# TS-ASL3 TS-ASP3 USER'S MANUAL Intel® Socket 370 Celeron™/ Pentium® III FC-PGA Series



Your Supplier, Your Partner, Your Friend.

# TS-ASL3/TS-ASP3 Motherboard

Supporting Intel® Pentium® III/Celeron™ Series Processor (Coppermine/Tualatin Core) 66/100/133MHz Front Side Bus

# Intel® 815E/815EP Chipset

#### Welcome!

Congratulations on your purchase of this great value motherboard with its range of special features and innovative onboard functions, built around the advanced architecture of the new Intel 815E/815EP Chipset. More details will follow later in this manual.

#### **Our Website**

Please come and visit our website at: <a href="http://www.transcendusa.com/">http://www.transcendusa.com/</a>. You'll find plenty of interesting information about this and many other quality Transcend products.

#### Your User's Manual

This User's Manual is designed to help end users and system manufacturers to setup and install the motherboard. All of the information within has been carefully checked for accuracy. However, Transcend Information, Inc. (hereinafter referred to as "Transcend") bears no responsibility or liability for any errors or inaccuracies which this manual may contain. This includes references to products and software. In addition, the information and specifications are subject to change without prior notice.

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# ezBIOS—Motherboard Shield and Upgrade Utility

#### ezBIOS—One Click is All it Takes!

Transcend is proud to inform you that your new motherboard comes with **ezBIOS** from Transcend. This BIOS updating program developed by Transcend will make BIOS updating easy, and enhance the security and stability of systems built with your Transcend motherboard.

#### ezBIOS Features:

- Anti-Virus BIOS Protection Transcend's motherboards come with a new hardware
  monitoring function that can prevent any unauthorized BIOS updating caused by
  viruses. Only ezBIOS, the BIOS updating program developed by Transcend, can
  update a Transcend motherboard.
- BIOS Updating Confidence Beyond preventing viruses, ezBIOS allows BIOS updating with confidence. In the past, any failure or incorrect operation during BIOS updating could crash the whole system. Normally the user wouldn't have the capability to retrieve and reestablish the system, they could only return the computer to the supplier for costly, time-consuming repairs. With the enhanced security of ezBIOS, Transcend's motherboards can completely avoid these problems. No matter what happens during BIOS updating, the user's system can still boot from the floppy drive, allowing the updating command to be executed again.
- One-Click, On-Line BIOS Updating For users of Windows 95/98, ezBIOS allows you to use Transcend's innovative on-line updating technology. Just one click can detect the BIOS version of your system, download the latest version, and execute all the updating commands automatically from the Internet. Restarting the computer completes the BIOS updating. This feature should be very handy for users who need to update BIOS repeatedly, especially MIS staff. The on-line updating program is included on the drivers CD-ROM included in the box with your motherboard. Following the step-by-step instructions, you can easily update or backup your BIOS. (If you have a different OS, see "Chapter 5 BIOS Upgrade" for your BIOS updating procedure.)
- Linear Overclocking ezBIOS also provides a linear overclocking function. Users can fine-tune the Front Side Bus (FSB) by increasing or reducing it by as little as 1.0MHz to find the optimum FSB setting for the system. (For details see "Frequency/Voltage Control" in Chapter 3.) Should the FSB be set too high, the system can be returned to the default setting by pressing the "INS" key.

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#### **CHAPTER 1 INTRODUCTION**

# 1.1 Essential Handling Precautions

IMPORTANT. Read this page before unpacking your motherboard!

#### Power Supply

Be careful! Always ensure that the computer is disconnected from the power supply when working on the motherboard and its components. The GREEN LED indicates that the power connector is attached to the power supply and the system is in Standby status. Stand-by power is supported when the GREEN LED is lit.

#### • Static Electricity

Static electricity may cause damage to the delicate integrated circuit chips on your motherboard. Before handling the motherboard outside of its protective packaging, ensure that there is no static electric charge in your body. A static discharge strong enough to damage computer components is not perceptible by a human. Observe these precautions while handling the motherboard and other computer components:

- 1. If possible, wear an anti-static wrist strap connected to a natural earth ground.
- 2. Touch a grounded or anti-static surface, or a metal fixture such as a pipe or the chassis of your system, before touching the motherboard.
- 3. When you have removed the motherboard from its anti-static packaging, try to hold it only by the edges, without touching any components.
- 4. Avoid contacting the components on add-on cards, motherboards, and modules with the gold-colored connectors which plug into the expansion slots.
- 5. Handle system components only by their mounting brackets.
- 6. Keep components which are not connected to the system in their anti-static packaging whenever possible.

#### Battery Replacement

The battery which holds the system settings memory (CMOS RAM) on your motherboard should not require replacement for at least five years, and probably much longer. In picture 2.2, it is located towards the lower right corner of the motherboard. Incorrect computer time and/or loss of time may indicate a weak motherboard battery. Please replace your battery only with the same type, or a similar type recommended by the battery manufacturer. If the battery is replaced incorrectly, there is a risk of a short circuit or explosion. Used batteries should be disposed of in accordance with the manufacturer's instructions and local environmental regulations.

#### Electric Screwdrivers

To reduce the risk of damage to the motherboard due to excessive torque, avoid setting electric screwdrivers above 7.5 kg/cm.

# 1.2 Checklist: Hardware Required for Setup

It is advisable to have all of these items of hardware available before you unpack your motherboard from its anti-static packaging and start building your system.

- Computer Case and Chassis with Appropriate Power Supply (300W Recommended)
- Monitor
- Socket 370 Central Processing Unit (CPU)
- DIMM Memory Module(s)
- PS/2 or USB Keyboard
- PS/2 or USB Mouse
- Hard Disk Drive (HDD)
- Floppy Disk Drive (FDD)
- CD-ROM Drive
- External Peripherals (Optional): Printer, Speakers, Modem
- Internal Peripherals (Optional): Modem, LAN Card
- 1 x FDD Cable
- 1 x Ultra DMA/66/100 cable

# 1.3 Package Contents

This motherboard package should contain the following items. Please check them as soon as you unpack the box. If you find any damaged or missing items, please contact your retailer.

- TS-ASL3/TS-ASP3 Motherboard
- 1 x CD-ROM
- 1 x FDD cable
- User's Manual
- Ultra DMA 66/100 cable x 1
- COM port cable x 1(optional)
- USB cable x 1 (optional)

# 1.4 Specifications and Features

#### CPU

- Supports Intel<sup>®</sup> Pentium III /Celeron Tualatin
- Supports Intel<sup>®</sup> FC-PGA Pentium III
- Supports Intel<sup>®</sup> FC-PGA Celeron<sup>™</sup>
- Supports VIA® C3™

# Chipset

- TS-ASL3: Intel® 815E (B-Step); FSB: 66/100/133 MHz
- TS-ASP3: Intel® 815EP (B-Step); FSB: 66/100/133 MHz

#### • Display Cache Memory (TS-ASL3 Only)

AIMM (AGP Inline Memory Module) Card (Optional)

# DRAM Memory

- Supports Synchronous DRAM
- 3 X 168-pin DIMM module sockets onboard
- 8~512MB memory size
- 8/16/32/64/128/256/512MB DIMM
- 64 data bits structure only

#### I/O BUS Slot

- 6 X Master/Slave PCI Bus slots (PCI 2.2 compliant)
- 1 X CNR (Communication and Networking Riser) slot

#### • On Board VGA (TS-ASL3 only)

- Full 2D/3D/Direct X acceleration
- Texture-mapped 3D with point-sampled, bilinear, trilinear, and anisotropic filtering
- Supports 640 by 480 (16, 256, High, True color)
- Supports 800 by 600 (256, High, True color)
- Supports 1024 by 768 (256, High, True color)
- Supports 1152 by 864 (256, High, True color)
- Supports 1280 by 1024 (256, High, True color)
- Supports 1600 by 1200 (256 colors)

#### I/O Functions

- Supports PIO Mode 3, 4, 5 ATAPI devices and Ultra DMA/33/66/100
- Supports 2 high speed UART 16550 COM ports
- Supports SPP/EPP/ECP LPT port
- Supports 1.44/2.88MB floppy drive
- Supports PS/2 Mouse and PS/2 Keyboard
- Supports IrDA port
- Supports 4 USB (Universal Serial Bus) ports
- Supports VGA port (TS-ASL3 Only)
- Supports Line-out, Line-in and MIC-in jack
- Supports Game/MIDI port

#### Award BIOS

- Supports PC99, Plug-and-Play
- Supports ACPI, APM, DMI and Green Features
- Easy BIOS Recovery

#### Wake-Up Features

- Supports Wake-on-LAN Function
- Remote Ring Wake-Up
- Time Wake-Up
- PS/2 Mouse and Keyboard Wake-Up

#### • PCB Dimensions

- ATX Form Factor, 4-Layer PCB, 21.3cm x 30.5cm (8.4-inch x 12-inch)

