

# **6ZMA/6ZM**

## **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.(Optional)**

**For Intel Pentium® II / III / Celeron™ Processor MAINBOARD  
REV. 1.2 First Edition  
R-12-01-090702**



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July. 2, 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 - 650MHz 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:

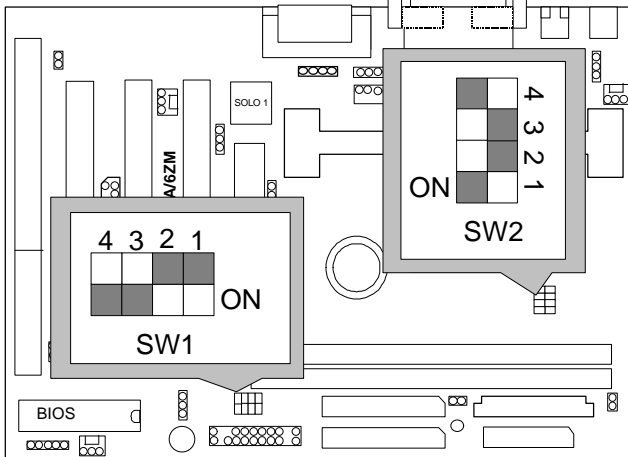
CPU	1	2	3	4
66	ON	OFF	OFF	ON
75	ON	ON	OFF	ON
83	ON	OFF	ON	ON
100	OFF	OFF	OFF	OFF
112	OFF	ON	OFF	OFF
133	OFF	OFF	ON	OFF

◆Note: It's strongly recommended that set the system speed according to

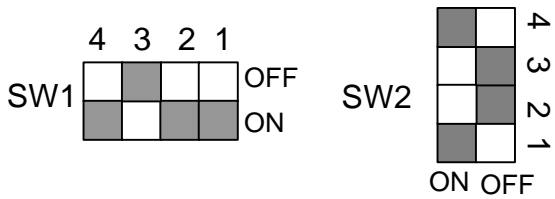
your hardware configuration: CPU, SDRAM, Cards, etc.

**The black part in the picture is the white extruding piece of the DIP switch.**

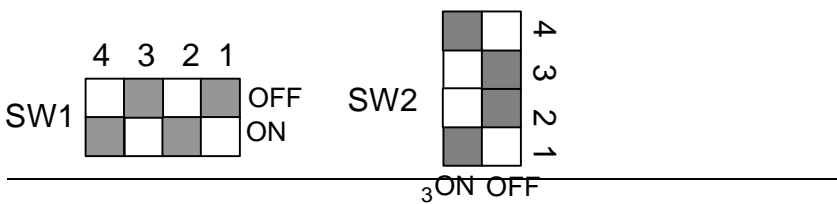
1. Pentium® II / Celeron™ 233 MHz / 66MHz FSB



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

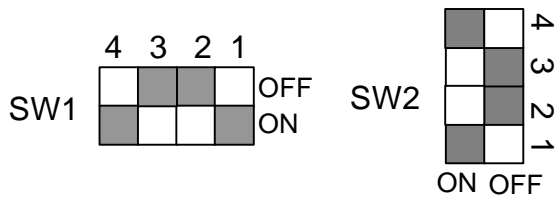


3. Pentium® II/Celeron™ 300MHz /Celeron™ 300A MHz /66MHz FSB

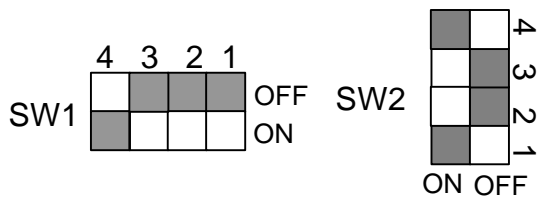




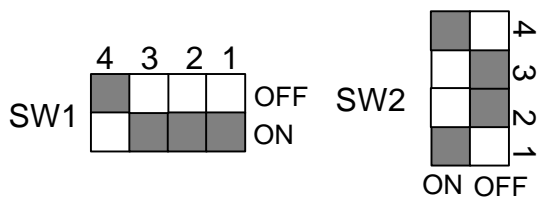
4. Pentium® II / Celeron™ 333MHz / 66MHz FSB



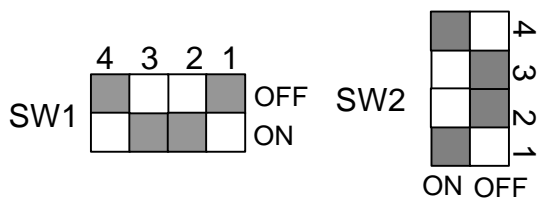
5. Pentium® II / Celeron™ 366 MHz / 66MHz FSB



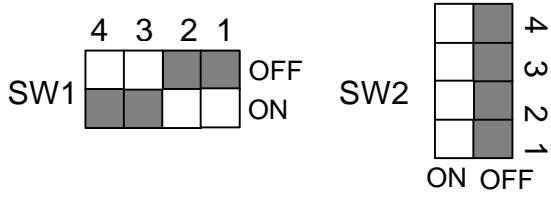
6. Pentium® II / Celeron™ 400 MHz / 66MHz FSB



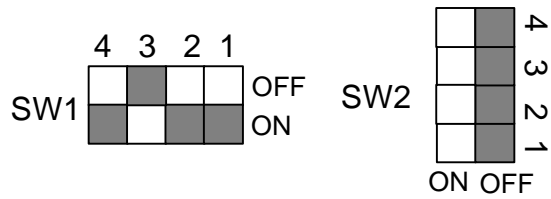
7. Pentium® II / Celeron™ 433 MHz / 66MHz FSB



