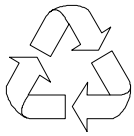
# TravelMate 350
## Service Guide

Service guide files and updates are available on the AIPG/CSD web; for more information, please refer to http://csd.acer.com.tw



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## Conventions

The following conventions are used in this manual:

| | |
|---|---|
| `Screen messages` | Denotes actual messages that appear on screen. |
| **NOTE** | Gives bits and pieces of additional information related to the current topic. |
| **WARNING** | Alerts you to any damage that might result from doing or not doing specific actions. |
| **CAUTION** | Gives precautionary measures to avoid possible hardware or software problems. |
| **IMPORTANT** | Reminds you to do specific actions relevant to the accomplishment of procedures. |

# Preface

Before using this information and the product it supports, please read the following general information.

1. This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.
2. Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

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# *Table of Contents*

# System Specifications

## Features

This computer was designed with the user in mind. Here are just a few of its many features:

### Performance

- Mobile Pentium® III 256 KB level 2 cache featuring Intel® SpeedStep™ technology
- 64-bit memory bus
- External EasyLink™ Combo Drive (floppy and CD-ROM/DVD-ROM drive)
- High-capacity, Enhanced-IDE hard disk
- Li-ion main battery pack
- Power management system with ACPI (Advanced Configuration Power Interface)
- Smart Card interface with pre-boot authentication systems as security feature.

### Display

- 13.3" Thin-Film Transistor (TFT) liquid-crystal display (LCD) displaying 24-bit true-color at 1024x768 eXtended Graphics Array (XGA) resolution
- 4 MB to 8 MB Video DRAM, configurable through BIOS
- 3D capabilities
- Simultaneous LCD and CRT display support
- Supports other output display devices such as LCD projection panels for large-audience presentations
- "Automatic LCD dim" feature that automatically decides the best settings for your display and conserves power
- Dual display capability

### Multimedia

- 16-bit high-fidelity AC'97 PCI stereo audio with wavetable synthesizer
- Built-in speaker with microphone
- Sound Blaster Pro and Windows Sound System-compatible
- High-speed CD-ROM or DVD-ROM drive
- USB video capture kit option

### Connectivity

- High-speed fax/data modem port
- Fast infrared wireless communication
- USB (Universal Serial Bus) ports
- Ethernet/Fast Ethernet port
- IEEE 1394 port
- Smart Card interface socket
- Optional Bluetooth wireless communication feature
- Optional 802.11b wireless LAN

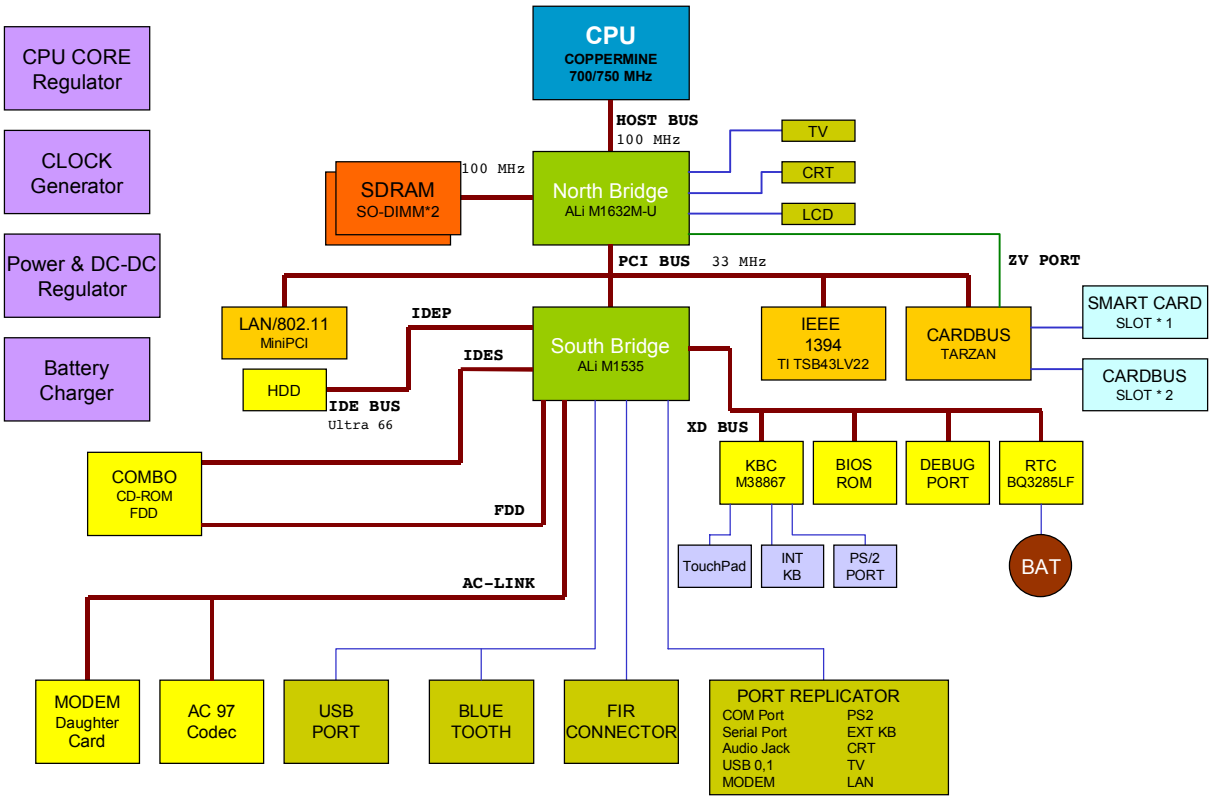
### Human-centric design and ergonomics

- ❑ Sleek, smooth and stylish design
- ❑ Full-sized keyboard
- ❑ Ergonomically-centered touchpad pointing device
- ❑ Internet scroll key

### Expansion

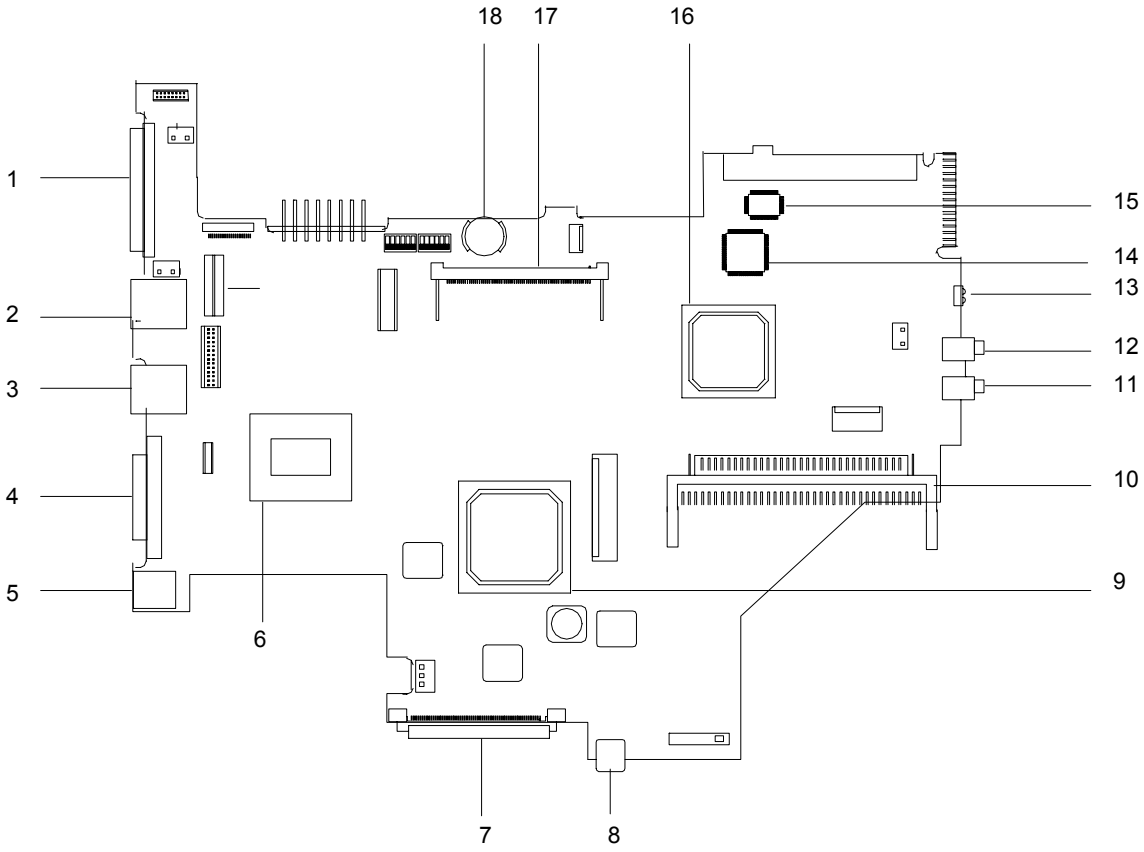
- ❑ One type II/I CardBus PC card (formerly PCMCIA) slot with ZV (zoomed video) port support
- ❑ Upgradeable memory
- ❑ EasyPort port replicator

# System Block Diagram



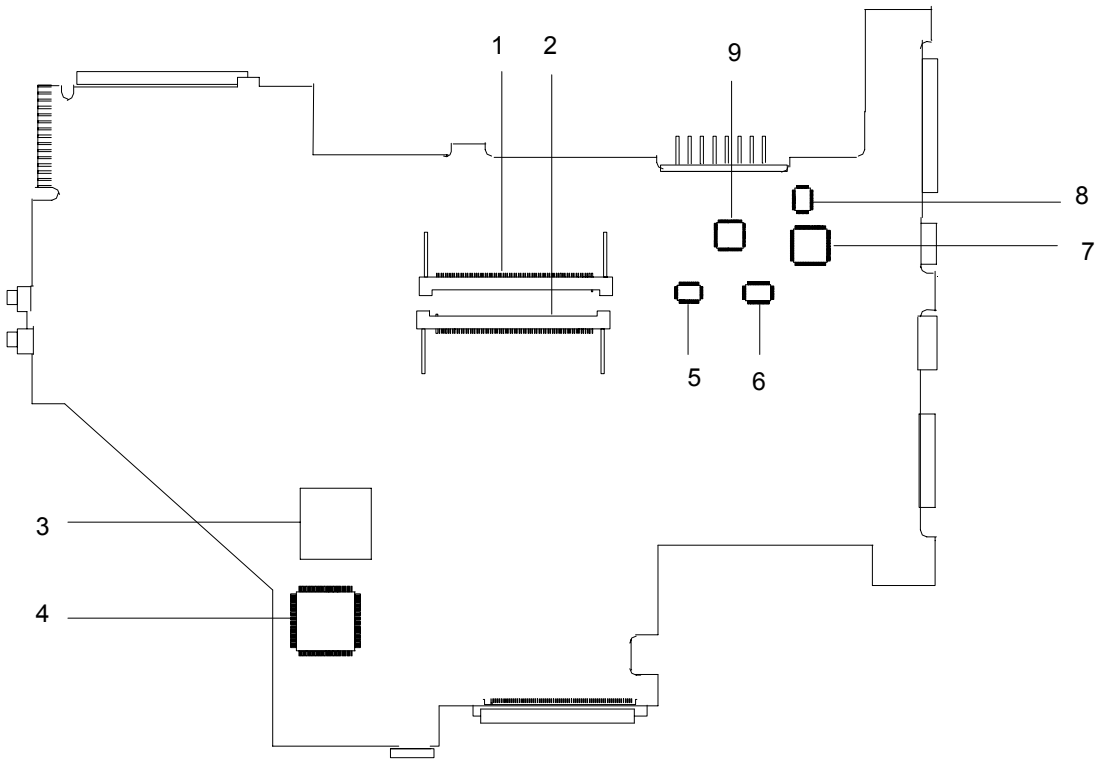
# Board Layout

## Top View




1. Expansion port
2. Modem port
3. LAN port
4. External monitor port
5. DC-in port 1
6. Pentium III processor
7. EasyLink Combo Drive port
8. IEEE 1394 port
9. ALI M1632 North Bridge
10. PCMCIA socket connector
11. Speaker/Headphone-out jack
12. Line-in/external MIC jack
13. Infrared port
14. Keyboard controller (M38867)
15. BIOS Flash ROM
16. ALI M1535 South Bridge
17. Mini PCI socket
18. RTC battery

## Bottom View

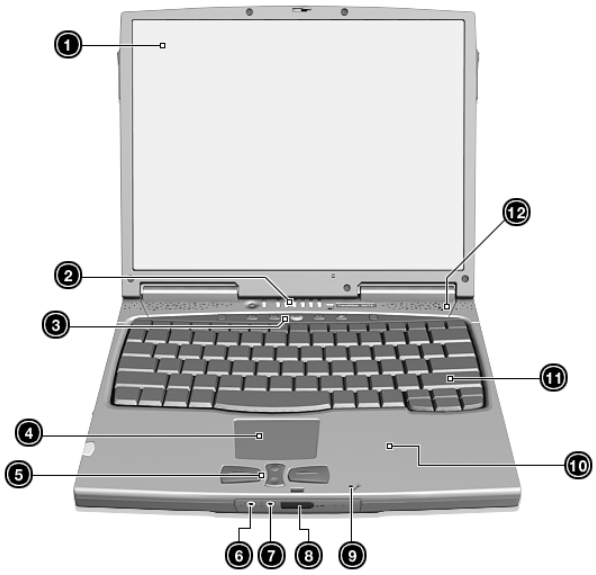



1. DIMM 1 socket
2. DIMM 2 socket (reverse)
3. CardBus controller
4. IEEE 1394 controller (TI TSB43LV22)
5. Clock buffer
6. Clock generator
7. TV controller
8. COM port controller
9. Geyserville controller

# Panel

Ports allow you to connect peripheral devices to your computer as you would with a desktop PC.

