6BMM

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. **ATI RAGE PRO AGP Display Onboard. (8M SDRAM)**

6. **YAMAHA PCI Sound Onboard.**

7. **Support STR Function (Optional).**

For Intel Pentiumâ II / Celeron™ Processor MAINBOARD

R-14-01-090112

REV. 1.4 First Edition

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.

January 12, 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 - 366MHz 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

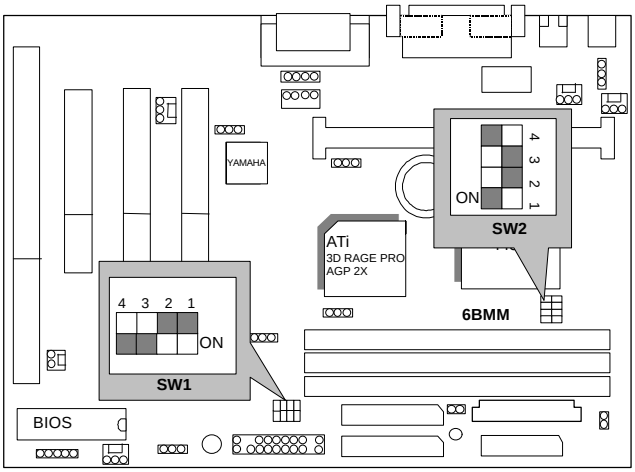
Set System Bus Speed

SW2:

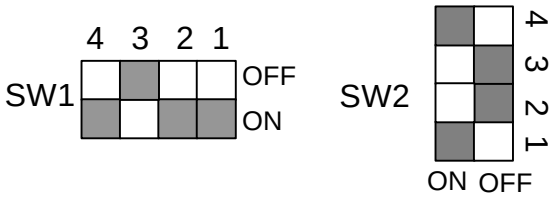
CPU	AGP	PCI	1	2	3	4
66	**66**	**33.4**	ON	OFF	OFF	ON
75	**75**	**37.5**	ON	ON	OFF	ON
83	**83**	**41.6**	ON	OFF	ON	ON
100	**66**	**33.4**	OFF	OFF	OFF	OFF
112	**75**	**37.5**	OFF	ON	OFF	OFF
133	**89**	**33.3**	OFF	OFF	ON	OFF

★ **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.**

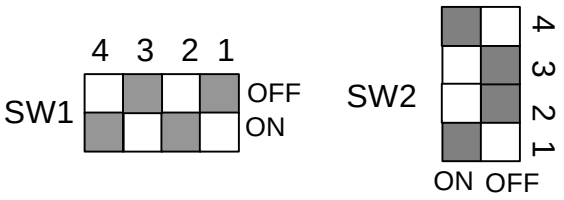
1. Pentium® II / Celeron 233 MHz / 66MHz FSB



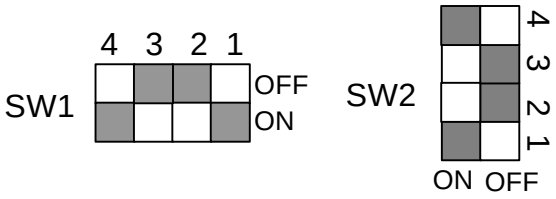
2. Pentium® II / Celeron 266MHz / 66MHz FSB



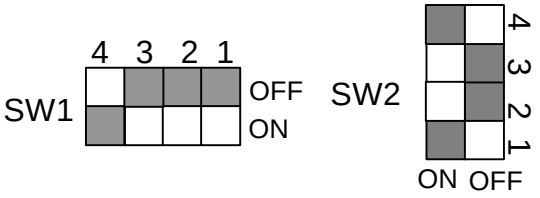
3. Pentium® II / Celeron 300MHz / Celeron 300A MHz / 66MHz FSB



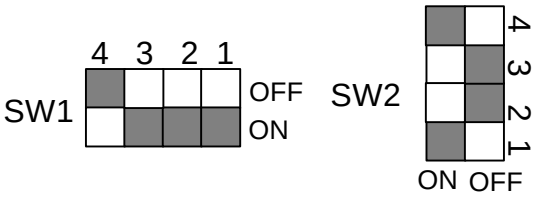
4. Pentium® II / Celeron 333MHz / 66MHz FSB



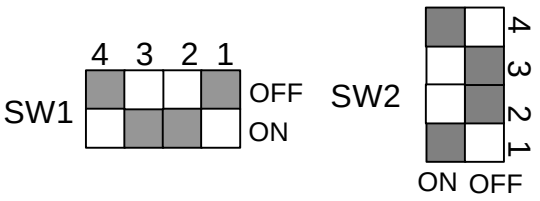
5. Pentium® II / Celeron 366 MHz / 66MHz FSB



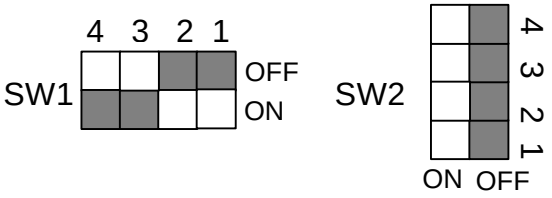
6. Pentium® II / Celeron 400 MHz / 66MHz FSB



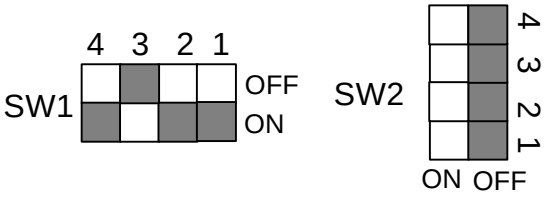
7. Pentium® II / Celeron 433 MHz / 66MHz FSB