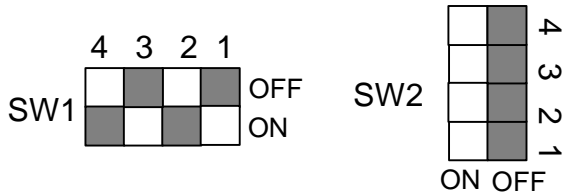
8. Pentium® II 350MHz / 100MHz FSB



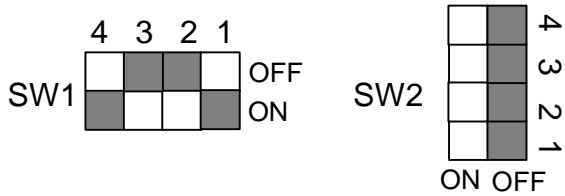
9. Pentium® II 400MHz / 100MHz FSB



10. Pentium® III 450MHz / 100MHz FSB

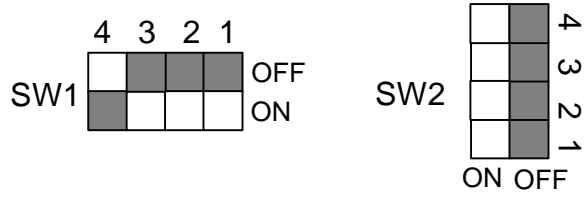


11. Pentium® III 500MHz / 100MHz FSB

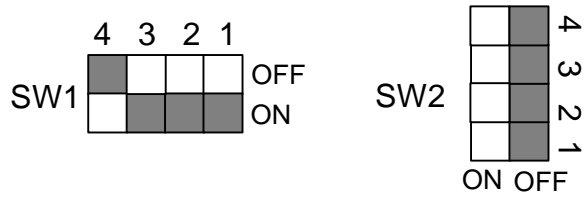




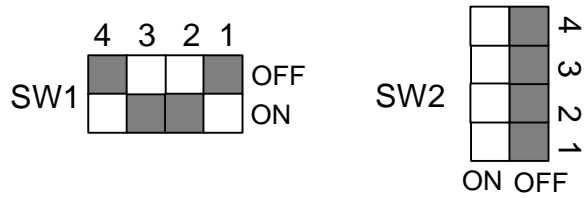
12. Pentium® III 550MHz / 100MHz FSB



13. Pentium® III 600MHz / 100MHz FSB

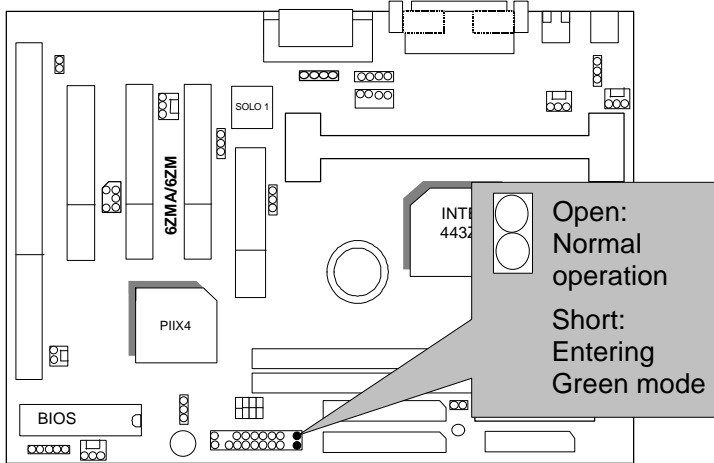


14. Pentium® III 650MHz / 100MHz FSB

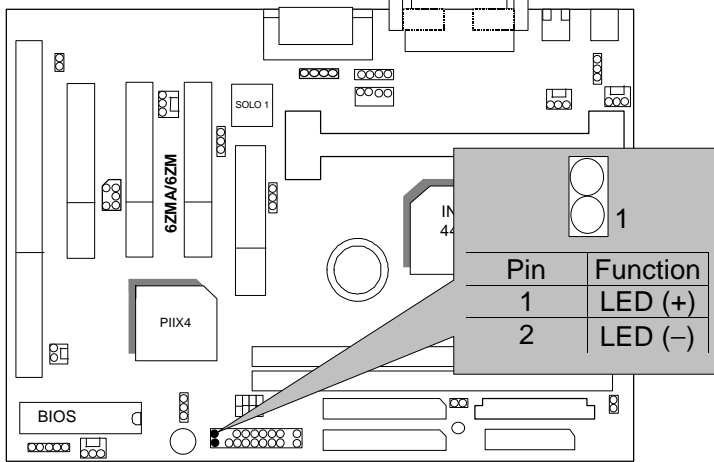