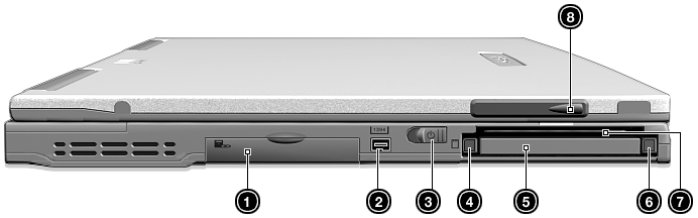
## Front view




| # | Item | Description |
|---|---|---|
| 1 | Display screen | Also called LCD (liquid-crystal display), displays computer output. |
| 2 | Status indicators | LEDs (light-emitting diodes) that turn on and off to show the status of the computer and its functions and components. |
| 3 | Launch keys | Buttons for launching frequently used programs. See “Launch Keys” on page 14 for more details. |
| 4 | Touchpad | Touch-sensitive pointing device which functions like a computer mouse. |
| 5 | Click buttons (left, center and right) | The left and right buttons function like the left and right mouse buttons; the center button serves as a scroll up/down button. |
| 6 | Speaker/Headphone-out jack | Connects to audio line-out devices (e.g., speakers, headphones). |
| 7 | Line-in jack | Accepts audio line-in devices (e.g., audio CD player, stereo walkman). |
| 8 | Infrared port | Interfaces with Infrared devices (e.g., infrared printer, IR-aware computers). |
| 9 | Microphone | Inputs sounds and voices into your computer. |
| 10 | Palmrest | Comfortable support area for your hands when you use the computer. |

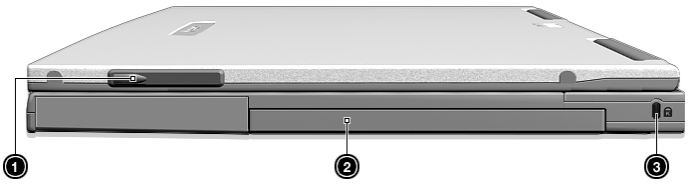
| # | Item | Description |
|---|---|---|
| 11 | Keyboard | Inputs data into your computer. |
| 12 | Speaker | Outputs sound. |

## Left view



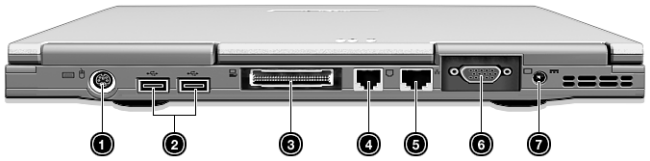

| # | Item | Description |
|---|---|---|
| 1 | EasyLink Combo Drive connector | Connects to an EasyLink Combo Drive. |
| 2 | IEEE 1394 port | Connects to any IEEE 1394 supported devices. |
| 3 | Power switch | Turns on the computer power. |
| 4 | PC Card eject button | Ejects PC Card from the card slot. |
| 5 | PC Card slot | Connects to one Type II 16-bit PC Card or 32-bit CardBus PC Card. |
| 6 | SmartCard eject button | Ejects SmartCard from the card slot. |
| 7 | Smart card slot | Slot for Smart Card interface with pre-boot authentication systems. |
| 8 | Video capture kit slot | Accepts the video capture kit option on the left side of the computer. |

## Right view



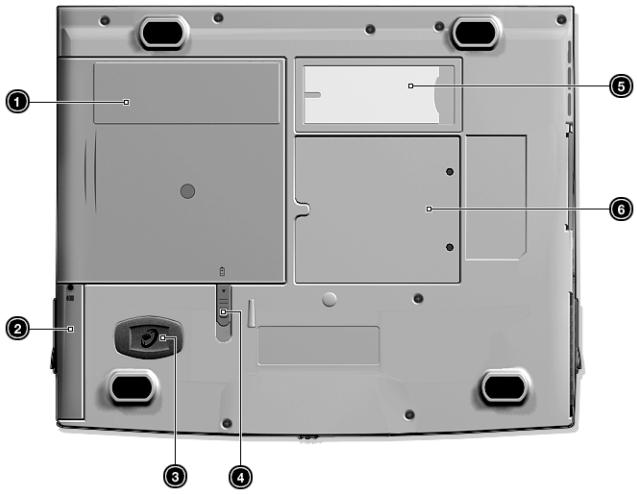

| # | Item | Description |
|---|---|---|
| 1 | Video capture kit slot | Accepts the video capture kit option on the right side of the computer. |
| 2 | Battery bay | Houses the computer's battery pack. |
| 3 | Security keylock | Connects to a Kensington-compatible key-based computer security lock. |

## Rear view




| # | Item | Description |
|---|---|---|
| 1 | PS/2 port | Connects to any PS/2-compatible device (e.g., PS/2 keyboard/ mouse/keypad). |
| 2 | USB ports (two) | Connect to any Universal Serial Bus devices (e.g., USB mouse, USB camera). |
| 3 | Expansion port | I/O replicator or EasyPort expansion devices. |
| 4 | Modem jack | Connects to a phone line. |
| 5 | Network jack | Connects to an Ethernet 10/100-based network |
| 6 | External display port | Connects to a display device (e.g., external monitor, LCD projector) and displays up to 64K colors at 1280x1024 resolution. |
| 7 | Power jack | Connects to an AC adapter. |

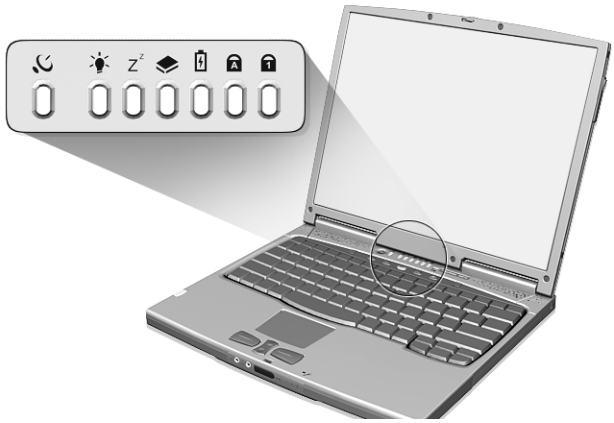
## Bottom view




| # | Item | Description |
|---|---|---|
| 1 | Battery bay | Houses the computer's battery pack. |
| 2 | Hard disk bay | Houses the computer's hard disk (secured by a screw). |
| 3 | Hard disk anti-shock protection | Protects your hard disk against shocks. |
| 4 | Battery release latch | Unlatches the battery to remove the battery pack. |
| 5 | Personal identification slot | Insert a business card or similar-sized identification card to personalize your computer. |
| 6 | Memory compartment | Houses the computer's main memory. |

# Indicators

The computer has seven easy-to-read status icons below the display screen.



The Power and Sleep status icons are visible even when you close the display cover so you can see the status of the computer while the cover is closed.

| Icon | Function | Description |
|---|---|---|
| | Wireless Communication | Lights when the Blue Tooth/Wireless LAN capabilities are enabled. |
| | Power | Lights when the computer is on. |
| | Sleep | Lights when the computer enters Sleep mode. |
| | Media Activity | Lights when the floppy drive, hard disk or EasyLink Combo drive is active. |
| | Battery Charge | Lights when the battery is being charged. |
| | Caps Lock | Lights when Caps Lock is activated. |
| | Num Lock | Lights when Num Lock is activated. |

# Keyboard

The keyboard has full-sized keys and an embedded keypad, separate cursor keys, two Windows keys and twelve function keys.

## Special keys

### Lock keys

The keyboard has three lock keys which you can toggle on and off.


| Lock key | Description |
|---|---|
| Caps Lock | When Caps Lock is on, all alphabetic characters typed are in uppercase. |
| Num Lock (Fn-F11) | When Num Lock is on, the embedded keypad is in numeric mode. The keys function as a calculator (complete with the arithmetic operators +, -, *, and /). Use this mode when you need to do a lot of numeric data entry. A better solution would be to connect an external keypad. |
| Scroll Lock (Fn-F12) | When Scroll Lock is on, the screen moves one line up or down when you press the up or down arrow keys respectively. Scroll Lock does not work with some applications. |

**NOTE:** To access the Num Lock and Scroll Lock functions, hold the Fn key down while pressing the F11 and F12 keys respectively.

## Embedded numeric keypad

The embedded numeric keypad functions like a desktop numeric keypad. It is indicated by small characters located on the upper right corner of the keycaps. To simplify the keyboard legend, cursor-control key symbols are not printed on the keys.


| Desired access | Num lock on | Num lock off |
|---|---|---|
| Number keys on embedded keypad | Type numbers in a normal manner. | |
| Cursor-control keys on embedded keypad | Hold Shift while using cursor-control keys. | Hold Fn while using cursor-control keys. |
| Main keyboard keys | Hold Fn while typing letters on embedded keypad. | Type the letters in a normal manner. |

**NOTE:** If an external keyboard or keypad is connected to the computer, the Num Lock feature automatically shifts from the internal keyboard to the external keyboard or keypad.

## Windows keys

The keyboard has two keys that perform Windows-specific functions.

| Key | Description |
|---|---|
| Windows logo key | Start button. Combinations with this key perform shortcut functions. Below are a few examples:<br>+ Tab (Activates next taskbar button)<br>+ E (Explores My Computer)<br>+ F (Finds Document)<br>+ M (Minimizes All)<br>Shift + + M (Undo Minimize All)<br>+ R (Displays the Run... dialog box) |
| Application key | Opens a context menu (same as a right-click). |

## Hot keys

The computer employs hot keys or key combinations to access most of the computer's controls like screen brightness, volume output and the BIOS Utility.

To activate hot keys, press and hold the **Fn** key before pressing the other key in the hot key combination.

| Hot key | Icon | Function | Description |
|---|---|---|---|
| Fn-F1 | ? | Hot Key Help | Displays help on hot keys. |
| Fn-F2 | | Setup | Accesses the computer's configuration utility. |
| Fn-F3 | | Power Management Scheme Toggle | Switches the power management scheme used by the computer (function available if supported by operating system). |
| Fn-F4 | z z | Sleep | Puts the computer in Sleep mode. |
| Fn-F5 | | Display Toggle | Switches display output between the display screen, external monitor (if connected) and both the display screen and external monitor. |
| Fn-F6 | | Screen Blank | Turns the display screen backlight off to save power. Press any key to return. |
| Fn-F7 | | Touchpad Toggle | Turns the internal touchpad on and off. |
| Fn-F8 | | Speaker Toggle | Turns the speakers on and off. |
| Fn-↑ | | Volume up | Increases the speaker volume. |
| Fn-↓ | | Volume down | Decreases the speaker volume. |
| Fn-→ | | Brightness up | Increases the screen brightness. |
| Fn-← | | Brightness down | Decreases the screen brightness. |
| Alt Gr-Euro | € | Euro | Types the Euro symbol (available on some models). |

## The Euro symbol

If your keyboard layout is set to United States-International or United Kingdom or if you have a keyboard with a European layout, you can type the Euro symbol on your keyboard.

**NOTE: For US keyboard users:** The keyboard layout is set when you first set up Windows. For the Euro symbol to work, the keyboard layout has to be set to United States-International.

To verify the keyboard type:

1. Click on **Start**, **Settings**, **Control Panel**.
2. Double-click on **Keyboard**.
3. Click on the **Language** tab.
4. Verify that the keyboard layout used for "English (United States)" is set to United States-International.
5. If not, select and click on **Properties**; then select **United States-International** and click on **OK**.
6. Click on **OK**.

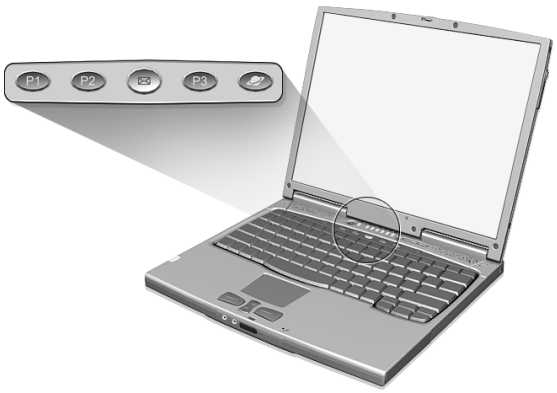
To type the Euro symbol:

1. Locate the Euro symbol on your keyboard.
2. Open a text editor or word processor.
3. Hold **Alt Gr** and press the Euro symbol.

**NOTE:** Some fonts and software do not support the Euro symbol. Please refer to http://www.microsoft.com/typography/faq/faq12.htm for more information.

## Launch Keys

Located at the top of the keyboard are five buttons. These buttons are called launch keys. They are designated as P1, P2, P3, mail button and Web browser button. By default, buttons P1and P2 are users programmable. The mail button is used to launch the e-mail application. The LED of the mail button will flash when the user has received an incoming e-mail. The P3, by default is used to launch a multimedia application that came bundled with your system. The Web browser button, by default, is used to launch your Internet browser.



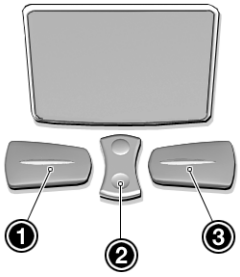
# Touchpad

The built-in touchpad is a PS/2-compatible pointing device that senses movement on its surface. This means the cursor responds as you move your finger on the surface of the touchpad. The central location on the palm rest provides optimum comfort and support.

**NOTE:** When using an external USB or serial mouse, you can press **Fn-F7** to disable the touchpad. If you are using an external PS/2 mouse, the touchpad is automatically disabled.

## Touchpad basics

The following items teach you how to use the touchpad:




- Move your finger across the touchpad to move the cursor.
- Press the left (1) and right (3) buttons located on the edge of the touchpad to do selection and execution functions. These two buttons are similar to the left and right buttons on a mouse. Tapping on the touchpad produces similar results.
- Use the center (2) button (top and bottom) to scroll up or down a page. This button mimics your cursor pressing on the right scroll bar of Windows applications.

| Function | Left button | Right button | Center buttons | Tap |
|---|---|---|---|---|
| Execute | Click twice quickly | | | Tap twice (at the same speed as double-clicking a mouse button) |
| Select | Click once | | | Tap once |
| Drag | Click and hold, then use finger to drag the cursor on the touchpad | | | Tap twice (at the same speed as double-clicking a mouse button) then hold finger to the touchpad on the second tap and drag the cursor |
| Access context menu | | Click once | | |

| Function | Left button | Right button | Center buttons | Tap |
|---|---|---|---|---|
| Scroll | | | Click and hold the up/ down button | |

**NOTE:** Keep your fingers dry and clean when using the touchpad. Also keep the touchpad dry and clean. The touchpad is sensitive to finger movements. Hence, the lighter the touch, the better the response. Tapping harder will not increase the touchpad's responsiveness.

# Hardware Specifications and Configurations

### Main board Major Chips

| Item | Controller |
|---|---|
| System core logic | ALI Aladdin Pro II chipset M1632/M1535 |
| Super I/O controller | Built in M1535 |
| Audio controller | Built in M1535 |
| Video controller | Built in M1632 (Trident CyberBlade AGP-2X) |
| IDE controller | Built in M1535 (2-channel dedicated Ultra-66 IDE Master Controller) |
| Keyboard controller | Mitsubishi M38867 |
| RTC | BenchMark BQ3285LF SSOP |
| PCMCIA controller | O2 Micro OZ711 CardBus controller (Tarzan) |
| IEEE 1394 controller | TI TSB43LV22 |

### Processor

| Item | Specification |
|---|---|
| CPU type | Intel Pentium III 650/700 MHz processor with 256KB L2 on-die cache memory |
| CPU package | BGA package |
| CPU core voltage | 1.6V/1.35V |
| CPU I/O voltage | 1.5V |

### BIOS

| Item | Specification |
|---|---|
| BIOS vendor | Acer |
| BIOS version | V3.3 |
| BIOS ROM type | Flash ROM |
| BIOS ROM size | 512KB |
| BIOS package | 32-pin TSOP |
| Supported protocols | ACPI 1.0b, HDD Password, Int 13h Extensions, S4BIOS for Win98, PnP BIOS 1.0a, SMBIOS 2.3,Simple Boot Flag 1.0, PCI 2.1<br>USB specification 1.0., PCI Bus Power Management interface Specification, Boot Block, SMI 1.2, EPP/IEEE 1284, ECP/IEEE 1284 1.7 & 1.9, IrDA, PS/2 keyboard and mouse, VESA VGA BIOS, DDC-2B, CD-ROM bootable |
| BIOS password control | Set by switch, see SW3 settings |

### Second Level Cache

| Item | Specification |
|---|---|
| Cache controller | Built-in CPU |
| Cache size | 256KB |
| 1st level cache control | Always enabled |
| 2nd level cache control | Always enabled |
| Cache scheme control | Fixed in write-back |

### System Memory

| Item | Specification |
|---|---|
| Memory controller | Built-in ALI M1632 |
| Onboard memory size | 0MB |
| DIMM socket number | 2 sockets |
| Supports memory size per socket | 64/128 MB |
| Supports maximum memory size | 256MB (128MB x 2) |
| Supports DIMM type | SDRAM |
| Supports DIMM speed | 100MHz |
| Supports DIMM voltage | 3.3V |
| Supports DIMM package | 144-pin SO-DIMM |
| Memory module combinations | You can install memory modules in any combinations as long as they match the above specifications. |

### Memory Combinations

| Slot 1 | Slot 2 | Total Memory |
|---|---|---|
| 0 MB | 64 MB | 64 MB |
| 64 MB | 64 MB | 128 MB |
| 0 MB | 128 MB | 128 MB |
| 64 MB | 128 MB | 192 MB |
| 128 MB | 128 MB | 256 MB |

Above table lists some system memory configurations. You may combine DIMMs with various capacities to form other combinations.

