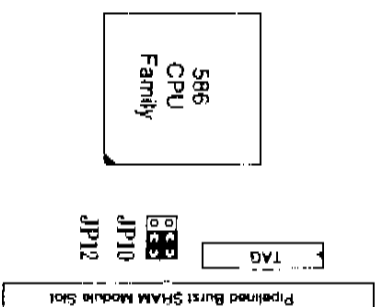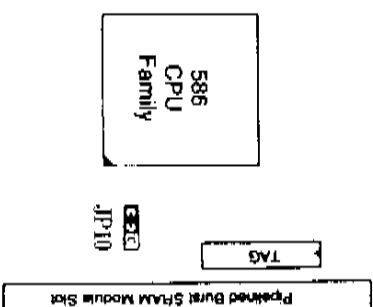

256K Pipelined Burst Cache Configuration

512K Pipelined Burst Cache Configuration

1. Insert Jumper into JP10 1,2pin when you have 512K Pipelined Burst SRAM (256K SRAM CHIPs and 256K Pipelined Burst SRAM module.)
2. Due to the various design, contact the supplier for Pipelined Burst SRAM module when you want to upgrade to 512K cache on your motherboard.
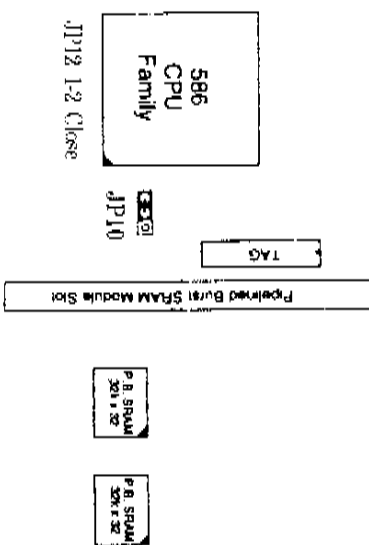
JP12 1-2 Close

512K Pipelined Burst Cache Configuration

1. Insert Jumper into JP10 1,2pin when you have 512K Pipelined Burst SRAM (512K SRAM CHIPs.)

512K Pipelined Burst Cache Configuration

Pentium-150/166 CPU Settings(2.5 x clock)

Pentium (P54CX-150:60MHz
JP7
JP6

Pentium (P54CX-166:66MHz
JP7
JP6

Figure 2-13 CPU Jumper Settings

Note: You must equip the CPU with a fan and heat sink for system stability.

Pentium-180/200 CPU Settings(3.0 x clock)

Pentium (P54CX-180:60MHz
JP7
JP6

Pentium (P54CX-200:66MHz
JP7
JP6

Figure 2-14 CPU Jumper Settings

Note: You must equip the CPU with a fan and heat sink for system stability.

JP20:CPU Voltage Select

Set This jumpers to configure the proper voltage for the installed CPU.

CPU Type Voltage	JP20
Standard and VR P54CX CPU(3.3V-3.5V) (Default)	1-2 close
VRE P54CX and AMD 5k86 and cyrix 6x86 CPU(3.45V-3.6V)	2-3 close

Note: Check with your CPU vendor to make sure of the CPU type voltage.

Memory Configuration

The mainboard supports two banks of 72-pin SIMM, FPO DRAM, and one 3.3V Unbuffered DIMM. The mainboard requires SIMM of at least 70ns access time.

Single-side SIMM   Double-side SIMM

4MB = 1MB x 36(32)   2MB = 512K x 36(32)
16MB = 4MB x 36(32)   8MB = 2MB x 36(32)
64MB = 16MB x 36(32)   32MB = 8MB x 36(32)

The mainboard supports from 4 to 128 Mbytes with no other restrictions on memory configurations. You can install SIMM in any combination without having to rely on a memory configuration table. Memory configuration is thus "Table-Free" on any SIMM bank.