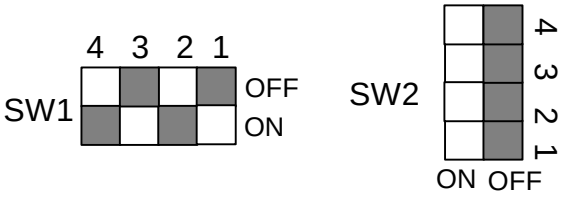
8. Pentium® II 350MHz / 100MHz FSB



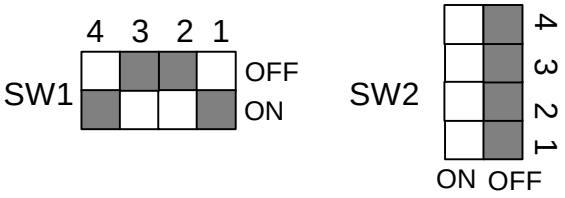
9. Pentium® II 400MHz / 100MHz FSB



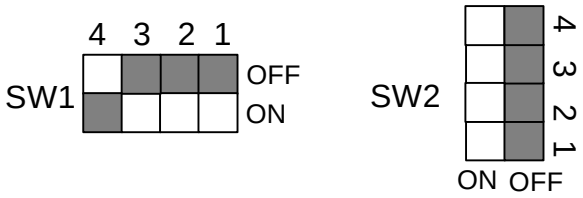
10. Pentium® II 450MHz / 100MHz FSB



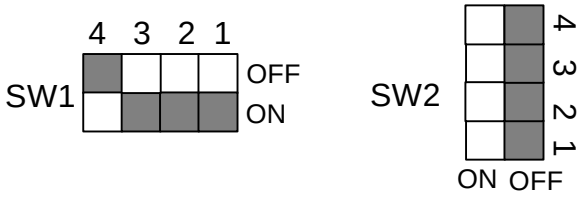
11. Pentium® II 500MHz / 100MHz FSB



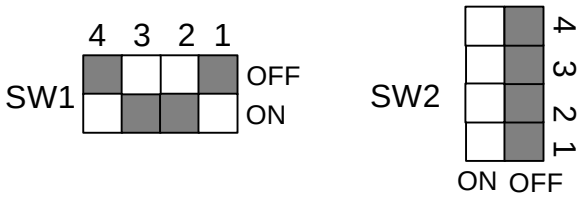
12. Pentium® II 550MHz / 100MHz FSB



13. Pentium® II 600MHz / 100MHz FSB

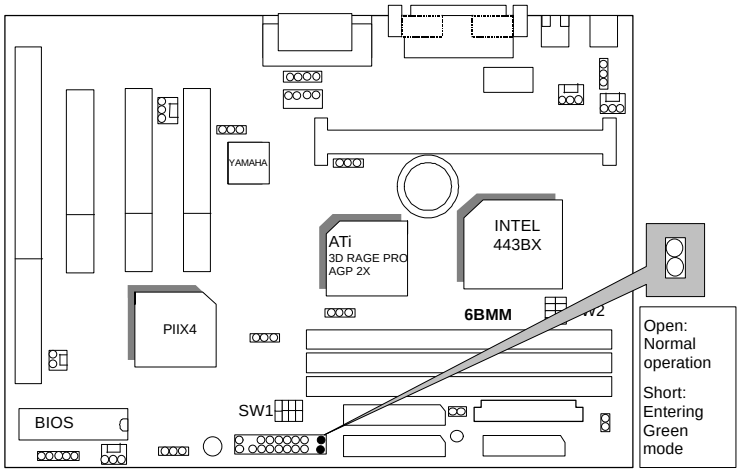


14. Pentium® II 650MHz / 100MHz FSB

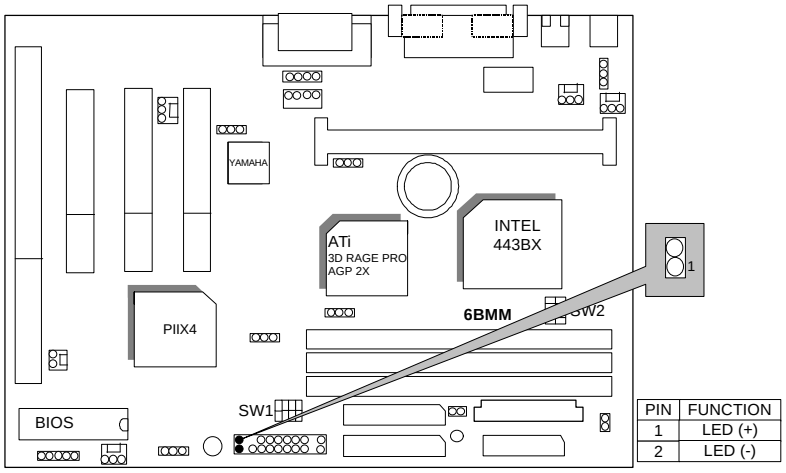


II. Jumper setting :

GN : Green Function Switch

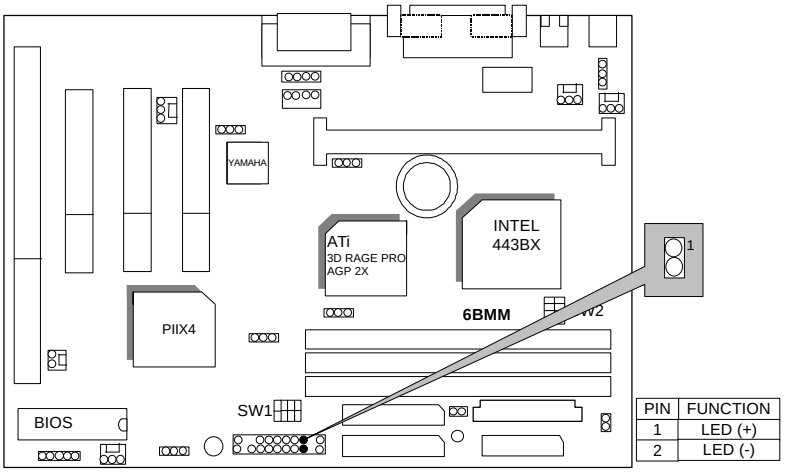


GD : Green Function LED



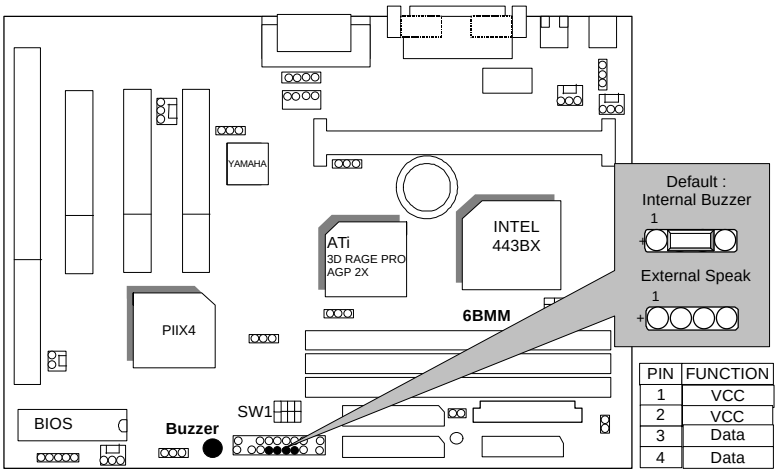
PIN	FUNCTION
1	LED (+)
2	LED (-)