### • Switching Voltage Regulator

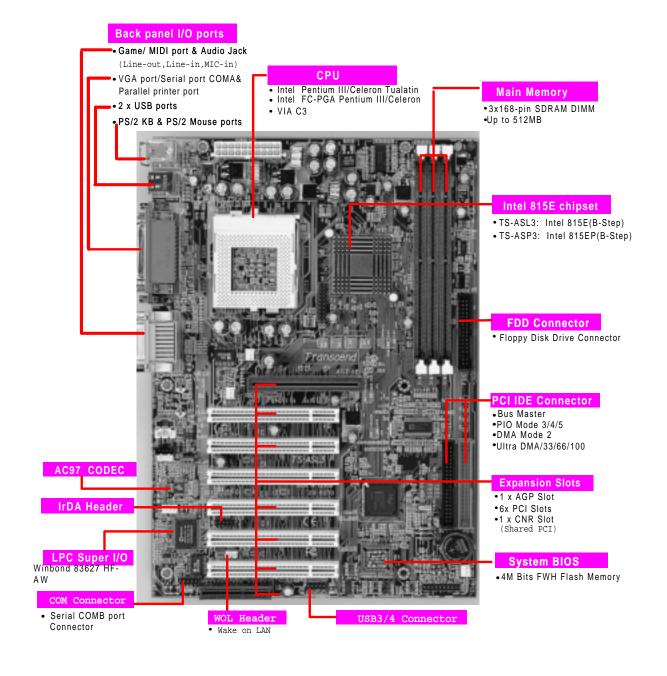
- VRM 9.0 Compliant

#### Other Features

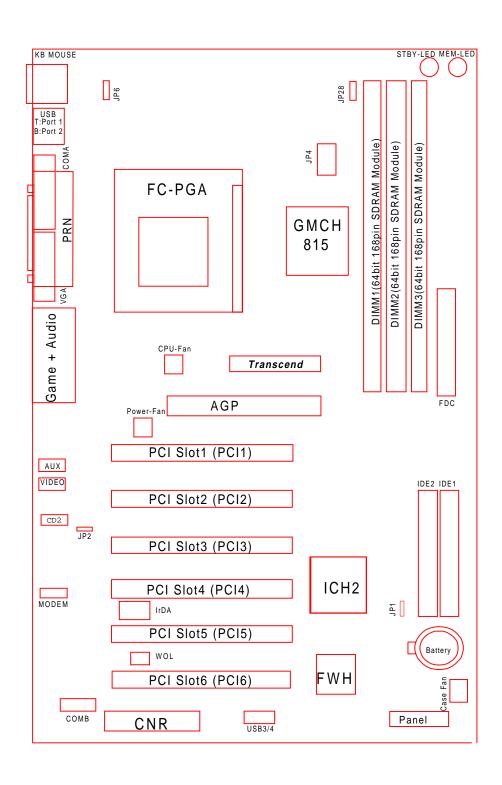
- Year 2000 Compliant
- Power failure resume
- FWH (Firmware Hub) supports security manageability
- BIOS Virus protection (warning)
- Board voltage monitors for CPU core, +3.3V, +/-5.0V, +/-12.0V, VTT, 3.3VSB/5VSB
- CPU overheat alarm
- CPU fan auto-off in sleep mode

# **CHAPTER 2 HARDWARE INSTALLATION**

#### 2.1 Transcend's TS-ASL3/TS-ASP3 Motherboard

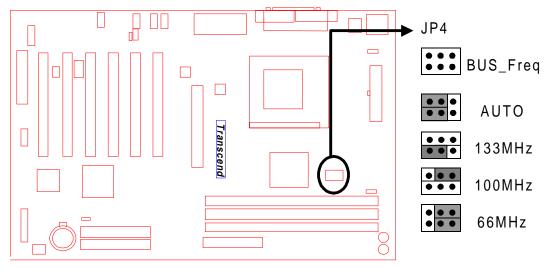


# 2.2 Layout of Transcend's TS-ASL3/TS-ASP3 Motherboard



# 2.3 66/100/133MHz System Configuration

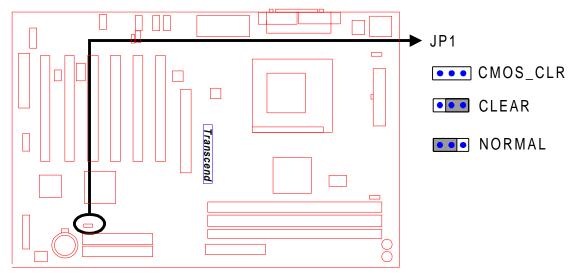
The JP4 Jumper allows you to set the FSB (Front Side Bus) to 66/100/133MHz configuration. When the Jumper is set to "Auto", the frequency range depends on your CPU type. When you set the FSB to 66MHz, you can select a system bus frequency from 66MHz to 99MHz through "CPU Host/PCI Clock" of "Frequency/Voltage Control" in the BIOS Setup menu. When you set the FSB to 100MHz, you can select a system bus frequency from 100MHz to 132MHz. When you set the FSB to 133MHz, you can select a system bus frequency from 133MHz to 166MHz.



66/100/133MHz FSB Configuration Jumper

# 2.4 Using Jumper JP1 to Clear CMOS (JP1 CMOS CLR)

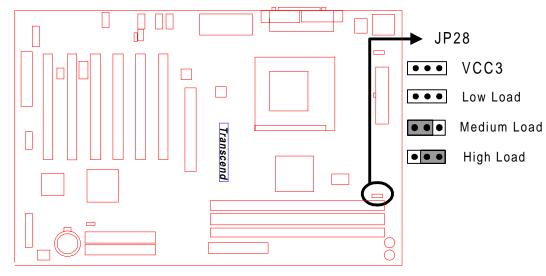
To clear the CMOS data, you should first record all your current BIOS settings. Next, turn off your computer's power and set JP1 to CLEAR as shown below for about 10 seconds. Return JP1 to NORMAL and turn on your computer. Hold down the [Delete] key during the Power On Self Test and enter BIOS Setup to reconfigure your BIOS settings.



**Clear CMOS Jumper** 

# 2.5 VCC3 Adjust

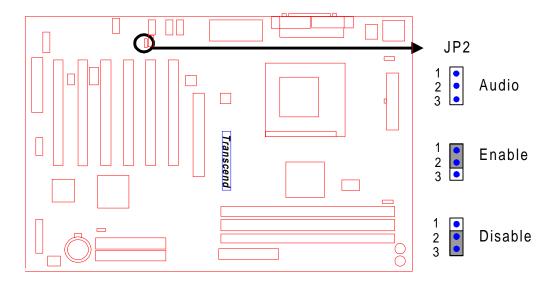
Keep this selection fixed unless you are familiar with the system. Default is "Medium".



**VCC3** Adjust

# 2.6 Onboard Audio Setting (JP2 ONBOARD AUDIO)

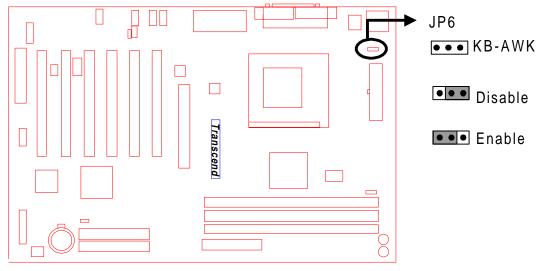
To use an external CNR card, the onboard audio CODEC can be enabled or disabled via this jumper. Please disable the onboard audio CODEC if you want to use a PCI Sound Card or an CNR Audio Card. When you install a CNR card, remember that the onboard audio CODEC uses the primary channel. Therefore, if you want the onboard CODEC to work, you must set the CNR to be secondary.



**Audio Selection Jumper** 

# 2.7 Keyboard Wake-Up (JP6 3-pin KB-AWK)

This function allows the Keyboard to Power Up the system. Set this jumper to "Enable" if you'd like your Keyboard to be able to Power Up your computer. Then, go to the "Power On Function" in "Integrated Peripherals" in BIOS to choose the setting you prefer.

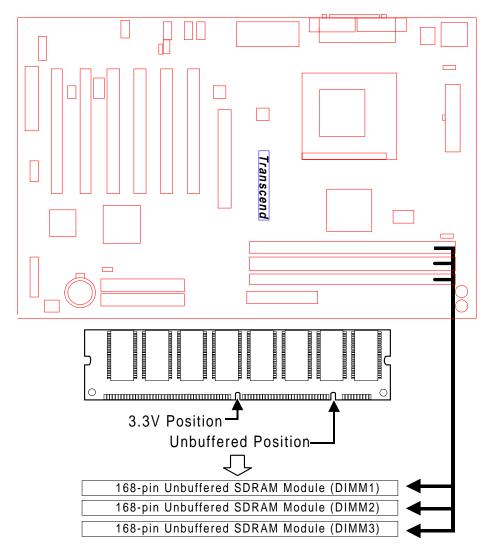


**Keyboard Wake-Up** 

# 2.8 Memory Configuration

This motherboard must be installed with PC100/PC133 SDRAM DIMM. You can install either single-sided or double-sided memory modules in any combination of memory capacities (listed below) in any socket, but never exceed 512MB total memory capacity.

