

6BNZ

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 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 (JP4) and password in CMOS Setup.
3. **Modem Ring-On. (COM A , B)**
4. **Support 3 steps ACPI LED.**
5. **ATi 3D RAGE PRO graphics acceleration Onboard.**
6. **YAMAHA YMF715E Audio chip Onboard (Optional).**
7. **INTEL SB82558B LAN chip Onboard (Optional).**
8. **Wake-Up on LAN. (The ATX power supply supports larger than 720 mA 5V Stand-By current) (Optional).**

For Intel Pentium® II / III / Celeron™ Processor MAINBOARD

R-21-01-090526

REV. 2.1 First Edition

The author assumes no responsibility for any errors or omissions which 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.

May. 26, 1999 Taipei, Taiwan

I. Quick Installation Guide :

CPU SPEED SETUP

The default system bus speed is 66 / 100MHz. The user can select the system bus speed (**JP1**) and change the DIP SWITCH (SW) 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 CPU's.

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

JP1

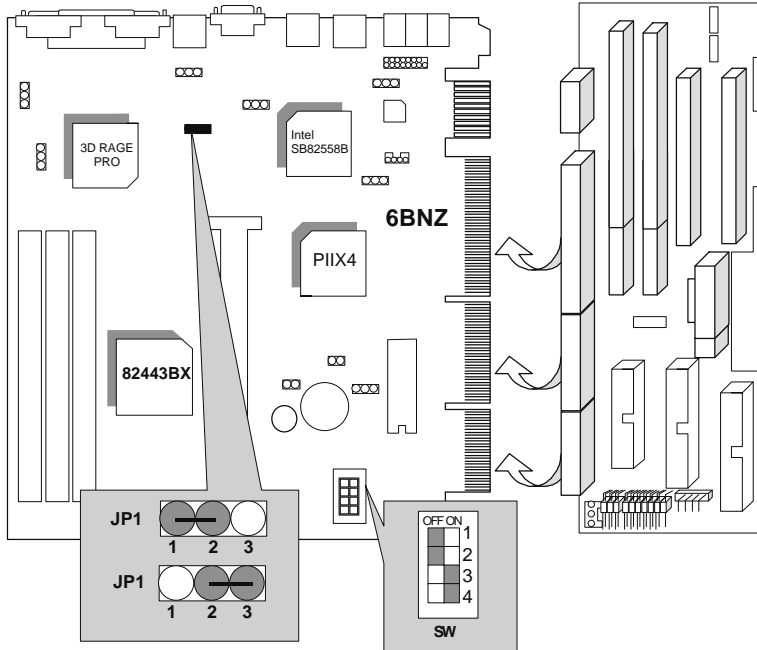
1-2 CLOSE :	System Speed is set to 66 MHz
2-3 CLOSE :	Set system speed to Auto - auto detect system speed (66 / 100MHz FSB)
OPEN :	System Speed is set to 100MHz

⚠ There are two ways to set system speed

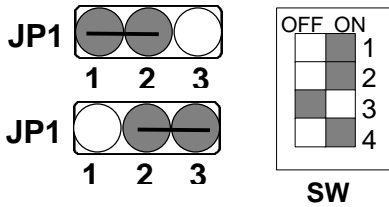
1. 66MHz (JP1) (1-2 short) or Auto detect (2-3 short)
2. 100MHz (JP1) (1-2-3 open) or Auto detect (2-3 short)

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

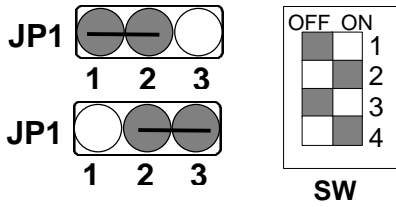
1. Pentium® II / Celeron™ 233 MHz / 66MHz FSB



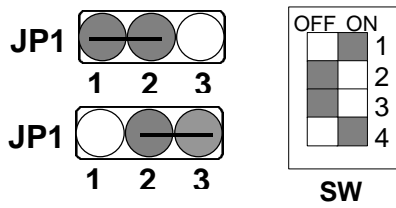
2. Pentium® II / Celeron™ 266MHz / 66MHz FSB



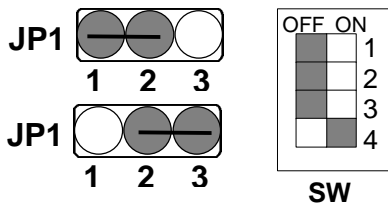
3. Pentium® II/Celeron™ 300MHz /Celeron™ 300A MHz /66MHz FSB



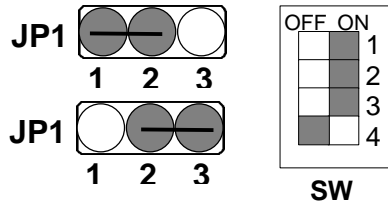
4. Pentium® II / Celeron™ 333MHz / 66MHz FSB



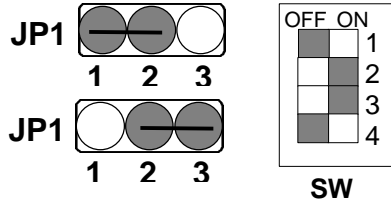
5. Pentium® II / Celeron™ 366 MHz / 66MHz FSB



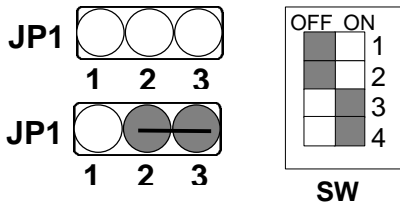
6. Pentium® II / Celeron™ 400 MHz / 66MHz FSB