HD : IDE Hard Disk Active LED



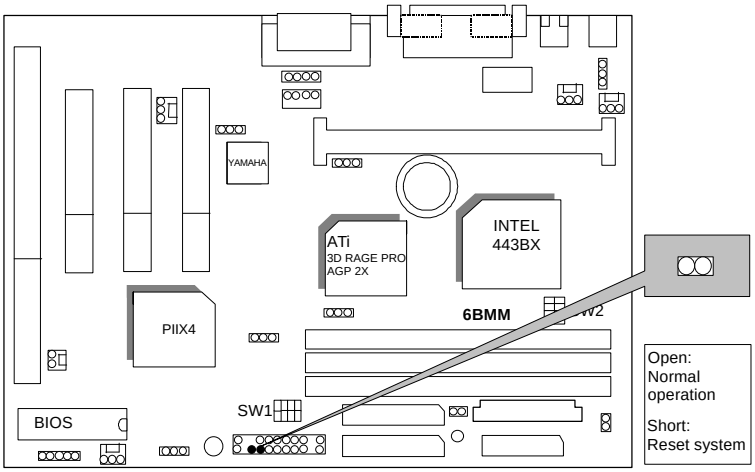
PIN	FUNCTION
1	LED (+)
2	LED (-)

SPKR : External Speaker/ Internal Buzzer Connector

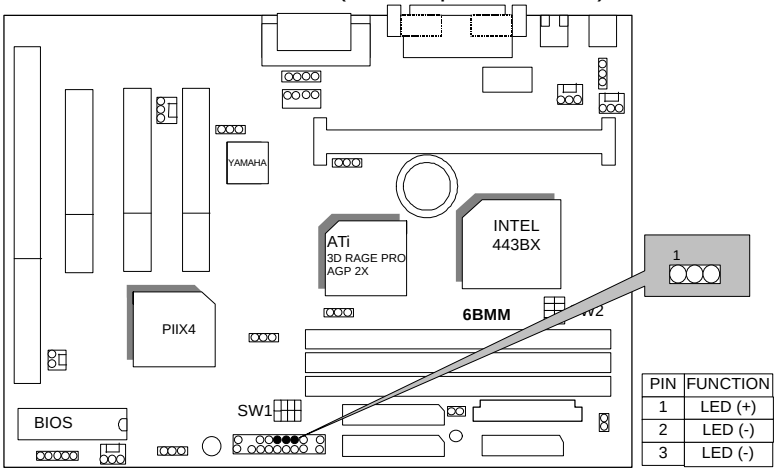


PIN	FUNCTION
1	VCC
2	VCC
3	Data
4	Data

RES : Reset Switch

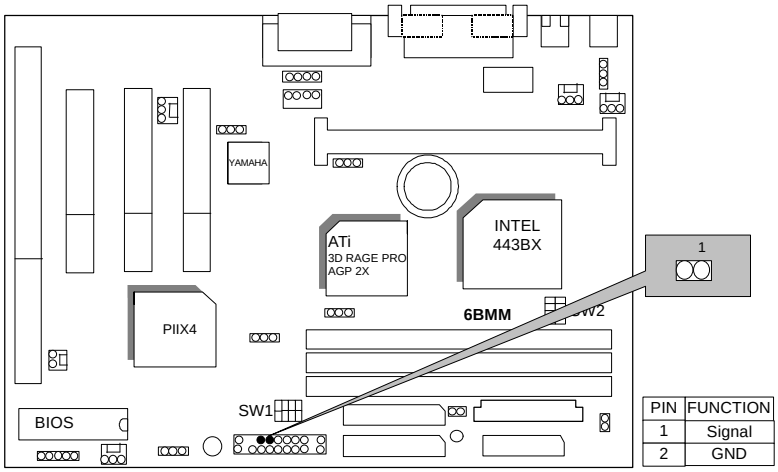


PWR : Power LED Connector (as 3 steps ACPI LED)



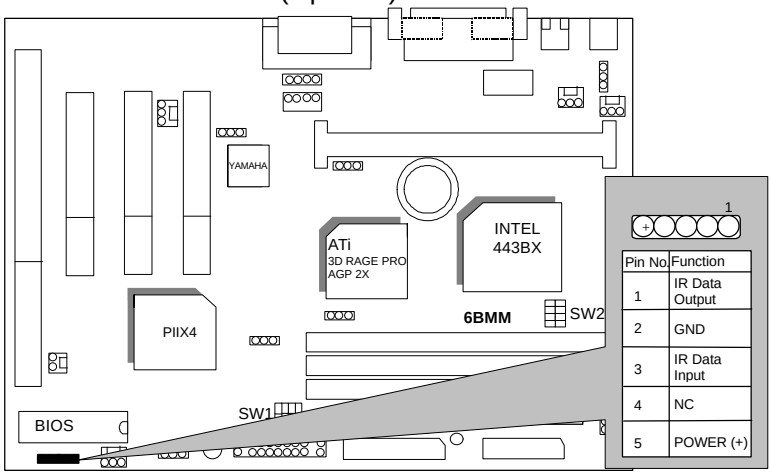
PIN	FUNCTION
1	LED (+)
2	LED (-)
3	LED (-)

Soft PWR : Soft Power Connector



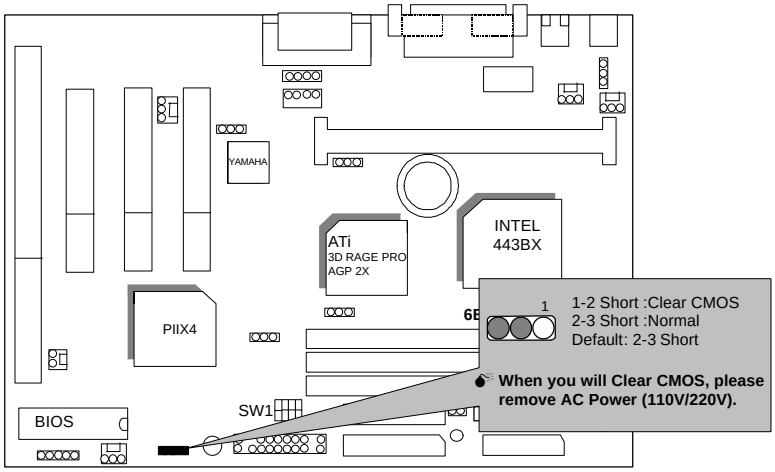
PIN	FUNCTION
1	Signal
2	GND

IR : Infrared Connector (Optional)