NOTE: This motherboard supports memory modules with 8/16/32/64/128/256/512MB.



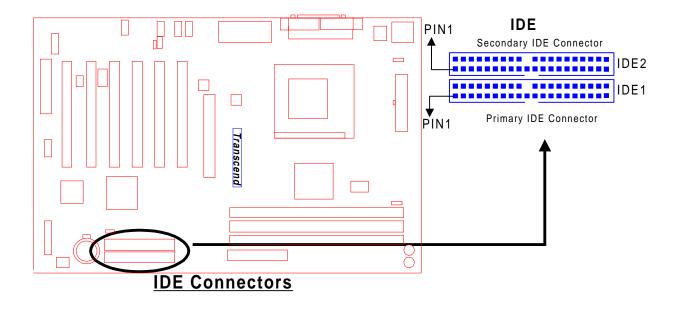
168Pin Memory DIMM Sockets

#### Primary/Secondary IDE Connectors (Two 40-pin IDE) 2.9

This motherboard supports two 40-pin IDE connectors marked as IDE1 (primary channel) and IDE2 (secondary channel). Each channel supports two IDE devices for a total of four devices. Connect your Hard Disk Drive (HDD) (the main HDD if you are using more than one) to the "Master" connector (at the end of the cable) and connect it to IDE1 (see important note below). If your HDD supports Ultra DMA/66 or Ultra DMA/100, you must use an 80-wire cable, otherwise the HDD won't be able to reach these higher speeds.

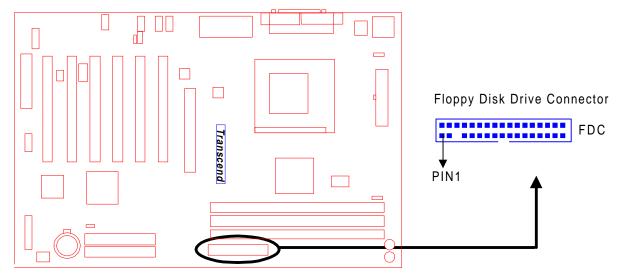
If you intend to operate two IDE devices from the same channel, one device must be set to "Master" mode, the other to "Slave" mode. HDDs, CD-ROMs and other IDE devices can have either setting depending on the device's jumper. Please refer to the device's manual for more information.

NOTE: The Connectors must be attached to the IDE channels correctly. Make sure that the red stripe on one edge of the ribbon cable (this may be faint and could be a dotted line) is the nearest to PIN1 (on the left as the motherboard is shown in the picture below).



# 2.10 Floppy Disk Drive Connector (34-pin FDC)

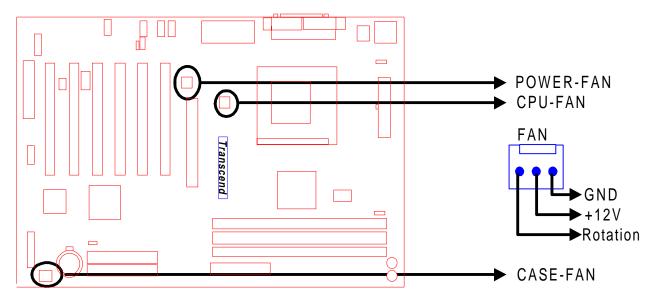
This connector supports the floppy disk drive (FDD) ribbon cable which is one of the items in your motherboard package. After connecting the single end to the board, connect the two plugs at the other end to the FDD(s). Remember, as in the last section, the red stripe on the edge of the ribbon cable must be the nearest to PIN1 or your connection won't work. PIN1 is on the left as shown below.



Floppy Disk Drive Connector

#### 2.11 Fan Power Connectors

There are three fan power connectors on the motherboard: the CPU-FAN, POWER-FAN, and the CASE-FAN. Each connector provides +12V power. Ensure fan power cables are connected in the right orientation, or they may cause damage. These connectors support cooling fans of 500 mA (6W) or less.

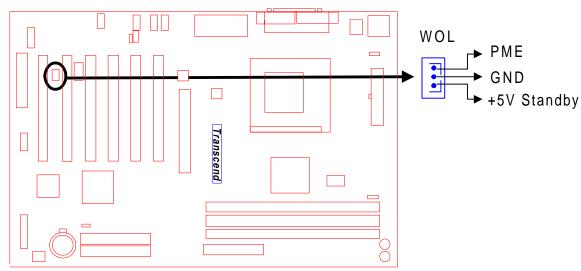


**Fan Power Connectors** 

# 2.12 Wake-on-LAN Connector (3-pin WOL)

This connector connects to LAN cards with a Wake-on-LAN output. The system can Power-up when a wake-up packet or signal is received from the LAN card.

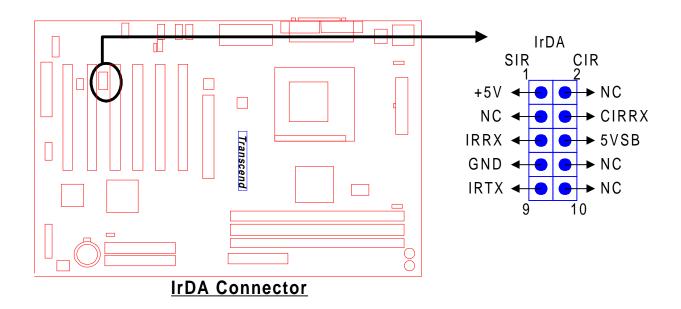
NOTE: This function requires that the "Wake-Up by PCI & WOL" function in the POWER MANAGEMENT SETUP in BIOS is set to "Enabled" and that your system has an ATX power supply with at least 720mA +5V standby power.



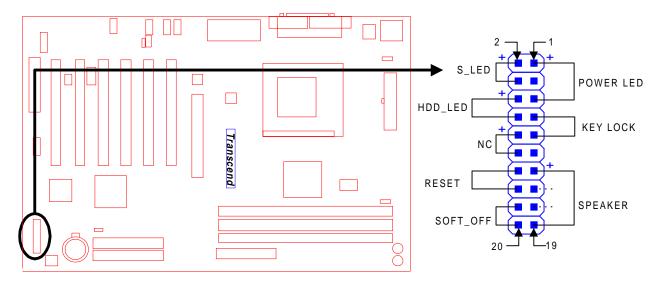
Wake-on-LAN Connector

# 2.13 IrDA-Compliant Infrared Module Connector (10-pin IrDA)

The IrDA connector can be configured to support a wireless infrared module. With this module and application software such as Laplink or Win95 Direct Cable Connection, users can transfer files to or from laptops (notebooks), PDAs and printers. You must also configure the setting through "UART Mode Select" in "Integrated Peripherals" in BIOS to select "IrDA". Connect the Standard IR (SIR) device to the onboard SIR connector according to the pin definitions. An optional Consumer Infrared (CIR) set connects to the CIR and SIR connectors simultaneously for both wireless transmitting and remote control functions through one external infrared module.



# 2.14 Panel Connectors



#### **Panel Connector**

#### Power LED (3-pin POWER\_LED)

This 3-pin connector attaches to the power LED.

Pin1: +5V Pin3: NC

Pin5: GND

#### Speaker (4-pin SPEAKER)

This 4-pin connector connects to the case-mounted speaker.

Pin13: +5V

Pin15: GND

Pin17: NC

Pin19: SPK

# Hard Disk LED (2-pin HDD\_LED)

This 2-pin connector connects to the LED of the hard disk drive (HDD). This LED lights up when an HDD is active.

Pin 6: +5V Pin 8: GND

# 19 HARDWARE INSTALLATION

#### **Keylock Lead (2-pin KEYLOCK)**

Use the keylock to enable or disable the keyboard.

Pin7: KEYLOCK

Pin9: GND

#### Suspend Mode LED (2-pin S\_LED)

This 2-pin connector connects to the Suspend Mode LED on your case. This LED lights up when the system is in "Suspend mode".

Pin2: +5V Pin4: GND

#### Reset Switch (2-pin RESET)

This 2-pin connector connects to the case-mounted reset switch for rebooting your computer without turning on your power switch.