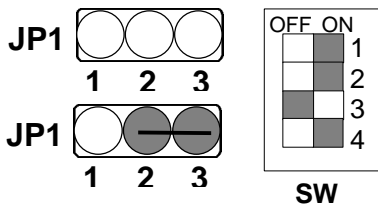
7. Pentium® II / Celeron™ 433 MHz / 66MHz FSB



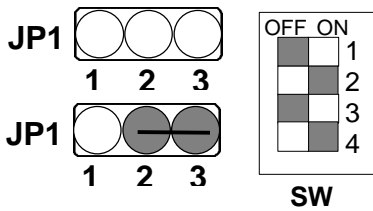
8. Pentium® II 350MHz / 100MHz FSB



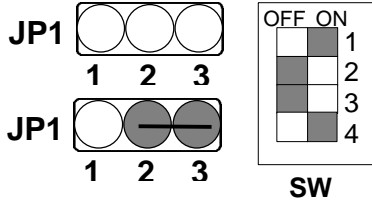
9. Pentium® II 400MHz / 100MHz FSB



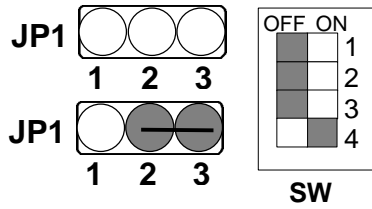
10. Pentium® III 450MHz / 100MHz FSB



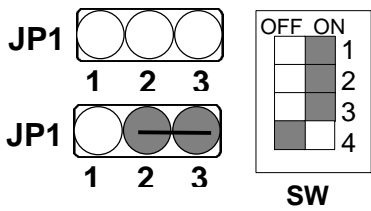
11. Pentium® III 500MHz / 100MHz FSB



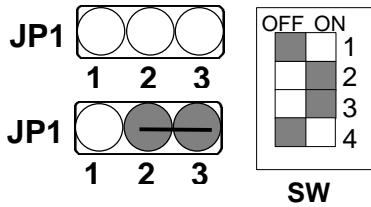
12. Pentium® III 550MHz / 100MHz FSB



13. Pentium® III 600MHz / 100MHz FSB

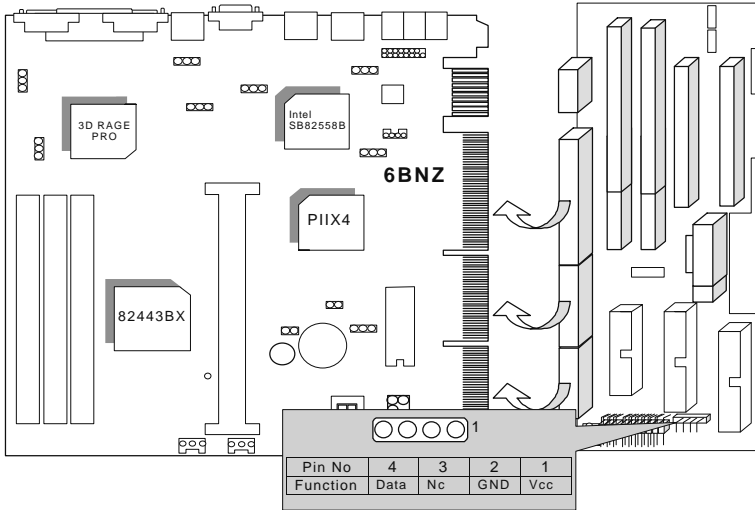


14. Pentium® III 650MHz / 100MHz FSB

