

6VMA

USER'S MANUAL

1. **System power on by PS/2 Mouse:** First, enable this function in CMOS Setup, then you can power on the system by double clicking the right or left button of your PS/2 Mouse.
2. **System power on by Keyboard:** If your ATX power supply supports larger than 300 mA 5V Stand-By current(dependent on the specification of keyboards), you can power on your system by entering password from the Keyboard after setting the “Keyboard power on” jumper (JP1) and password in CMOS Setup.
3. **Support Modem Ring-On.** (Include internal Modem and external modem on COM A and COM B)
4. **Support Wake-up On LAN.** (Your ATX power supply must support larger than 720 mA 5V Stand-By current)
5. **ESS SOLO 1 PCI Sound Onboard.**
6. **Support STR Function (Optional).**

For Intel Pentium[®] II / III / Celeron[™] Processor MAINBOARD
REV. 1.0 First Edition
R-10-01-090225

The author assumes no responsibility for any errors or omissions that may appear in this document nor does it make a commitment to update the information contained herein.

Third-party brands and names are the property of their respective owners.

Sound Blaster is a registered trademark of Creative Technology Ltd in the United States and certain other countries. Sound Blaster-LINK and SB-LINK are trademarks of Creative Technology Ltd.

Feb. 25, 1999 Taipei, Taiwan

I. Quick Installation Guide :**CPU SPEED SETUP**

The default system bus speed is set 66/100MHz (**SW2**). The user can change the DIP SWITCH (**SW1**) selection to set up the CPU speed for 233 - 633MHz processor.

● The CPU speed must match with the frequency RATIO. It will cause system hanging up if the frequency RATIO is higher than that of CPU.

SW1:

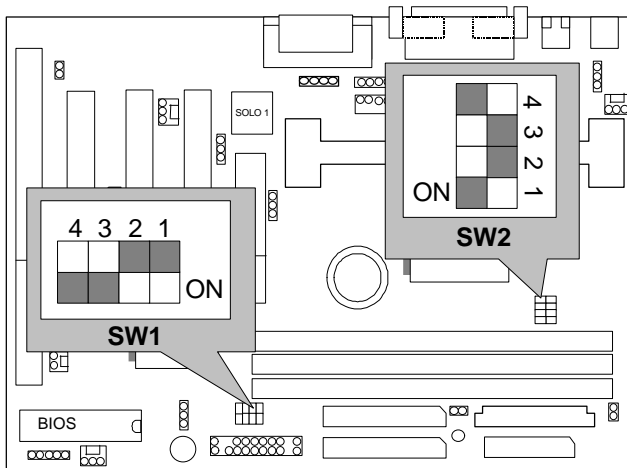
CLK RATIO	1	2	3	4
X3	ON	OFF	ON	ON
X3.5	OFF	OFF	ON	ON
X4	ON	ON	OFF	ON
X4.5	OFF	ON	OFF	ON
X5	ON	OFF	OFF	ON
X5.5	OFF	OFF	OFF	ON
X6	ON	ON	ON	OFF
X6.5	OFF	ON	ON	OFF
X 7	ON	OFF	ON	OFF
X 7.5	OFF	OFF	ON	OFF
X 8	ON	ON	OFF	OFF
X 8.5	OFF	ON	OFF	OFF
X 9	ON	OFF	OFF	OFF
X 9.5	OFF	OFF	OFF	OFF

SW2:

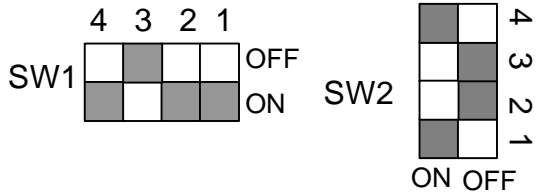
CPU	1	2	3	4
66	ON	OFF	OFF	ON
75	ON	ON	OFF	ON
83	ON	OFF	ON	ON
100	OFF	OFF	OFF	OFF
112	OFF	ON	OFF	OFF
133	OFF	OFF	ON	OFF

★ **Note:** We don't recommend you to setup your system speed to 75, 83, 112 or 133MHz because these frequencies are not the standard specifications for CPU, Chipset and most of the peripherals. Whether your system can run under 75, 83, 112 or 133MHz properly will depend on your hardware configurations: CPU, SDRAM, Cards, etc.

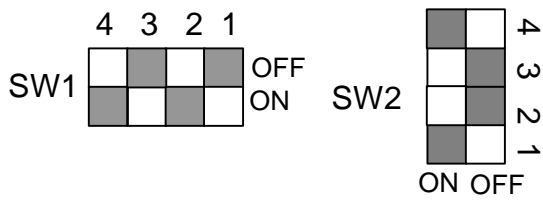
1. Pentium® II / Celeron 233 MHz / 66MHz FSB



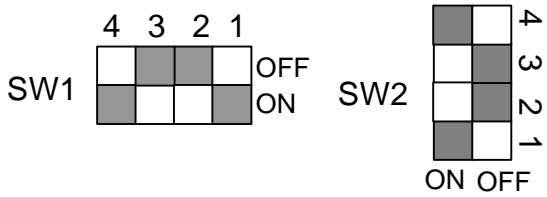
2. Pentium® II / Celeron 266MHz / 66MHz FSB



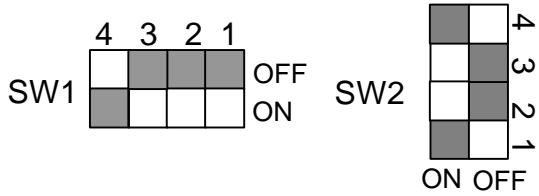
3. Pentium® II / Celeron 300MHz / Celeron 300A MHz / 66MHz FSB



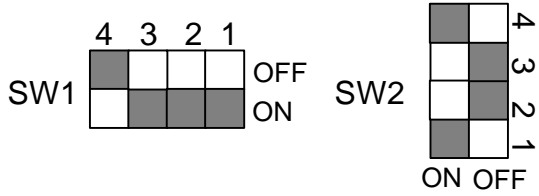
4. Pentium® II / Celeron 333MHz / 66MHz FSB



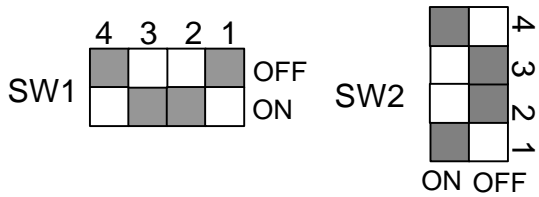
5. Pentium® II / Celeron 366 MHz / 66MHz FSB