Pin14 & Pin16

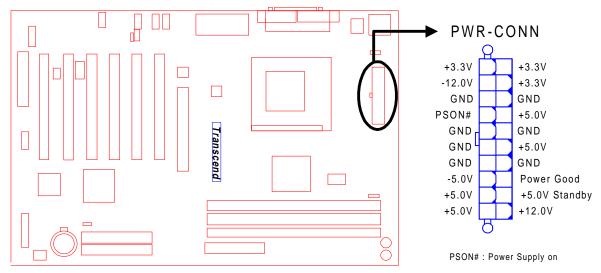
#### **Soft Power-Off (2-pin SOFT\_OFF)**

Attach the PW\_BTTN Switch of the panel to this connector. Use the switch to power On/Off your system. Set "Soft-Off by PWR-BTTN" in "Power Management Setup" in BIOS to either "Instant-Off" or "Delay 4 Sec."

Pin18 & Pin20

# 2.15 Power Connector (20-pin PWR-CONN)

Make sure you plug the ATX power supply connector in properly. The pin definition is shown below. Make sure that your ATX power supply can support at least 720mA +5V standby power for the Advanced Configuration and Power Interface (ACPI) functions.

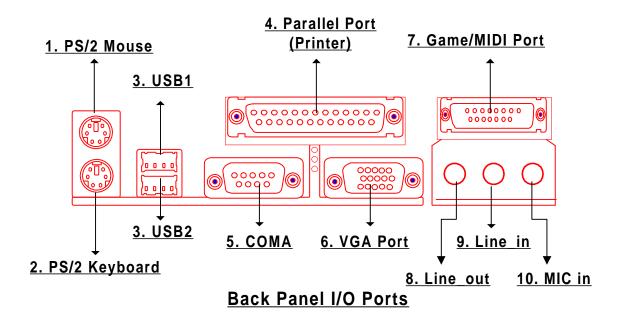


**Power Connector** 

# 2.16 External Back Panel I/O Ports

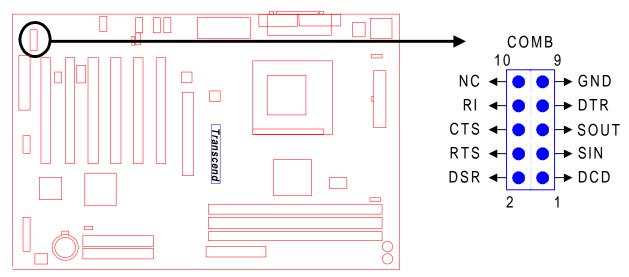
There are either 9 or 10 kinds of external connectors on the motherboard. The TS-ASL3 has a Display VGA Port onboard that is not available on the TS-ASP3. **The view in the drawing shown below is the back panel of the motherboard housing of a TS-ASL3.** 

- 1. PS/2 Mouse Port (Green 6-pin MOUSE)
- 2. PS/2 Keyboard Port (Purple 6-pin KB)
- 3. USB (Universal Serial Bus) Ports 1 & 2 (Black two 4-pin USBs)
- 4. Parallel Port (Burgundy 25-pin Printer)
- 5. Serial Port COMA (Turquoise 9-pin COMA)
- 6. Display VGA Port (Blue 15-pin VGA) (None on TS-ASP3)
- 7. Game Port/MIDI Port (Gold 15-pin GAME)
- 8. Line\_out (Lime Green 1/8" LINE\_OUT)
- 9. Line\_in (Light blue 1/8" LINE\_IN)
- 10. MIC\_in (Pink 1/8" MIC)



# 2.17 Internal Serial Port Connector COMB

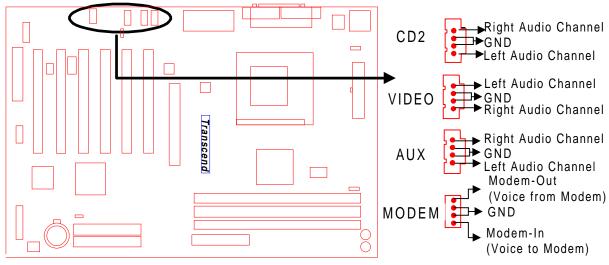
You can use the provided serial port bracket to add a serial port (COMB) for an additional serial device.



**Internal Serial Port Connector COMB** 

#### 2.18 Internal Audio Connectors

These connectors allow you to receive stereo audio input from sound sources such as a CD-ROM, TV tuner, or MPEG card. The MODEM connector allows the onboard audio to interface a voice modem card with a matched connector. It also allows the sharing of mono\_in (such as a phone) and mono\_out (such as a speaker) between the onboard audio and the voice modem card.

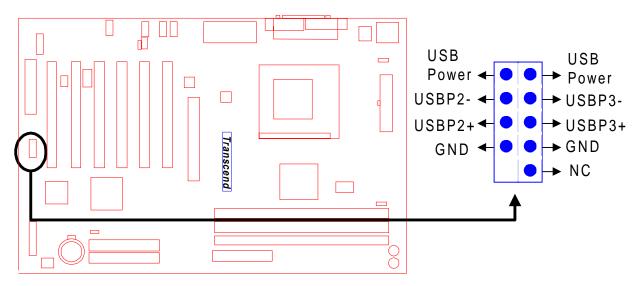


**Internal Audio Connectors** 

# 2.19 Internal USB Port Connector (10-Pin USB3/4)

You can use the optional USB port bracket to add 2 serial ports for additional serial devices. Regarding the external onboard USB ports (USB1/2), please refer to "Section 2.16 External Back Panel I/O Ports".

NOTE: Please make sure that the two red stripes on the cable are seated on pin1 and pin2.



**USB 3/4 Connector** 

# **Congratulations! You have completed Hardware Setup!**

You may now continue with "Chapter 3 BIOS Setup" and turn on your PC.

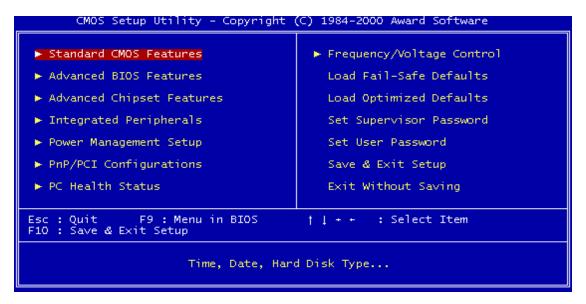
#### **CHAPTER 3 BIOS SETUP**

# 3.1 BIOS Setup

Award BIOS has a built-in Setup program that allows users to modify the basic system configuration. This information is stored in CMOS RAM, so it can retain the Setup information when the power is turned off. If the CMOS battery fails, these data will be lost. If that happens, please set up your configuration parameters again after replacing the battery. Please refer to "Section 1.1 Essential Handling Precautions" for instructions on replacing the CMOS battery.

#### 3.2 The Main Menu

As you turn on or reboot the system, the BIOS is immediately activated. It will read the system configuration information, and check the system through the Power On Self Test (POST). During the POST process, pressing the [Del] key allows you to enter the Award BIOS configuration system. The following screen will appear:



In the Award BIOS system, you can use the arrows (  $\uparrow \downarrow \longrightarrow \longleftarrow$  ) to highlight an item, and press the [Enter] key to enter its submenu. The following keys help you navigate in Setup.

[Esc] Main Menu: Quit and do not save changes into CMOS RAM

Other pages: Exit current page and return to Main Menu

[PgUp] Increase the numeric value or make changes

[PgDn] Decrease the numeric value or make changes

| [+]   | Increase the numeric value or make changes          |
|-------|---|
| [-]   | Decrease the numeric value or make changes          |
| [F1]  | General help on setup navigation keys               |
| [F5]  | Load previous values from CMOS                      |
| [F6]  | Load the Fail-Safe Defaults from BIOS default table |
| [F7]  | Load the Optimized Defaults                         |
| [F10] | Save all CMOS changes and exit                      |

The following is a brief summary of each setup category:

#### Standard CMOS Features

Options in the original PC AT-compatible BIOS

#### Advanced BIOS Features

Award enhanced BIOS options

#### Advanced Chipset Features

Available options specific to your system's Chipset

#### Integrated Peripherals

I/O subsystems that depend on the integrated peripheral controllers in your system

# • Power Management Setup

Advanced Power Management (APM) and Advanced Configuration and Power Interface (ACPI) options

# • PnP/PCI Configurations

Plug-and-Play standard and PCI Local Bus configuration options

#### PC Health Status

To display the fan status, CPU temperature, etc., and to provide the temperature monitoring option

# Frequency/Voltage Control

To control the frequency and voltage of the CPU

#### Load Fail-Safe Defaults

To load the most basic BIOS default values required for your system to operate

# • Load Optimized Defaults

To load the BIOS default values that are factory settings for optimal system performance

#### Set Supervisor/User Password

To change, set, or disable a password

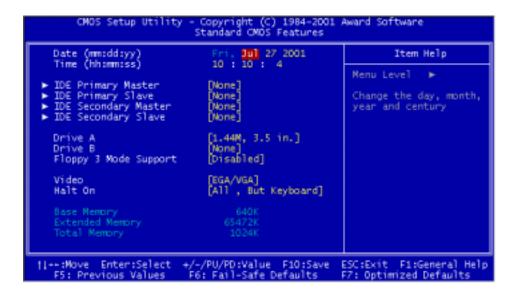
#### Save & Exit Setup

To save settings in nonvolatile CMOS RAM and exit Setup

#### Exit Without Saving

To abandon all changes and exit Setup

### 3.3 Standard CMOS Features

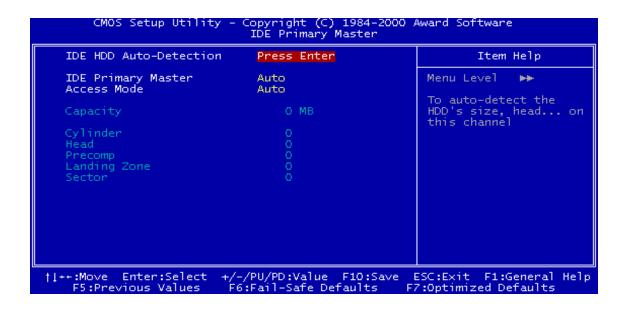


Date (mm:dd:yy)/Time (hh:mm:ss)

Highlight the items and use [PageUp]/[PageDown] to change the value of Date/Time.