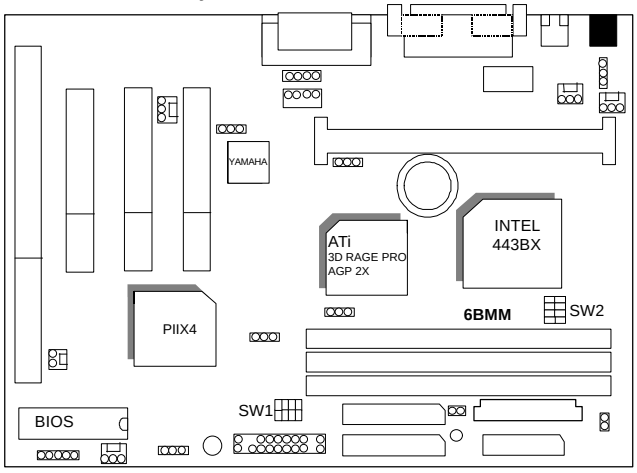


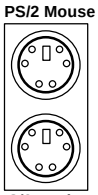
Pin No.	Function
1	IR Data Output
2	GND
3	IR Data Input
4	NC
5	POWER (+)

JP14:CLEAR CMOS FUNCTION



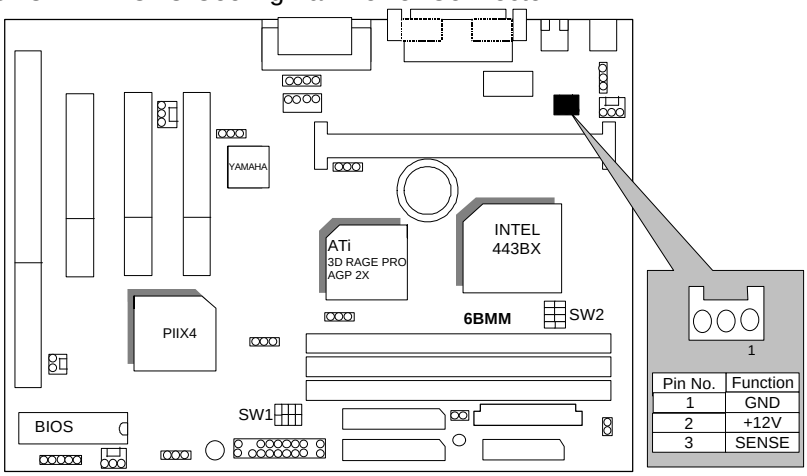
PS/2 Mouse / Keyboard Connector





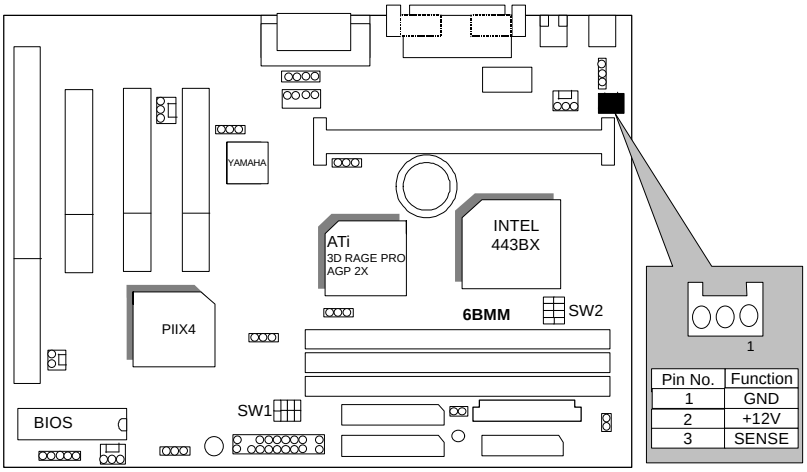
PS/2 Mouse/Keyboard	
Pin No.	Function
1	Data
2	NC
3	GND
4	VCC (+5V)
5	Clock
6	NC