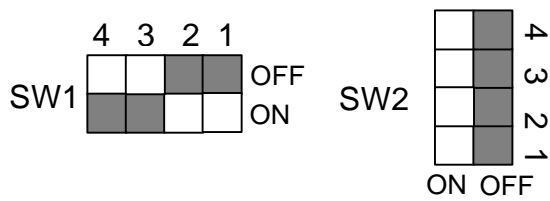
6. Pentium® II / Celeron 400 MHz / 66MHz FSB



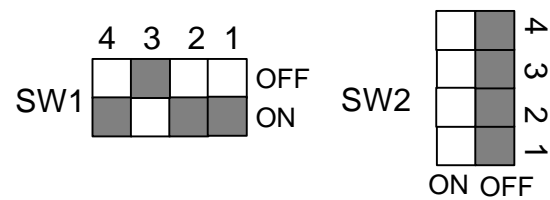
7. Pentium® II / Celeron 433 MHz / 66MHz FSB



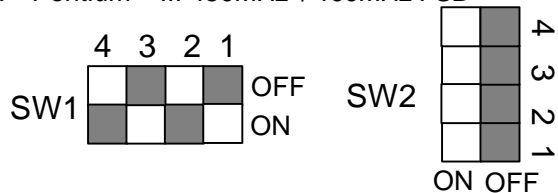
8. Pentium® II 350MHz / 100MHz FSB



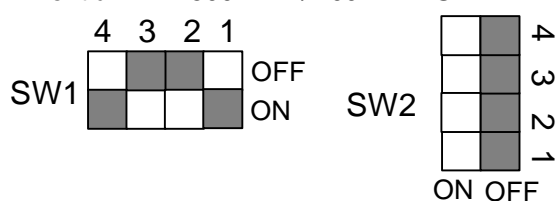
9. Pentium® II 400MHz / 100MHz FSB



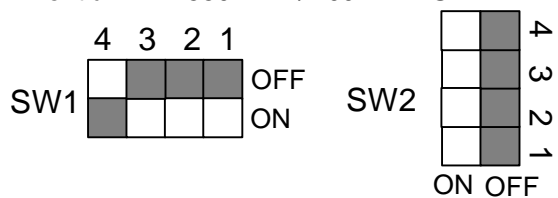
10. Pentium® III 450MHz / 100MHz FSB



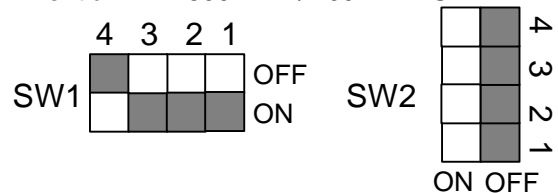
11. Pentium® III 500MHz / 100MHz FSB



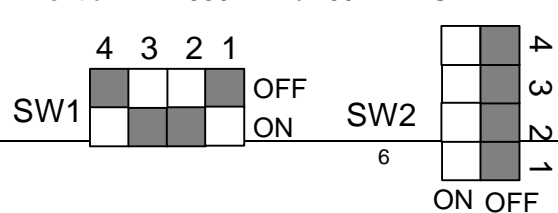
12. Pentium® III 550MHz / 100MHz FSB



13. Pentium® III 600MHz / 100MHz FSB