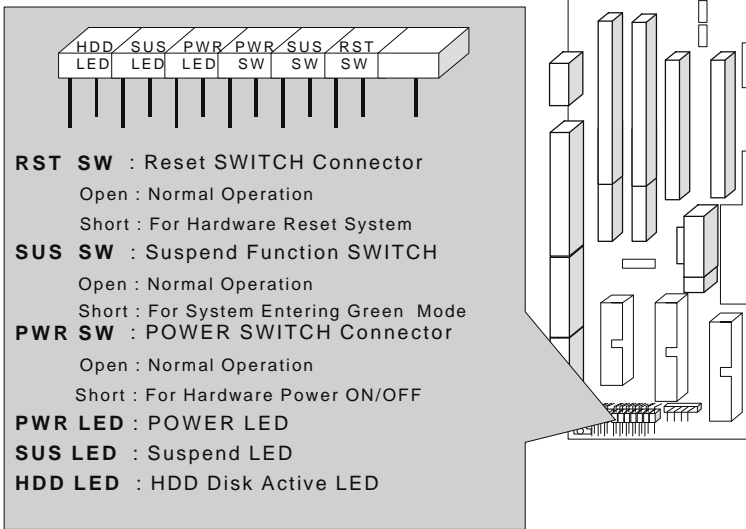


II. Jumper setting:

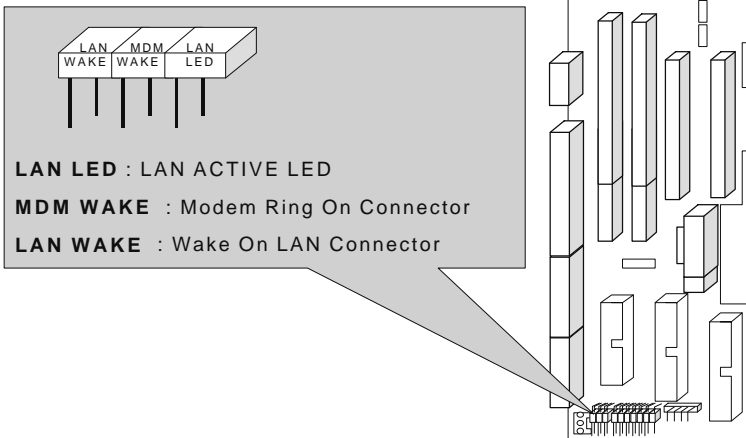
SPK : Speaker Connector



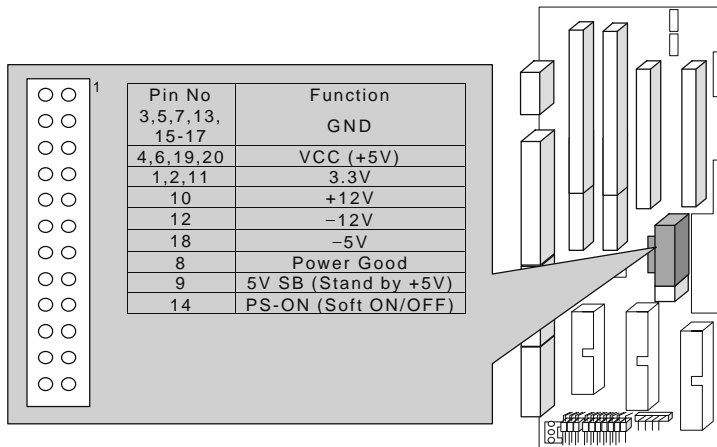
RST : Rest Switch



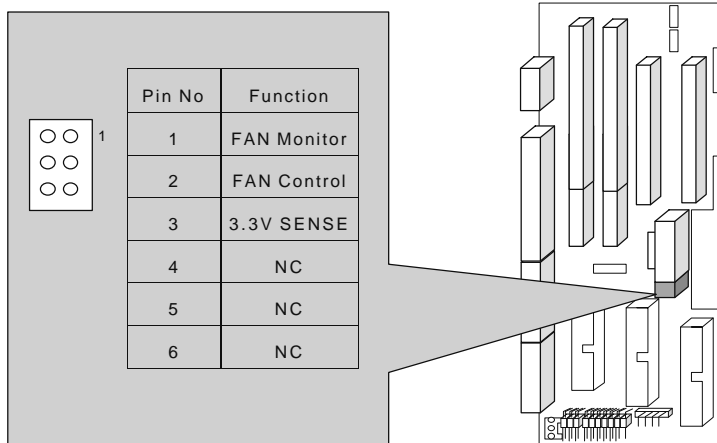
LAN Connector (Optional)



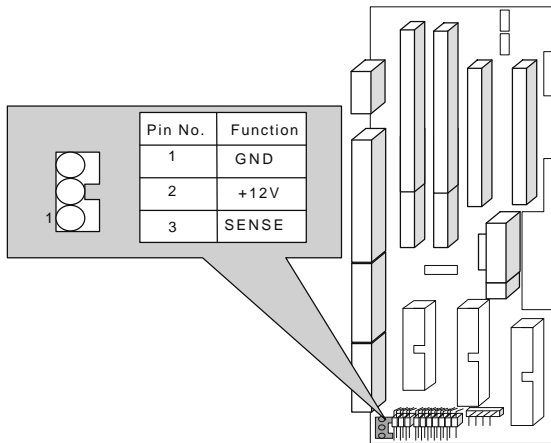
POWER1 : ATX Power Connector



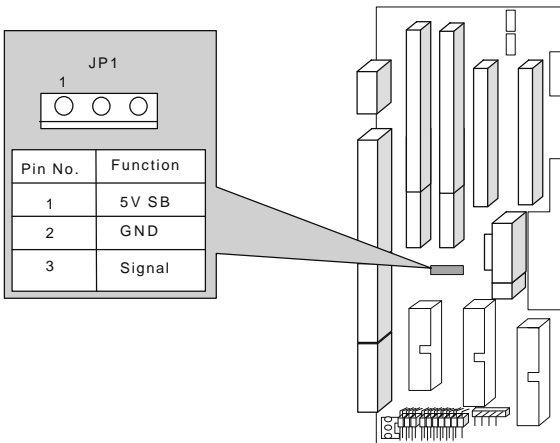
POWER2 : ATX Power FAN Connector (Optional)



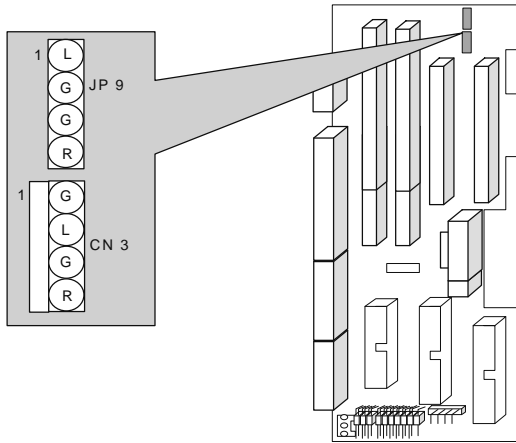
SYSTEM FAN PWR : System Cooling Fan Power Connector



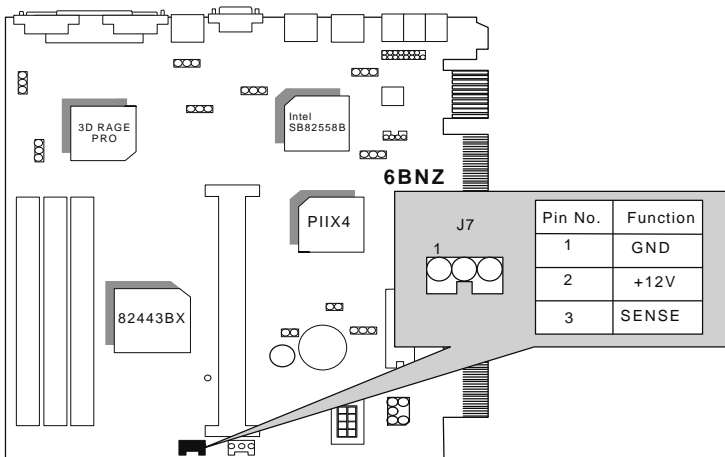
WAKE On LAN Connector (Optional)