**NOTE:** The shipping specification for DIMM combination is 64MB in slot 1.

### LAN Interface

| Item | Specification |
|---|---|
| LAN Interface/Chipset | Mini PCI interface LAN card / Intel 82559 chipset |
| Supports LAN protocol | 10/100 Mbps |
| LAN connector type | RJ45 |
| LAN connector location | Rear side |

### Wireless LAN Interface

| Item | Specification |
|---|---|
| LAN Interface | Mini PCI interface IEEE 802.11a LAN card |
| Channel support and default channel protocol | Covering the FCC subset of the IEEE802.11b ISM Band |
| Enable/disable radio | Support FAA requirement |

### Modem Interface

| Item | Specification |
|---|---|
| Modem Interface/Chipset | Built in M1535 AC'97 2.1 compliant digital controller interface with software modem solution / Ambit U98M005.01 |
| Fax modem data baud rate (bps) | 14.4K |
| Data modem data baud rate (bps) | 56K |
| Supports modem protocol | V.90 data modem 56K, V.90 fax modem 14.4K and digital line protection operation |
| Modem connector type | RJ11 |
| Modem connector location | Rear side |

### Hard Disk Drive Interface

| Item | Specification | | |
|---|---|---|---|
| Vendor & Model Name | IBM DJSA-205 | IBM DJSA-210 | IBM DJSA-220 |
| Capacity (GB) | 5 | 10 | 20 |
| Bytes per sector | 512 | 512 | 512 |
| Logical heads | 15 | 16 | 16 |
| Logical sectors | 63 | 63 | 63 |
| Drive Format | | | |
| Logical cylinders | 13424 | 16383 | 16383 |
| Physical read/write heads | 1 | 2 | 4 |
| Disks | 1 | 1 | 2 |
| Spindle speed (RPM) | 4200 | 4200 | 4200 |
| Performance Specifications | | | |
| Buffer size (KB) | 418 | 418 | 418 |
| Interface | IDE (ATA-4) | IDE (ATA-4) | IDE (ATA-4) |
| Data transfer rate (disk buffer, MB/s) | 85.5-161.6 | 85.5-161.6 | 85.5-161.6 |
| Data transfer rate (host buffer, MB/s) | 16.6 (PIO Mode-4)<br>66.6 (Ultra DMA Mode-4) | 16.6 (PIO Mode-4)<br>66.6 (Ultra DMA Mode-4) | |
| DC Power Requirements | | | |
| Voltage tolerance | 5+/-5% | 5+/-5% | 5+/-5% |

### CD-ROM/Floppy Diskette Combo Drive Interface

| Item | Specification |
|---|---|
| Vendor & model name | TEAC CF240500 |
| **CD-ROM** | |
| Performance Specification | |
| Transfer rate (KB/sec) | 1,545KB/sec ~ 3,600KB/sec. (FULL - CAV) |
| Access time (typ.) | 130 ms |
| Rotation speed | 5136 rpm (typ.) |
| Buffer memory | 128 KB |
| Interface | ATAPI |
| Applicable disc format | CD-DA, CD-ROM (Mode-1, Mode-2), CD-ROM XA MODE-2 (FORM-1, FORM-2), Multi-Session Photo CD, CD-I, Video CD, Enhanced CD & CD PLUS Compatible, CD-R/W |

### CD-ROM/Floppy Diskette Combo Drive Interface

| Item | Specification | | |
|---|---|---|---|
| Loading mechanism | Drawer with soft eject and emergency eject hole | | |
| Power Requirement | | | |
| Input Voltage | 5 V | | |
| **Floppy disk drive** | | | |
| Floppy disk Specifications | | | |
| Media recognition | 2DD (720KB) | 2HD (1.2MB, 3-mode) | 2HD (1.44MB) |
| Sectors / track | 9 | 15 | 18 |
| Tracks | 80 | 80 | 80 |
| Data transfer rate (Kbit/s) | 250 | 500 | 500 |
| Rotational speed (RPM) | 300 | 360 | 300 |
| Read/write heads | 2 | | |
| Encoding method | MFM | | |
| Power Requirement | | | |
| Input Voltage (V) | +5V +-10% | | |

### DVD-ROM/Floppy Diskette Combo Drive Interface

| Item | Specification | | |
|---|---|---|---|
| Vendor & model name | Addonics MKE SR8175 | | |
| **DVD-ROM** | | | |
| Performance Specification | With CD Diskette | With DVD Diskette | |
| Transfer rate (KB/sec) | 1,500KB/sec ~ 3,600KB/sec.<br>(FULL - CAV) | 4.58MB/sec ~ 11.08MB/sec.<br>(FULL - CAV) | |
| Access time (typ.) | 110 ms | 150 ms | |
| Rotation speed | 4800 rpm (typ.) | 3700 rpm (typ.) | |
| Buffer memory | 512 KB | 512 KB | |
| Interface | ATAPI | | |
| Applicable disc format | DVD-ROM, DVD-Video, CD-DA, CD-ROM (Mode-1, Mode-2), CD-ROM XA MODE-2 (FORM-1, FORM-2), Multi-Session Photo CD, CD-I, Video CD, Enhanced CD & CD PLUS Compatible, CD-R/W | | |
| Loading mechanism | Drawer with soft eject and emergency eject hole | | |
| Power Requirement | | | |
| Input Voltage | 5 V | | |
| **Floppy disk drive** | | | |
| Floppy disk Specifications | | | |
| Media recognition | 2DD (720KB) | 2HD (1.2MB, 3-mode) | 2HD (1.44MB) |
| Sectors / track | 9 | 15 | 18 |
| Tracks | 80 | 80 | 80 |
| Data transfer rate (Kbit/s) | 250 | 500 | 500 |
| Rotational speed (RPM) | 300 | 360 | 300 |
| Read/write heads | 2 | | |
| Encoding method | MFM | | |
| Power Requirement | | | |
| Input Voltage (V) | +5V +-10% | | |

### Audio Interface

| Item | Specification |
|---|---|
| Audio controller | Built in M1535 audio controller combined with standard AC97/AC98 codec (Cirrus CS-4299) |
| Audio onboard or optional | Onboard |
| Mono or Stereo | Stereo |
| Resolution | 16 bit |
| Compatibility | Windows Sound System (WSS), Microsoft PC98/PC99, WHQL audio requirement |
| Mixed sound source | Voice, Synthesizer, Line-in, Microphone, CD |
| Voice channel | 6/16-bit, mono/stereo |
| Sampling rate | 48 KHz |
| Internal microphone | Yes |
| Internal speaker / Quantity | Yes/ 1 pieces |
| Supports PnP DMA channel | DMA channel 0<br>DMA channel 1 |
| Supports PnP IRQ | IRQ3, IRQ5, IRQ7, IRQ9, IRQ10, IRQ11 |

### Video Interface

| Item | Specification |
|---|---|
| Vendor & model name | Built in M1632 (Trident CyberBlade AGP-2X) |
| Chip voltage | Core/2.5V<br>Memory/3.3V |
| Supports ZV (Zoomed Video) port | Yes |
| Graph interface | 2X AGP (Accelerated Graphics Port) bus |
| Maximum resolution (LCD) | 1024x768 (24 bit colors) |
| Maximum resolution (CRT) | 1024x768 (24 bit colors) |

### Video Memory

| Item | Specification |
|---|---|
| Fixed or upgradeable | Share with system memory |
| Video memory size | 4 or 8 MB |

### Video Resolutions Mode

| Resolution | Refresh Rate | |
|---|---|---|
| | CRT Only | LCD/CRT Simultaneous |
| 640x480x256 | 85 | 60 |
| 640x480x64K | 85 | 60 |
| 640x480x16M | 85 | 60 |
| 800x600x256 | 85 | 60 |
| 800X600X64K | 85 | 60 |
| 1024x768x256 | 60, 75 | 60 |

### USB Port

| Item | Specification |
|---|---|
| USB Compliancy Level | 1.0 |
| OHCI | USB 1.0 |
| Number of USB port | 2 |
| Location | Rear side |
| Serial port function control | Enable/Disable by BIOS Setup |

### IrDA Port

| Item | Specification |
|---|---|
| IrDA FIR port controller | Built in M1535 |
| Number of IrDA FIR port | 1 |
| Location | Front side |
| IrDA FIR port function control | Enable/disable by BIOS Setup |
| Optional IrDA FIR port<br>(in BIOS Setup) | 2F8h, 3F8h, 3E8h, 2E8h |
| Optional IrDA FIR port IRQ<br>(in BIOS Setup) | IRQ3, IRQ4, IRQ10, IRQ11 |
| Optional IrDA FIR port DRQ<br>(in BIOS Setup) | DRQ3, DRQ1, DRQ0 |

### PCMCIA Port

| Item | Specification |
|---|---|
| PCMCIA controller | O2 Micro OZ711 CardBus controller (Tarzan) |
| Supports card type | Type II/I |
| Number of slots | One for smart card (upper)<br>One type II/I (lower) |
| Access location | Left side |
| Supports ZV (Zoomed Video) port | Yes |
| Supports 32 bit CardBus | Yes |

### Keyboard

| Item | Specification |
|---|---|
| Keyboard controller | Mitsubishi M38867 |
| Keyboard vendor & model name | Darfon NSK-A3001 |
| Total number of keypads | 84/85/88-key |
| Windows 95 keys | Yes |
| Internal & external keyboard work simultaneously | Yes |

### Battery

| Item | Specification |
|---|---|
| Vendor & model name | Sanyo 3UF103450P-2 |
| Battery Type | Li-ion |
| Pack capacity | 1650 mA |

### Battery

| Item | Specification |
|---|---|
| Cell voltage | 3.6V |
| Number of battery cell | 6 |
| Package configuration | 3S-2P |
| Package voltage | 11V |

### DC-AC LCD Inverter

| Item | Specification |
|---|---|
| Vendor & model name | Ambit T62I174.00 & Sumida IV003 (IV15090/T) |
| Input voltage (V) | +5V |
| Input current (mA) | 200mA max |
| Output voltage (Vrms, no load) | 1300Vrms |
| Output voltage frequency (kHz) | 60K-65K Hz |
| Output Current/Lamp | 6.0 mA max |

**NOTE:** DC-AC inverter is used to generate very high AC voltage, then support to LCD CCFT backlight user, and is also responsible for the control of LCD brightness. Avoid touching the DC-AC inverter area while the system unit is turned on.

**NOTE:** There is an EEPROM in the inverter, which stores its supported LCD type and ID code. If you replace a new inverter or replace the LCD with a different brand, use Inverter ID utility to update the ID information.

### LCD

| Item | Specification |
|---|---|
| Vendor & model name | LG LP133X8 |
| Mechanical Specifications | |
| LCD display area (diagonal, inch) | 13.3 |
| Display technology | TFT |
| Resolution | XGA, 1024x768 |
| Supports colors | 262K |
| Optical Specification | |
| Brightness control | keyboard hotkey |
| Contrast control | No |
| Electrical Specification | |
| Supply voltage for LCD display (V) | 3.3 |
| Supply voltage for LCD backlight (Vrms) | 630 |

### AC Adapter

| Item | Specification | |
|---|---|---|
| Vendor & model name | Lite-On PA-1600-02 | Delta ADP-60DB |
| Input Requirements | | |
| Maximum input current (A, @90Vac, full load) | 1.5 A @ 90Vac<br>0.9 A @ 180Vac | 1.5 A @ 90Vac<br>0.9 A @ 180Vac |
| Nominal frequency (Hz) | 47 - 63 | 47 - 63 |

### AC Adapter

| Item | Specification | |
|---|---|---|
| Frequency variation range (Hz) | 47 - 63 | 47 - 63 |
| Nominal voltages (V) | 90 - 264 | 90 - 264 |
| Inrush current | The maximum inrush current will be less than 50A and 100A when the adapter is connected to 115Vac(60Hz) and 230Vac(50Hz) respectively. | The maximum inrush current will be less than 50A and 100A when the adapter is connected to 115Vac(60Hz) and 230Vac(50Hz) respectively. |
| Efficiency | It should provide an efficiency of 83% minimum, when measured at maximum load under 115V(60Hz). | It should provide an efficiency of 83% minimum, when measured at maximum load under 115V(60Hz). |
| Output Ratings (CV mode) | | |
| DC output voltage | 19 +0.6/-0 V | 19 +0.6/-0 V |
| Noise + Ripple | 300m Vp-p max (20MHz bandwidth) | 300m Vp-p max (20MHz bandwidth) |
| Load | 0 A (min.) 3.16 A (max.) | 0 A (min.) 3.16 A (max.) |
| Output Ratings (CC mode) | | |
| DC output voltage | +12V ~ +19V | +12V ~ +19V |
| Constant output | 2.75 ± 0.2 A | 2.75 ± 0.2 A |
| Dynamic Output Characteristics | | |
| Turn-on delay time | 2 sec. (@115Vac) | 2 sec. (@115Vac) |
| Hold up time | 4 ms min. (@115 Vac input, full load) | 4 ms min. (@115 Vac input, full load) |
| Over Voltage Protection (OVP) | 24 V | 24 V |
| Short circuit protection | Output can be shorted without damage | Output can be shorted without damage |
| Electrostatic discharge (ESD) | 15kV (at air discharge)<br>8kV (at contact discharge) | 15kV (at air discharge)<br>8kV (at contact discharge) |
| Dielectric Withstand Voltage | | |
| Primary to secondary | 1500 Vac (or 2121 Vdc), 10 mA for 1 second | 1500 Vac (or 2121 Vdc), 10 mA for 1 second |
| Leakage current | 0.25 mA max. (@ 254 Vac, 60Hz) | 0.25 mA max. (@ 254 Vac, 60Hz) |
| Regulatory Requirements | Internal filter meets:<br>1. FCC class B requirements. (USA)<br>2. VDE 243/1991 class B requirements. (German<br>3. CISPR 22 Class B requirements. (Scandinavia)<br>4. VCCI class II requirements. (Japan) | Internal filter meets:<br>1. FCC class B requirements. (USA)<br>2. VDE 243/1991 class B requirements. (German<br>3. CISPR 22 Class B requirements. (Scandinavia)<br>4. VCCI class II requirements. (Japan) |

### Power Management

| Power Saving Mode | Phenomenon |
|---|---|
| **Standby Mode**<br>❑ Waiting time specified by the System Standby value or the operating system elapses without any system activity.<br>❑ Closing the display cover<br>❑ When the computer is about to enter Hibernation mode (e.g., during a battery-low condition), but the Hibernation file is invalid or not present.<br>❑ When customized functions for power management are set to Standby and the corresponding action is taken.<br>❑ Invoked by the operating system power-saving modes. | ❑ The buzzer beeps<br>❑ The Sleep indicator lights up |
| **Hibernation Mode**<br>❑ When customized functions for power management are set to Hibernation and the corresponding action is taken.<br>❑ Invoked by the operating system power-saving modes. | ❑ All power shuts off |
| **Display Standby Mode**<br>Keyboard, built-in touchpad, and an external PS/2 pointing device are idle for a specified period. | ❑ The display shuts off |
| **Hard Disk Standby Mode**<br>Hard disk is idle within a specified period of time. | ❑ Hard disk drive is in standby mode. (spindle turned off) |

### Environmental Requirements

| Item | Specification |
|---|---|
| **Temperature** | |
| Operating | +5 ~ +35°C |
| Non-operating | -10 ~ +60°C |
| Non-operating | -20 ~ +60°C (storage package) |
| **Humidity** | |
| Operating | 20% ~ 80% RH, non-condensing |
| Non-operating | 20% ~ 90% RH, non-condensing (Unpacked) |
| Non-operating | 20% ~ 90% RH, non-condensing (storage package) |
| **Vibration** | |
| Operating (unpacked) | 5 ~ 25.6 Hz: 0.38mm (peak to peak)<br>25.6 ~ 250 Hz: 0.5G |
| Non-operating (unpacked) | 5 ~ 27.1 Hz: 0.6G<br>27.1 Hz ~ 50 Hz: 0.4mm (peak to peak)<br>50 ~ 500 Hz: 2.0G |
| Non-operating (packed) | 5 ~ 62.6 Hz: 0.51mm (peak to peak)<br>62.6 Hz ~ 500 Hz: 4G |