• IDE Primary/Secondary Master/Slave

Press [Enter] to enter the submenu shown on the following page.



- IDE HDD Auto-Detection: Detect the HDD on this channel. If the detection is successful, it fills the remaining fields on this submenu.
- IDE Primary/Secondary Master/Slave: We recommend that you select "AUTO" for all drives. The BIOS can automatically detect the specifications during POST while the system boots. You can also choose "Manual" to set the specifications yourself. The "None" setting means there is no device installed on the designated IDE channel.
- Access Mode: "CHS", "LBA", "Large", or "Auto".
  - CHS: Maximum number of Cylinders, Heads, and Sectors supported are 1024,
     16, and 63 respectively.
  - LBA (Logical Block Addressing): During drive access, the IDE controller transfers
    the data address described by sector, head, and cylinder number into a physical
    block address. This significantly improves data transfer rates for drives with
    more than 1024 cylinders.
  - Large: For drives that do not support LBA and have more than 1024 cylinders.
  - Auto: The BIOS automatically determines the optimal access mode.
- Capacity: Disk drive capacity. Note that this size is slighty greater than the size of a formatted disk given by the disk-checking program.
- Cylinder: Number of cylinders

Head: Number of heads

Precomp: Write precompensation cylinder

• Landing Zone: Landing zone

Sector: Number of sectors

#### Drive A/Drive B

Select the correct types of diskette drive(s) installed in the computer.

- None: No diskette drive installed
- 360K, 5.25 in.: 5-1/4 inch standard drive; 360 kilobyte capacity
- 1.2M, 5.25 in.: 5-1/4 inch high-density drive; 1.2 megabyte capacity
- 720K, 3.5 in.: 3-1/2 inch double-sided drive; 720 kilobyte capacity
- 1.44M, 3.5 in.: 3-1/2 inch double-sided drive; 1.44 megabyte capacity
- 2.88M, 3.5 in.: 3-1/2 inch double-sided drive; 2.88 megabyte capacity

#### Floppy Mode 3 Support

Supports some particular Japanese floppy drives (3.5 inch drives with 1.2 MB capacity).

#### Video

Select the type of primary video subsystem in your computer. The BIOS will detect the correct video type automatically. The BIOS supports a secondary video subsystem, but do not select it in this Setup.

- EGA/VGA: Enhanced Graphics Adapter/Video Graphics Array. For EGA, VGA, SEGA, SVGA or PGA monitor adapters.
- CGA 40: Color Graphics Adapter, powers up in 40-column mode.
- CGA 80: Color Graphics Adapter, powers up in 80-column mode.
- MONO: Monochrome adapter, including high resolution.

#### Halt On

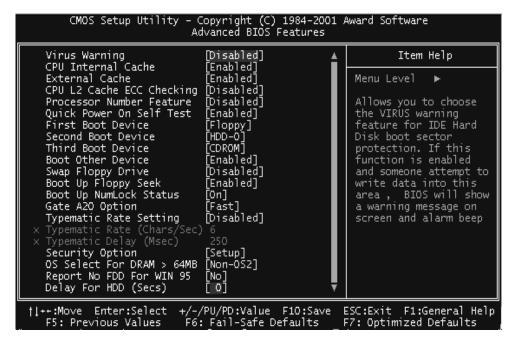
During POST, the computer stops if the BIOS detects a hardware error. You can set the BIOS to ignore certain errors during POST and continue the boot-up process. The followings are the selections:

- All Errors: If the BIOS detects any non-fatal errors, POST stops and prompts you to take corrective action.
- No Errors: POST does not stop for any error.
- All, But Keyboard: If the BIOS detects any non-fatal errors except keyboard, POST stops and prompts you to take corrective action.

- All, But Diskette: If the BIOS detects any non-fatal errors except the disk drive,
   POST stops and prompts you to take corrective action.
- All, But Disk/Key: If the BIOS detects any non-fatal errors except keyboard or the disk drive, POST stops and prompts you to take corrective action.

#### 3.4 Advanced BIOS Features

The "Advanced BIOS Features" option allows you to improve your system performance and setup system features according to your preferences.



# Virus Warning

When this function is enabled, you will receive a warning message if a program (specifically, a virus) attempts to write to the boot sector or the partition table of the HDD. You should then execute an anti-virus program. Keep in mind that this feature protects the boot sector only, not the entire HDD.

NOTE: Many disk diagnostic programs that access the boot sector table can trigger the virus warning message. If you plan to run such a program, we recommend that you disable the virus warning first.

#### CPU Internal/External Cache

Cache memory is additional memory that is much faster than conventional DRAM (system memory). CPUs from 486-type and up contain internal cache memory. Most, but not all, modern PCs have additional (external) cache memory. When the CPU requests data, the system transfers the requested data from the main DRAM into cache memory for even faster access by the CPU. The "External Cache" field may not appear if your system does not have external cache memory.

#### CPU L2 Cache ECC Checking

Select "Enabled" to make sure data are accurate.

#### Processor Number Feature

Make the CPU Serial number function active. (Only for PIII CPUs)

#### Quick Power On Self Test

Select "Enabled" to reduce the amount of time required to run the POST. The Quick POST skips certain steps; therefore, we recommend that you normally disable Quick POST. It is better to find a problem during POST than to lose data during your work.

#### First/Second/Third Boot Device; Boot Other Device

The original IBM PCs loaded the DOS operating system from drive A (floppy disk); therefore, IBM PC-compatible systems are designed to search for an operating system first on drive A, and then on drive C (hard disk). However, the selections in these fields will determine the sequence that BIOS will follow in attempting to load the operating system from the system's devices. In addition to the traditional drives A ("Floppy") and C ("HDD-0"), options include: "LS120", a "SCSI" bootable device, "CDROM", "HDD-1", "HDD-2", "HDD-3", a "ZIP100" drive, and a "LAN" drive. If your bootable device is not included in the list, you can set the "Boot Other Device" field to "Enabled", and let the system detect the drive automatically.

# Swap Floppy Drive

This field is effective only in systems with two floppy drives. Selecting "Enabled" assigns physical drive B to logical drive A, and physical drive A to logical drive B.

## Boot Up Floppy Seek

When you select "Enabled", the BIOS tests (seeks) floppy drives to determine whether they have 40 or 80 tracks. Only 360KB floppy drives have 40 tracks; drives with 720KB, 1.2MB, and up capacity all have 80 tracks. Because very few modern PCs have 40-track floppy drives, we recommend that you set this field to "Disabled" to save time.

## Boot Up NumLock Status

Toggle between "On" and "Off" to control the state of the NumLock key when the system boots. When toggled "On", the numeric keypad generates numbers instead of controlling cursor operations.

### • Gate A20 Option

Choose "Fast" (default) or "Normal". "Fast" allows RAM access above 1MB to use the fast Gate A20 line.

## Typematic Rate Setting

When this function is disabled, the following two items (Typematic Rate and Typematic Delay) are irrelevant. Keystrokes repeat at a rate determined by the keyboard controller in your system. When this function is "Enabled", you can select a typematic rate and typematic delay.

# • Typematic Rate (Chars/Sec)

When the Typematic Rate setting is "Enabled", you can set the typematic rate (the rate at which characters repeat) to "6", "8", "10", "12", "15", "20", "24" or "30" characters per second.

## • Typematic Delay (Msec)

When the Typematic Delay setting is "Enabled", you can select a typematic delay (the delay before key strokes begin to repeat) of "250", "500", "750" or "1000" milliseconds.

# Security Option

If you have set a password, you can select whether the password is required while the "System" boots, or only when you enter "Setup".