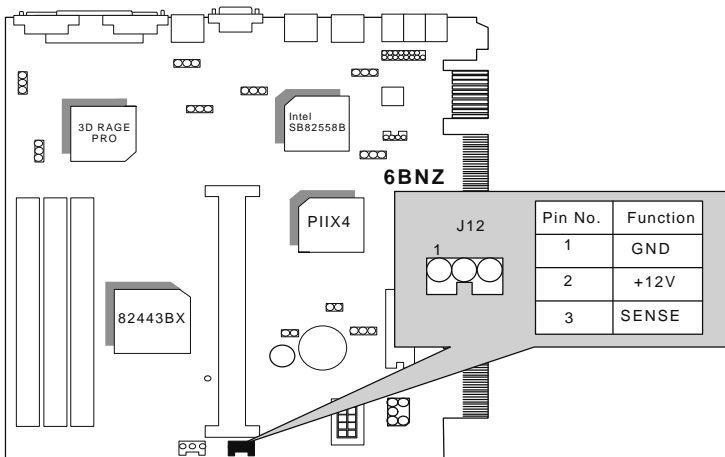
JP9/CN3 : CD Audio Line-in Connector (Optional)



J7 : CPU FAN PWR (CPU Cooling Fan Power Connector)

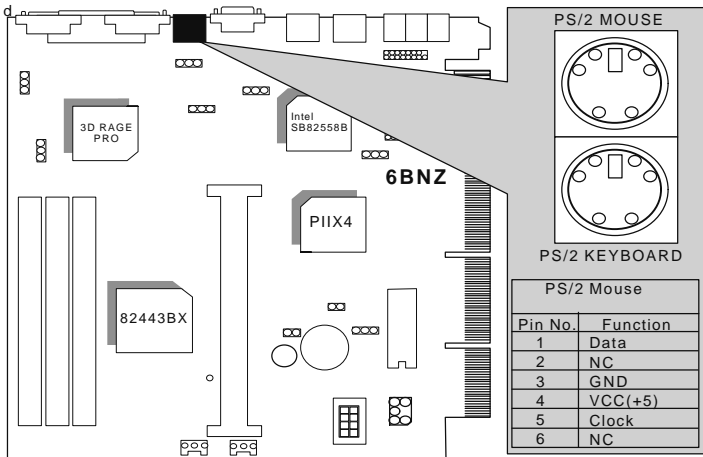


**J12 : System FAN PWR (System Cooling Fan Power Connector)
(Optional)**

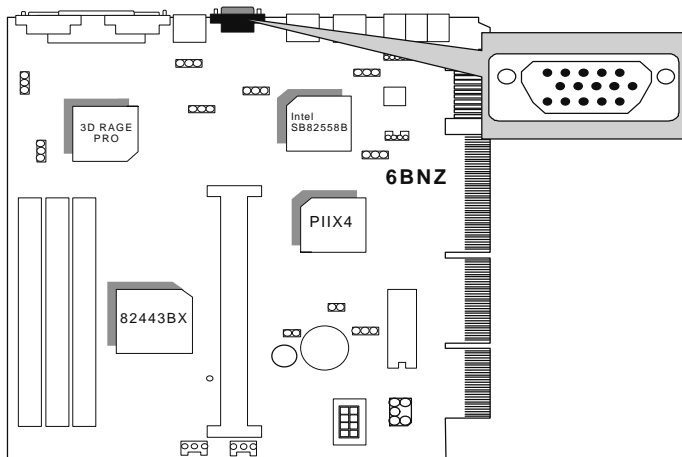


PS/2 Mouse and IBM PS/2 Keyboard Connector

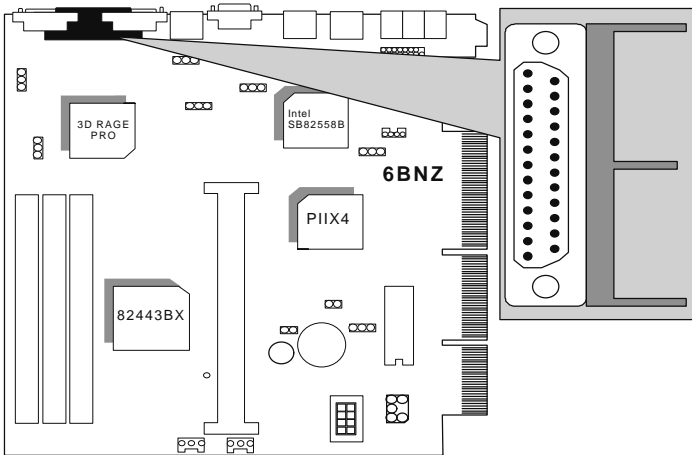
6BNZ



