

SpeedEasy
P5I430VX-250DM
Explorer II

 **SpeedEasy**TM


QDI Innovative Technology

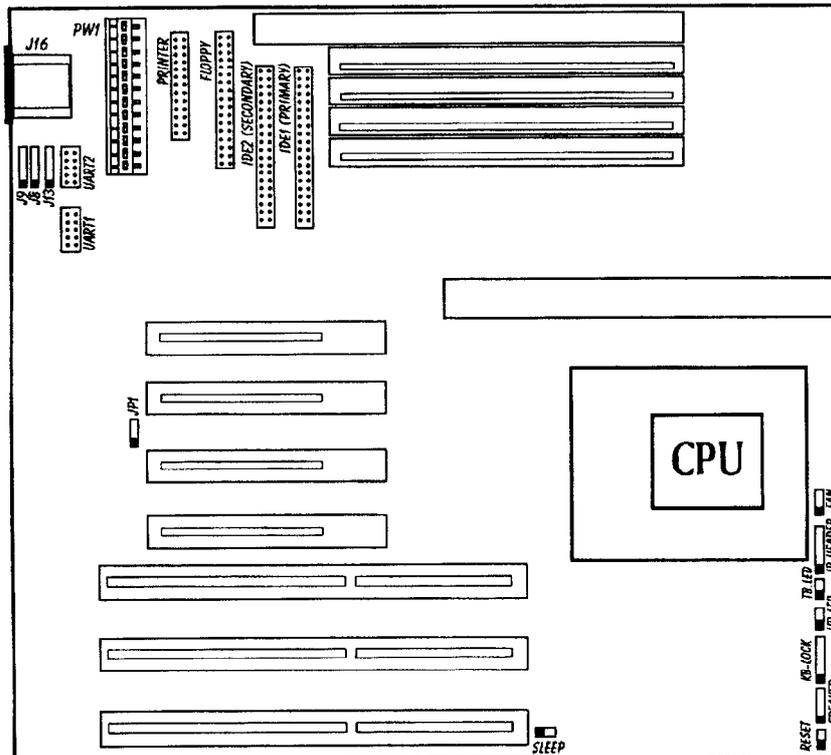
SpeedEasy Type Introduction

Identify SpeedEasy

SpeedEasy Type Main Board Layout

Note: Before setting up your main board, you must first confirm whether your P5I430VX-250DM Main Board is *SpeedEasy* type or common type.

The following jumperless board is P5I430VX-250DM main board layout.



Note: If using SpeedEasy type P5I430VX-250DM Explorer II Main Board, you can skip JC1, JC2, JC3, JS1, JS2, JV3 and JV5 jumpers setting.

SpeedEasy Type Introduction

The following pages tell you the options of each item and describe the meaning of each option.

CPU Type

BIOS can automatically detect your CPU model, so this item is shown only. You needn't and will not be able to manually select it. These models are:

- . Intel Pentium (P54C, P54CTB and P55C)
- . AMD
- . Cyrix

CPU Speed

In fact, this item is to set CPU frequency. Different model of CPU have different working frequency, so you should select CPU speed according to your CPU brand and type.

Note: *CPU speed = System Clock x Clock Multiplier*

1. For Intel Pentium CPU, the following CPU speed can be selected:

| | |
|----------------|------------------|
| 75MHz (50x1.5) | 83MHz (55x1.5)* |
| 90MHz (60x1.5) | 100MHz (66x1.5) |
| 100MHz (50x2)* | 110MHz (55x2)* |
| 120MHz (60x2) | 125MHz (50x2.5)* |
| 133MHz (66x2) | 150MHz (60x2.5) |
| 150MHz (50x3)* | 166MHz (66x2.5) |
| 180MHz (60x3) | 200MHz (66x3) |

2. For Cyrix 6x86 and 6x86L CPUs, the following CPU speed can be selected:

| | |
|-----------------------|------------------------|
| P120+, 100MHz (50x2) | P133+, 110MHz (55x2) |
| P150+, 120MHz (60x2) | P166+, 133MHz (66x2) |
| P200+, 150MHz (75x2)* | P200+, 150MHz (50x3)** |

3. For AMD-K5 CPUs, the following CPU speed can be selected:

| | |
|---------------------------|-------------------------|
| PR75, 75MHz (50x1.5) | PR83, 83MHz (55x1.5) |
| PR90, 90MHz (60x1.5) | PR100, 100MHz (66x1.5) |
| PR100, 75MHz (50x1.5) | PR120, 90MHz (60x1.5) |
| PR133, 100MHz (66x1.5) | PR150, 105MHz (60x1.75) |
| PR166, 116.7MHz (66x1.75) | |

** : It is not recommended to select this option for CPU speed.

***: The main board can run perfectly if using the selection, but the performance of system is lower than using 75MHz.

P5I430VX-250DM Main Board

CPU Voltage

If "CPU Voltage" is shown on "SpeedEasy CPU Setup" menu, that means your CPU is a single voltage CPU.