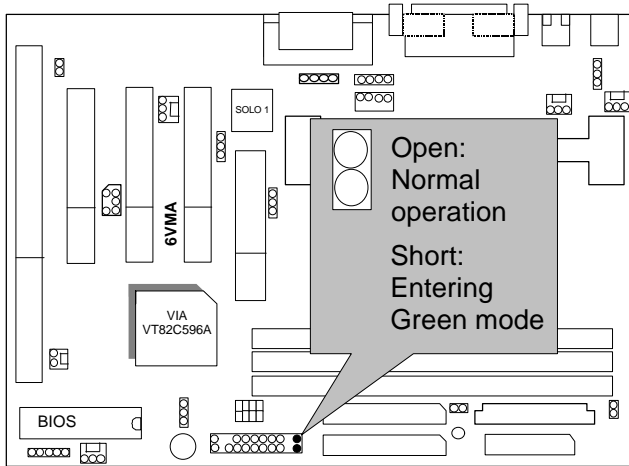


14. Pentium® III 650MHz / 100MHz FSB

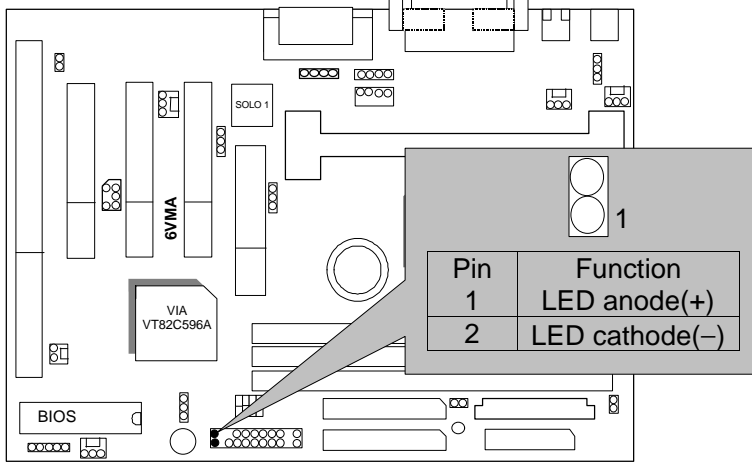


II. Jumper setting :

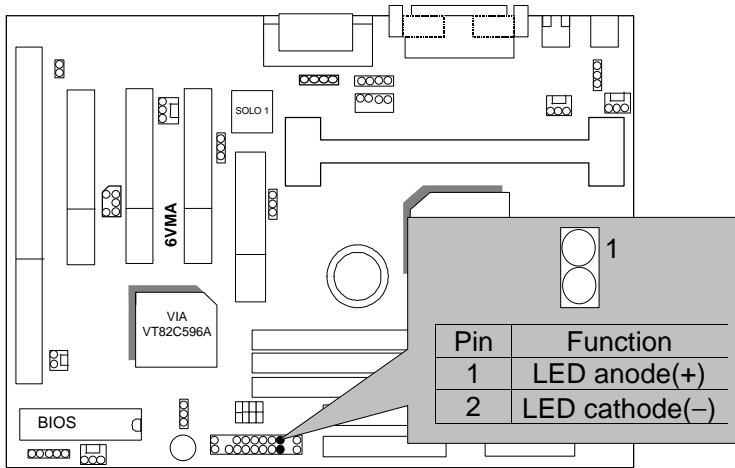
GN : Green Function Switch



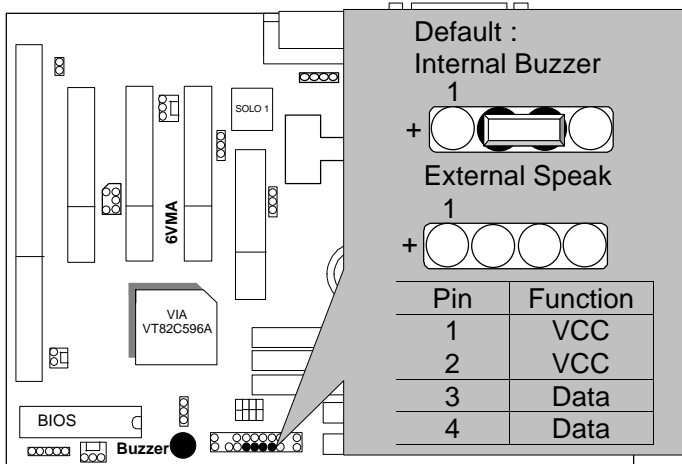
GD : Green Function LED



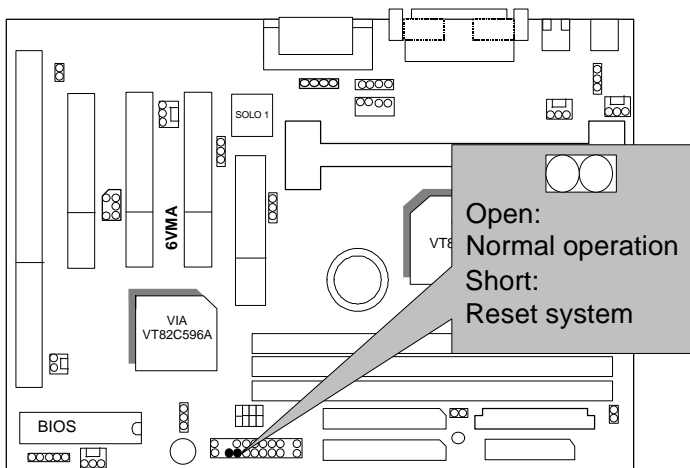
HD : IDE Hard Disk Active LED



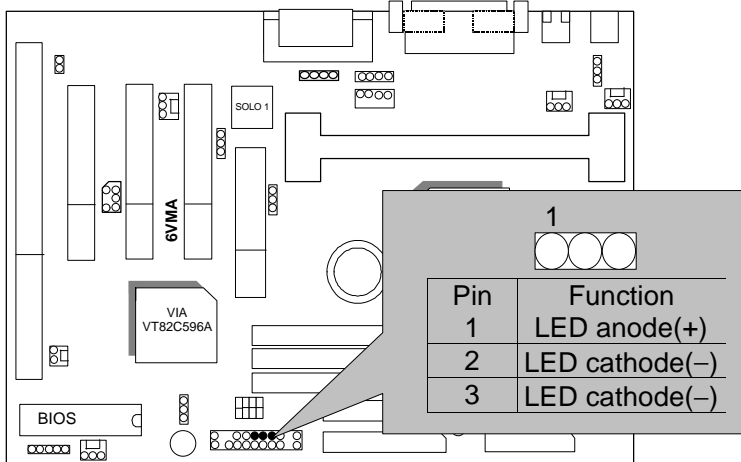
SPK : External Speaker/ Internal Buzzer Connector



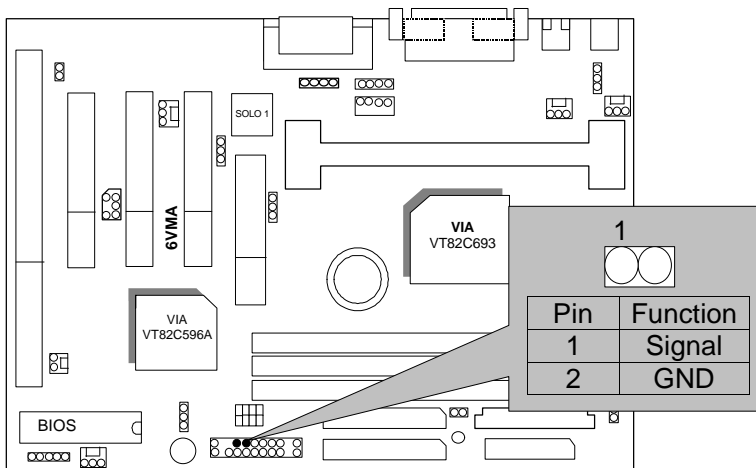
RES : Reset Switch



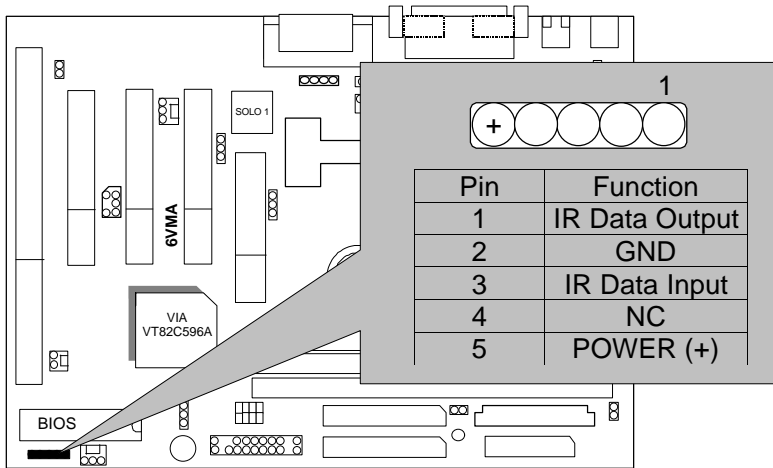
PWR : Power LED Connector (as 3 steps ACPI LED)