## II. Jumper setting :

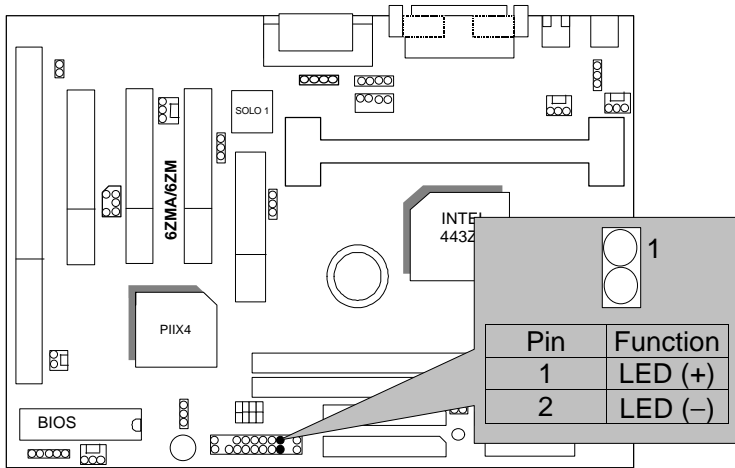
GN : Green Function Switch



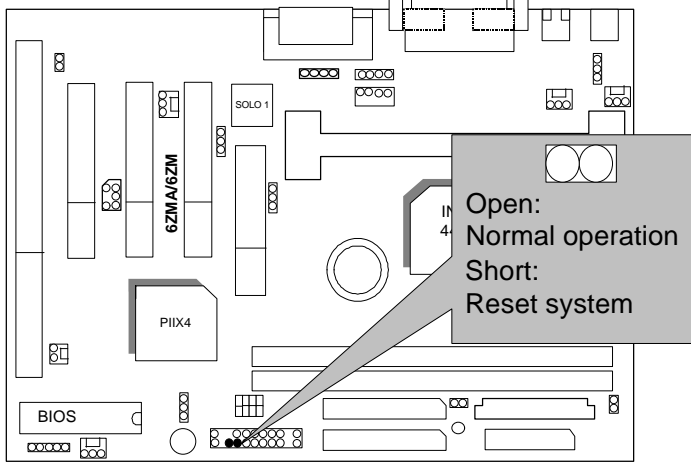
GD : Green Function LED



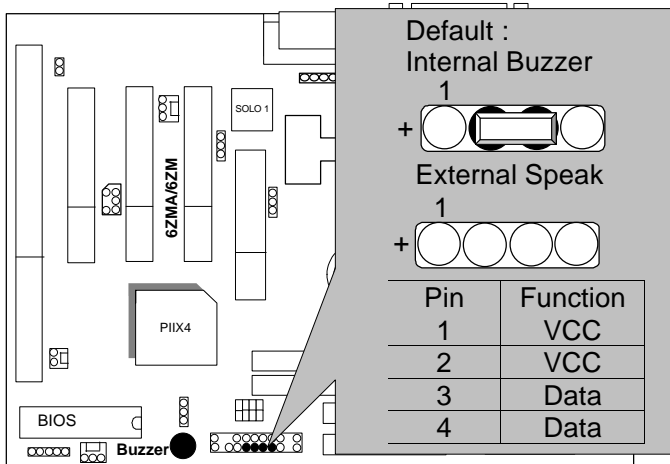
HD : IDE Hard Disk Active LED



RST : Reset Switch

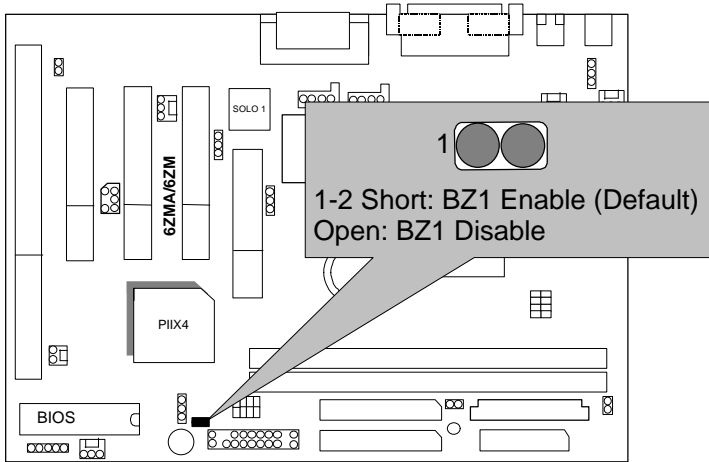


SPK : External Speaker/ Internal Buzzer Connector

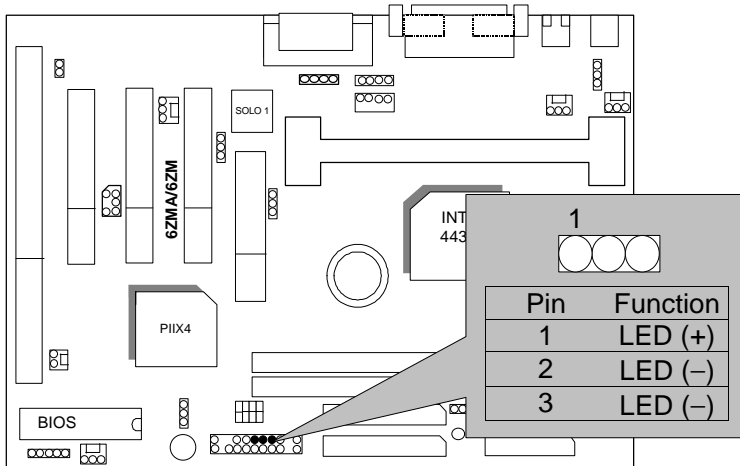


JP21 : Internal Buzzer Connector

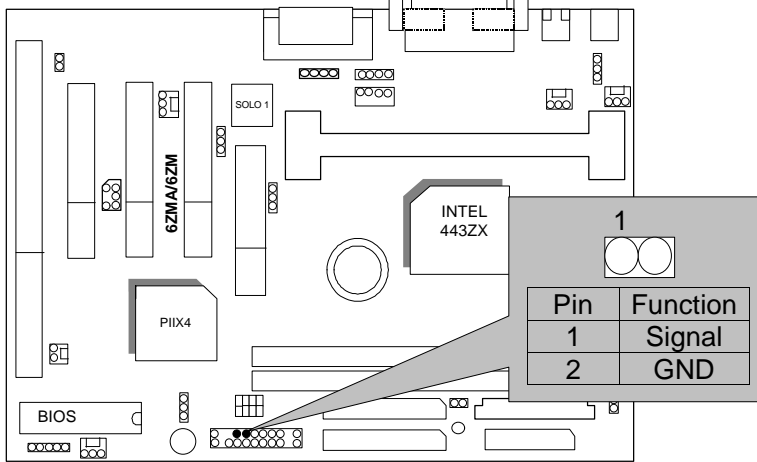
(This function is support in PCB version 1.2 and above)



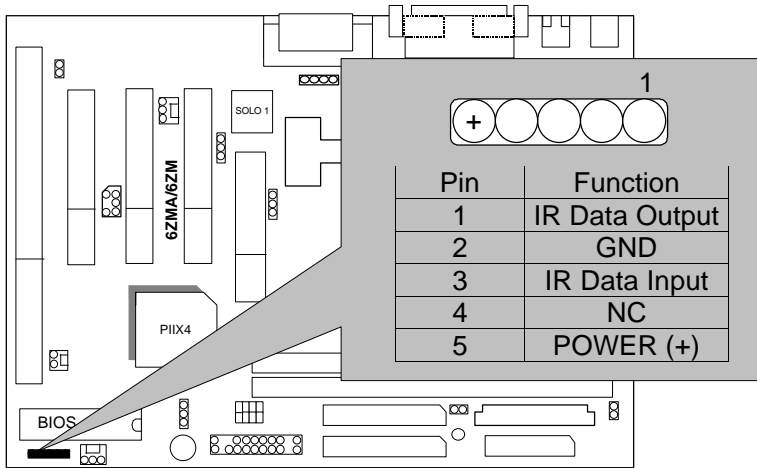
PWR : Power LED Connector (as 3 steps ACPI LED)