Please notice that the CPU voltage of AMD and Cyrix CPU can be changed according to CPU mark, but the CPU voltage of Intel CPU is automatically set by BIOS, and you can not change it.

- 3.5V For P54C CPU
AMD-K5 CPU (BIOS default setting, but you may change it to 3.3V according to CPU mark).
- 3.3V For P54CTB CPU;
Cyrix 6x86 CPU (BIOS default setting, but you may change it to 3.5V according to CPU mark);

CPU I/O Voltage

When "CPU I/O Voltage" and "CPU Core Voltage" are shown on "SpeedEasy CPU Setup" menu, that means your CPU is a dual voltage CPU.

BIOS can automatically set "CPU I/O Voltage" and "CPU Core Voltage" for your CPU. But you still can change these parameters according to CPU mark.

- 3.5V Reserved
- 3.3V For P55C CPU

CPU Core Voltage

For dual voltage CPU:

- 2.9V Reserved
- 2.8V For P55C CPU
- 2.7V Reserved
- 2.5V Reserved

Remark:

For Intel CPU, CPU I/O voltage and core voltage are automatically set by BIOS, user can not change these settings.

For AMD and Cyrix CPU, the voltage is shown as default settings but user can change these according to the following Appendix A and B.

SpeedEasy Type Introduction

Appendix A.

Introduce AMD-K5 CPU mark:

Operating Voltage:

B=3.45V~3.60V-->3.5V

C=3.30V~3.465-->3.3V

F=3.135V~3.465V-->3.3V

G=x/y

H=2.86V~3.00V/3.30V~3.465V-->2.9/3.3

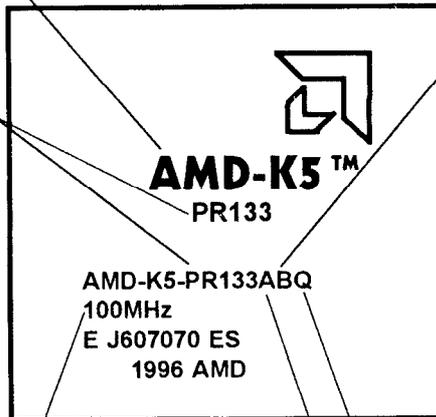
J=2.57V~2.84V/3.30V~3.465V-->2.7/3.3

K=2.38V~2.63V/3.30V~3.465V-->2.5/3.3

Processor Name

P-Rating
75, 90, 100, 120,
133, 150, 166

Internal CPU
Frequency
75MHz, 90MHz,
100MHz, 105MHz,
116.7MHz



Case Temperature:

W=55° C

R=70° C

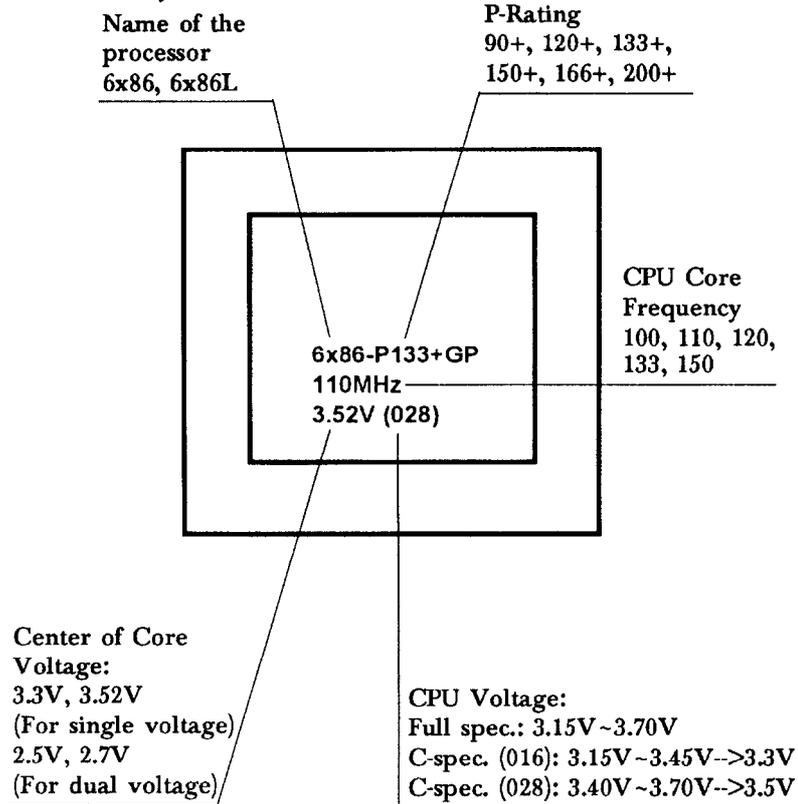
Q=60° C Y=75° C

Package Type

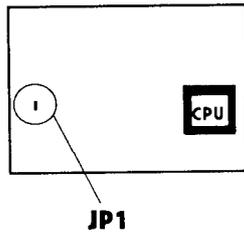
A=SPGA

Appendix B.

Introduce Cyrix 6x86 CPU mark:



Clear CMOS



Clear CMOS
just close once

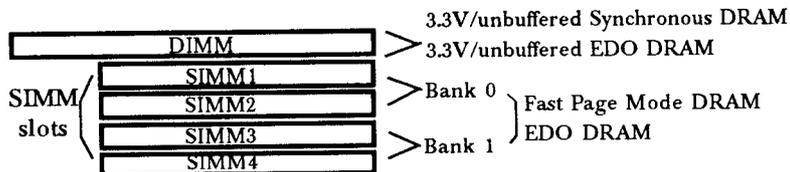
*Normal



*** : Represent for default jumper settings.

Memory Configuration

The P5I430VX-250DM Explorer II main board provides 4 SIMM slots and 1 DIMM slot for providing a flexible memory size from 8MB up to 128MB main memory. Please do not plug in two different brands of SIMMs on a bank simultaneously.



If using DIMM together with SIMM, you must install DIMM as the following table:

| DIMM | Bank 0 | Bank 1 |
|-----------------|-------------------------------|-------------------------------|
| None | Single-row or Double-row SIMM | Single-row or Double-row SIMM |
| Single-row DIMM | Single-row SIMM | Single-row or Double-row SIMM |
| Double-row DIMM | None | Single-row or Double-row SIMM |

Jumper Configuration

The following table illustrates how to set your main memory at SIMM slot.

| RAM SIZE | SIMM1 | SIMM2 | SIMM3 | SIMM4 |
|----------|-------|-------|-------|-------|
| 8 MB | 4 MB | 4MB | --- | --- |
| 16 MB | 4 MB | 4 MB | 4 MB | 4 MB |
| 16 MB | 8 MB | 8 MB | --- | --- |
| 24 MB | 8 MB | 8 MB | 4 MB | 4 MB |
| 32 MB | 8 MB | 8 MB | 8 MB | 8 MB |
| 32 MB | 16 MB | 16 MB | --- | --- |
| 40 MB | 16 MB | 16 MB | 4 MB | 4 MB |
| 48 MB | 16 MB | 16 MB | 8 MB | 8 MB |
| 64 MB | 16 MB | 16 MB | 16 MB | 16MB |
| 64 MB | 32 MB | 32 MB | --- | --- |
| 72 MB | 32 MB | 32 MB | 4 MB | 4 MB |
| 80 MB | 32 MB | 32 MB | 8 MB | 8 MB |
| 96 MB | 32 MB | 32 MB | 16 MB | 16 MB |
| 128 MB | 32 MB | 32 MB | 32 MB | 32 MB |

Note:

1. When using DIMM together with SIMM, it is strongly recommended that you use Bank 1 (SIMM3 & SIMM4) to avoid conflict between DIMM and SIMM.
2. Please consult your vendors whether your DIMM/SIMM is single-row or double-row.
3. Do not plug into two different brands of SIMMs on a bank simultaneously.
4. This main board supports 4Mbit x 4 SDRAM DIMM. However, due to loading reason, it is not recommended to use 4Mbit x 4 SDRAM DIMM under 60 and 66MHz system clock.