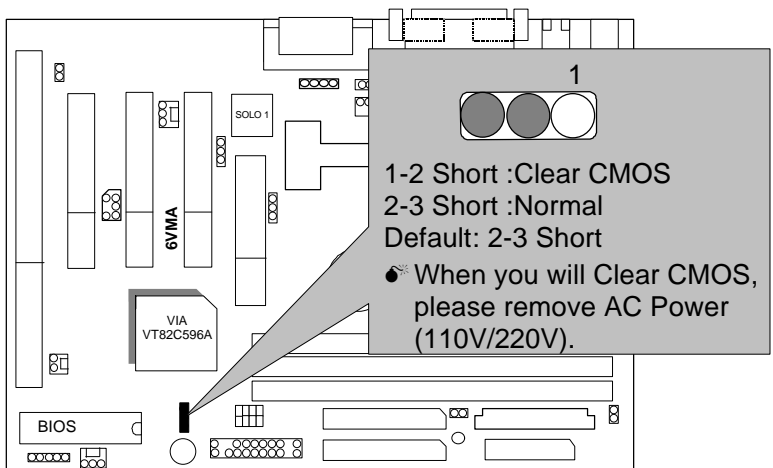
Soft PWR : Soft Power Connector



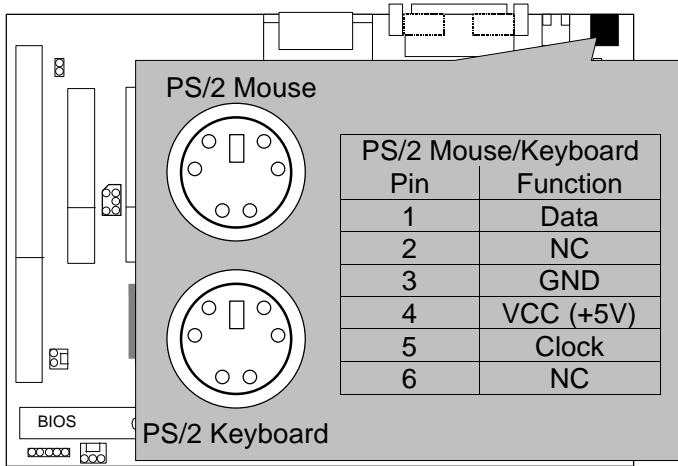
IR : Infrared Connector (Optional)



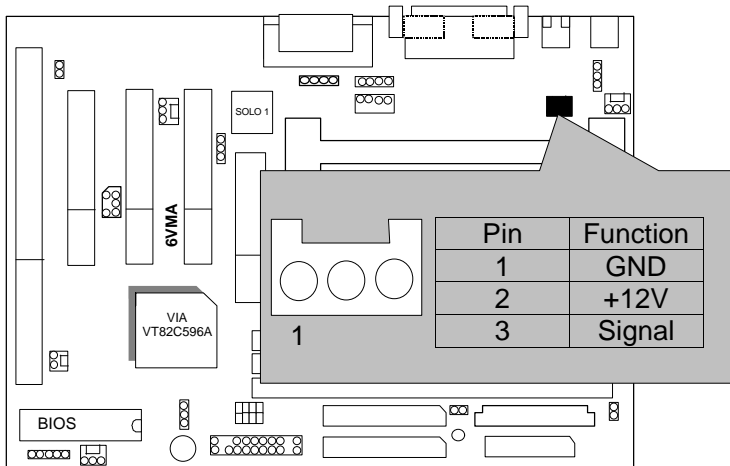
JP14: CLEAR CMOS FUNCTION



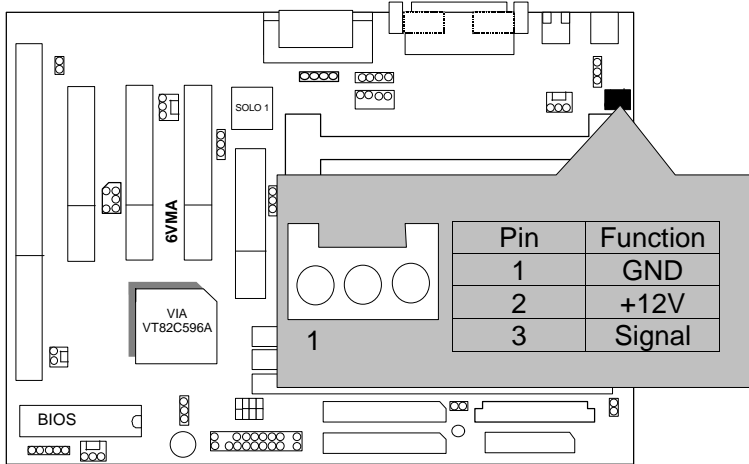
PS/2 Mouse / Keyboard Connector



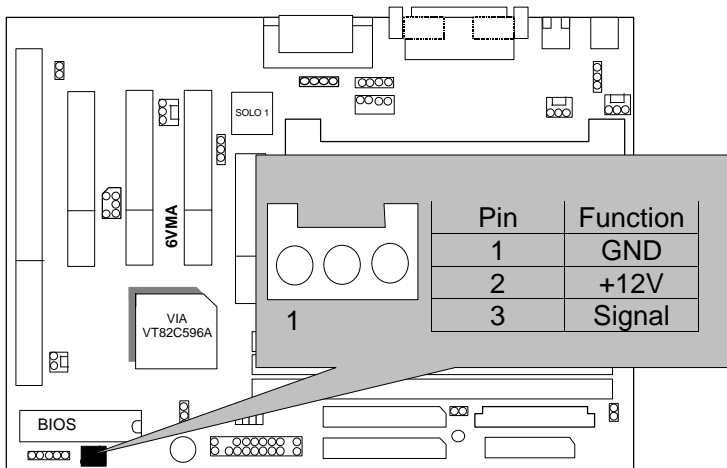
CPU FAN : CPU Cooling Fan Power Connector