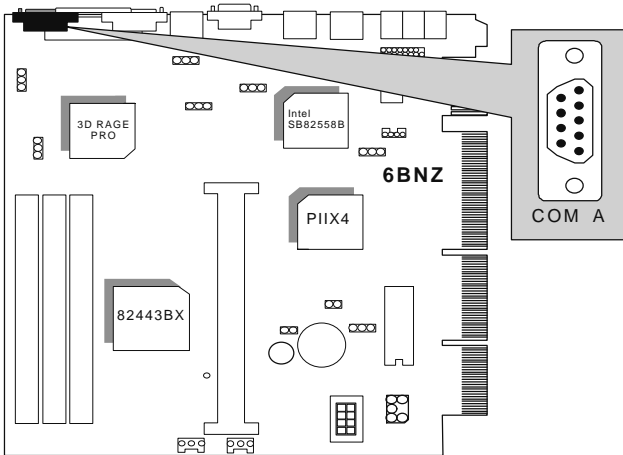
VGA : VGA Port



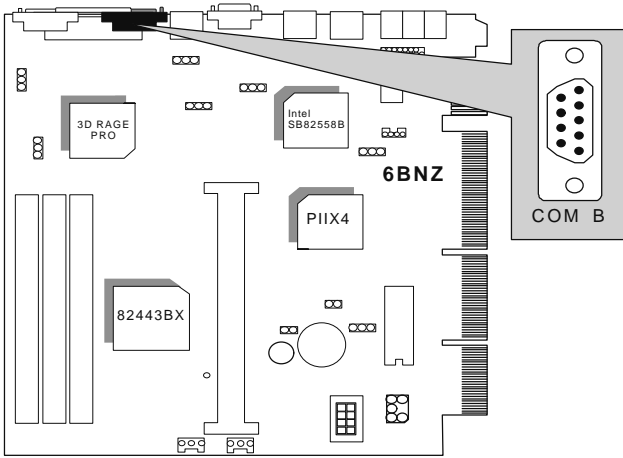
LPT : Printer Port



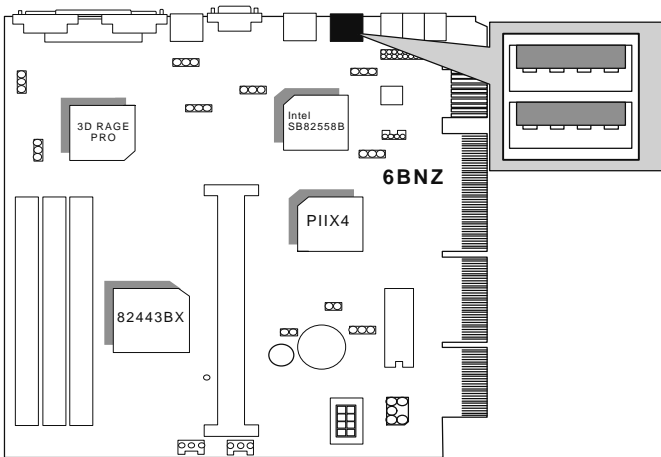
COM A : Serial port1



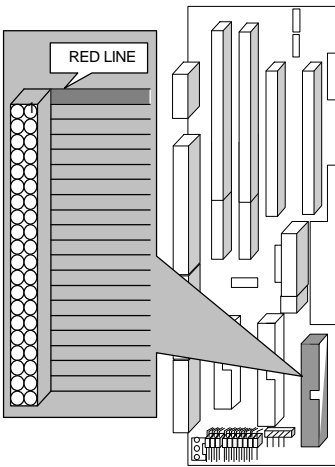
COM B : Serial port 2



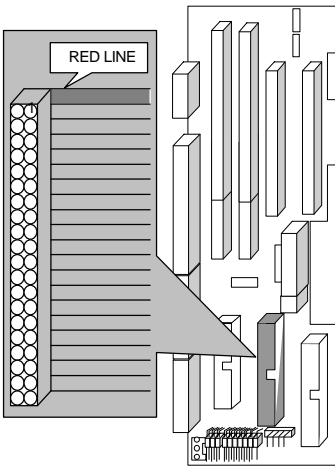
USB : USB Connector



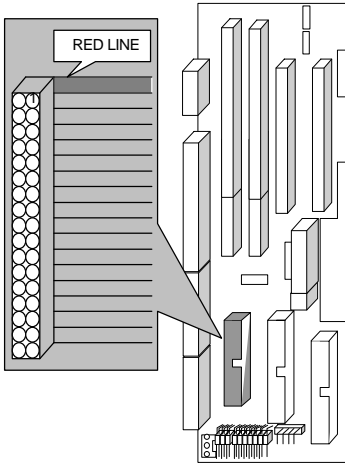
IDE1 : Primary IDE port



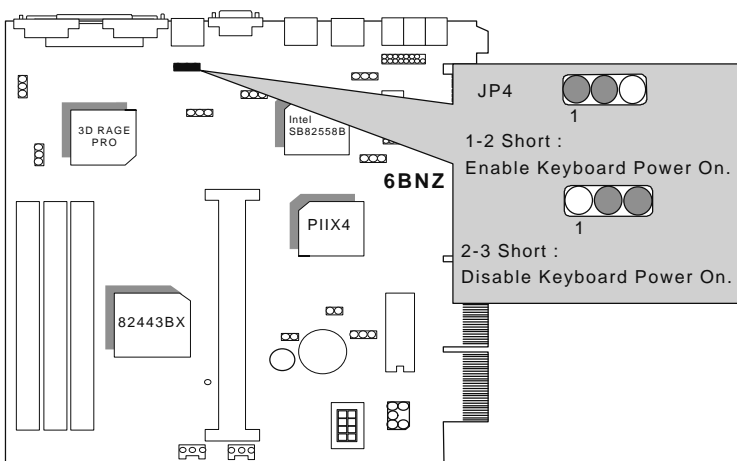