#### OS Select For DRAM >64MB

Select "OS2" only if you are running the OS/2 operating system with more than 64 MB of RAM on your system. Select "Non-OS/2" for all other operating systems.

### Report No FDD For WIN 95

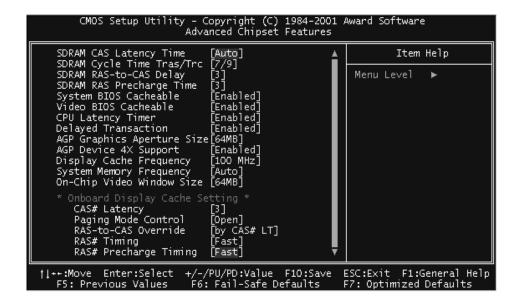
Select "Yes" to release IRQ6 when there is no FDD, for compatibility with WIN 95 logo certification.

## Delay For HDD (Secs)

Generally, you can set this field as "0", but for some old HDDs, you may need to increase the delay time for BIOS to detect what type it is.

# 3.5 Advanced Chipset Features

This option will change the values of the chipset registers and the system settings will alter. Do not change any value if you are unfamiliar with the chipset.



# SDRAM CAS Latency Time

This controls the SDRAM performance: default is "AUTO". BIOS will auto detect the SPD information of the Memory Module and choose the proper setting. You may manually set "SDRAM CAS Latency Time" to either "2" or "3".

## SDRAM Cycle Time Tras/Trc

Select the number of SDRAM clocks used per access cycle. Settings available are: "Auto", "7/9", or "5/7".

## SDRAM RAS-to-CAS Delay

This controls the latency between SDRAM active command and the read/write command. Leave it on the default setting. Options are: "Auto", "3", and "2".

## SDRAM RAS Precharge Time

This controls the idle clocks after issuing a precharge command to SDRAM. Leave it on the default setting. Options are: "Auto", "3", or "2".

### System BIOS Cacheable

Selecting "Enabled" allows caching of the system BIOS. This action can increase system performance.

### Video BIOS Cacheable

Selecting "Enabled" allows caching of the video BIOS. This action can increase system performance.

### CPU Latency Timer

The option determines the way that the 815 chipset uses the deferrable processor cycle. Options are: "Enabled" or "Disabled".

## • Delayed Transaction

PCI access speed is faster than ISA. If "Enabled" PCI will release the master bus to the ISA interface for accessing data. The master bus control will then go back to PCI again.

# • AGP Graphics Aperture Size

The Aperture is a portion of the PCI memory address range dedicated for graphics memory address space. Access to the aperture range is forwarded to AGP without any translation. Available options are 64MB and 32MB.

# AGP Device 4X Support

Select "Enabled" if you use an AGP-4X video card.

# Display Cache Frequency

When you have AIMM installed, you can set the frequency according to the speed of the SDRAM of your AIMM. Options are: "100MHz" or "133MHz".

# • System Memory Frequency

Default is "Auto". When the CPU is 133MHz you can choose 100/133MHz, but when the CPU is 100MHz, only the 100MHz selection functions.

## • On-Chip Video Window Size

You can select the size of mapped memory for the VGA/AGP driver to use.

# Onboard Display Cache Setting (Only for AIMM)

The following fields are displayed only if there is AIMM installed.

### CAS# Latency

Set the CAS Latency of the onboard display memory. Options are "2" or "3".

## Paging Mode Control

"Open" or "Close" the paging mode control of the onboard display cache memory.

### RAS-to-CAS Override

The default value, "by CAS# LT", will let this field have the same configuration as the value of the field "CAS# Latency". Alternatively, the option, "Override (2)", will set the value of this field to 2.

### RAS# Timing

Set the RAS timing of the onboard display cache memory. Options are: "Fast" or "Slow".

# RAS# Precharge Timing

Set the RAS precharge timing of the onboard display cache memory. Options are: "Fast" or "Slow".

# 3.6 Integrated Peripherals

Choose this option and the following display appears:

```
On-Chip Primary PCI IDE [Enabled]
On-Chip Primary PCI IDE [Enabled]
On-Chip Secondary PCI IDE [Enabled]
IDE Primary Master PIO [Auto]
IDE Primary Slave PIO [Auto]
IDE Secondary Master PIO [Auto]
IDE Secondary Master PIO [Auto]
IDE Primary Slave PIO [Auto]
IDE Primary Slave PIO [Auto]
IDE Secondary Slave PIO [Auto]
IDE Secondary Slave PIO [Auto]
IDE Primary Slave UDMA [Auto]
IDE Secondary Slave IDMA [Auto]
IDE Hob Secondary Slave IDMA [Auto]
IDE HOD Secondary Slave IDMA [Auto]
```

# • On-Chip Primary/Secondary PCI IDE

The chipset contains a PCI IDE interface which supports two IDE channels. Select "Enabled" to activate the first and/or second IDE interface. Select "Disabled" to deactivate this interface, when you install a primary and/or secondary add-in IDE interface.

# IDE Primary/Secondary Master/Slave PIO

The four IDE PIO (Programmed Input/Output) fields let you set a PIO mode (0-5) for each of the four IDE devices that the onboard IDE interface supports. Modes 0 through 5 provide successively increased performance. In "Auto" mode, the system automatically determines the best one for each device.

# IDE Primary/Secondary Master/Slave UDMA

Ultra DMA/33/66/100 implementation is possible only if your IDE HDD can support it, and if the operating environment includes a DMA driver (Windows 95 OSR2 or higher or a third-party IDE bus master driver). If both your HDD and your system software can support Ultra DMA/33/66/100, select "Auto" to enable BIOS support.

### USB Controller

Select "Enabled" if your system contains a Universal Serial Bus (USB) controller and USB peripheral(s).

## USB Keyboard Support

Select "Enabled" if you use a USB Keyboard.

## Init Display First

This item allows you to decide which to activate first: the Onboard/AGP or the PCI Slot.

### AC97 Audio/Modem

If you select "Auto", BIOS will detect whether you are using any Audio/Modem devices. When an Audio/Modem device is detected, the onboard Audio/Modem controller will be enabled. If you want to use your own Audio/Modem card, set these fields to "Disabled". If not, set these fields to "Auto".

#### IDE HDD Block Mode

Block Mode is also called Block Transfer, Multiple Commands, or Multiple Sector Read/Write. If your IDE HDD supports Block Mode (most new drives do), select "Enabled" for automatic detection of the optimal number of Block Read/Write per sector the drive can support.

#### POWER ON Function

- Password: Power On only if you key in the correct password.
- Hot KEY: You can use a hot key to Power On the system.
- Mouse Left: Power On with the Mouse Left Button.
- Mouse Right: Power On with the Mouse Right Button.
- Any KEY: Press any key to Power On the system.
- BUTTON ONLY: Power On only by pushing the button on the case (Default).
- Keyboard 98: Power On system by pushing the [Power-On] key on a Keyboard 98.

#### KB Power On Password

Enter the Power On Password here. Activated only when "Password" is selected in the POWER ON Function Menu.

**NOTE:** If you want to use this function, please make sure that the "KB-AWK" (JP6) jumper is set to "Enable". See Section 2.7 for details.

## Hot Key Power ON

Choose [CTRL] +[F1] ~ [F12] as a "hot key" to Power On the system. Activated only when "Hot KEY" is selected in the POWER ON Function Menu.

#### Onboard FDC Controller

You can use this function to enable or disable the onboard FDC controller.

### Onboard Serial Port 1/Port 2

Select an address and the corresponding interrupt for each of the first and second serial ports. The choices are: "Disabled", "3F8/IRQ4", "2F8/IRQ3", "3E8/IRQ4", "2E8/IRQ3", and "Auto". The second serial port shares resources (address and IRQ) with IrDA.

### UART Mode Select

Choose the right type of infrared device:

- Normal: Normal operation
- IrDA: IrDA compliant serial infrared port
- ASKIR: Amplitude Shift Keyed Infrared Port

### RxD, TxD Active

Consult your IR peripheral documentation to select the correct combination of RxD and TxD.

# IR Transmission Delay

Consult your IR peripheral documentation to select "Enabled" or "Disabled" for the IR Transmission Delay.

# • UR2 Duplex Mode

This item allows you to select the IR "Half" or "Full" duplex function.

### Use IR Pins

This option selects IR transmission routing. The two choices are: RxD2,TxD2 

COMB

Connector or IR-Rx2Tx2 

IR Connector

#### Onboard Parallel Port

Select a logical LPT port name and matching address for the physical parallel (printer) port. The choices are: "378/IRQ7", "278/IRQ5", "3BC/IRQ7" and "Disabled".

#### Parallel Port Mode

This field allows you to set the operation mode of the parallel port.

- SPP: Allows normal-speed operation, but in one direction only.
- EPP: Allows bi-directional parallel port operation at maximum speed.
- ECP: Allows DMA and bi-directional operation. It is faster than EPP mode.
- ECP + EPP: Allows normal speed operation in two-way mode.