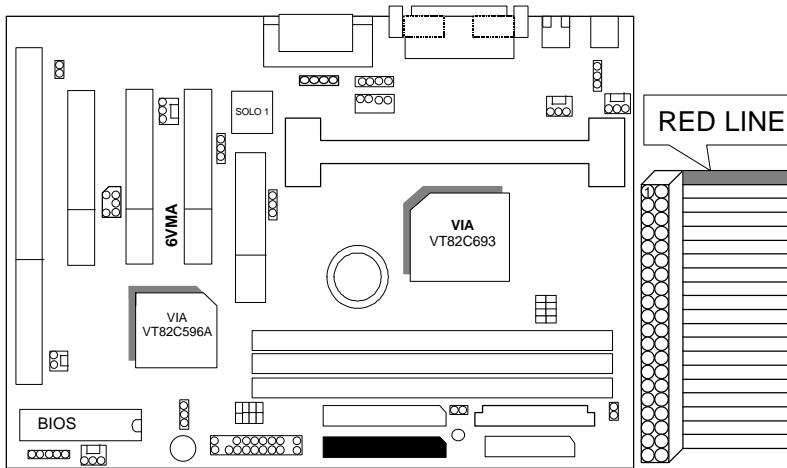
Power FAN : Power Fan Power Connector



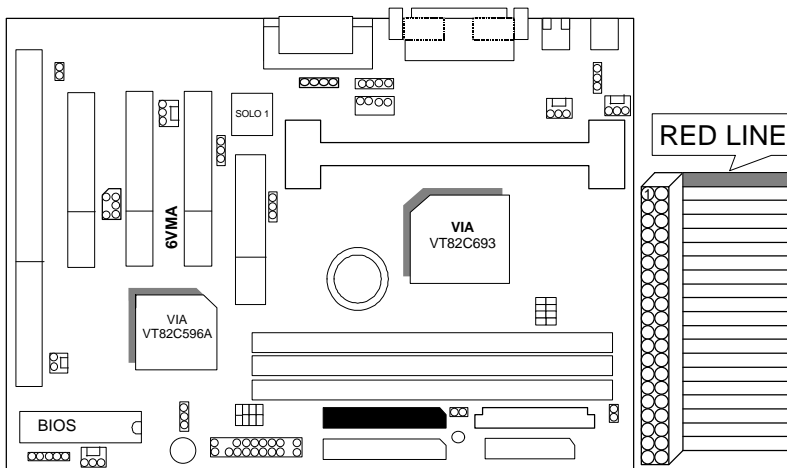
System FAN (Panel FAN): System Fan Power Connector