IDE2 : Secondary IDE port



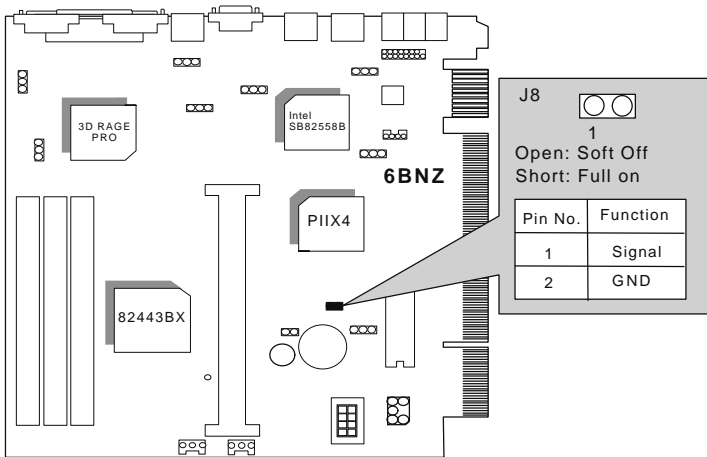
FLOPPY : FLOPPY PORT



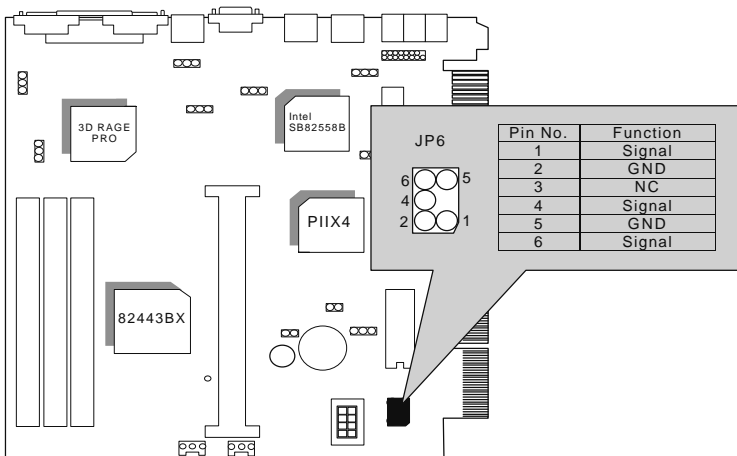
JP4 : Keyboard Power On



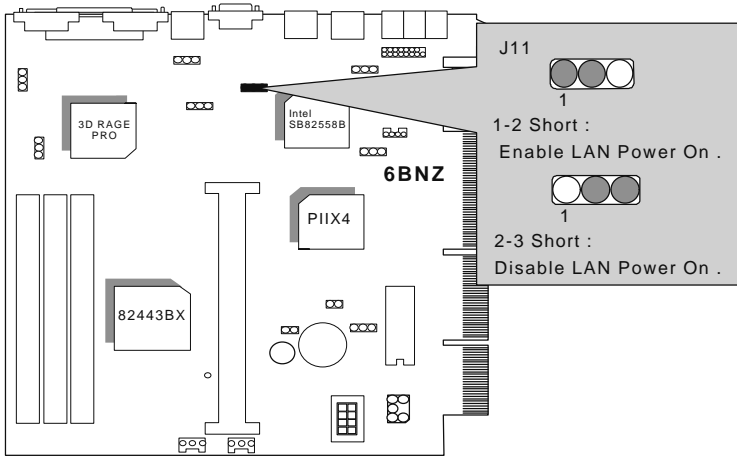
J8 : By PASS ATX PWR CTRL



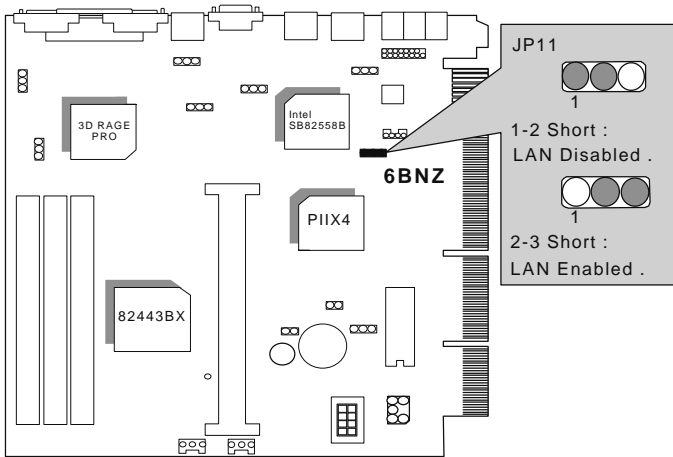
JP6 : SB-LINK (Creative PCI Sound Card Support)(Optional)



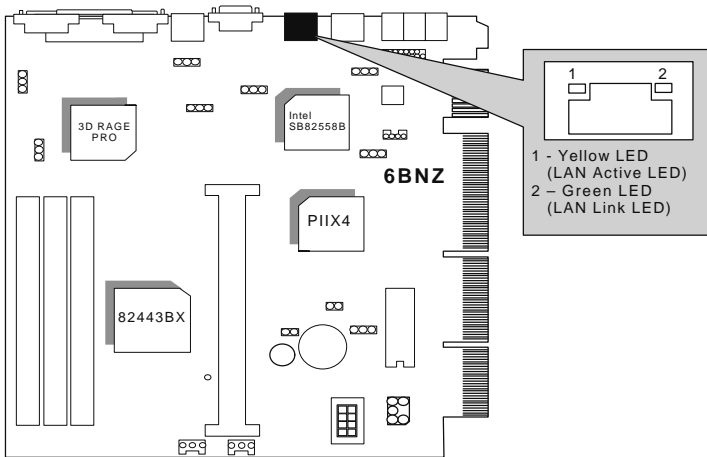
J11 : LAN Power On (Optional)