### • EPP Mode Select

Select EPP port type "EPP1.7" or "EPP1.9".

#### ECP Mode Use DMA

Assign DMA channel "1" or "3" to the port for ECP mode operation.

#### PWR-ON After PWR-Fail

Choose if you want the system to automatically Power On after the power has failed.

- Off: Disable this function
- On: Enable this function
- Former-Sts: Not only Power On the system, but also to return it to its former status.

#### Game Port Address

Set Joystick Game Port Address. The choices are: "Disabled", "201" and "209".

#### Midi Port Address

Set Midi Port Address. The choices are: "Disabled", "330", "300" and "290".

#### Midi Port IRQ

Assign IRQ "5" or "10" to the Midi Port.

# 3.7 Power Management Setup

The Power Management Setup allows you to configure your system to minimize energy consumption according to your own style of computer use.



#### ACPI Function

This item allows you to "Enable"/"Disable" the Advanced Configuration and Power Interface (ACPI).

# • ACPI Suspend Type

Select the ACPI Suspend Type: "S1 (POS)" or "S3 (STR)". If your expansion cards do not support the STR (Suspend-to-RAM) function, you must leave this field on "S1 (POS)" setting. STR is an energy-saving feature. It takes only a few seconds to wake up the system and return to the previous situation.

NOTE: This feature (STR) requires an ATX power supply with at least 720mA + 5V standby power for the Advanced Configuration and Power Interface (ACPI) functions.

## Power Management

This category allows you to select the type (or degree) of power saving and is directly related to the following modes:

- 1. Suspend Mode
- 2. HDD Power Down

There are three selections for Power Management. Two of them have fixed mode settings.

### 1. "Min Saving":

Minimum power management mode. Inactivity period is defined below:

Suspend Mode = 1 hr.

HDD Power Down = 15 min.

### 2. "Max Saving":

Maximum power management mode. Inactivity period is defined below:

Suspend Mode = 1 min.

HDD Power Down = 1 min.

#### 3. "User Define":

Allows you to set each mode individually. Select the time-out period for each mode shown above.

#### Video Off Method

Defines the Video Off features.

- "Blank Screen":

Only blanks the screen. Use this for monitors without power management and "green" features.

– "V/H SYNC+BLANK":

Blanks the screen and turns off vertical and horizontal scanning.

- "DPMS":

The DPMS (Display Power Management System) feature allows the BIOS to control the video display card if it supports the DPMS feature.

## VIDEO Off In Suspend

This determines the manner in which the monitor is blanked. Select "Yes" to blank the monitor when the system enters suspend mode.

### Suspend Type

Select Suspend Type: "Stop Grant" or "PWR ON Suspend".

#### MODEM Use IRQ

You can select one of the following interrupt resources for modem use: "N/A", "3", "4", "5", "7", "9", "10", and "11".

### Suspend Mode

After the selected period of system inactivity (1 minute to 1 hour), all devices except the CPU will be shut down.

#### HDD Power Down

After the selected period of system inactivity (1 to 15 minutes), the HDD powers down while all other devices remain active. This feature doesn't effect SCSI HDDs.

### Soft-Off by PWR-BTTN

When set to "Instant-off", the ATX switch can be used as a normal system Power Off button. When set to "Delay 4 seconds", you need to press the Power Off button down for more than 4 seconds if you want to Power Off the system.

# Wake-Up by PCI & WOL

Select "Enabled" if you want to Power On your system when a PCI or LAN event occurs.

# Power On by Ring

Select "Enabled" to Power On your system when the external modem receives a call.

NOTE: This function requires an external modem which supports the Ring Wake-Up function.

# • USB KB Wake-Up From S3

When your system is in S3 (Suspend to RAM) mode, you can wake-up the system by pressing the wake-up key on the USB Keyboard.

## CPU Thermal-Throttling

Select the CPU Thermal-Throttling rate. If BIOS detects that the CPU temperature is too high, it will slow down the CPU's speed according to this field. The choices are: "87.5%", "75.0%", "62.5%", "50.0%", "37.5%", "25.0%" and "12.5%".

### Resume by Alarm

Select "Enabled" if you want to power up your system at a certain time on the same day every month, or at a certain time every day.

### Date/Time

If select "On", any activity on PCI Master wakes up the system.

#### Reload Global Timer Events

An event occurring on an "Enabled" device among the devices listed below restarts the global timer from Standby Mode and Powers On the system.

Primary IDE 0

Primary IDE 1

Secondary IDE 0

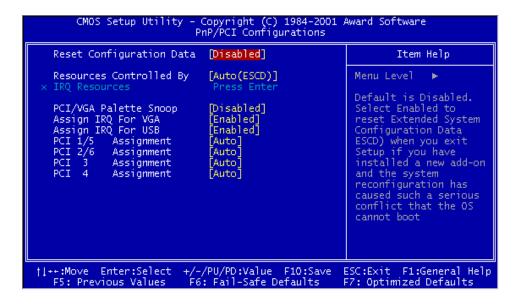
Secondary IDE 1

FDD, COM, LPT Port

PCI PIRQ[A-D]#

The settings in these fields "enable" or "disable" the detection of IDE, floppy, serial and parallel port activities for powering down state transition. Actually, it detects read/write to/from I/O ports.

# 3.8 PnP/PCI Configuration Setup



## Reset Configuration Data

Normally, you leave this field "Disabled". Select "Enabled" to reset Extended System Configuration Data (ESCD) if you have just installed a new add-on card and the system reconfiguration has caused such a serious conflict that the operating system cannot boot. The setting will automatically be set back to "Disabled" the next time the system reboots.

# Resources Controlled by

The Award Plug-and-Play BIOS can automatically configure all the boot and Plug-and-Play (PnP) compatible devices. If you select "Auto", all of the Interrupt Requests (IRQs) and DMA assignment fields will be activated as the BIOS automatically assigns them. The choices are: "Auto" and "Manual". If you select "Manual", you will get the submenu shown on the next page.

# PCI/VGA Palette Snoop

Some VGA cards, such as graphics accelerators or MPEG video cards, might not show colors properly. Select "Enabled" to correct this problem. If you don't have such problems, leave this field "Disabled".

## Assign IRQ For USB

When "Enabled", BIOS will assign an IRQ channel for the USB controller.

## Assign IRQ For VGA

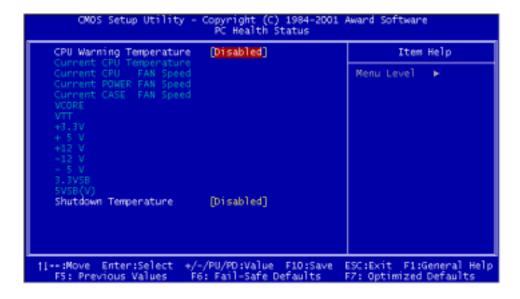
Select "Enabled" only if your VGA card requires an assigned IRQ. Most ordinary cards do not, but some high-end cards with video capture function do. Consult your VGA documentation to set this field. Activity of the selected IRQ always awakens the system.

## PCI n Assignment

Each PCI Slot can be assigned its own IRQ number. When you assign one and find out that the real IRQ is different from your assignment, the IRQ you assign must be taken over by another device like Printer, USB Controller, MIDI, etc.

# 3.9 PC Health Status

This menu provides two thermo-protection functions (CPU warning temperature and shutdown temperature) and a hardware monitoring center. These features let you know the health status of your PC.



# CPU Warning Temperature

This field allows you to set the CPU warning temperature. You can choose from "50°C/122°F" to "70°C/158°F" or "Disabled".

## • Shutdown Temperature

This field allows you to set the CPU shutdown temperature. The choices are: "60°C/140°F", "65°C/149°F", "70°C/158°F" and "75°C/167°F".

## • Current CPU Temperature

This field displays the CPU temperature.

## • Current CPU/Power/Case Fan Speed

These fields display the fan speeds of the CPU fan, Power fan and Case fan.

### VCORE

This field displays the CPU working voltage.

### VTT

This field displays the GTL bus voltage.

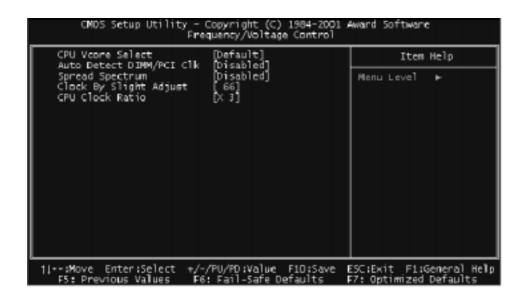
### +3.3V/+5V/+12V/-12V/-5V

These fields show the power supply voltages.

## • 3.3VSB/5VSB(V)

These fields display the 3.3V/5V standby power supplied to the CMOS battery.