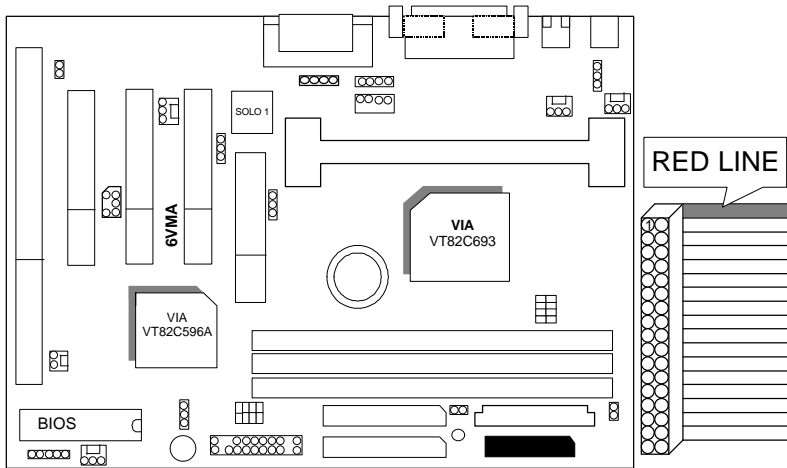
IDE1: For Primary IDE port



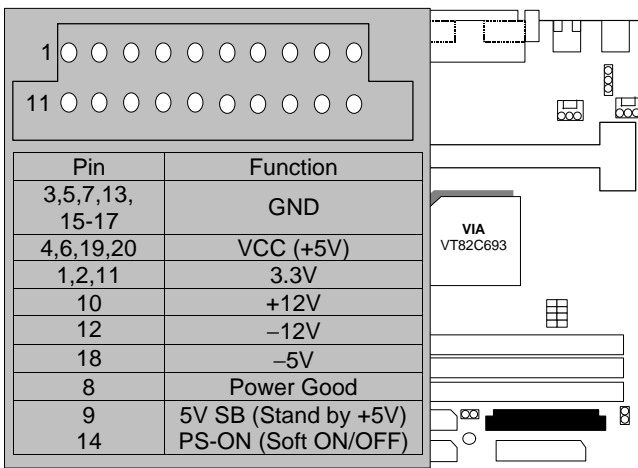
IDE2: For Secondary IDE port



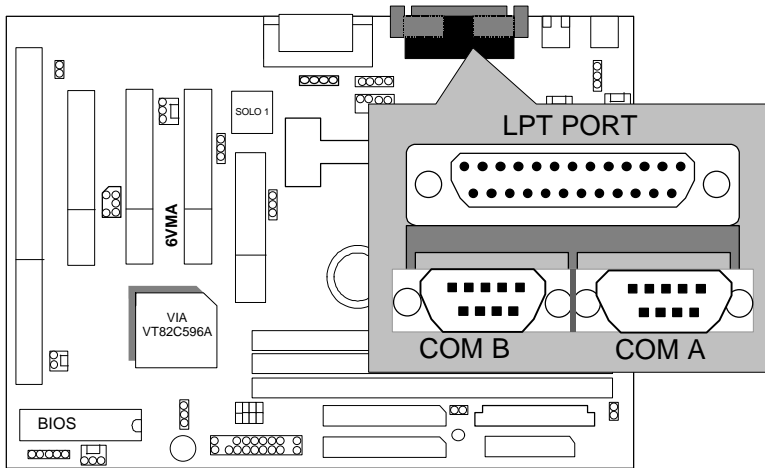
FLOPPY : FLOPPY PORT



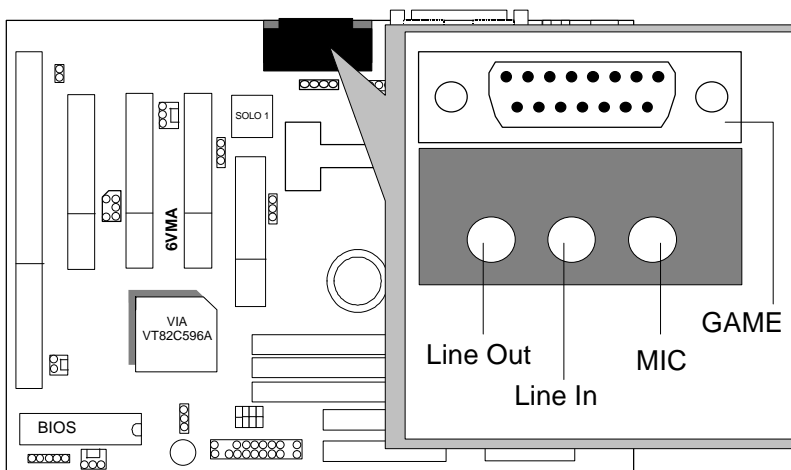
ATX POWER : ATX POWER Connector



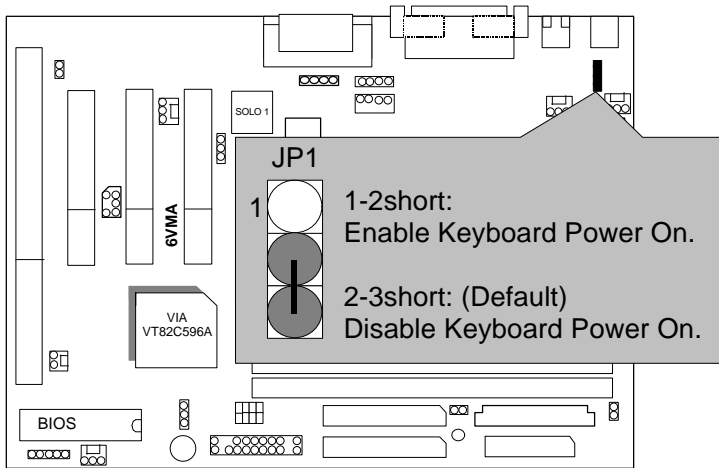
LPT PORT / COM A / COM B



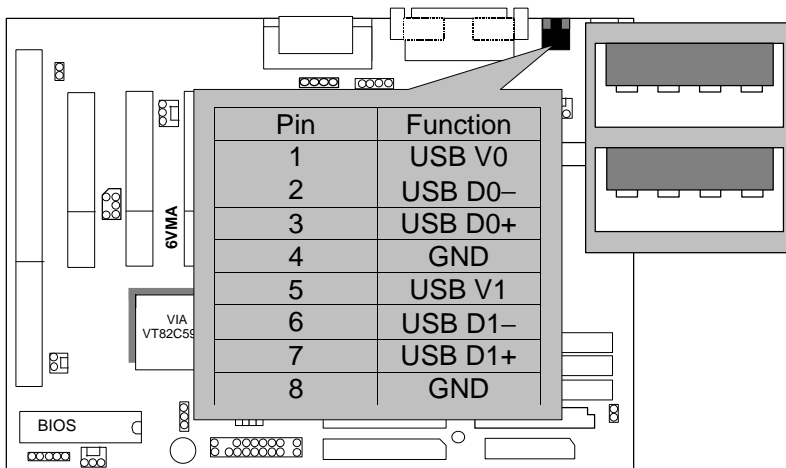
GAME & AUDIO PORT



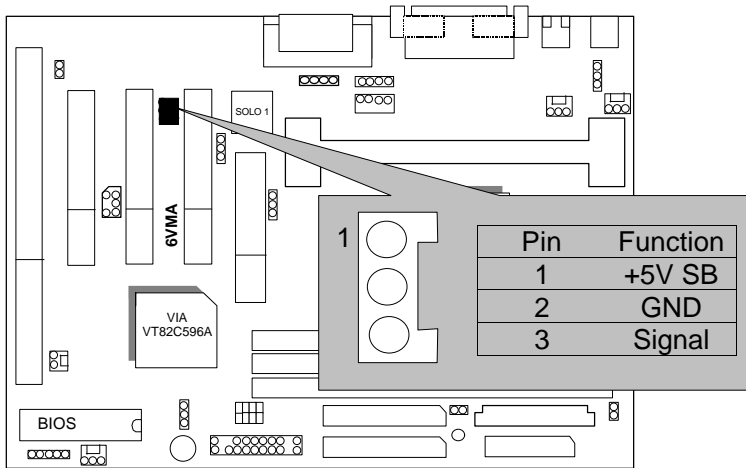
JP1 : Keyboard Power On



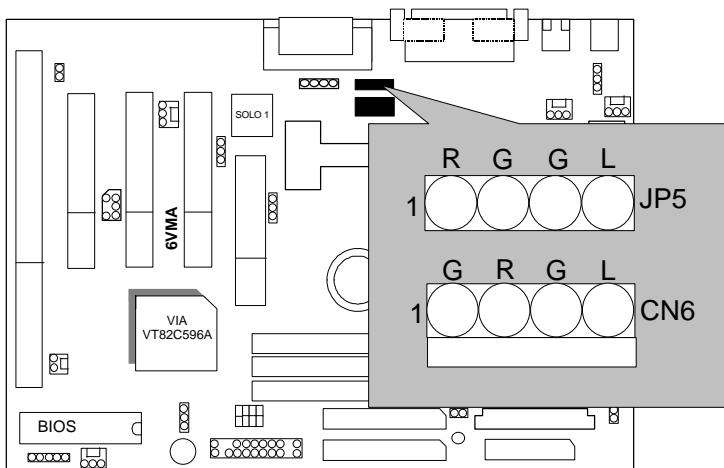
USB: USB Port



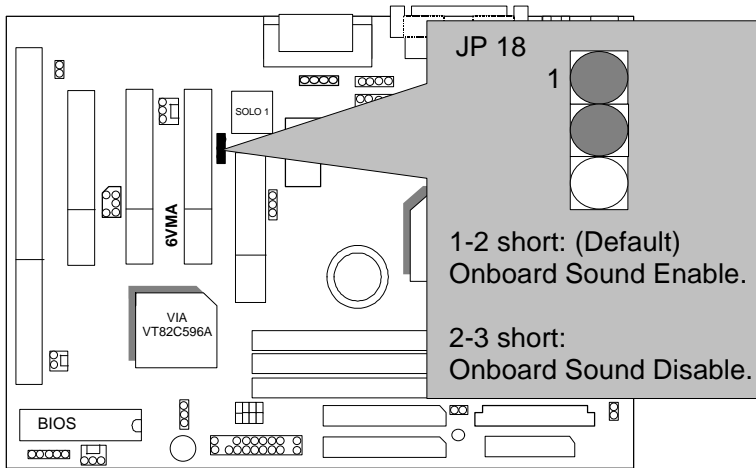
JP7: Wake on LAN



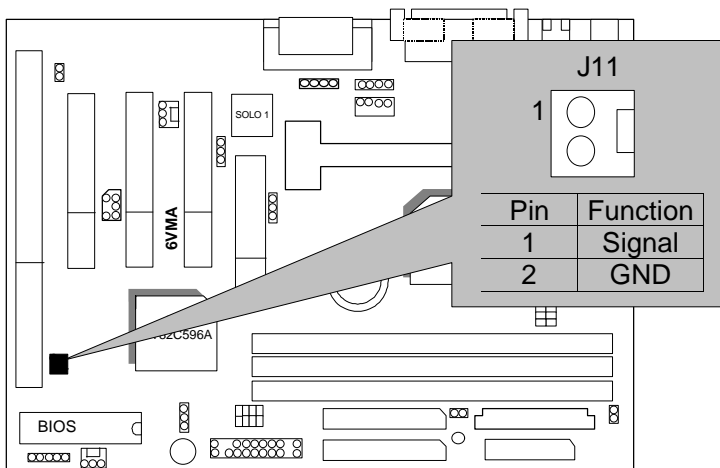