DIMM Voltage Only su

Type of DIMM
3.3V SDRAM (default)

Note:1 You must install two strips of SIMM modules to complete a bank.
2. Bank 1 and DIMM share the same part of DRAM architecture so that the system only recognizes DIMM when you install DIMM and Bank1 together.

CPU Type Configuration

Set the mainboard's CPU jumpers JP6,JP7,JP26,and JP27 according to CPU type as described below, and the set JP20 for the proper voltage of the CPU.

Pentium-75/90/100 CPU Settings (1.5 x clock)
AMD 5x86-P75/P90/P100/P120/P133(1.5 x clock)

Pentium (P54CX)-75/50MHz
AMD 5x86(SSA5)-P75/50MHz
JP7
JP6

AMD 5x86(SSA5)-P100/33MHz
AMD 5x86(SSA5)-P90/50MHz
JP7
JP6

Pentium (P54CX)-90/60MHz
AMD 5x86(SSA5)-P90/60MHz
AMD 5x86(K5)-P120/60MHz
JP7
JP6

Pentium (P54CX)-100/66MHz
AMD 5x86(SSA5)-P100/66MHz
AMD 5x86(K5)-P133/66MHz
JP7
JP6

Figure 2-1-1 CPU Jumper Settings

Note:1. You must equip the CPU with a fan and heat sink for system stability.
2. AMD CPU(SSA5/K5) voltage is based on VRE spec. Setting for JP20 should be modified.

Pentium-100/120/133 CPU Settings(2.0 x clock)
Cyrix 6x86-P120+/P133+/P150+/P166+CPU Settings(2.0 x clock)
AMD 5x86-P150/P166 CPU Settings(2.0 x clock)

Pentium (P54CX)-100/50MHz
Cyrix 6x86-P120+50MHz
JP7
JP6

Cyrix 6x86-P133+50MHz
JP7
JP6

Pentium (P54CX)-120/60MHz
Cyrix 6x86-P150+60MHz
AMD 5x86(K5)-P150/60MHz
JP7
JP6

Pentium (P54CX)-133/66MHz
Cyrix 6x86-P166+66MHz
AMD 5x86(K5)-P166/66MHz
JP7
JP6

Figure 2-1-2 CPU Jumper Settings

Note:1. You must equip the CPU with a fan and heat sink for system stability.
2. AMD CPU(SSA5/K5) voltage is based on VRE spec. Settings for JP20/JP31 should be modified.
3. Cyrix 6x86-P166+ has to be matched with 60ns DRAMs.

2 Hardware Setup

This chapter explains how to configure the mainboard's hardware. After you install the mainboard, you can set jumpers, install memory on the mainboard, and make case connections. Refer to this chapter whenever you upgrade or reconfigure your system.

CAUTION: Turn off power to the mainboard, system chassis, and peripheral devices before performing any work on the mainboard or system.
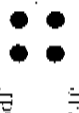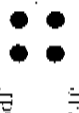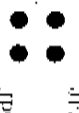
Jumpers

JP11/JP19:CMOS Clear Jumper

Clear the CMOS memory. In momentarily shorting this jumper, then open the jumper to retain new settings.

CMOS Setting	JP11/JP19
Retain CMOS data (default)	1 2
Clear CMOS data	1 2

For DS12887A Battery to clear CMOS by JP11. For Li Battery to clear CMOS by JP19.

JP26, JP27:Bus Fraction Core/Bus Ratio Select

Set this jumper according to your CPU clock.

Ratio	586 CPU Family	JP26,JP27
3:2 (Default) (1.5 x clock)	Pentium-75, 90, 100MHz; AMD 5k86 (SSA5)-P75, P90, P100MHz	JP26 JP27
2:1 (2 x clock)	Pentium-120, 133MHz; Cyrix-P120+, P133+; AMD 5k86-P120, P133MHz	JP26 JP27
5:2 (2.5 x clock)	Pentium-150, 166MHz; Cyrix-P150+, P166+MHz; AMD 5k86-P150, P166MHz	JP26 JP27
3:1 (3 x clock)	Pentium-180, 200MHz	JP27 JP26