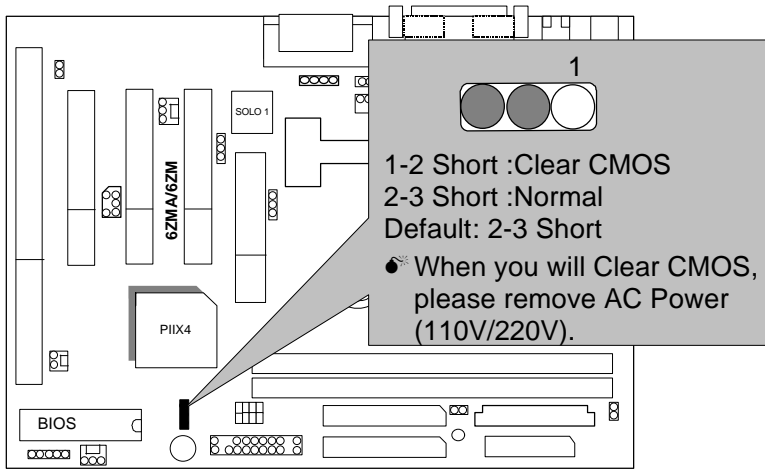
PW : Soft Power Connector



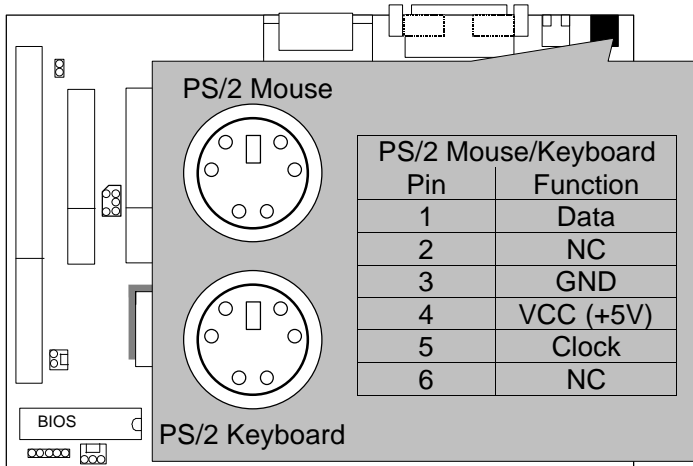
**IR : Infrared Connector (Optional)**



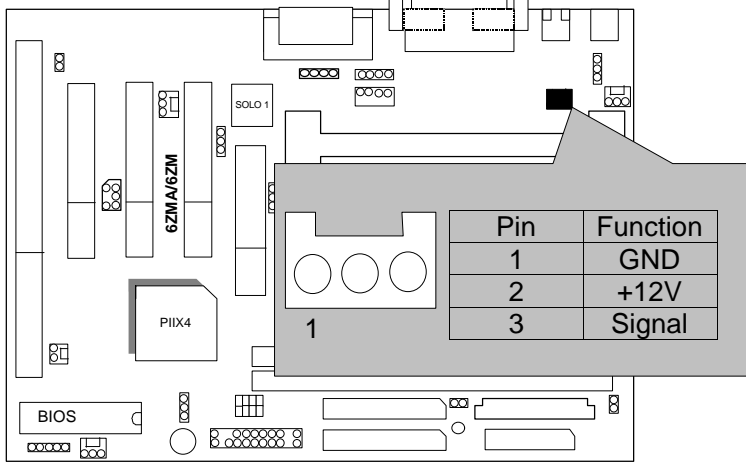
**JP14: CLEAR CMOS FUNCTION**



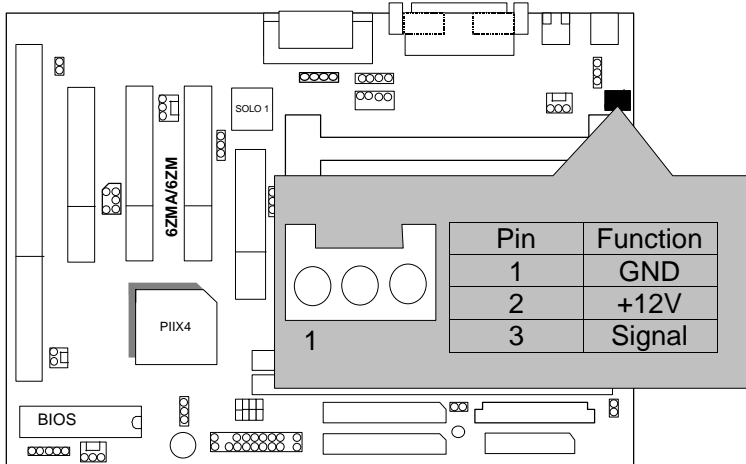
PS/2 Mouse / Keyboard Connector



CPU FAN : CPU Cooling Fan Power Connector

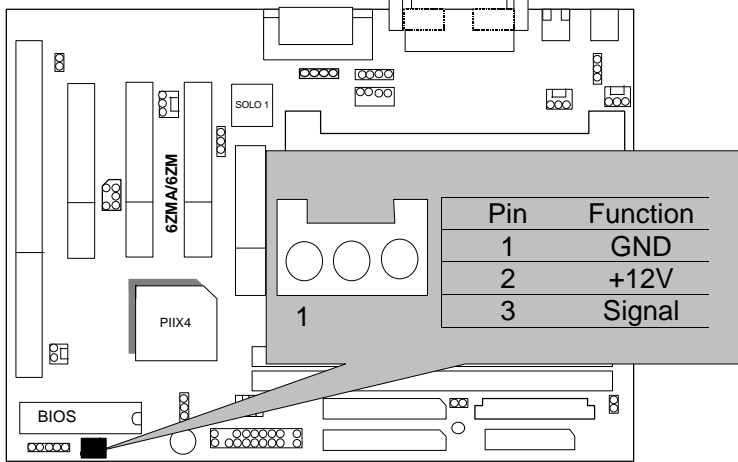


**Power FAN : Power Fan Power Connector**

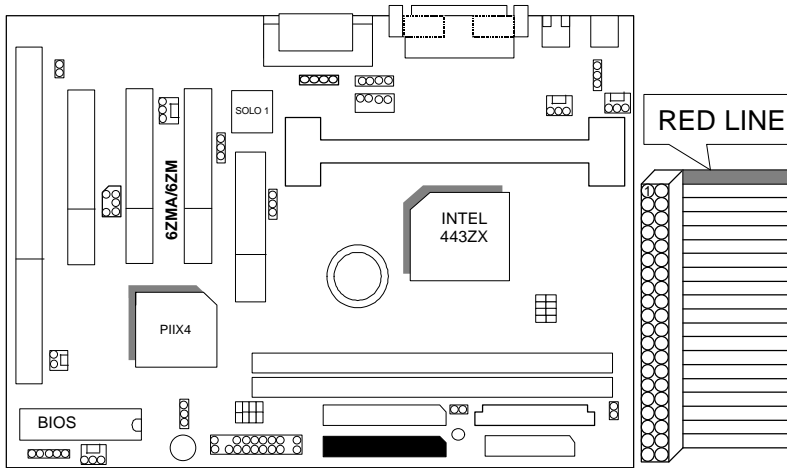