CPU FAN : CPU Cooling Fan Power Connector



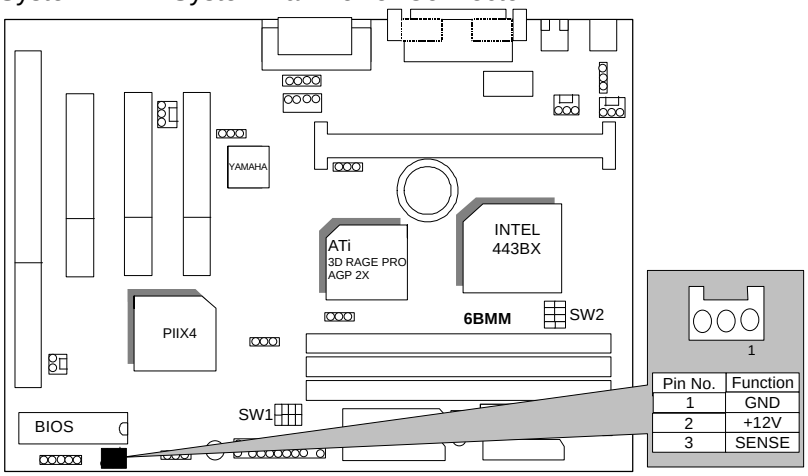
Pin No.	Function
1	GND
2	+12V
3	SENSE

Power FAN : Power Fan Power Connector

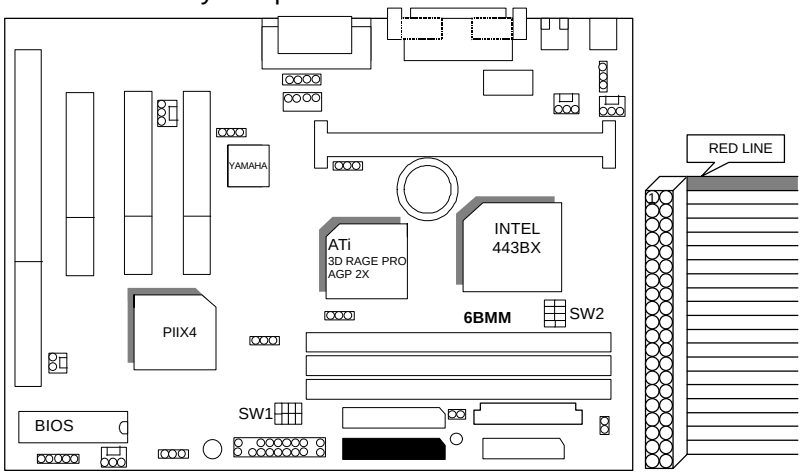


Pin No.	Function
1	GND
2	+12V
3	SENSE

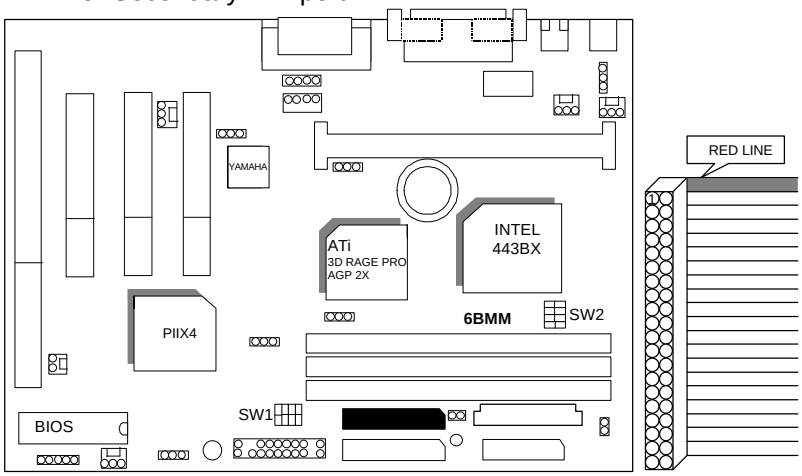
System FAN : System Fan Power Connector



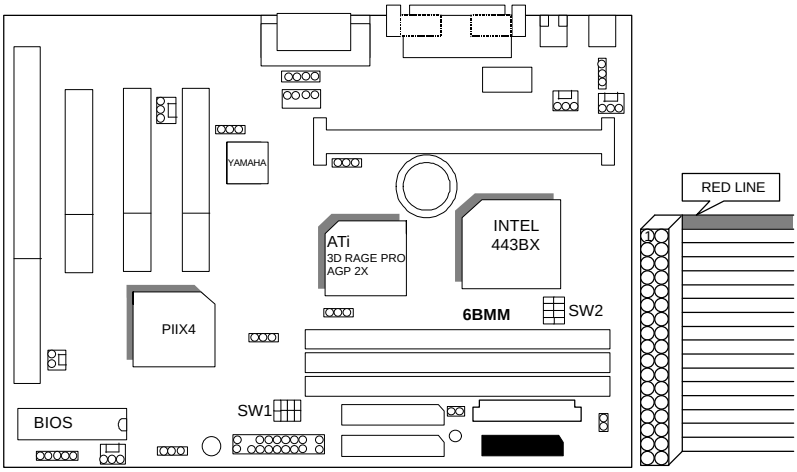
IDE1: For Primary IDE port



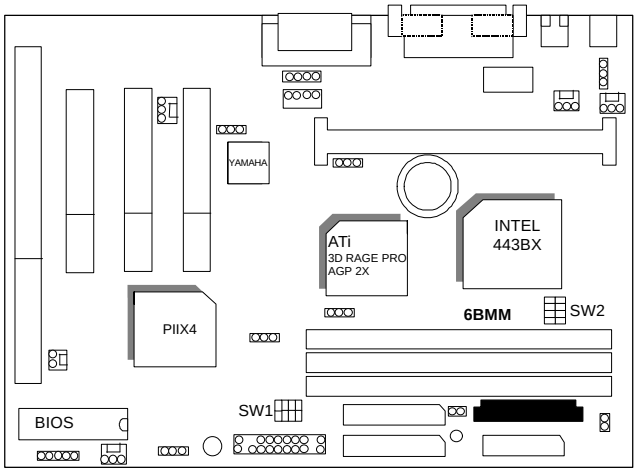
IDE2: For Secondary IDE port

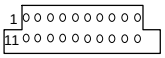


FLOPPY : FLOPPY PORT



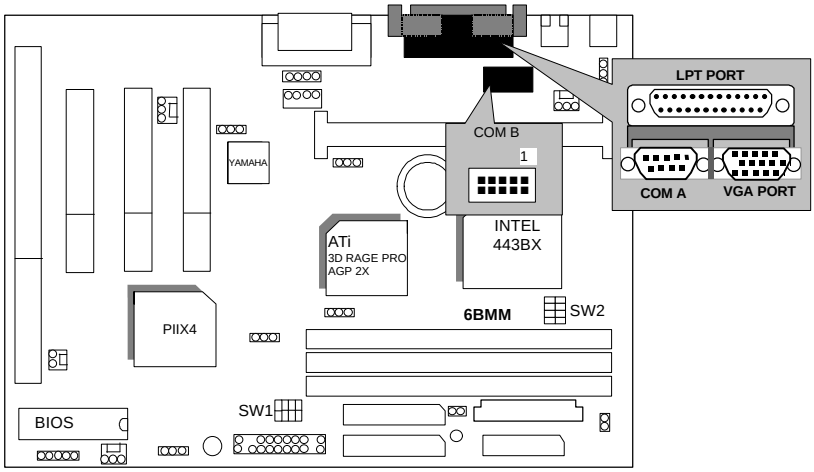
ATX POWER : ATX POWER Connector



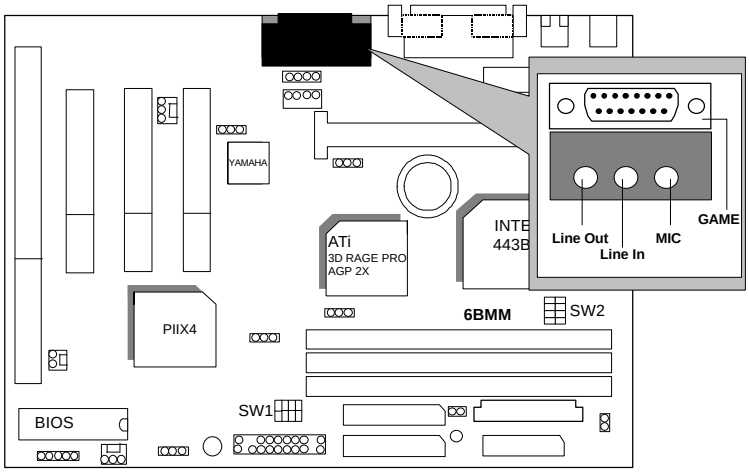


Pin No.	Function
3,5,7,13,15-17	GND
4,6,19,20	VCC (+5V)
10	+12V
12	-12V
18	-5V
8	Power Good
9	5V SB (Stand by+5V)
14	PS-ON (Soft ON/OFF)