CN6 & JP5: CD Audio Line In



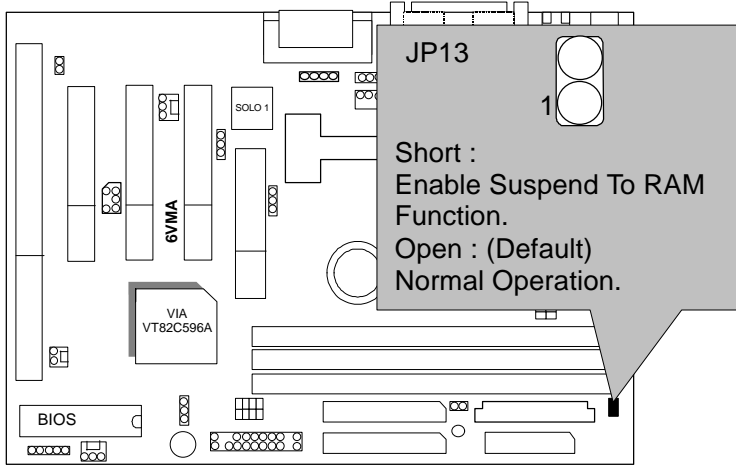
JP18: Onboard Sound Function Selection



J11: Internal Modem Card Ring PWR On



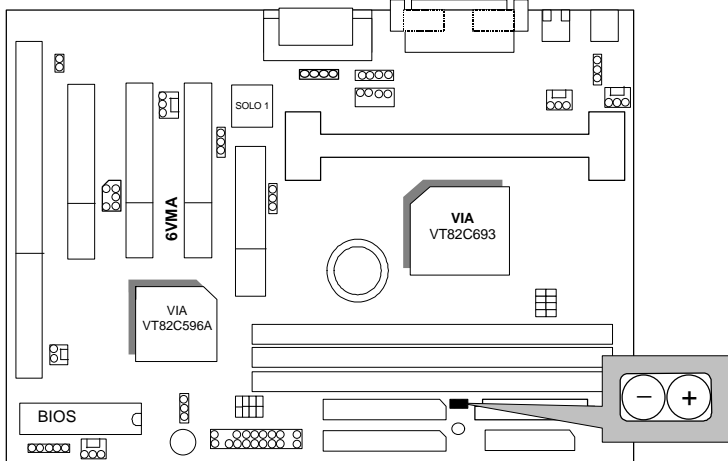
JP13 : Suspend To RAM Function (Optional)



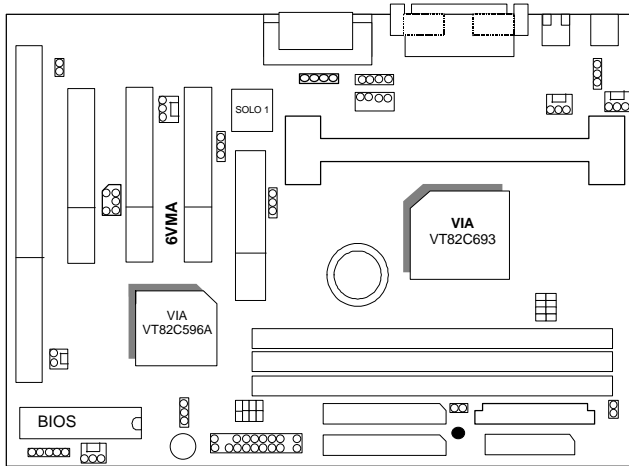
● When STR function is Enabled, please do not unplug the SDRAM modules, for it will burn the SDRAMs and mainboard .

● Support under Windows 98 ACPI O.S.

JP15: STR LED Connector (Optional)

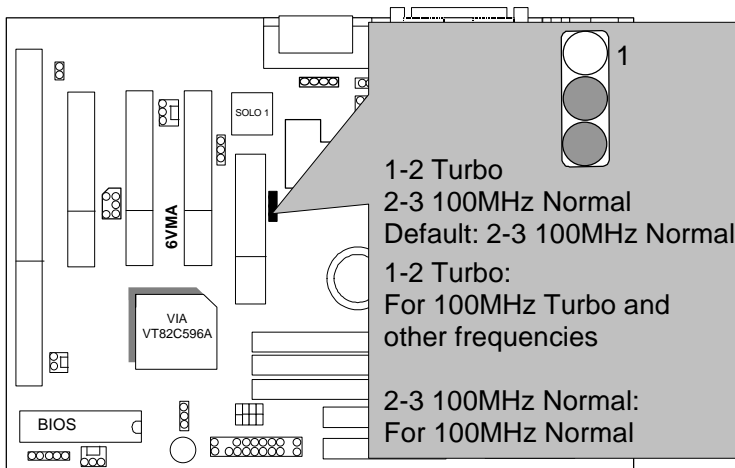


LED 1: DRAM LED (Optional)

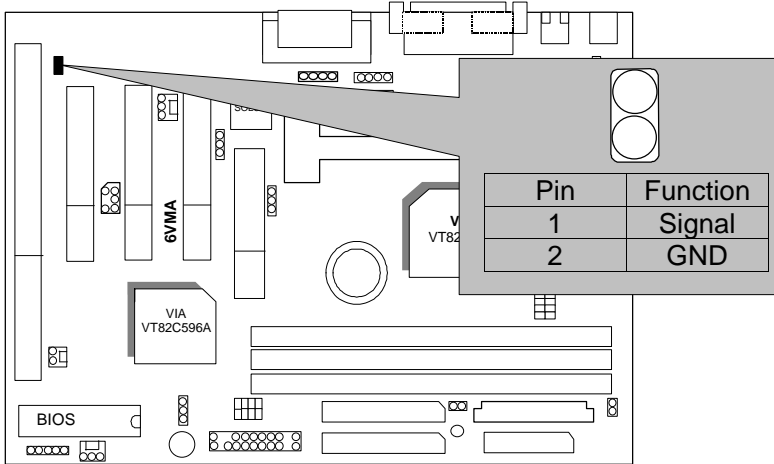


● When RAM LED is on, please do not unplug the SDRAM modules.