**System FAN : System Fan Power Connector**

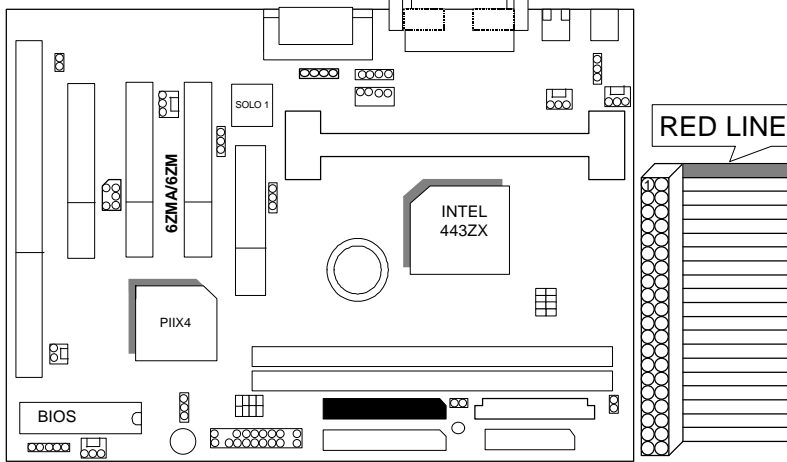




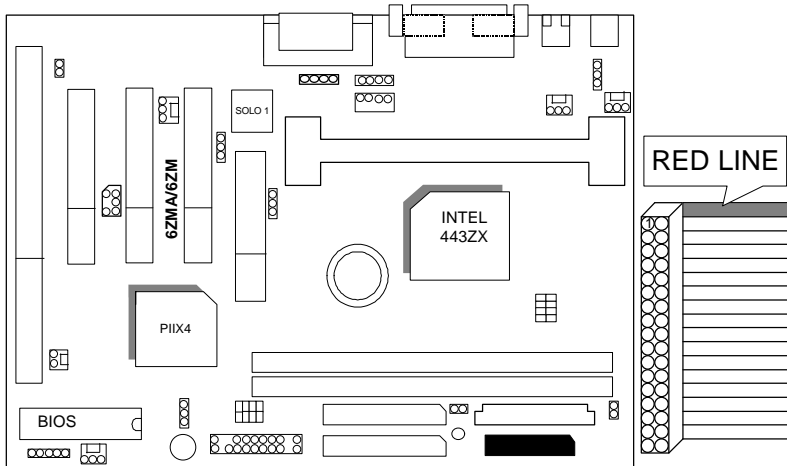
IDE1: For Primary IDE port



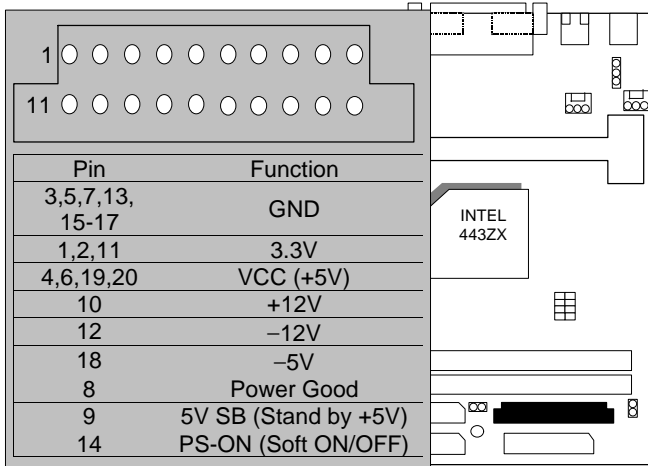
IDE2: For Secondary IDE port



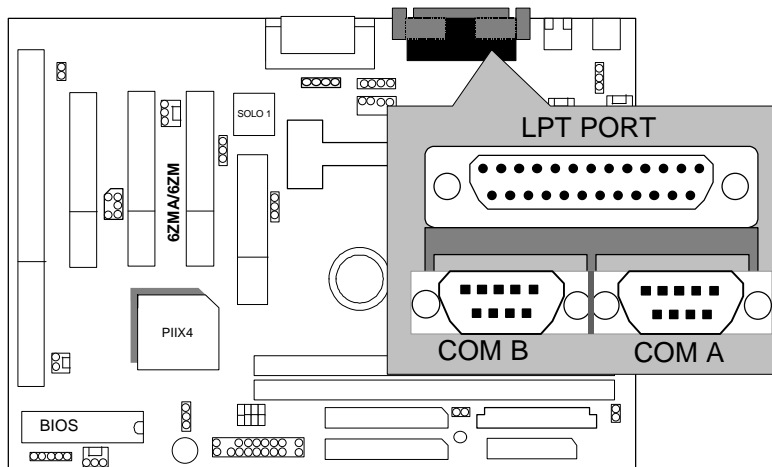
FLOPPY : FLOPPY PORT



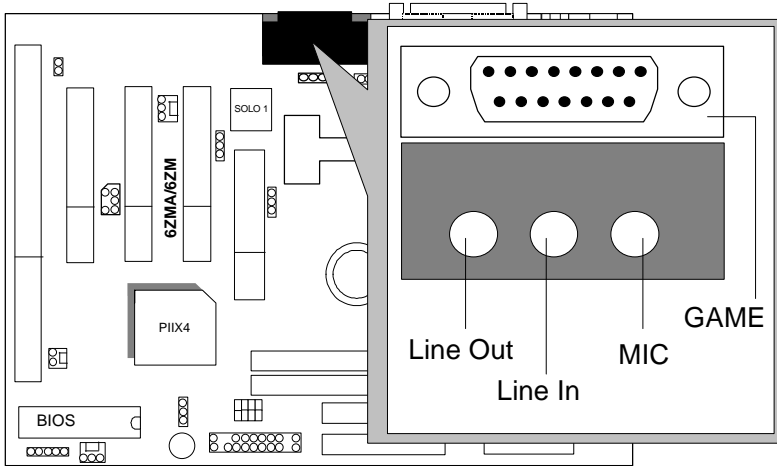
ATX POWER : ATX POWER Connector



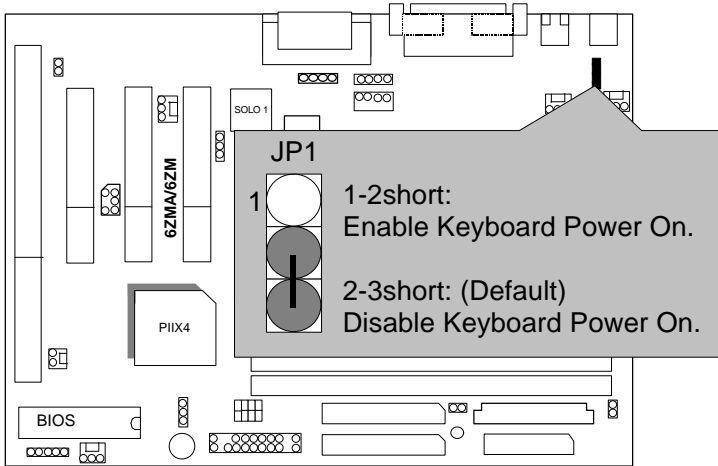