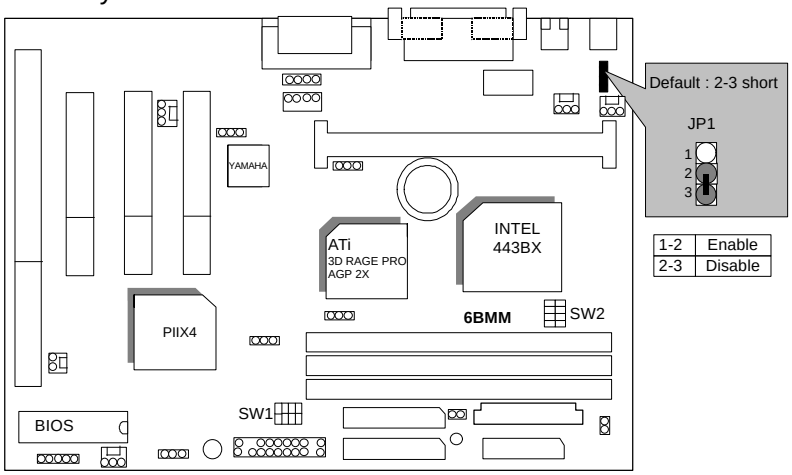
LPT PORT / COM A / COM B / VGA PORT



GAME & AUDIO PORT

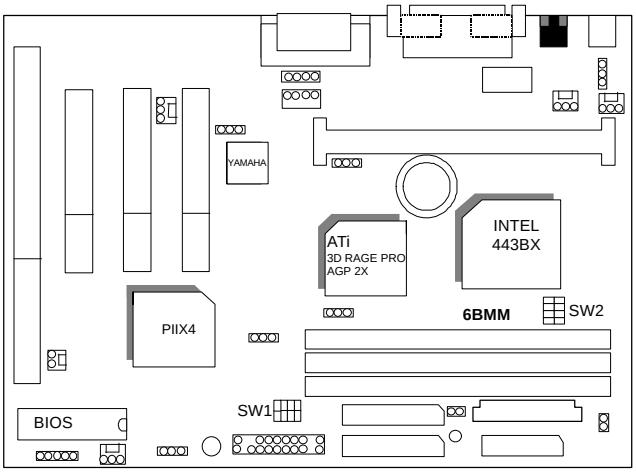


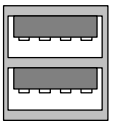
JP1 : Keyboard Power On



1-2	Enable
2-3	Disable

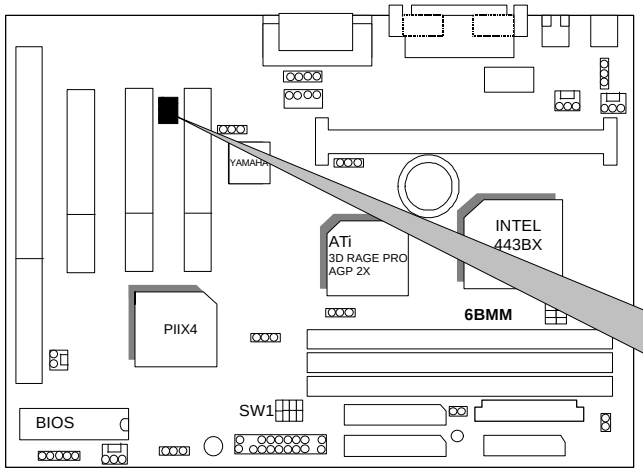
USB: USB Port

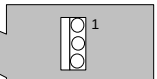




Pin No.	Function
1	USB V0
2	USB D0-
3	USB D0+
4	GND
5	USB V1
6	USB D1-
7	USB D1+
8	GND