### Mechanical Specifications

| Item | Specification |
|---|---|
| Dimensions | 289mm (W) x 219mm (D) x 23mm (H) |
| Weight | 1.816 kg (4 lbs) (including battery) |
| I/O Ports | One type II/I PCMCIA (PC card) port, one Smart Card port, one IEEE 1394 port, one EasyLink Combo Drive connector, one RJ11 port, one RJ-45 port, one DC-in port, one infrared (FIR) port, two USB ports, one external display port, one PS/2 keyboard/mouse port, one line-out jack, one line-in jack, one expansion port |
| Drive Bays | One |
| Material | LCD Panel & Lower Case: Meg-Alloy<br>Others of Housing: Plastic |
| Indicators | Wireless Communication LED, Power LED, Sleep LED, Media Activity LED, Battery Charge LED, Caps Lock LED, Num Lock LED |
| Switch | Power |

### Memory Address Map

| Memory Address | Size | Function |
|---|---|---|
| 00000000-0009FFFF | 640 KB | Base memory |
| 000A0000-000BFFFF | 128 KB | Video memory |
| 000C0000-000C9FFF | 40 KB | Video BIOS |
| 000CA000-000CBFFF | 8 KB | I/O ROM |
| 000E0000-000FFFFF | 128 KB | System BIOS |
| 00100000-top limited | -- | Extended (DIMM) memory |
| 04301000-04301FFF | 4 KB | PCMCIA controller (slot 1) |
| 04302000-04302FFF | 4 KB | PCMCIA controller (slot 2) |
| 0430000-04300FFFF | 64 KB | USB controller |

### I/O Address Map

| I/O Address | Function |
|---|---|
| 000-00F | DMA controller-1 |
| 020-021 | Interrupt controller-1 |
| 040-043 | Timer 1 |
| 060, 064 | Keyboard controller 8742 chip select |
| 061, 066 | System speaker, ACPI embedded controller |
| 040B | DMA controller-1 |
| 061 | System speaker |
| 070-073 | System CMOS/real-time clock |
| 080-08F | DMA page register |
| 0A0-0A1 | Interrupt controller-2 |
| 0C0-0DF | DMA controller-2 |
| 0F0-0FF | Numeric data processor |
| 104-10B | Lucent tech. soft modem AMR |
| 120-13F<br>180-18F | Power management controller |
| 170-177 | 2nd EIDE device (CD-ROM) select |
| 1F0-1F7 | 1st EIDE device (hard drive) select |

### I/O Address Map

| I/O Address | Function |
|---|---|
| 220-22F | Audio |
| 240-24F | Audio (optional) |
| 278-27F | Parallel port 3 |
| 2E8-2EF | COM4 |
| 2F8-2FF | COM2 or FIR (optional) |
| 376, 3F6 | ALi M5229 PCI BusMaster IDE controller |
| 3BC-3BF | Parallel port 1 |
| 3B0-3BB<br>3C0-3DF | Video Controller |
| 3F0h-3F7 | Standard Floppy Disk Controller |
| 3E8-3EF | ALi fast IR controller |
| 3F0-3F5, 3F7 | Floppy disk controller |
| 3F8-3FF | COM1 |
| 480-48F, 4D6 | DMA controller-1 |
| 4D0-4D1<br>CF8-CFF | PCI configuration register |

### IRQ Assignment Map

| Interrupt Channel | Function |
|---|---|
| IRQ0 | System timer |
| IRQ1 | Standard 101/102-key or Microsoft natural keyboard. |
| IRQ2 | Programmable Interrupt Controller |
| IRQ3 | IrDA Fast Interrupt Port |
| IRQ4 | COM1 |
| IRQ5 | Reserve |
| IRQ6 | Floppy Disk Controller |
| IRQ7 | Printer Port (LPT1) |
| IRQ8 | System CMOS/real time clock |
| IRQ9 | SCI IRQ used by ACPI bus |
| IRQ10 | ALi audio accelerator WDM driver<br>Lucent Technologies SoftModem AMR<br>1394 host controller |
| IRQ11 | PCMCIA CardBus Controller<br>O2Micro Smart CardBus reader<br>Trident CyberBlade Ai1 AGP<br>ALi PCI to USB Open Host Controller |
| IRQ12 | PS2 pointing device |
| IRQ13 | Numeric data processor |
| IRQ14 | 1st EIDE device |
| IRQ15 | 2nd EIDE device |

### DMA Channel Assignment

| DMA Channel | Function |
|---|---|
| DRQ0 | Not Used |
| DRQ1 | Not Used |
| DRQ2 | Floppy Disk Controller |

### DMA Channel Assignment

| DMA Channel | Function |
|---|---|
| DRQ3 | IrDA Fast Infrared Port |
| DRQ4 | Direct memory access controller |
| DRQ5 | Not Used |
| DRQ6 | Not Used |
| DRQ7 | Not Used |

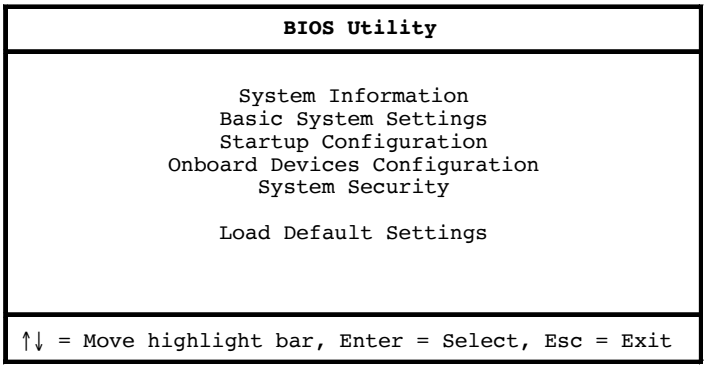
# System Utilities

## BIOS Setup Utility

The BIOS Setup Utility is a hardware configuration program built into your computer's BIOS (Basic Input/ Output System).

Your computer is already properly configured and optimized, and you do not need to run this utility. However, if you encounter configuration problems, you may need to run Setup. Please also refer to Chapter 4 Troubleshooting when problem arises.

To activate the BIOS Utility, press **F2** during POST (while the TravelMate logo is being displayed).



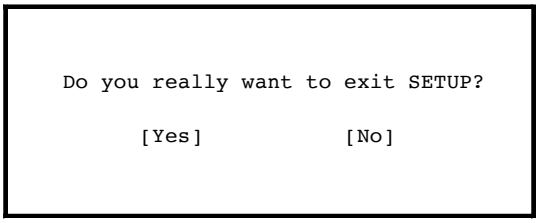

### Navigating the BIOS Utility

There are six menu options. Use the cursor up/down keys to select a menu item, then press Enter. After you enter a sub-menu, you can:

- Use the **cursor up/down** keys to move between the parameters.
- Use the **cursor left/right** keys to change the value of a parameter.

  You can change the value of a parameter if it is enclosed in square brackets.
- Press **Esc** to exit the current sub-menu.

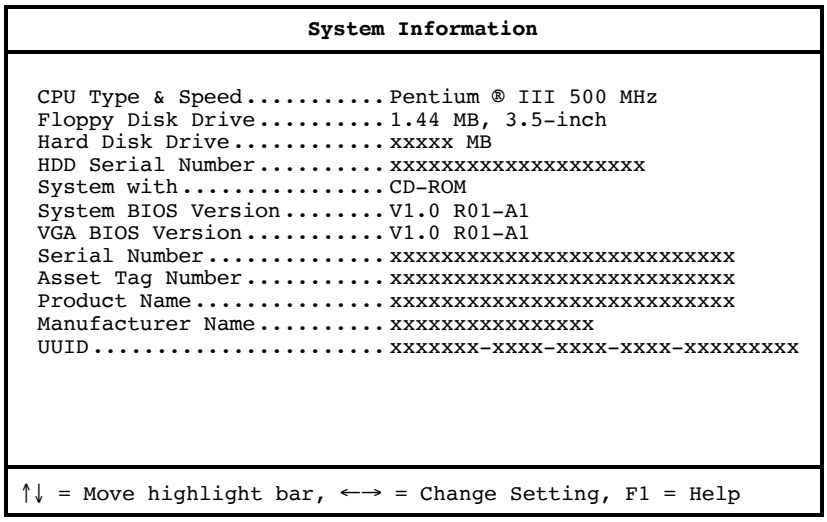
At the main menu, press **Esc** to exit the BIOS Utility. If you make any changes, the following dialog box displays:




If you would like to keep the changes you made, use the cursor left/right keys to select **Yes**; then press **Enter**. Choose **No** if you want to discard the changes you made.

## System Information

The System Information sub-menu displays basic and important information about your computer.




**NOTE:** The screen above is a sample and may not reflect the actual data on your computer. "X" may refer to a series of numbers and/or characters.

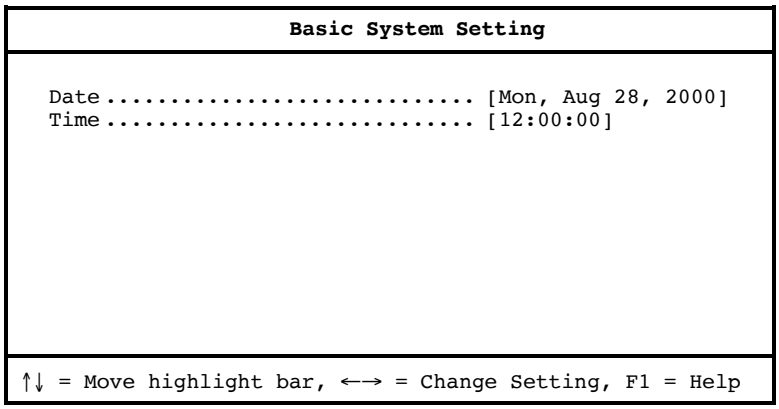
The following table describes the information in this sub-menu.

| Parameter | Description |
|---|---|
| CPU Type & Speed | Shows the type and speed in Megahertz of the Central Processing Unit (CPU) |
| Floppy Disk Drive | Shows the floppy disk drive type. |
| Hard Disk Drive | Shows the size or capacity of the hard disk. |
| HDD Serial Number | Shows the serial number of the hard disk |
| System with | Shows the drive type installed in the AcerMedia Bay. |
| System BIOS Version | Shows the version number of the BIOS. |
| VGA BIOS Version | Shows the version number of the VGA display BIOS. |
| Serial Number | Shows the serial number of the computer. |
| Asset Tag Number | Shows the asset tag number of the computer. |
| Product Name | Shows the product name of the computer. |
| Manufacturer Name | Shows the manufacturer of the computer |
| UUID | Shows the universally unique identifier of your computer |

The items in this sub-menu are important and vital information about your computer. If you experience computer problems and need to contact technical support, this data helps our service personnel know more about your computer.

## Basic System Settings

The Basic System Settings sub-menu allows you to set the system date and time.

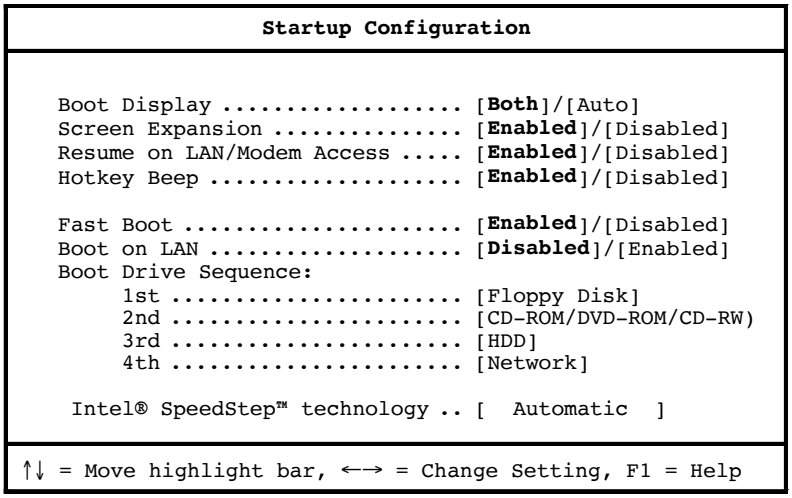



The following table describes the parameters in this sub-menu.

| Parameter | Description | Format |
|---|---|---|
| Date | Sets the system date. | DDD MMM DD, YYYY<br>(day-of-the-week month day, year) |
| Time | Sets the system time. | HH:MM:SS (hour:minute:second) |

## Startup Configuration

The Startup Configuration sub-menu contains parameter values that define how your computer behaves on system startup.



The following table describes the parameters in this sub-menu. Settings in **boldface** are the default and suggested parameter settings.

| Parameter | Description | Options |
|---|---|---|
| Boot Display | Sets the display on boot-up.<br>When set to **Auto**, the computer automatically determines the display device when the computer starts up. If an external display device (e.g., monitor) is connected, it becomes the boot display; otherwise, the computer LCD is the boot display. When set to **Both**, the computer outputs to both the computer LCD and an external display device if one is connected. | **Both** or Auto |
| Screen Expansion | Enables or disables the screen expansion feature. When enabled, DOS screens expand to fill the LCD. | **Enabled** or Disabled |
| Resume on LAN/Modem Access | When enabled, allows your computer to resume when LAN/Modem access is active | **Enabled** or Disabled |
| Hotkey Beep | Enables or disables a system beep when a hotkey or key combination is pressed. | **Enabled** or Disabled |
| Fast Boot | Fast Boot allows your computer to boot up and resume from Sleep mode (including Standby and Hibernation modes) faster. When enabled, the operating system and BIOS communicate information about Plug-and-Play resources and previous boot-ups. | **Enabled** or Disabled |
| Boot on LAN | When enabled, allows your computer to boot by other computer or server through the LAN. And the LANDesk (R) Service Agent in Boot Drive Sequence item will be enabled. | **Disabled** or Enabled |
| Boot Drive Sequence | Specifies the order in which the computer starts up from. See the section below. | 1st: Floppy Disk,<br>2nd: CD-ROM/DVD-ROM/ CD-RW,<br>3rd: HDD<br>4th: LANDesk (R) Service Agent |
| Intel(R) SpeedStep(TM) technology | Intel SpeedStep technology allows your computer to automatically adjust the CPU speed depending on the power source. If set to Automatic, system will adjust the processor speed by OS. f the power source is supplied by AC adapter, processor will run at the maximum speed. If the power source is supplied by battery, processor will run at the minimum speed. | **Automatic**<br>Maximum Performance<br>Battery Optimized<br>Reversed |

### Setting the Boot Drive Sequence

The Boot Drive Sequence section lists boot priorities (1st, 2nd, 3rd and 4th) for bootable drives in your computer.

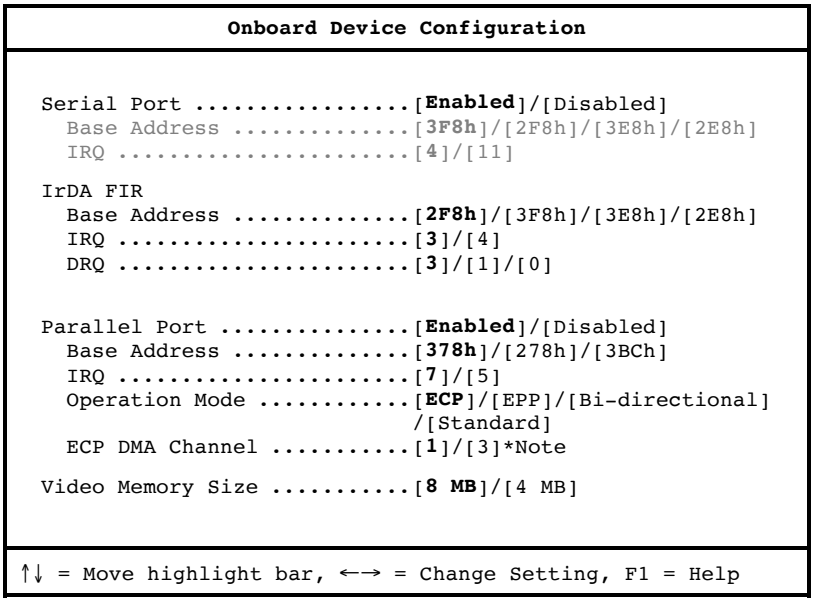
For example, the default value (1st:Floppy Disk, 2nd:CD-ROM, 3rd:HDD and 4th:LANDesk (R) Service Agent) tells the computer to first search for a bootable floppy disk in the floppy drive. If it finds one present, it boots up from that floppy disk. If not, the computer continues to search for a bootable CD-ROM in the CD-ROM drive. If it cannot boot up from the CD-ROM, it continues by booting up from the Hard Disk.