LPT PORT / COM A / COM B



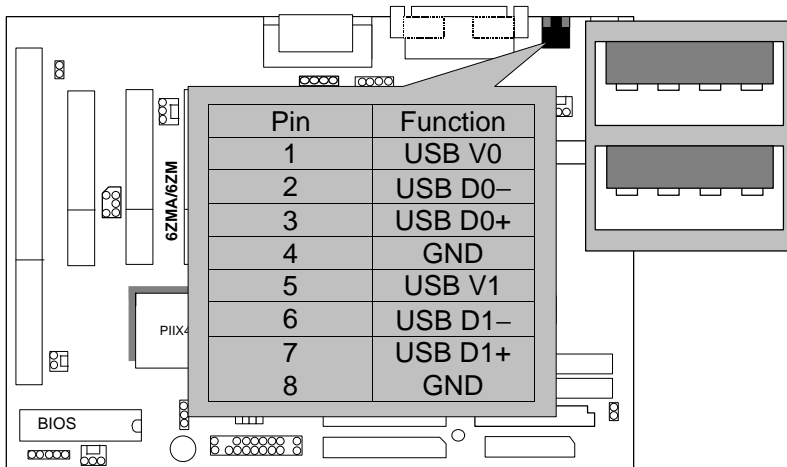
GAME & AUDIO PORT (Optional)



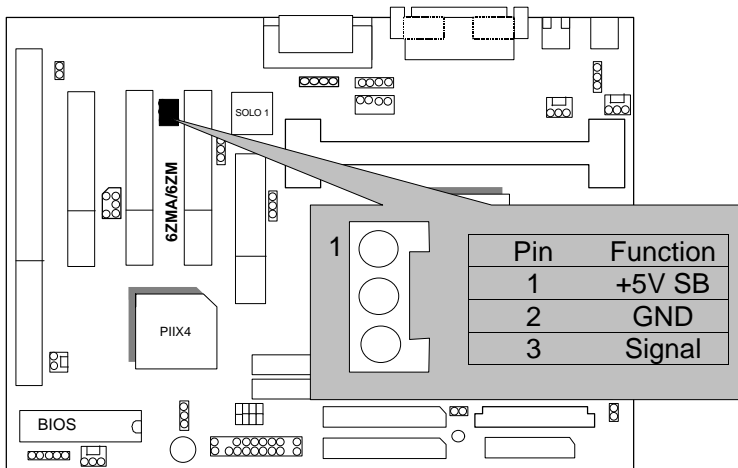
JP1 : Keyboard Power On



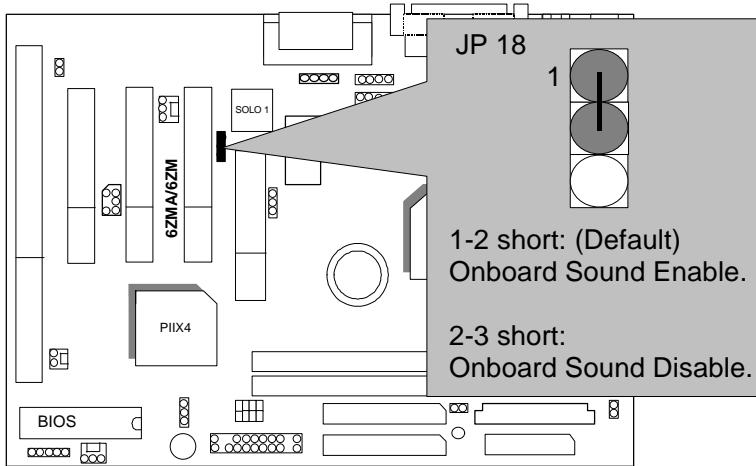
USB: USB Port



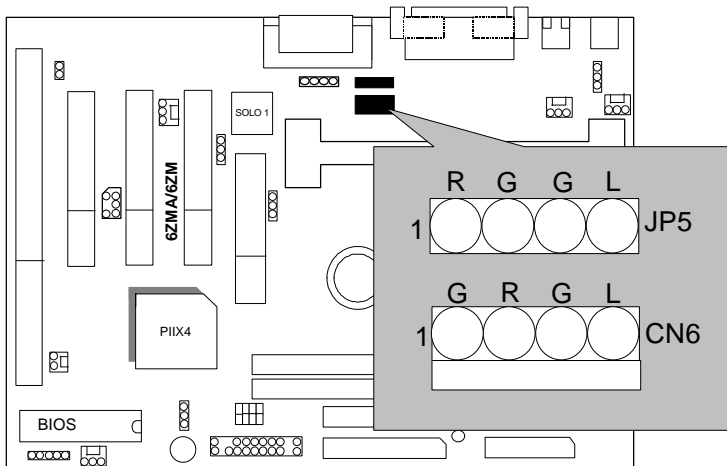
JP7: Wake on LAN



JP18: Onboard Sound Function Selection (Optional)

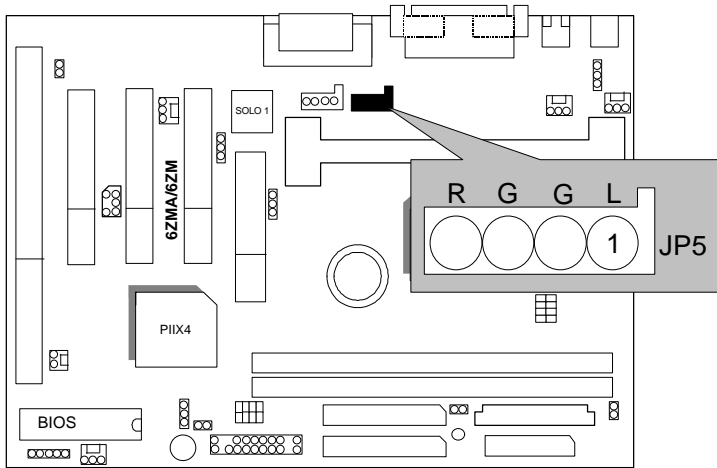


CN6 & JP5: CD Audio Line In (Optional)