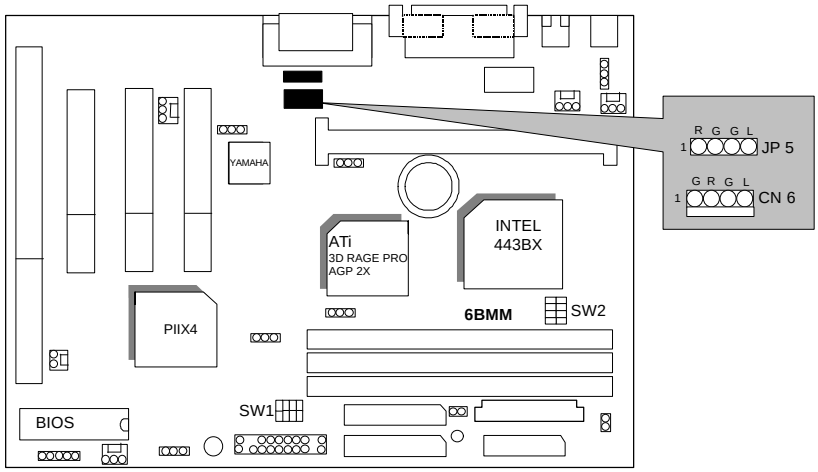
JP7: Wake on LAN



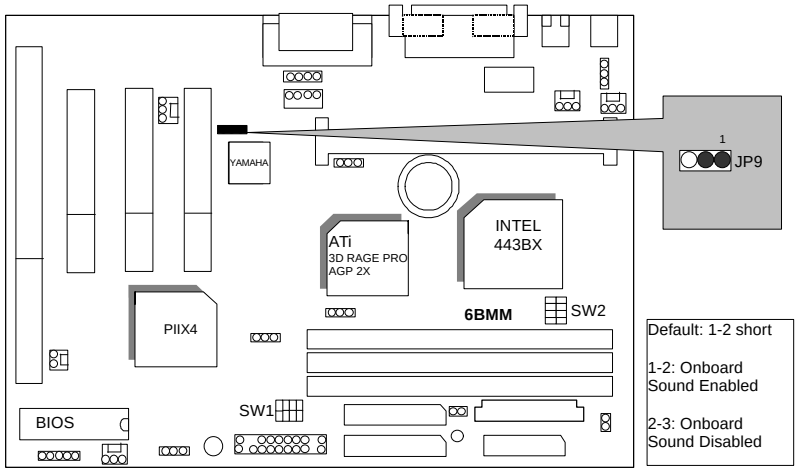


Pin No.	Function
1	+5V SB
2	GND
3	Signal

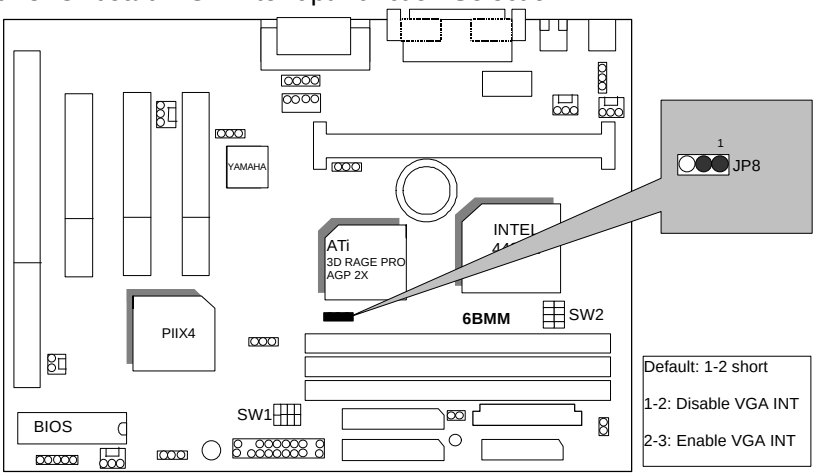
CN6 &JP5:CD Audio Line In



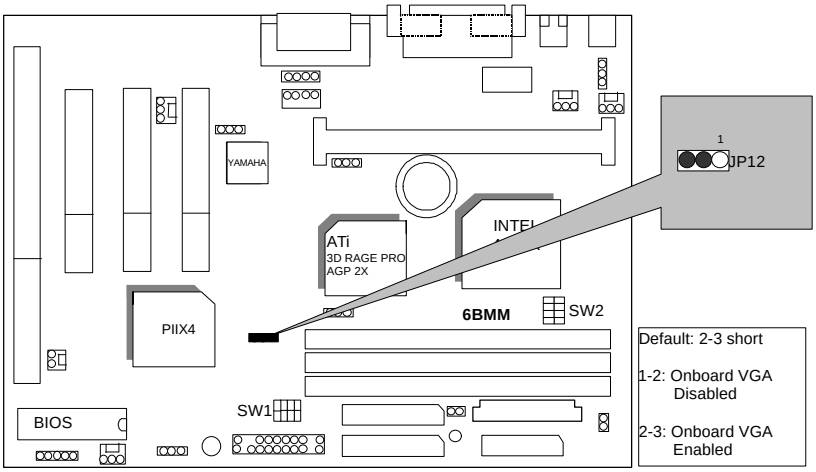
JP9: Onboard Sound Function Selection



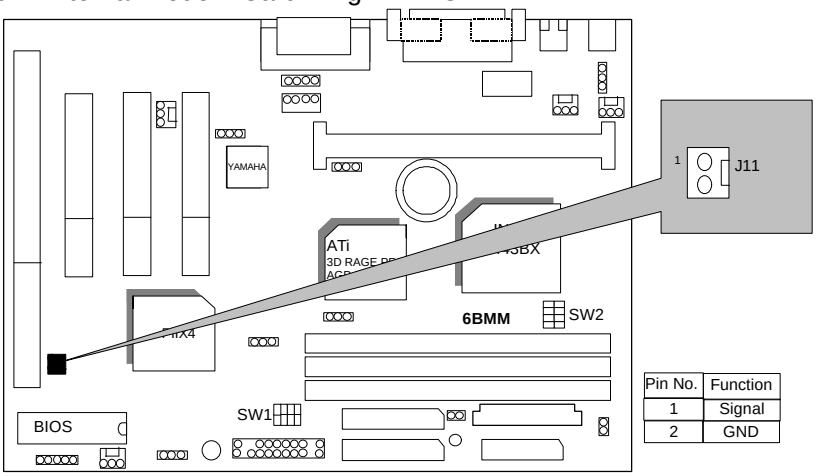
JP8: Onboard VGA Interrupt Function Selection



JP12: Onboard VGA Function Selection

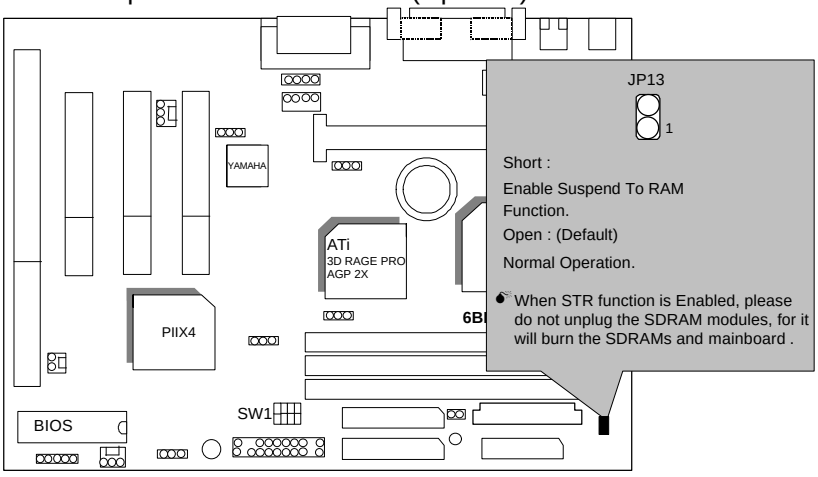


J11:Internal Modem Card Ring PWR On



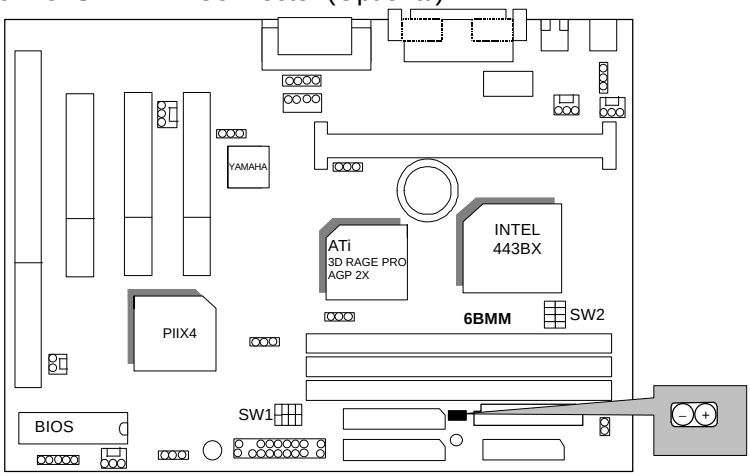
Pin No.	Function
1	Signal
2	GND

JP13 : Suspend To RAM Function (Optional)