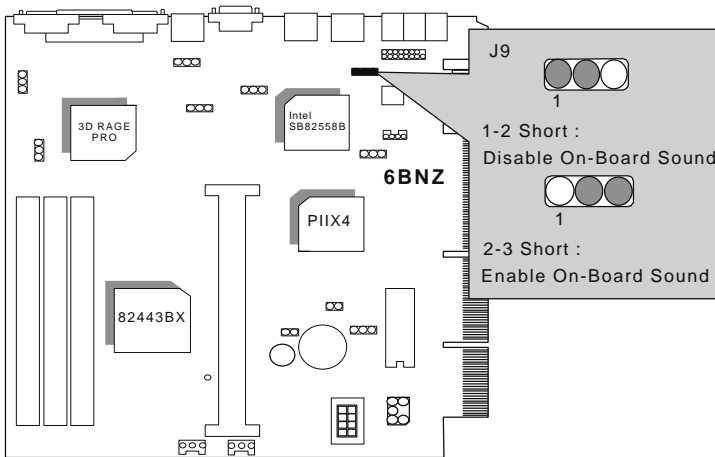
JP11 : On-Board LAN Function (Optional)



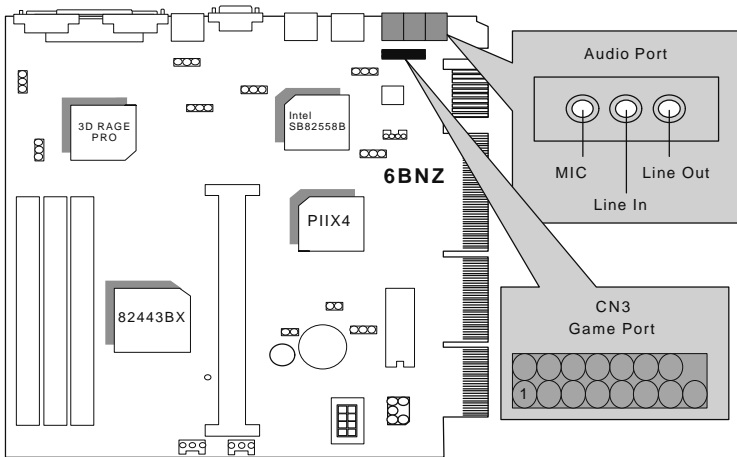
On-Board LAN Connector (Optional)



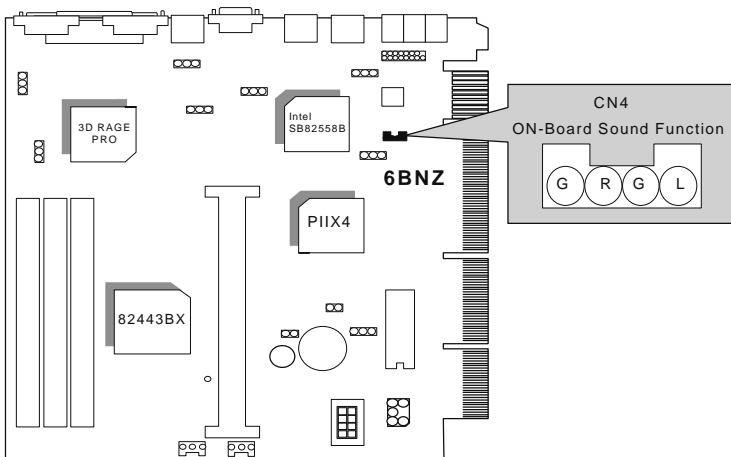
J9 : On-Board Sound Function (Optional)



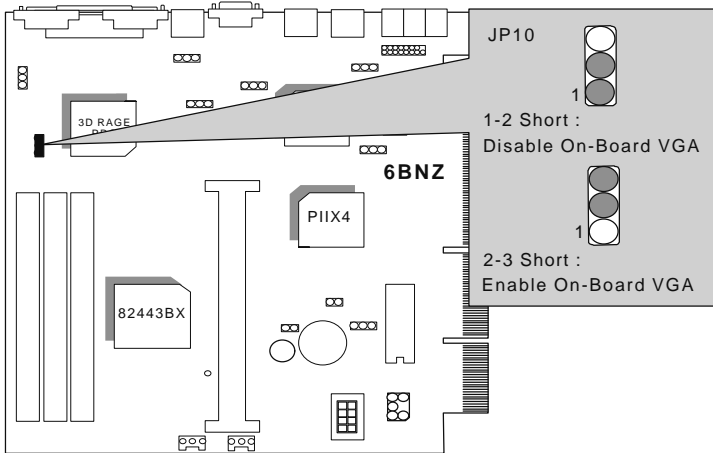
Game Port / Audio Port (Optional)



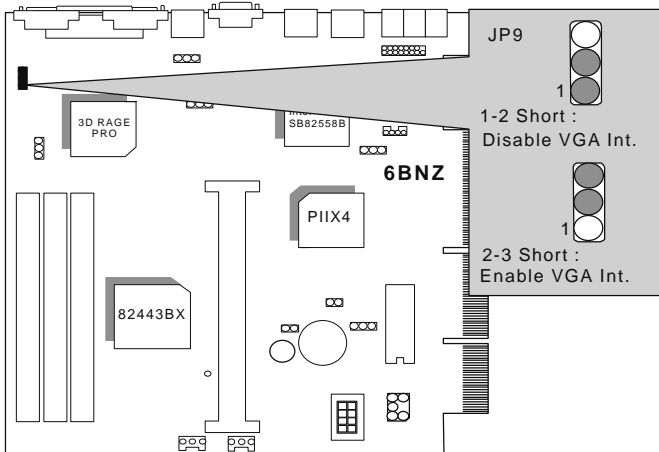
CN4 : On-Board Sound CD-Line In (Optional)