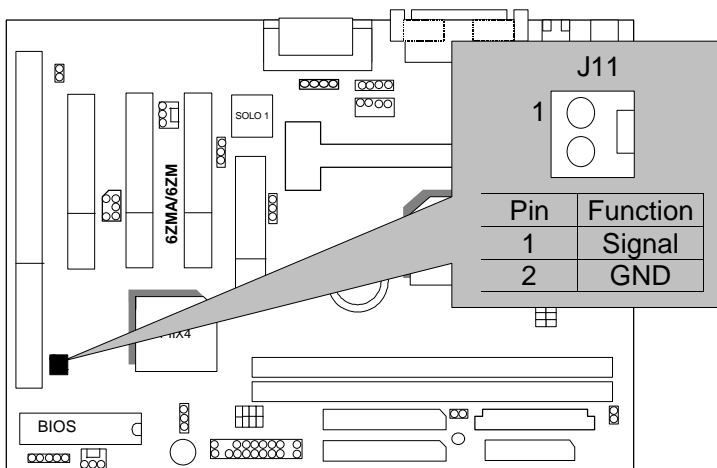


**JP5:CD Audio Line In (Optional)**

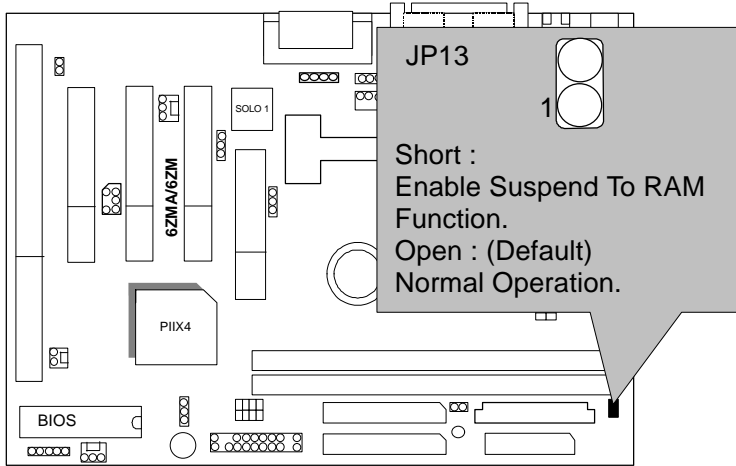
(This function is support in PCB version 1.2 and above)



**J11:Internal Modem Card Ring PWR On**



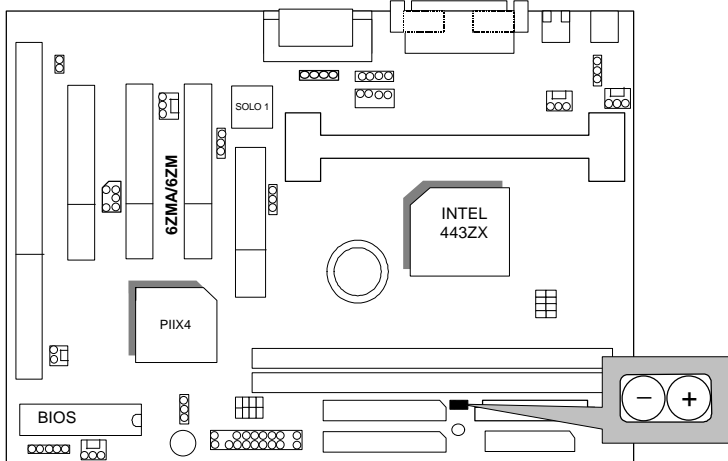
**JP13 : Suspend To RAM Function (Optional)**



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

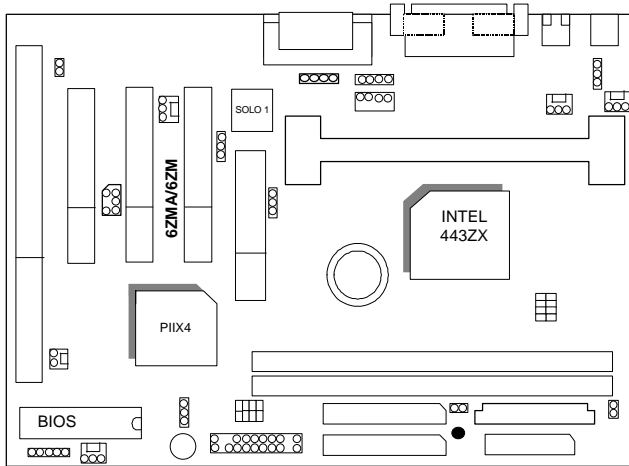
● **Support under Windows 98 ACPI O.S.**

JP15: STR LED Connector (Optional)



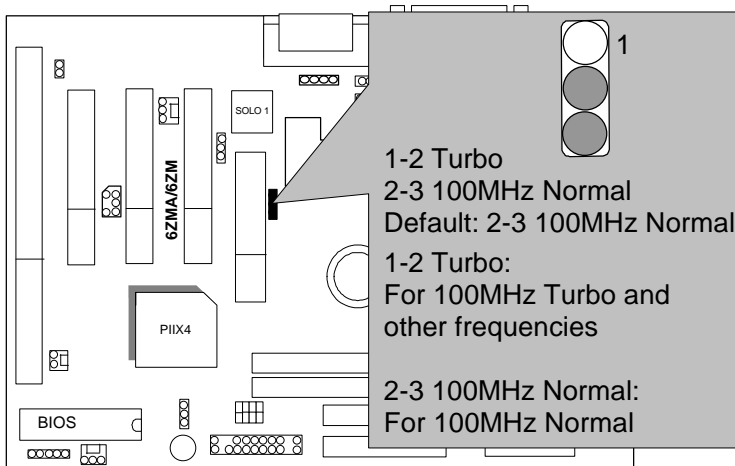


LED 1: DRAM LED (Optional)

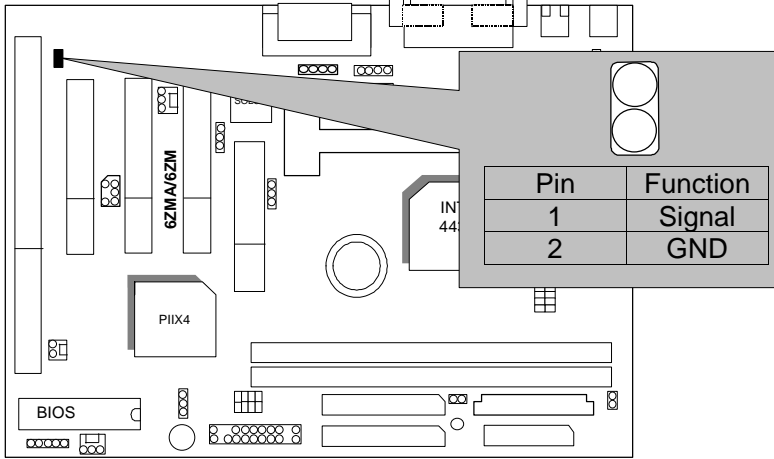


● When RAM LED is on, please do not unplug the SDRAM modules.