To set the boot drive sequence, use the **cursor up/down keys** to select a priority level (1st, 2nd, 3rd or 4th); then use the **cursor left/right** keys to select the device for that priority level.

## Onboard Devices Configuration

The parameters in this screen are for advanced users only. You do not need to change the values in this screen because these values are already optimized.

The Onboard Devices Configuration sub-menu assigns resources to basic computer communication hardware.




**NOTE:** 1. This option item should be [---] if user chooses Bi-directional and Standard Mode.
2. When the device is disabled, all the sub-items will be showed with [---].

The following table describes the parameters in this sub-menu. Settings in **boldface** are the default and suggested parameter settings.

| Parameter | Description | Options |
|---|---|---|
| Serial Port | Enables or disables the serial port.<br>When enabled, you can set the base I/O address and interrupt request (IRQ) of the serial port. | **Enabled** or Disabled<br>**3F8h**, 3E8h, 2F8h or 2E8h<br>**4** or 11 |
| IrDA FIR | Allow you to set the base I/O address, Interrupt request (IRQ) and Direct Memory Access (DMA) of IrDA FIR port. | **2F8h**, 3F8h, 3E8h, 2E8h<br>**3** or 4<br>**3**, 1 or 0 |
| Parallel Port | Enables or disables the parallel port.<br>When enabled, you can set the base I/O address, interrupt request (IRQ) and operation mode of the parallel port.<br>If operation mode is set to ECP, the direct memory access (DMA) channel of the parallel port is set to 1. | **Enabled** or Disabled<br>**378h**, 278h, or 3BCh<br>**7** or 5<br>**ECP**, EPP, Standard, or Bi-directional<br>**1** |
| Video Memory Size | Allow you to set the video memory size that share with system memory. | **8 MB**<br>4 MB |

## System Security

The System Security sub-menu allows you to safeguard your computer and data with passwords and other security measures.

```
                    System Security

  Setup Password ..................... [None]/[Present]
  Power-On Password .................. [None]/[Present]
  Hard Disk Password ................. [None]/[Present]
  Processor Serial Number ............ [Enabled]/[Disabled]

↑↓ = Move highlight bar, ←→ = Change Setting, F1 = Help
```

The following table describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

| Parameter | Description | Options |
|---|---|---|
| Setup Password | When set, this password protects the computer and this BIOS Utility from unauthorized entry. See the following section for instructions on how to set a password. | **None** or Present |
| Power-on Password | When set, this password protects the computer from unauthorized entry. See the following section for instructions on how to set a password. | **None** or Present |
| Hard Disk Password | When set, this password protects the hard disk from unauthorized access. See the following section for instructions on how to set a password. | **None** or Present |
| Processor Serial Number | The Pentium III processor includes a unique serial number which allows individual CPUs to be identified. You can turn off this feature by setting this parameter to Disabled. | **Enabled** or Disabled |

### Setting a Password

Follow these steps:

1. Use the cursor up/down keys to highlight a Password parameter (Setup, Power-on or Hard Disk) and press the **Enter** key. The password box appears:
2. Type a password. The password may consist of up to seven characters (A-Z, a-z, 0-9).

**IMPORTANT:** Be very careful when typing your password because the characters do not appear on the screen.

3. Press **Enter**. Retype the password to verify your first entry and press **Enter**.

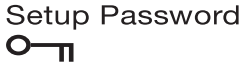
After setting the password, the computer automatically sets the chosen password parameter to Present.

Three password types protect your computer from unauthorized access. Setting these passwords creates several different levels of protection for your computer and data:

- ❑ Setup Password prevents unauthorized entry to the BIOS Utility. Once set, you must key-in this password to gain access to the BIOS Utility.
- ❑ Power-On Password secures your computer against unauthorized use. Combine the use of this password with password checkpoints on boot-up and resume from hibernation for maximum security.
- ❑ Hard Disk Password protects your data by preventing unauthorized access to your hard disk. Even if the hard disk is removed from the computer and moved to another computer, it cannot be accessed without the Hard Disk Password.

When a password is set, a password prompt appears on the left-hand corner of the display screen.

**1.** When the Setup Password is set, the following prompt appears when you press **F2** to enter the BIOS Utility at boot-up.




Type the Setup Password and press **Enter** to access the BIOS Utility.

**2.** When the Power-on Password is set, the following prompt appears at boot-up.

Type the Power-on Password (a symbol appears for each character you type) and press **Enter** to use the computer. If you enter the password incorrectly, an **x** symbol appears. Try again and press **Enter**.

**3.** When the Hard Disk Password is set, the following prompt appears at boot-up.

Type the Hard Disk Password (a symbol appears for each character you type) and press **Enter** to use the computer. If you enter the password incorrectly, an **x** symbol appears. Try again and press **Enter**.

You have three chances to enter a password. If you successfully entered the password, the following symbol appears.

If you fail to enter the password correctly after three tries, the following message or symbol appears.

**Setup**

Incorrect password specified. System disabled.

**Power-on/Hard Disk**

## Removing a Password

Should you decide to remove a password, do the following:

**1.** Use the cursor **up/down** (↑↓) keys to highlight a Password parameter (Setup, Power-on or Hard Disk).

**2.** Use the cursor **left**/**right** (→←) key to remove the password.

**NOTE:** When you want to remove the Hard Disk password, you are prompted for the Hard Disk password before it is removed.

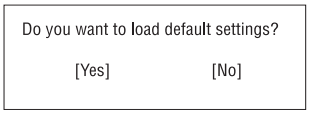
### Changing a Password

To change a password, follow these steps:

- ❑ Remove the current password. See “Removing a Password” on page 35.
- ❑ Set a new password. See “Setting a Password” on page 34.

## Loading Default Settings

If you want to restore all parameter settings to their default values, select this menu item and press **Enter**. The following dialog box displays.




If you would like to load default settings for all parameters, use the cursor **left/right** (→←) keys to select **Yes**; then press **Enter**. Choose **No** if otherwise.

# BIOS Flash Utility

The BIOS flash memory update is required for the following conditions:

- New versions of system programs
- New features or options

Use the AFlash utility to update the system BIOS flash ROM.

**NOTE:** Do not install memory-related drivers (XMS, EMS, DPMI) when you use AFlash.

**NOTE:** This program contains a readme.txt file. This readme.txt file will introduce how to use AFlash utility.

## Executing Flash Program

**IMPORTANT:** If this diskette is not bootable, do the following actions before you use it:

1. Create a bootable disk.
2. Copy all AFlash files into this bootable diskette.
3. Put the bootable disk into TravelMate 350 series mobile, then re-boot.

**IMPORTANT:** Never turn off the system power while Flash BIOS is programming. This will damage your system.

4. After Flash BIOS is done, reboot the system.

**NOTE:** If there are any problems occurred during BIOS update, see “Index of PQA Diagnostic Error Code, Message” on page 81 for troubleshooting.

# System Utility Diskette

This utility diskette is for the Acer TravelMate 350 notebook machine. It provides the following functions:

1. Panel ID Utility
2. Thermal & Fan Utility
3. Main Board Data Utility

To use this diskette, first boot from this diskette, then a “Microsoft Windows ME Startup Menu” prompt you to choose the testing item. Follow the instructions on screen to proceed.

**NOTE:** This program contains a readme.txt file. This readme.txt file will introduce each test utility and its functions.

**IMPORTANT:** If this diskette is not bootable, do the following actions before you use it:

1. Do system transfers. (Sys A:)
2. Copy HIMEM.SYS to A:\.
3. Copy RAMDRIVE.SYS to A:\.

## Panel ID Utility

There is an EEPROM in the inverter which stores its supported LCD type ID code. If you replace an LCD with one of a different brand or use a new inverter, the ID information in the inverter EEPROM should be updated.

Follow the steps below to see the LCD Panel ID:

1. Follow the instruction on screen to read current or to set new LCD Panel ID code.

**NOTE:** When you set a new LCD Panel ID and the new LCD is not yet enabled (to function), so connect an external CRT to see the program execution process.

**NOTE:** Make sure the new ID code you choose corresponds with the LCD brand and type. If you write a wrong ID into inverter, just reboot and re-execute the program and input the correct ID code.

2. Restart computer - the new LCD should work normally.

**NOTE:** If LCD cannot display after change ID code, make sure you write the correct ID code, or try reconnecting the LCD FPC cable connectors.

## Thermal and Fan Utility

The system is equipped with sensors to protect against system overheating. By setting System and processor thermal thresholds, the system can turn on the cooling fan or shut down automatically when temperatures reach the defined threshold parameters. This utility will test fan, processor thermal and system thermal.

## Main Board Data Utility

This utility will display Main Board Data (MBD) which include header information, product name, manufacturer name, UUID (Universally Unique IDentifiers) and serial number. This function can display and create MBD data as well as store those information to LCD inverter EEPROM (not flash ROM).

# System Diagnostic Diskette

**IMPORTANT:** [1]The diagnostics program here that we used is called PQA (Product Quality Assurance) and is provided by Acer Headquarters. You can utilize it as a basic diagnostic tool. To get this program, either download it from http://csd.acer.com.tw or find it in the TravelMate 350 service CD kit.
To better fit local service requirements, your regional office MAY have other diagnostic program. Please contact your regional offices or the responsible personnel/channel to provide you with further technical details.

**NOTE:** This program contains a readme.txt file. This readme.txt file will introduce each test and its functions.

This diagnostic program divided into two diskettes is for the Acer TravelMate 350 notebook machine. It provides the following functions:

**Disk 1:**

1. PQA System Diagnostics
2. Audio Resource and Speaker Out Test
3. USB Register and Connect/Disconnect Test
4. IR Test

**NOTE:** The Infrared Ray setting in BIOS Setup must be set to enable when executing the Infrared Ray Test.

5. Exit

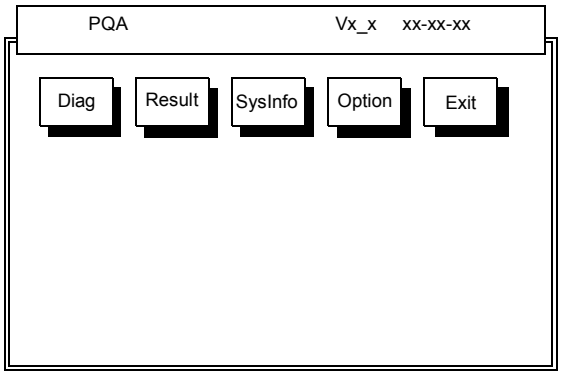
To use this diskette, first boot from this diskette, then a “Microsoft Windows ME Startup Menu” prompts you to choose the testing item. Follow the instructions on screen to proceed.

**IMPORTANT:**If this diskette is not bootable, do the following actions before you use it:

1. Do system transfers.
2. Copy the following files to A:\
   HIMEM.SYS
   MSCDEX.EXE
   CHOICE.COM
   RAMDRIVE.SYS

**NOTE:** When executing a parallel or serial port test in System Test item, a loopback tool is needed. This loopback is Acer proprietary design. You may reach the computerhwdoctor@acer.com.tw for ordering information.

## Running PQA Diagnostics Program

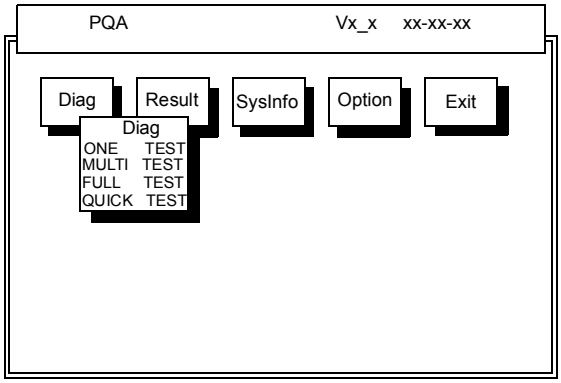



[1] New added description. Please pay attention to it.

Press →← to move around the main menu. Press Enter to enable the selected option. The main options are Diag, Result, SysInfo, Option and Exit.

The Diag option lets you select testing items and times.

The following screen appears when you select Diag from the main menu.



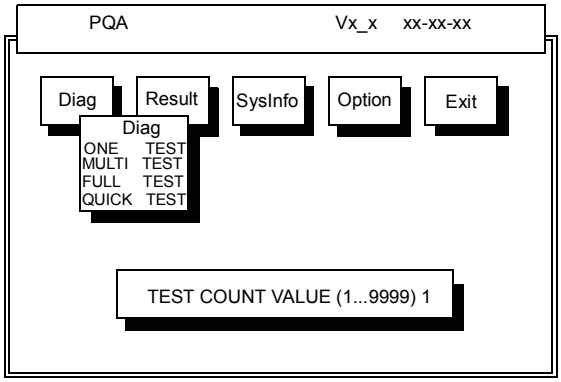

One Test performs a single test and Manual checks the selected test items in sequence.

Multi Test performs multiple tests of the selected items and check the selected test items in sequence.

Full Test performs all test items in detail for your system.

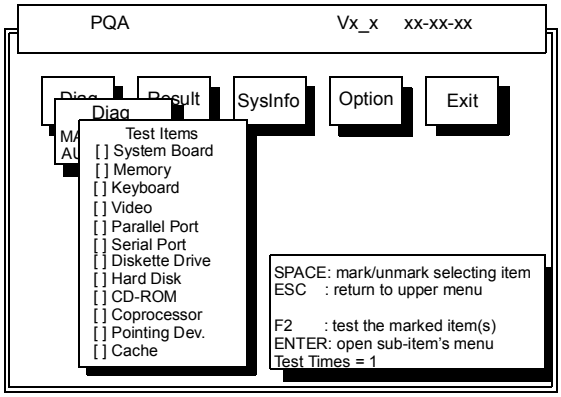
Quick Test performs all test items quickly for your system.

The screen below appears if you select Multi Test.




Specify the desired number of tests and press **Enter**.

After you specify the number of tests to perform, the screen shows a list of test items (see below).




Move the highlight bar from one item to another. Press Space to enable or disable the item. Press **Enter** to view the available options of each selected item. Press **Esc** to close the submenu.

The right corner screen information gives you the available function keys and the specified test number.

- ❑ Space: Enables/disables the item
- ❑ ESC: Exits the program
- ❑ F1: Help
- ❑ F2: Tests the selected item(s)
- ❑ Enter: Opens the available options
- ❑ Test Times: Indicates the number of tests to perform.

**NOTE:** The F1 and F2 keys function only after you finish configuring the Test option.

**NOTE:** When any errors are detected by diagnostic program, refer to "Index of PQA Diagnostic Error Code, Message" on page 81 for troubleshooting.

# Machine Disassembly and Replacement

This chapter contains step-by-step procedures on how to disassemble the notebook computer for maintenance and troubleshooting.