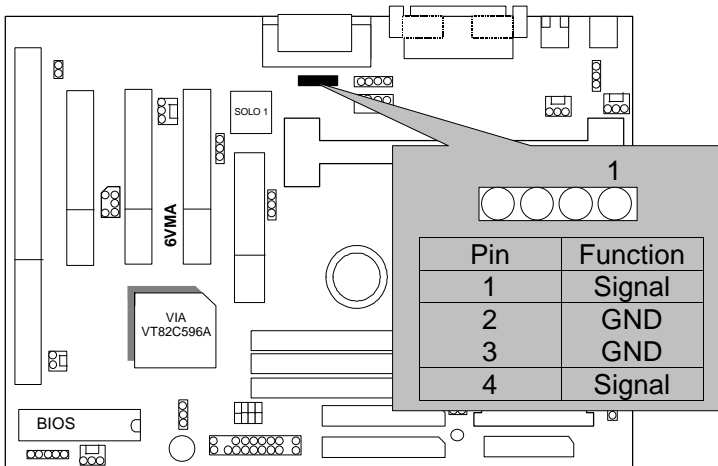
JP11: System Acceleration



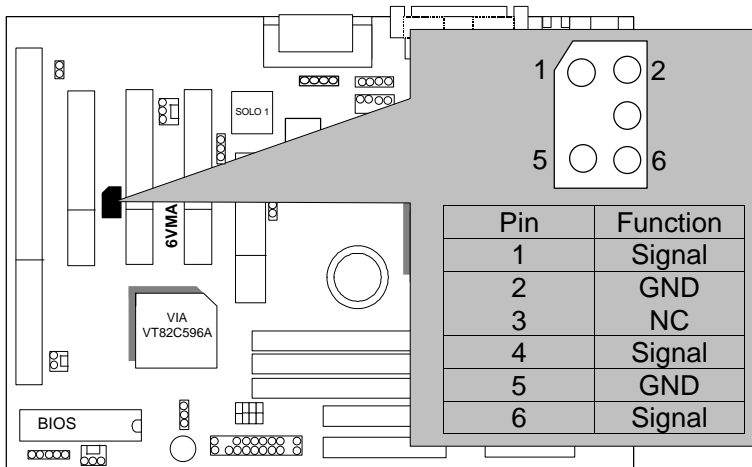
JP10 : CASE OPEN (Optional)



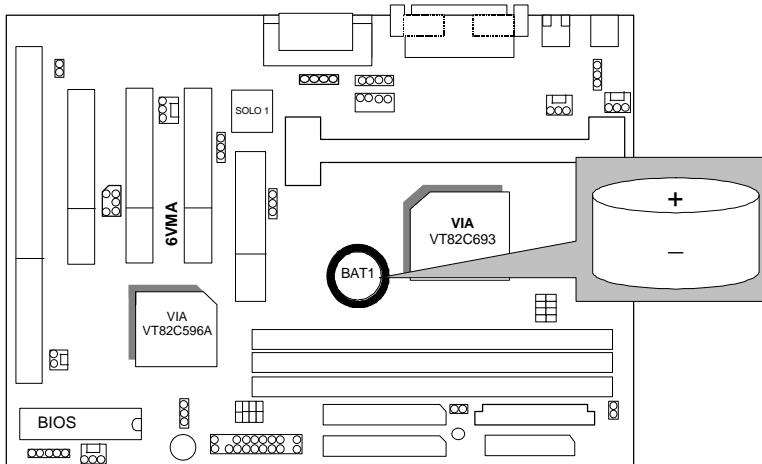
TEL :The Connector is for Modem with internal Voice Connector



JP10 : SB-LINK (Creative PCI Sound Card Support) (Optional)



BAT1:For Battery



- ⚠ Danger of explosion if battery is incorrectly replaced.
- ⚠ Replace only with the same or equivalent type recommended by the

manufacturer.

- Dispose of used batteries according to the manufacturer's instructions.

III. Top Performance Test Setting:

The following performance data list is the testing results of some popular benchmark testing programs.

Users have to modify the value for each item in chipset features as follow

```

ROM PCI/ISA BIOS (2A69KG0F)
CHIPSET FEATURES SETUP
AWARD SOFTWARE, INC.

Bank 0/1 DRAM Timing      : Turbo
Bank 2/3 DRAM Timing      : Turbo
Bank 4/5 DRAM Timing      : Turbo
SDRAM Cycle Length        : 2
DRAM Clock                 : Host CLK
Memory Hole At 15M-16M    : Disabled
Read Around write         : Disabled
Concurrent PCI/Host       : Disabled
Video RAM Cacheable       : Disabled
AGP Aperture Size         : 64M
Power LED in Suspend      : BLINKING
Spread Spectrum           : Disabled

Slow Down CPU Duty Cycle  : Normal
Shutdown Temp.(°C/°F)    : 75/167
**Temp. Select (°C/°F)**
CPU :70/158
**Temperature Alarm**
CPU :No
**Fan Fail Alarm**
CPU:No POWER:No SYS:No

Reset Case Open Status    :No
Case Opened               :No
**Current Temp.(°C/°F)**
CPU :39/217
**Current Fan Speed (RPM)**
CPU: 4326 POWER:0 SYS:0
**Current Voltage (V)**
VCORE : 2.83 VGTL : 1.48 UCC3: 3.37
+5V: 4.94 +12V: 12.34 -12V: -12.85
-5V:- 5.04 VBAT: 3.07 5VSB: 4.97

ESC : Quit          ↑↓↓↑ : Select Item
F1  : Help          PU/PD/+/- : Modify
F5  : Old Values   (Shift)F2 : Color
F6  : Load BIOS Defaults
F7  : LOAD PERFORMANCE DEFAULTS

```

for top performance setting.

**The above settings have to modify according to different kinds of CPU, SDRAM, and peripherals for your system to work properly.

These data are just referred by users, and there is no responsibility for different testing data values gotten by users. (The different Hardware & Software configuration will result in different benchmark testing results.)

- CPU Pentium® II processor
- DRAM (128 x 1) MB SDRAM (TOSHIBA TC59S6408FTL-80H)
- CACHE SIZE 512 KB included in CPU
- DISPLAY GA-630 AGP Voodoo banshee(16MB SGRAM)
- STORAGE Onboard IDE (IBM DHEA-36481)
- O.S. Windows NT™4.0
- DRIVER Display Driver at 1024 x 768 x 64k colors x 75Hz.
VIA Bus Master IDE Driver 2.3.12

Processor	Intel Pentium® II	
	350MHz(100x3.5)	450MHz(100x4.5)
Winbench99		
CPU mark32	881	1110
FPU Winmark	1800	2300
Business Disk	3910	4220
Hi-End Disk	8530	8380
Business Graphics	161	194
Hi-End Graphics	281	354
Winstone99		
Business	27.2	31
Hi-End	23.2	27.2