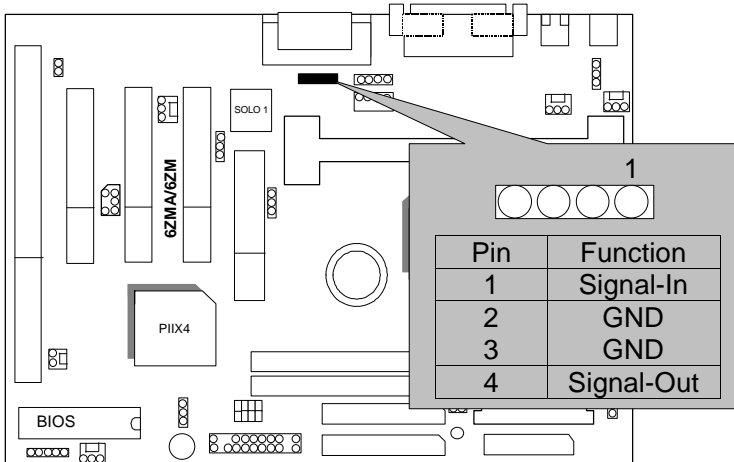
JP11: System Acceleration



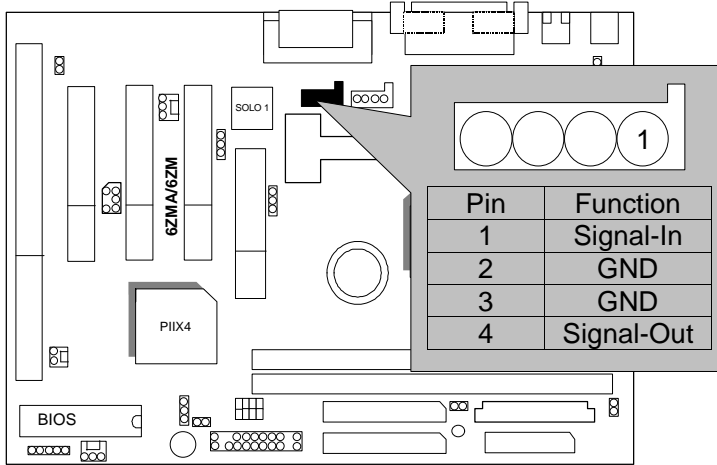
JP10 : CASE OPEN (Optional)



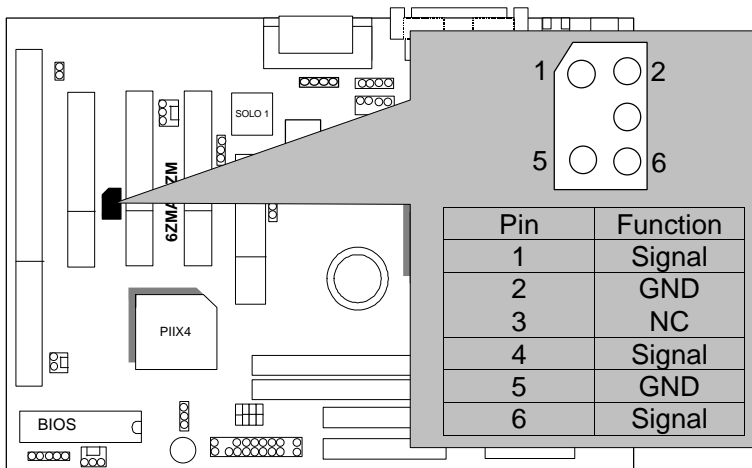
TEL :The Connector is for Modem with internal Voice Connector (Optional)



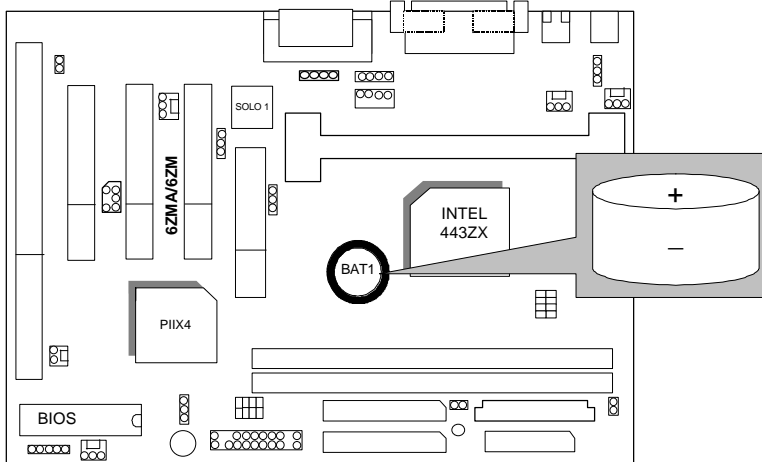
TEL :The Connector is for Modem with internal Voice Connector  
 (This function is support in PCB version 1.2 and above)  
 (Optional)



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.

EDO CAS# MA Wait State      : 1
EDO RAS# Wait State         : 1
SDRAM CAS Latency Time      : 2
System BIOS Cacheable       : Enabled
Video BIOS Cacheable        : Enabled
Video RAM Cacheable         : Disabled
16 Bit I/O Recovery Time    : 1
Memory Hole At 15M-16M     : Disabled
Delayed Transaction         : Disabled
Spread Spectrum              : Disabled

Reset Case Open Status      : No
Case Opened                 : No

**Current Temp.(°C/°F)**
CPU :32/89

**Current Fan Speed (RPM)**
CPU:3924   POWER :0   SYS : 0

**Current Voltage (V)**
VCCORE : 2.06  VGT L : 1.50  UCC3: 3.46
+ 5V:  4.97  +12V: 12.46  -12V:-12.85
- 5V:- 4.94  VBAT:  3.07  5USB: 4.99

Slow Down CPU Duty Cycle    : Normal
Shutdown Temp.(°C/°F)      : 75°C/167°F

**Temp. Select (°C/°F)**
CPU :70°C/158°F

**Temperature Alarm**
CPU :No

**Fan Fail Alarm**
CPU:No  POWER :No  SYS:No

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 Intel Pentium® II / III processor
- DRAM (128 x 1) MB SDRAM (SEC KM48S8030BT-GH)
- CACHE SIZE 512 KB included in CPU
- DISPLAY GA-630 voodoo banshee (16MB SGRAM)
- STORAGE Onboard IDE (IBM DHEA 36481)
- O.S. Windows NT™4.0 SPK4
- DRIVER Display Driver at 1024 x 768 x 264k colors x 75Hz.  
TRIONES Bus Master IDE Driver 3.60

Processor	Intel Pentium® II	Intel Pentium® III
	350MHz(100x3.5)	500MHz(100x5.0)
<b>Winbench99</b>		
CPU mark32	909	1270
FPU Winmark	1810	2560
Business Disk	4040	4230
Hi-End Disk	8200	8280
Business Graphics	155	203
Hi-End Graphics	285	397
<b>Winstone99</b>		
Business	27.8	33.6
Hi-End	24.1	29.8