To disassemble the computer, you need the following tools:

- Wrist grounding strap and conductive mat to prevent electrostatic discharge
- Flat-bladed screwdriver
- Phillips screwdriver
- Hexagonal screwdriver
- Plastic stick

**NOTE:** The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatches when putting back the components.

# General Information

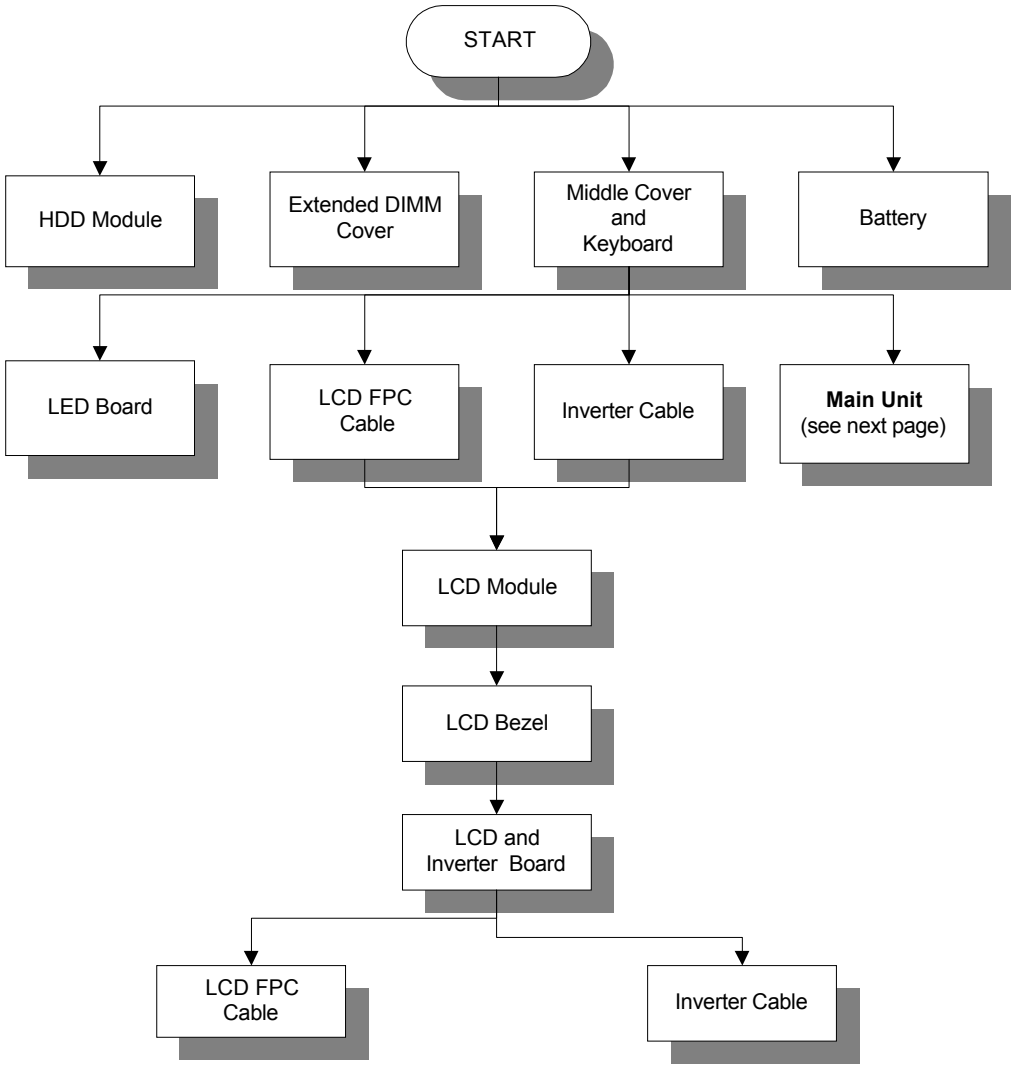
## Before You Begin

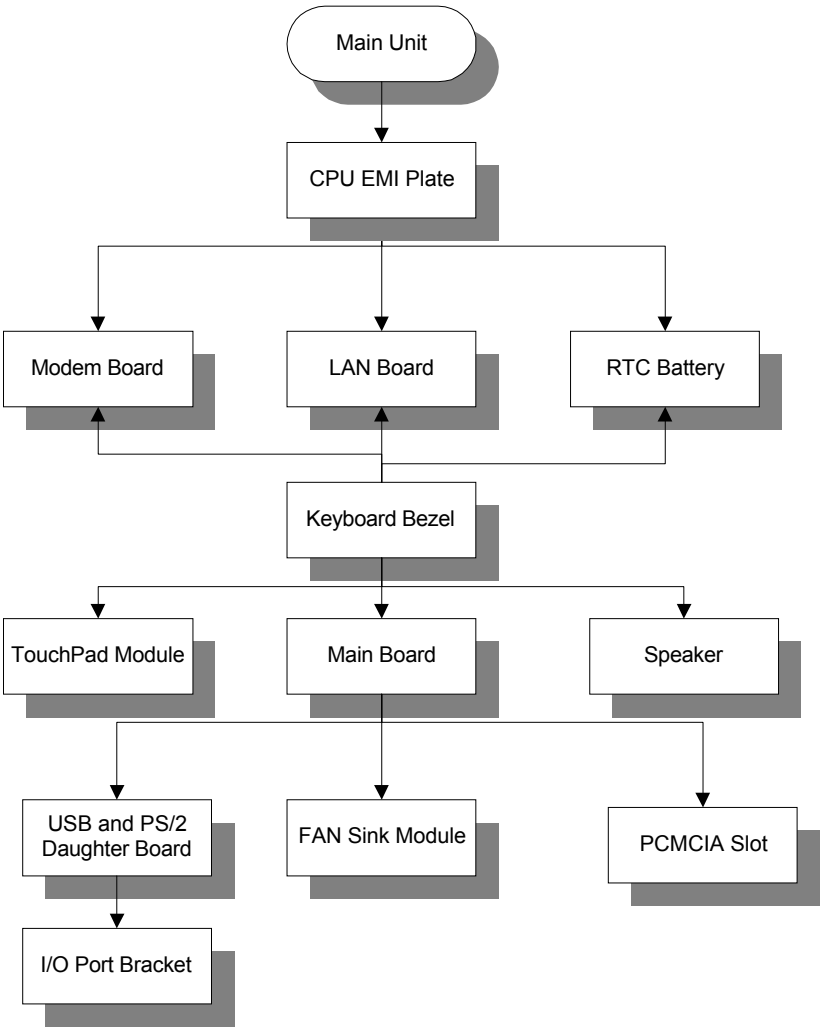
Before proceeding with the disassembly procedure, make sure that you do the following:

1. Turn off the power to the system and all peripherals.
2. Unplug the AC adapter and all power and signal cables from the system.

## Disassembly Procedure Flowchart

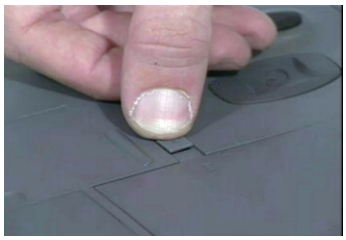
The flowchart on the succeeding page gives you a graphical representation on the entire disassembly sequence and instructs you on the components that need to be removed during servicing. For example, if you want to remove the system board, you must first remove the keyboard, then disassemble the inside assembly frame in that order.




Main Unit
CPU EMI Plate
Modem Board
LAN Board
RTC Battery
Keyboard Bezel
TouchPad Module
Main Board
Speaker
USB and PS/2 Daughter Board
FAN Sink Module
PCMCIA Slot
I/O Port Bracket

## Removing the Battery Pack

1. To remove the battery pack, push the battery release button inward.
2. Slide the battery pack out of the machine.

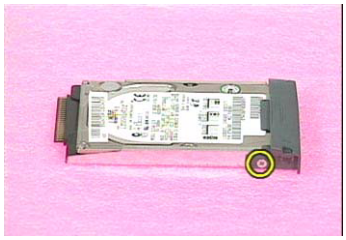


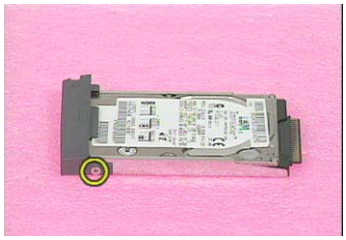
## Removing the Hard disk drive Module

1. To remove the hard disk drive, first remove the screw from the hard disk drive bezel.
2. Then carefully remove the hard disk drive module from the machine.

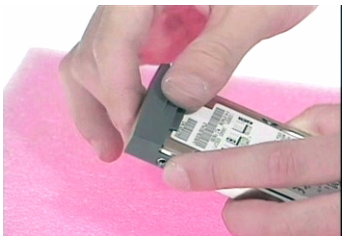
## Disassembling the Hard disk drive Module

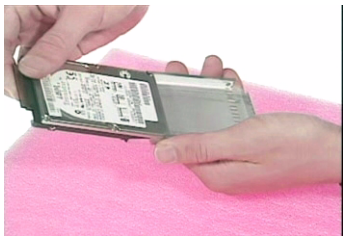
1. Remove the two screws from either side of the hard disk drive module.





2. Remove the hard disk drive bezel from the hard disk drive module.
3. Slide the hard disk drive out from the hard disk drive bracket.





4. Then disconnect the drive connector from the drive module.

## Removing the DVD-ROM and Floppy disk drive Module

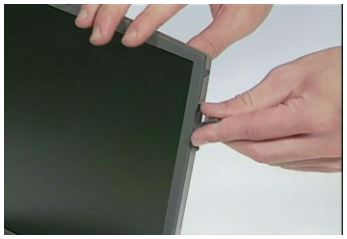
1. To remove the DVD-ROM and floppy disk drive module, first disconnect the DVD-ROM and floppy disk drive cable from the easylink combo drive bay.

2. Then close the easylink combo drive bay cover.

## Removing the Video Capture Kit

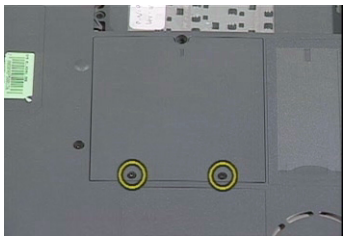
1. To remove the video capture kit, disconnect the video capture kit cable from the USB port on the rear of the unit.
2. Remove the video capture kit from the side of the LCD.

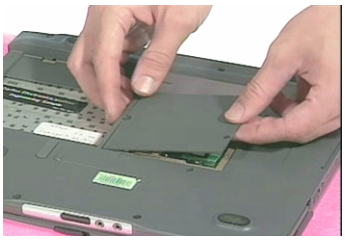
3. Then insert the rubber cover back into its position.



## Removing the Extended Memory

1. To remove the extended memory from the machine, first loosen two screws from the memory cover.
2. Then lift the cover off and remove it from the main unit.





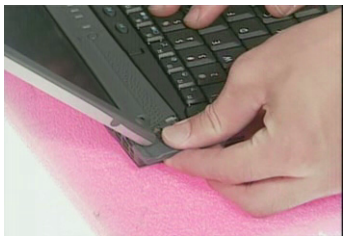
3. Push out the latches on both sides of the socket and pull the memory module from the socket.

# Disassembling the LCD

## Removing the Hinge Cap

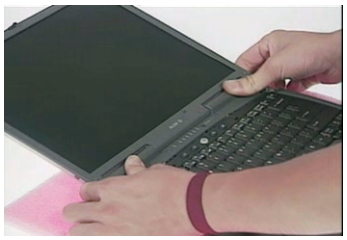
1. To avoid risk on LCD damage, place a protective mylar film on the LCD surface before disassembly.

2. Push the hinge cap outward, then slide the cap out from the main unit.

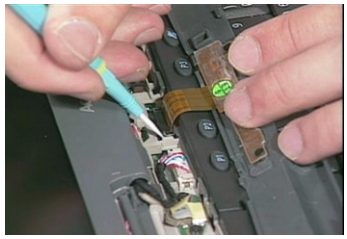


## Removing the Middle Cover

1. Push the middle cover backward and lift the middle cover away from the system.

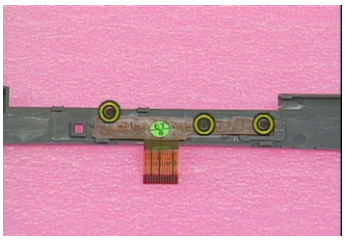


2. Disconnect the LED cable from the main board and remove the middle cover from the main unit.



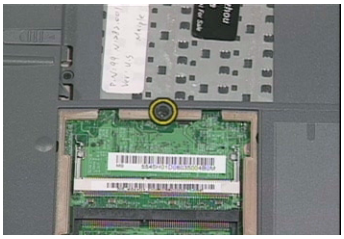
## Removing the LED Board

1. Remove the three screws on the middle cover and then remove the LED board from the middle cover.

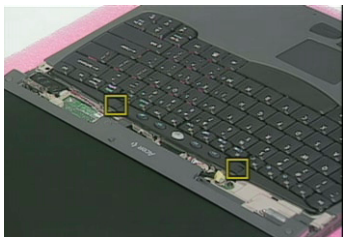


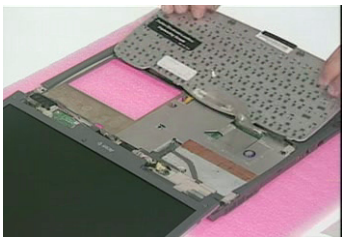
## Removing the Keyboard

1. To remove the keyboard, first remove the screw from the main unit.

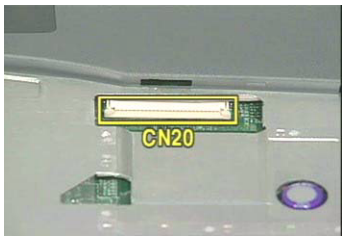


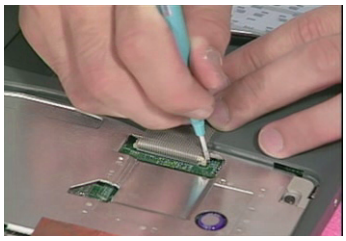
2. Pull the two latches downward to lift the keyboard upward and expose the keyboard.

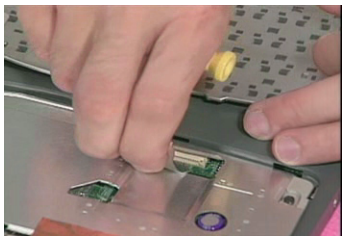




3. Disconnect the keyboard cable from the main board at CN20, then carefully remove the keyboard from the unit.

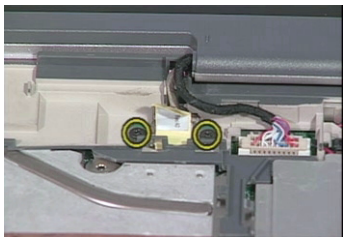
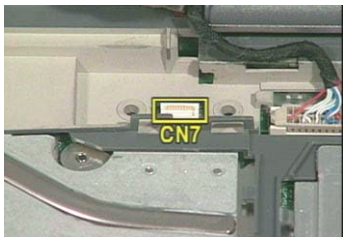


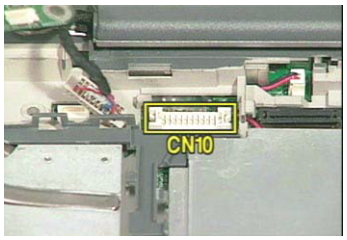


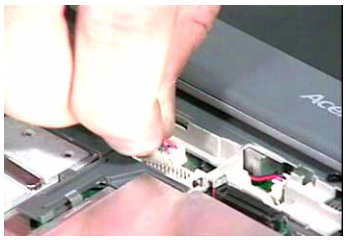
## Removing the Inverter Board

1. Remove the two screws from the LCD coaxial cable.
2. Disconnect the coaxial cable from the main board at CN7.

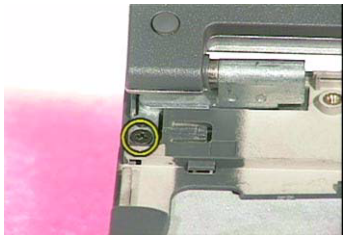
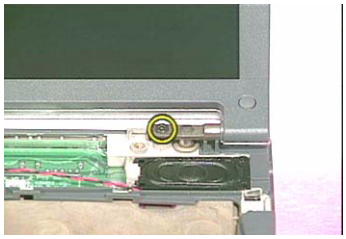



3. Disconnect the inverter cable from the main board at CN10.





4. Remove the four screws from the hinges and bottom of the unit as shown.

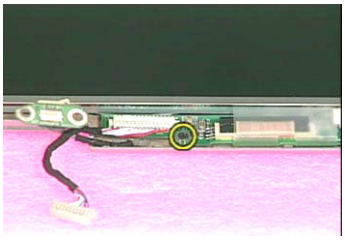
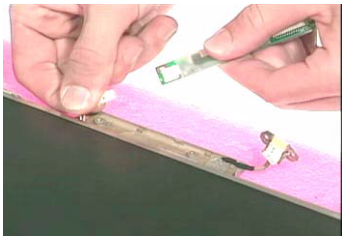
5. Then remove the LCD module from the main unit.