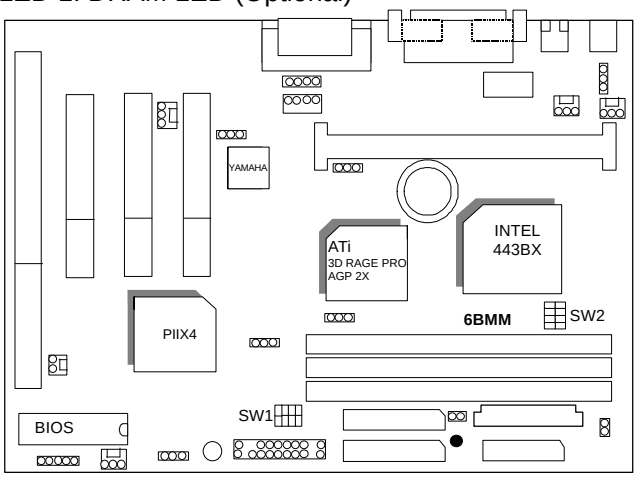


Support under Windows 98 ACPI O.S.

JP15: STR LED Connector (Optional)

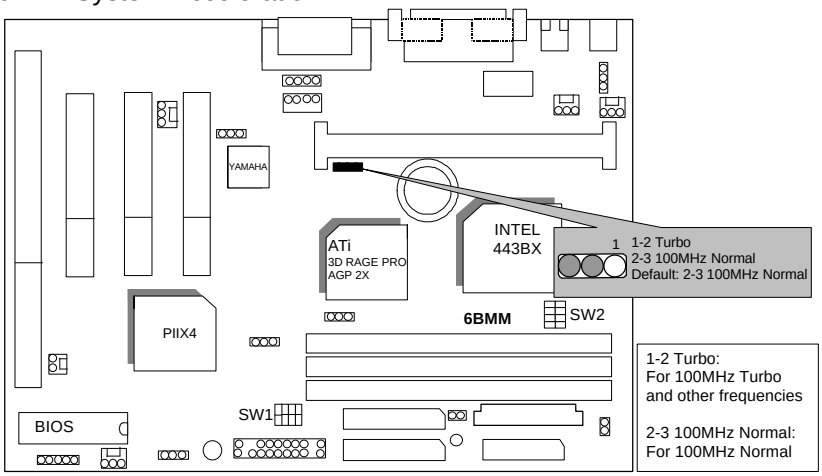


LED 1: DRAM LED (Optional)

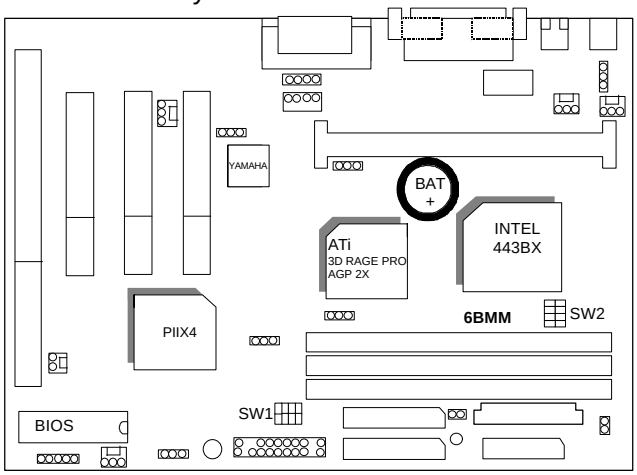


When RAM LED is on, please do not unplug the SDRAM modules.

JP11: System Acceleration



BAT1:For Battery



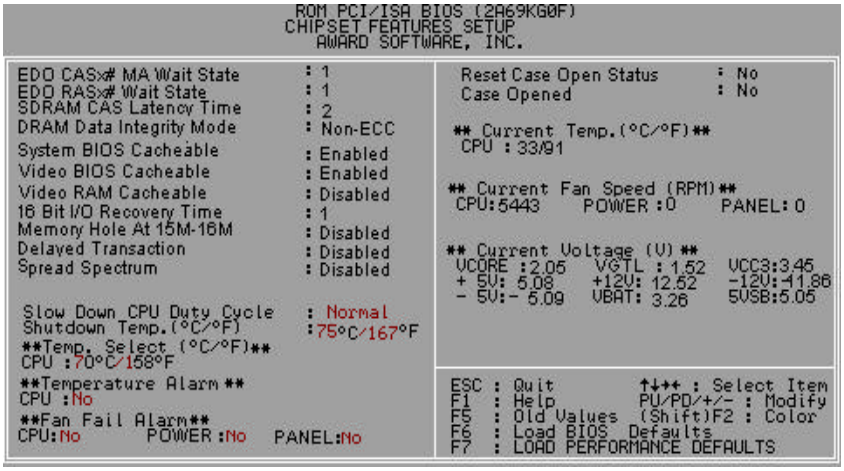
- Danger of explosion if battery is incorrectly replaced.
- Replace only with the same or equivalent type recommended by the manufacturer.

- 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



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 (SEC KM48S8030BT-GH)
- CACHE SIZE — 512 KB included in CPU
- DISPLAY — Onboard ATi AGP 3D graphics acceleration chip (8MB SDRAM)
- STORAGE — Onboard IDE (Seagate ST34520A)
- O.S. — Windows NT™4.0
- DRIVER — Display Driver at 1024 x 768 x 64k colors x 75Hz.
  TRIONES Bus Master IDE Driver 3.70

Processor	Intel Pentium® II	
	350MHz(100x3.5)	450MHz(100x4.5)
Winbench98		
CPU mark32	909	1130
FPU Winmark	1810	2300
Business Disk	2130	2160
Hi-End Disk	5160	5270
Business Graphics	183	210
Hi-End Graphics	206	246
Winstone98		
Business	33.8	37.6
Hi-End	39.1	43.4