# 3.10 Frequency/Voltage Control



### CPU Vcore Select

This option adjusts the CPU voltage. Available selections depend on CPU type.

- 1.PIII and Celeron CPU: Default/+0.05V/+0.10V/+0.15V/+0.20V/+0.25V/+0.30V/+0.35V.
- 2.Tualatin CPU: Default/+0.025V/+0.050V/+0.075V/+0.100V/+0.125V/+0.150V/+0.175V.

#### Autodetect DIMM/PCI CIk

"Enable" can stop the frequency output for unused DIMM/PCI slots.

### Spread Spectrum

"Enable" provides spread Spectrum for better EMI solution.

# Clock By Slight Adjust

This function allows you to set/adjust the FSB frequency of the CPU and the speed of the PCI bus to any number between 66MHz and 166MHz. When JP4 is set to "AUTO" (See Section 2.3 66/100/133MHz System Configuration), the frequency setting depends on your CPU type. When JP4 is set to "66MHz", you can select the system bus frequency from 66MHz to 99MHz. When JP4 is set to "100MHz", you can select the system bus frequency from 100MHz to 132MHz. When JP4 is set to "133MHz", you can select the system bus frequency from 133MHz to 166MHz. When you overclock the CPU too much, some devices on the motherboard might not function well, like onboard CODEC. When this situation happens, reduce the frequency.

### CPU Clock Ratio

This function allows you to set the CPU internal frequency ratio. It determines the CPU internal frequency according to the following formula:

CPU internal frequency = frequency ratio x system bus frequency.\*

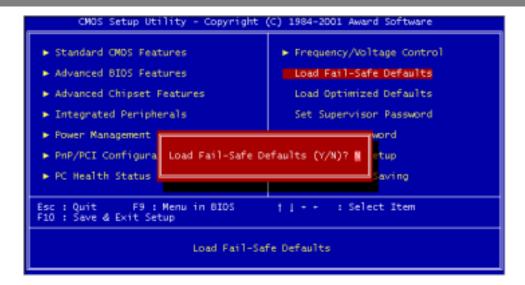
The choices are: "3", "3.5", "4", "4.5", "5", "5.5", "6", "6.5", "7", "7.5", and "8" \*System bus frequency is set in the previous field ("Clock By Slight Adjust").

**NOTE:** Because Intel has locked the frequency ratio for new CPU settings, this field to adjust the frequency ratio is usually useless. However, it is effective for older version CPUs.

## 3.11 Load Fail-Safe Defaults

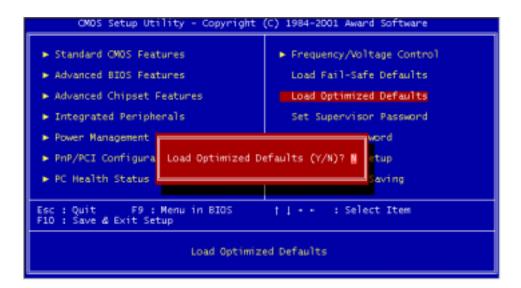
This option allows you to load the troubleshooting default values permanently stored in the BIOS ROM.

NOTE: These default settings are non-optimal and disable all high performance features.



# 3.12 Load Optimized Defaults

This option allows you to load the default values to the system configuration fields. These default values are the optimized configuration settings for the system.



# 3.13 Supervisor Password

This option allows you to set a password to prevent others from changing the BIOS settings of your system.



The password prevents any unauthorized use of your computer. If you set a password, the system prompts for the correct password before you boot or access "Setup".

To set a password:

- 1. At the prompt, type your password. Your password can be up to 8 alpha-numeric characters. When you type the characters, they appear as asterisks on the password screen box.
- 2. After typing the password, press the [Enter] key.
- At the next prompt, re-type your password and press the [Enter] key again to confirm
  the new password. After password entry, the screen automatically reverts to the
  main screen.

To disable the password, press the [Enter] key when prompted to enter the password. The screen displays a message confirming that the password has been disabled.

# **BIOS SETUP**

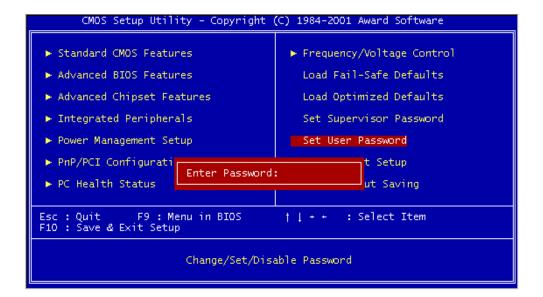
Forget the password?

If you forget the password, you can clear it by erasing the CMOS Real Time Clock (RTC) RAM with jumper 1(JP1). See Section 2.4 Using Jumper JP1 to Clear CMOS. To erase the RTC RAM:

- 1. Unplug your computer.
- 2. Short the JP1 jumper.
- 3. Turn on your computer.
- 4. Hold down [Delete] key during the POST process and enter BIOS Setup to reconfigure BIOS.

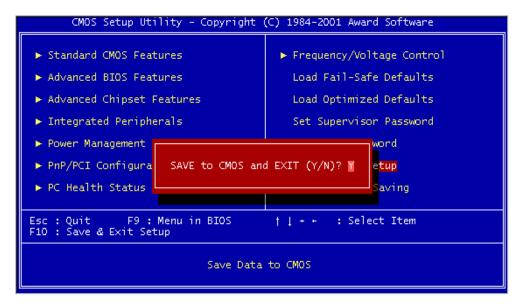
## 3.14 User Password

This option allows you to set a password to prevent others from changing the BIOS settings of your system. This operation is the same as Supervisor Password.



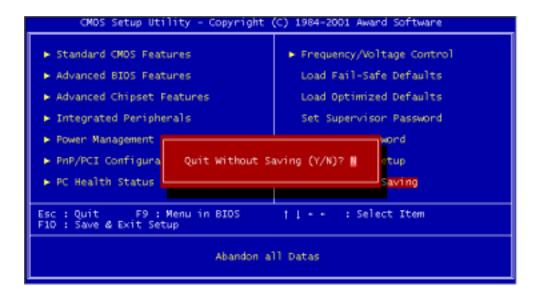
# 3.15 Save & Exit Setup

Save the settings and exit the BIOS utility.



# 3.16 Exit Without Saving

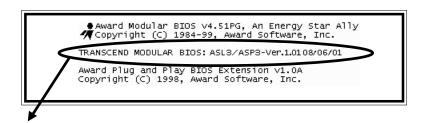
Abort the current changes and exit the BIOS utility.



## **CHAPTER 4 BIOS UPGRADE**

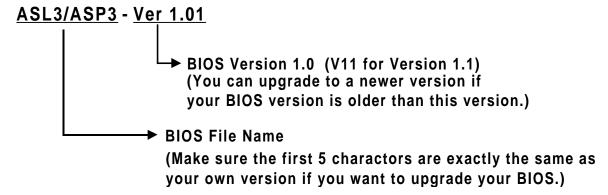
# 4.1 How to Check Your BIOS File Name and Version

Turn on your PC. The first screen will display as follows:



### TRANSCEND MODULAR BIOS: ASL3/TS-ASP3-Ver.1.01 08/06/01

The BIOS description shows on the third line.



# 4.2 Download the Correct BIOS File from Our Web Site

Go to the Transcend web site: <a href="http://www.transcendusa.com/">http://www.transcendusa.com/</a>

Choose "Motherboard".

Choose "BIOS".

Select the appropriate Transcend motherboard model.

The BIOS file name consists of 5 characters. Check the exact BIOS to download. Your BIOS file name must exactly match the one shown on our web site. Download the suitable version to your disk or other storage device.

WARNING: Your system could be seriously damaged if a wrong BIOS version is accidently used. If you are not sure what version you should choose, please contact us at techsupport@transcend.com.tw.

# 4.3 How to Upgrade Your Motherboard BIOS

Please follow these 5 steps listed below to upgrade your BIOS:

Step 1: Make a record of your original or existing BIOS Setup parameters.

- Press [Del] during the Power On Self Test to enter the BIOS Setup Program when you start your system.
- Write down the values of each parameter to enable you to re-configure your system after the BIOS upgrade.

Step 2: Make a system Disk

- Put a clean 3.5" disk in Drive A

MS-DOS: Key in **FORMAT A:/s** and press [Enter].

Windows O/S: Select the icon [My Computer]

Click [3.5" Floppy (A:)]

Select [File/Format] from Command Bar

Under Format 3.5 Floppy (A:) Menu Select

Format type = Full item and

Other Options = Copy system files

Click [Start] button

Step 3: Download the updated BIOS EXE file from the web site to a floppy disk.

(Ref 5.1 and 5.2)

Step 4: Execute the downloaded file to decompress it.

Step 5: Please read the Readme.TXT file carefully, and follow the instructions step-by-step. Continue upgrading BIOS and reconfigure your system.