## Disassembling the LCD Module

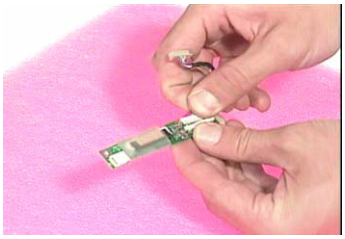
1. Remove the view capture kit rubber cover from each side of the LCD module.
2. Remove five LCD cushions and then five screws from the LCD bezel.


3. Snap off the LCD bezel carefully then remove the LCD bezel from the module.

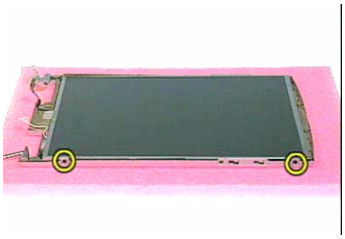

4. Remove the screw from the inverter.
5. Disconnect the LCD power cable from the inverter and then remove the inverter from the LCD module.

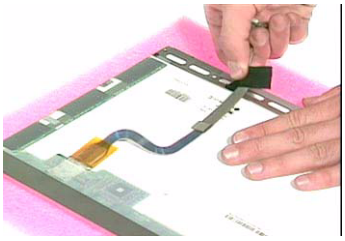
6. Disconnect the inverter cable from the inverter.



7. Remove four screws from both sides of the LCD.
8. Then remove the LCD from the LCD panel.

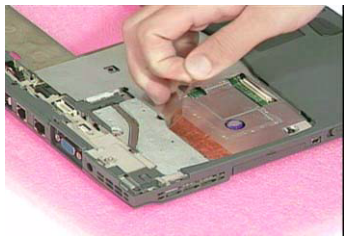
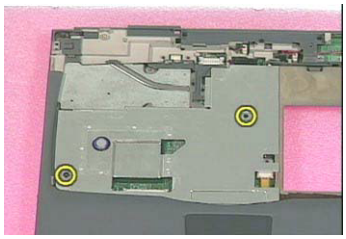

9. Remove the ESD tape and disconnect the LCD coaxial cable from the LCD gently.



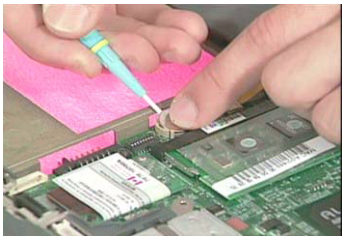

10. Then remove the two LCD hinges from the panel.


## Removing the LAN Board

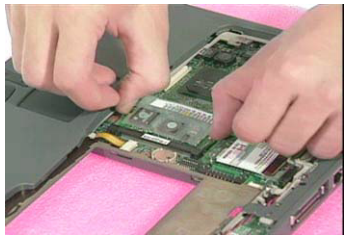
1. Remove the EMI mylar.
2. Loosen two screws from the CPU EMI plate.

3. Remove the CPU EMI plate from the main unit.
4. Use a flat screw driver to remove the RTC battery.

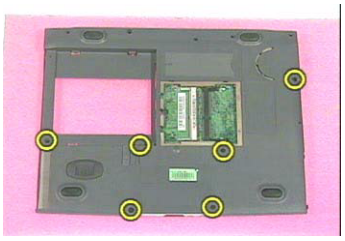
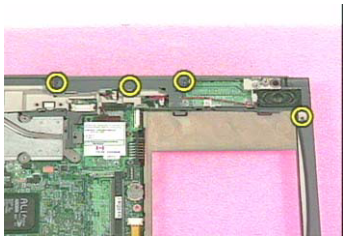



5. Push the latches on both sides of the socket and pull the LAN board out of the socket.

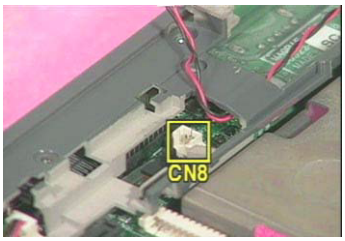


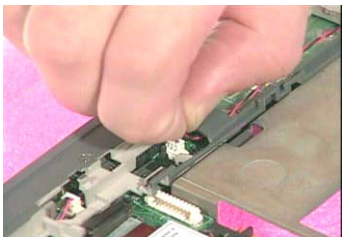

## Removing the Upper Case

1. To remove the upper case, first remove the six screws from the bottom of the main unit and four screws from the upper case as shown.

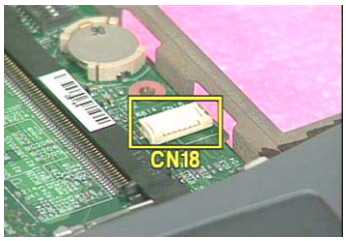



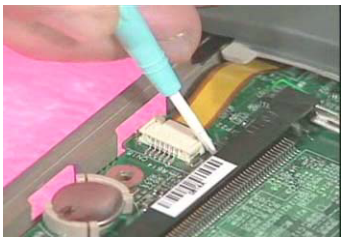
2. Disconnect the speaker cable from the main board at CN 8.



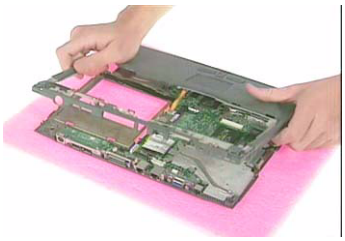


3. Disconnect the touchpad cable from the main board at CN18.

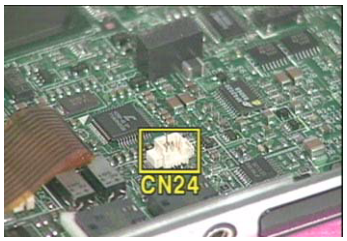


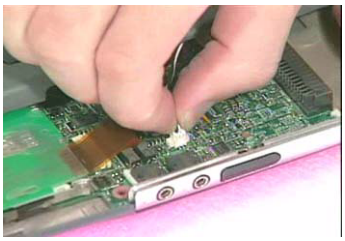


4. Then detach the upper case of the main unit carefully.



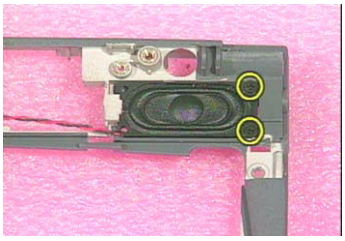
5. Disconnect the microphone cable from the main board at CN24.
6. Then remove the upper case from the main unit.





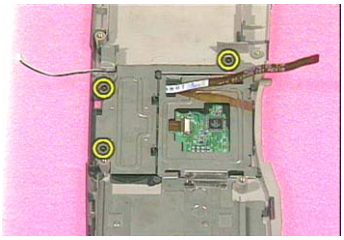
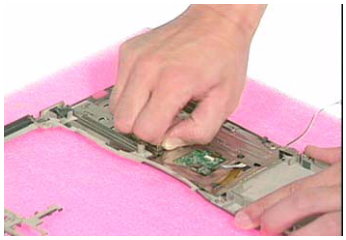
## Removing the Speaker

1. Remove the two screws from the speaker and then remove the speaker from the upper case.

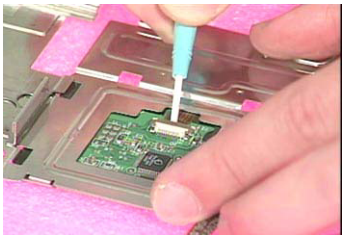
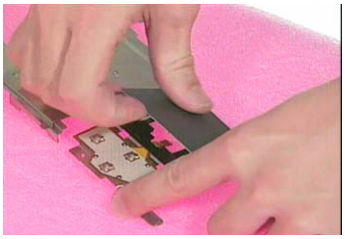



## Removing the Touchpad

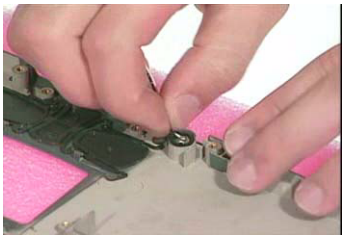
1. Remove the three screws from the touchpad support bracket then slide the bracket leftwards to detach it from the upper case.

2. Disconnect the touchpad cable from the touchpad, then remove the touchpad board from the bracket.

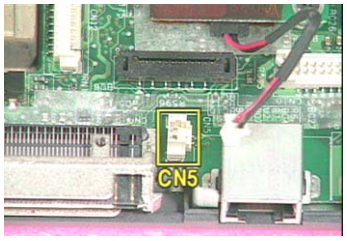



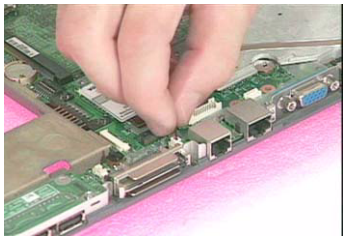
3. Remove the microphone from the upper case.



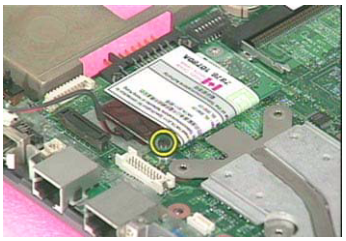
## Removing the Modem Board

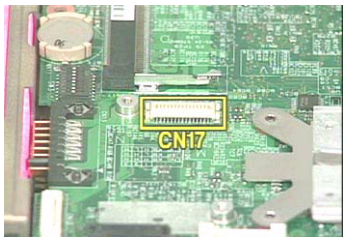
1. Disconnect the modem cable from the main board at CN5.

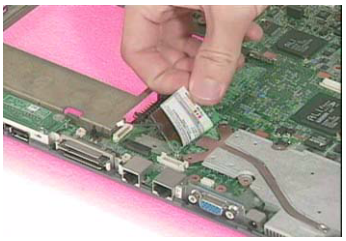


2. Remove the screw from the modem board and then remove the modem board from the main board at CN17.





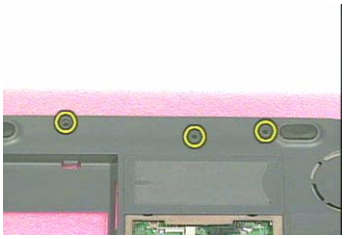



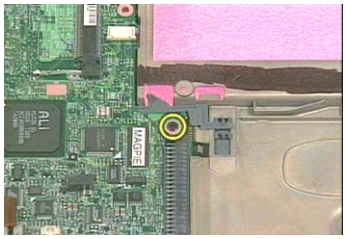
3. Remove the modem cable from the modem board.

# Removing the Lower Case

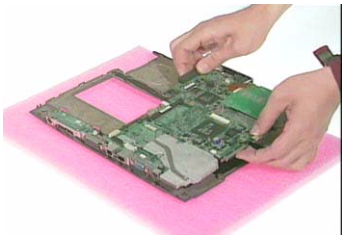
## Removing the Main board

1. Remove the three screws from the bottom of the unit and one screw from the main board.



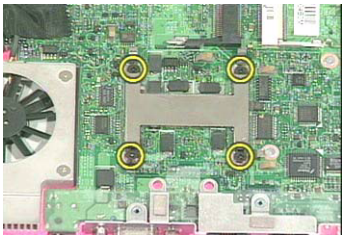


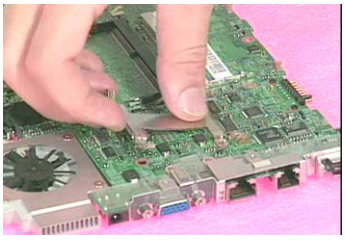
2. Remove the main board from the lower case.



## Removing the EMI Plate

1. Remove the four screws from the EMI plate.
2. Then remove the EMI plate from the main board.

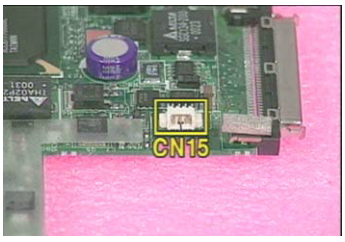


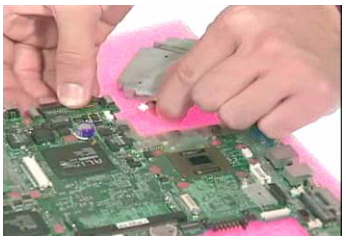


## Removing the Heatsink

1. Detach the ESD tape from the main board.

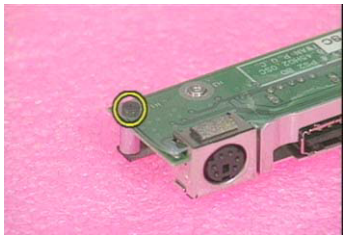
2. Lift up the heatsink and disconnect the fan cable from the main board at CN15.
3. Then remove the heatsink.

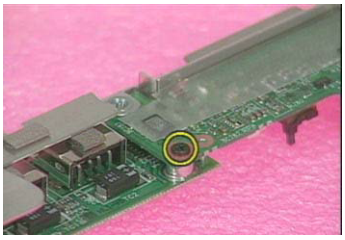


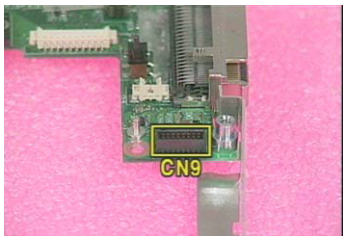
## Removing the Daughter and I/O board

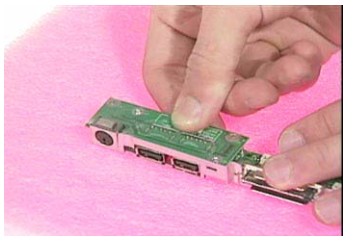
1. Remove the two screws from the USB daughter board.



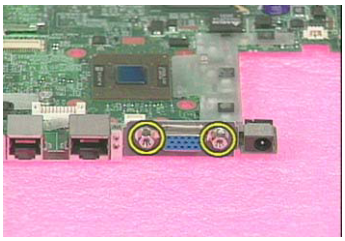
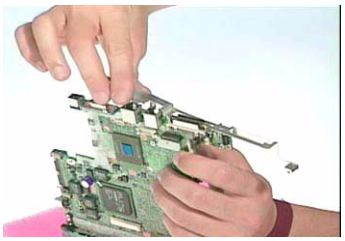
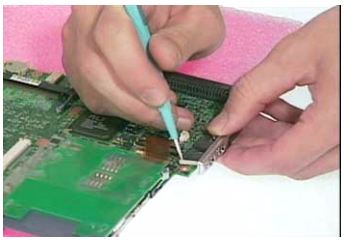


2. Then remove the USB daughter board from the main board at CN9.



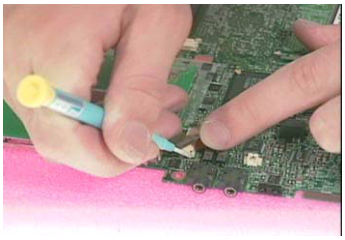



3. Remove the two hex screw from the I/O port bracket, then remove the I/O port bracket from the main board.
4. Detach the audio cover from the main board.

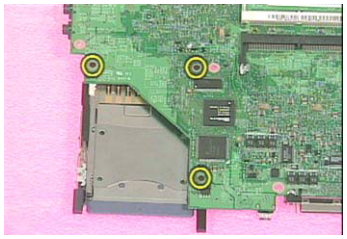
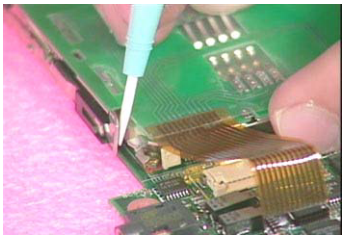




## Removing the PCMCIA Slot

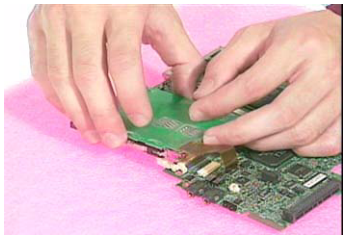
1. Disconnect the PCMCIA slot cable from the main board at CN23.