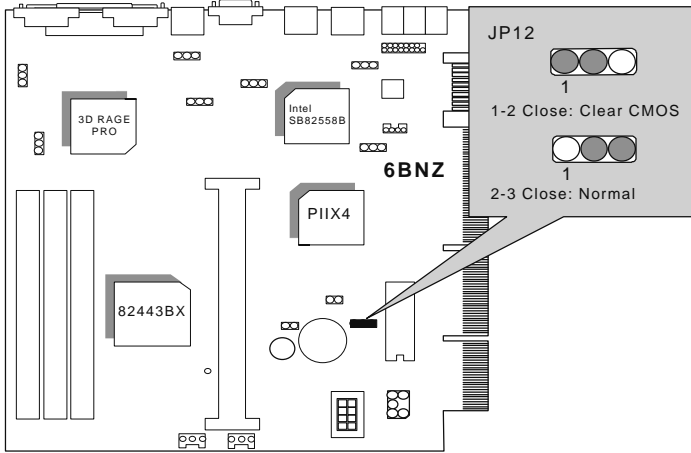
JP10 : On-Board VGA



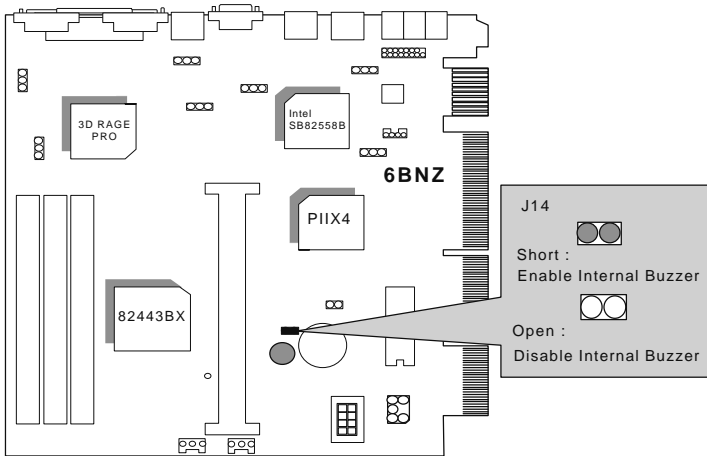
JP9 : Release On-Board VGA from occupying IRQ Resource
(It is not to enable or disable On-Board VGA Function.)



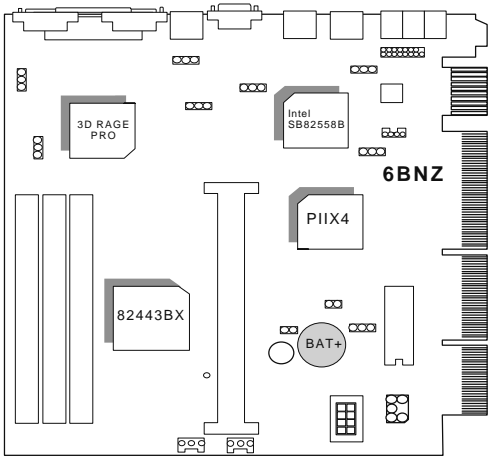
JP12 : CLEAR CMOS FUNCTION



J14 : Internal Buzzer



BAT1 : 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:

Users have to modify the value for each item in chipset features as follow for top performance setting.

ROM PCI/ISA BIOS (2A69KG0F)			
CHIPSET FEATURES SETUP			
AWARD SOFTWARE, INC.			
Slow Down CPU Duty Cycle	: Normal	Current SYS. Temperature	: 8°C/82°F
Shutdown Temp.	: 75°C/167°F	Current CPU Temperature	: 40°C/104°F
SYS Temperature Select	: 70°C/158°F	Current CPU Fan Speed	: 5611 RPM
CPU Temperature Select	: 70°C/158°F	Current System Fan Speed	: 3255 RPM
Alarm When SYS. Overheat	: Disabled	Current CPU Core A	: 1.99
Alarm When CPU Overheat	: Disabled	Current GTL Voltage	: 1.50
CPU Fan Fail Alarm	: Disabled	Current +3.3V	: 3.32
System Fail Alarm	: Disabled	Current +5 V	: 4.99
EDO CAS# MA Wait State	: 1	Current +12 V	: 12.22
EDO RAS# Wait State	: 1	Current -12 V	: -11.95
SDRAM CAS latency Time	: Auto	Current Battery Voltage	: 3.15
DRAM Data Integrity Mode	: Non-ECC	Current 5VSB	: 4.97
System BIOS Cacheable	: Enabled	ESC : Quit	↑↓↓↓ : Select Item
Video BIOS Cacheable	: Enabled	F1 : Help	PU/PD/+/- : Modify
Video RAM Cacheable	: Enabled	F5 : Old Values (Shift)F2 : Color	
16 Bit I/O Recovery Time	: 1	F6 : Load BIOS Defaults	
Memory Hole At 15M-16M	: Disabled	F7 : LOAD PERFORMANCE DEFAULTS	
Delayed Transaction	: Disabled		
Clock Spread Spectrum	: Disabled		

** Each value of items as above depends on your hardware configuration : CPU , SDRAM , Cards , etc.
Please modify each value of items if your system does not work properly

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

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 2) MB SDRAM (SEC KM48S8030BT-GH)
- CACHE SIZE 512 KB included in CPU
- DISPLAY ATi RAGE Pro AGP Display Onboard (4MB SGRAM)
- STORAGE Onboard IDE (IBM DHEA-36481)
- O.S. Windows® NT 4.0
- DRIVER Display Driver at 1024 x 768 x 256 colors x 75Hz.
Triones Bus Master IDE Driver 3.70

Processor	Intel Pentium® II	
	266MHz (66×4)	350MHz (100×3.5)
Winbench98		
CPU mark32	719	862
FPU Winmark	1380	1800
Business Disk	1840	1900
Hi-End Disk	4370	4620
Business Graphics	156	195
Hi-End Graphics	171	219
Winstone98		
Business	29.4	34.1
Hi-End	32.8	37.4