2. Loosen the three screws from the main board.
3. Detach the PCMCIA slot with a flat screw driver to loosen the latch.

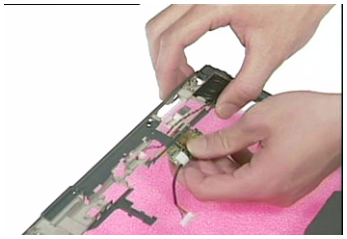
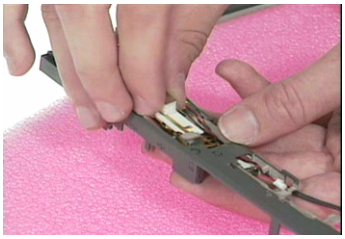
4. Then remove the PCMCIA slot from the main board.



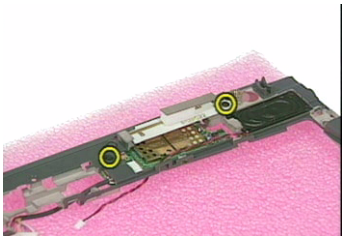
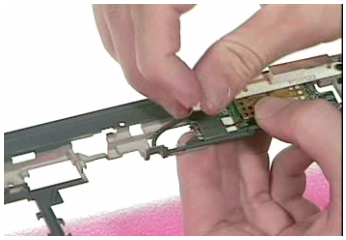
# System Upgrade Procedure

## Base Unit to Bluetooth Unit

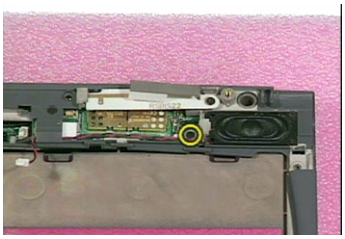
1. To upgrade system from Base Unit to Bluetooth Unit, first install the bluetooth module to the upper case.

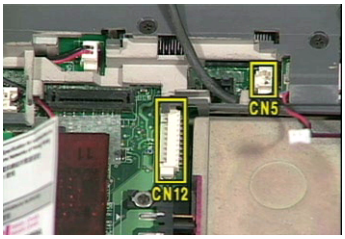
2. Then secure it with two screws and arrange the cable well.

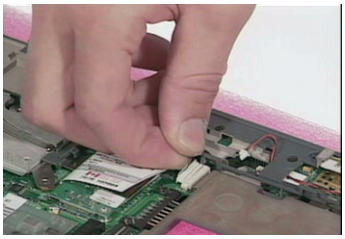
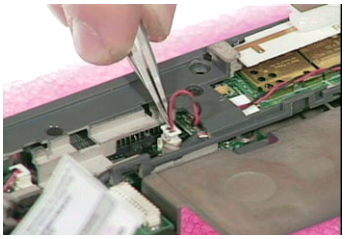



3. Re-attach the upper case back into the main unit and secure with one screw.

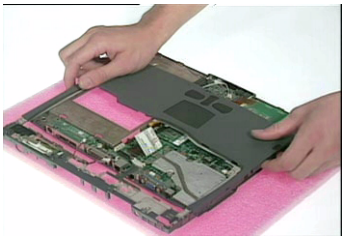
4. Re-connect the bluetooth and speaker cables back into the main board at CN12 and CN5 respectively.



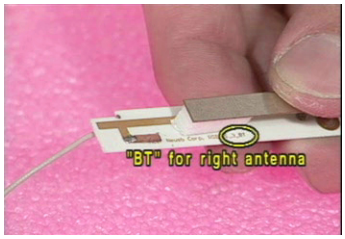



## Base Unit to Wireless LAN Unit

1. To upgrade the system to from Base Unit to Wireless LAN Unit, first detach the upper case from the main unit carefully.

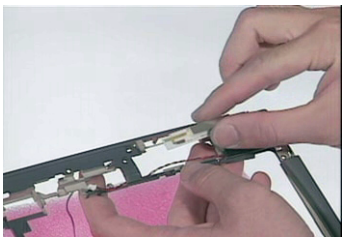


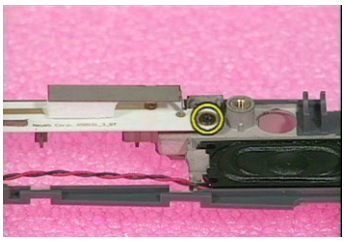
2. Note that the one marked with BT is for the right antenna and the one marked with 802.11b is for the left antenna.



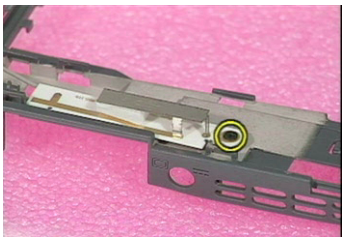


3. Attach the right antenna to the upper case and secure it with a screw.
4. Ensure that the RF cable is arrange well.

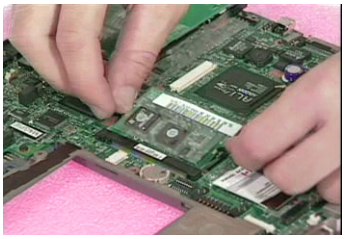
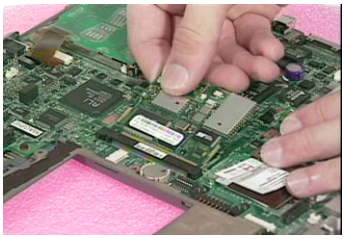




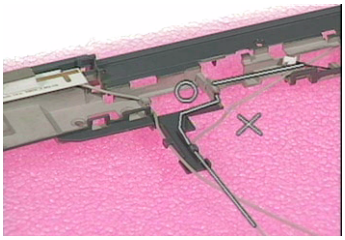
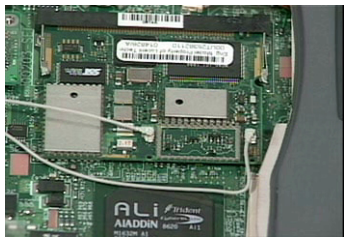
5. Attach the left antenna to the upper case and secure it with a screw.



6. Remove the LAN board from the main board.
7. Then insert the wireless LAN board into its socket and press it down to secure well.

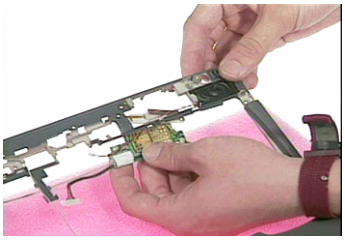
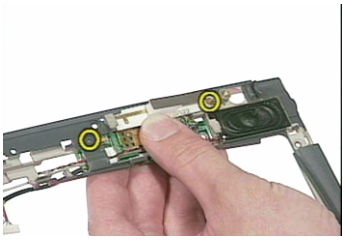



8. Be careful to arrange the right and left RF cables well.
9. Re-attach the upper case back into the main unit and connect the RF cables into the Wireless LAN board.

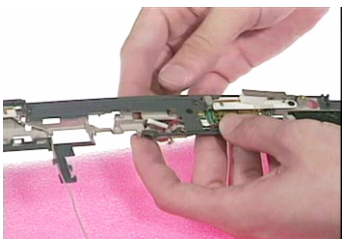
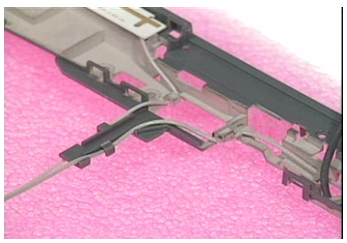




## Wireless LAN to Wireless LAN and Bluetooth Combo Unit

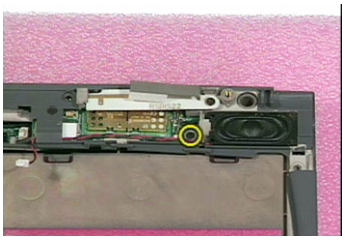
1. Remove the right antenna from the upper case.
2. Attach the bluetooth module into the upper case.
3. Secure it with two screws.

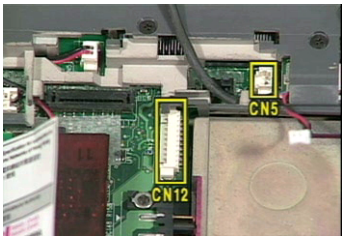
4. Arrange the bluetooth and the RF cables well.

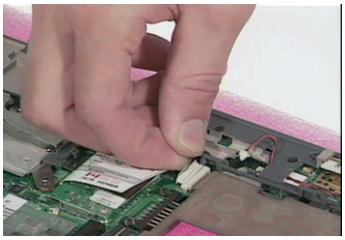



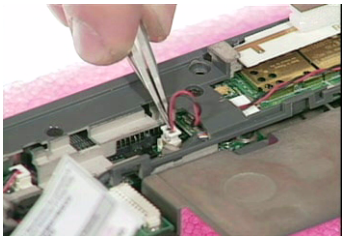
5. Re-attach the upper case back into the main unit and secure with one screw.



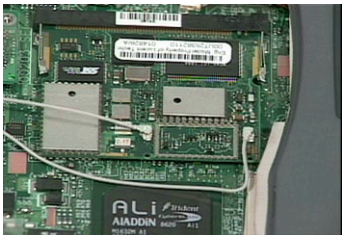
6. Re-connect the bluetooth and speaker cables back into the main board at CN12 and CN5 respectively.





7. Re-connect the RF cables back into the Wireless LAN board.



# Troubleshooting

Use the following procedure as a guide for computer problems.

**NOTE:** The diagnostic tests are intended to test only Acer products. Non-Acer products, prototype cards, or modified options can give false errors and invalid system responses.

1. Obtain the failing symptoms in as much detail as possible.
2. Verify the symptoms by attempting to re-create the failure by running the diagnostic test or by repeating the same operation.
3. Use the following table with the verified symptom to determine which page to go to.

| Symptoms (Verified) | Go To |
|---|---|
| Power failure. (The power indicator does not go on or stay on.) | “Power System Check” on page 71. |
| POST does not complete. No beep or error codes are indicated. | “Power-On Self-Test (POST) Error Message” on page 73 “Undetermined Problems” on page 80 |
| POST detects an error and displayed messages on screen. | “Error Message List” on page 74 |
| The diagnostic test detected an error and displayed a FRU code. | “Running PQA Diagnostics Program” on page 39 |
| Other symptoms (i.e. LCD display problems or others). | “Power-On Self-Test (POST) Error Message” on page 73 |
| Symptoms cannot be re-created (intermittent problems). | Use the customer-reported symptoms and go to “Power-On Self-Test (POST) Error Message” on page 73<br>“Intermittent Problems” on page 80<br>“Undetermined Problems” on page 80 |

# System Check Procedures

## External Diskette Drive Check

Do the following to isolate the problem to a controller, driver, or diskette. A write-enabled, diagnostic diskette is required.

**NOTE:** Make sure that the diskette does not have more than one label attached to it. Multiple labels can cause damage to the drive or cause the drive to fail.

Do the following to select the test device. See “Running PQA Diagnostics Program” on page 39 for details.

1. Boot from the diagnostics diskette and start the PQA program (see “Running PQA Diagnostics Program” on page 39).
2. Go to the diagnostic Diskette Drive in the test items.
3. Press F2 in the test items.
4. Follow the instructions in the message window.

If an error occurs with the internal diskette drive, reconnect the diskette connector on the main board.

If the error still remains:

1. Reconnect the external diskette drive/CD-ROM module.
2. Replace the external diskette drive/CD-ROM module.
3. Replace the main board.

## External CD/DVD-ROM Drive Check

Do the following to isolate the problem to a controller, drive, or CD/DVD-ROM. Make sure that the CD/DVD-ROM does not have any label attached to it. The label can cause damage to the drive or can cause the drive to fail.

Do the following to select the test device:

1. Boot from the diagnostics diskette and start the PQA program (refer to “Running PQA Diagnostics Program” on page 39.
2. Go to the diagnostic CD/DVD-ROM in the test items.
3. Press F2 in the test items.
4. Follow the instructions in the message window.

If an error occurs, reconnect the connector on the main board. If the error still remains:

1. Reconnect the external diskette drive/CD/DVD-ROM module.
2. Replace the external diskette drive/CD/DVD-ROM module.
3. Replace the main board.

## Keyboard or Auxiliary Input Device Check

Remove the external keyboard if the internal keyboard is to be tested.

If the internal keyboard does not work or an unexpected character appears, make sure that the flexible cable extending from the keyboard is correctly seated in the connector on the main board.

If the keyboard cable connection is correct, run the Keyboard Test. See “Running PQA Diagnostics Program” on page 39 for details.

If the tests detect a keyboard problem, do the following one at a time to correct the problem. Do not replace a non-defective FRU:

1. Reconnect the keyboard cables.
2. Replace the keyboard.
3. Replace the main board.

The following auxiliary input devices are supported by this computer:

- ❑ Numeric keypad
- ❑ External keyboard

If any of these devices do not work, reconnect the cable connector and repeat the failing operation.

## Memory Check

Memory errors might stop system operations, show error messages on the screen, or hang the system.

1. Boot from the diagnostics diskette and start the PQA program (please refer to “Running PQA Diagnostics Program” on page 39.
2. Go to the diagnostic memory in the test items.
3. Press F2 in the test items.
4. Follow the instructions in the message window.

**NOTE:** Make sure that the DIMM is fully installed into the connector. A loose connection can cause an error.

## Power System Check

To verify the symptom of the problem, power on the computer using each of the following power sources:

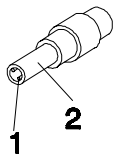
1. Remove the battery pack.
2. Connect the power adapter and check that power is supplied.
3. Disconnect the power adapter and install the charged battery pack; then check that power is supplied by the battery pack.

If you suspect a power problem, see the appropriate power supply check in the following list:

- ❑ “Check the Power Adapter” on page 71
- ❑ “Check the Battery Pack” on page 71

### Check the Power Adapter

Unplug the power adapter cable from the computer and measure the output voltage at the plug of the power adapter cable. See the following figure




Pin 1: +19 to +20.5V
Pin 2: 0V, Ground

1. If the voltage is not correct, replace the power adapter.
2. If the voltage is within the range, do the following:
   - ❑ Replace the main board.
   - ❑ If the problem is not corrected, see “Undetermined Problems” on page 80.
   - ❑ If the voltage is not correct, go to the next step.

**NOTE:** An audible noise from the power adapter does not always indicate a defect.

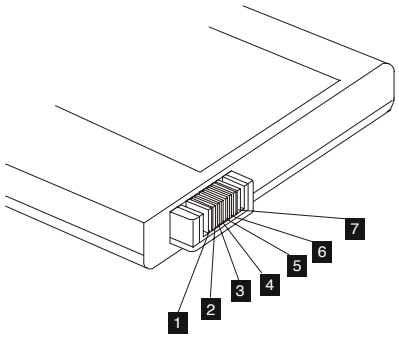
3. If the power-on indicator does not light up, check the power cord of the power adapter for correct continuity and installation.
4. If the operational charge does not work, see “Check the Battery Pack” on page 71.

### Check the Battery Pack

To check the battery pack, do the following:

1. Power off the computer.

2. Remove the battery pack and measure the voltage between battery terminals 1(ground) and 7(BT+). See the following figure




3. If the voltage is still less than 7.2 Vdc after recharging, replace the battery.

To check the battery charge operation, use a discharged battery pack or a battery pack that has less than 50% of the total power remaining when installed in the computer.

If the battery status indicator does not light up, remove the battery pack and let it return to room temperature. Re-install the battery pack.

If the charge indicator still does not light up, replace the battery pack. If the charge indicator still does not light up, replace the DC/DC charger board.

## Touchpad Check

If the touchpad doesn't work, do the following actions one at a time to correct the problem. Do not replace a non-defective FRU:

1. Reconnect the touchpad cables.
2. Replace the touchpad.
3. Replace the main board.

After you use the touchpad, the pointer drifts on the screen for a short time. This self-acting pointer movement can occur when a slight, steady pressure is applied to the touchpad pointer. This symptom is not a hardware problem. No service actions are necessary if the pointer movement stops in a short period of time.

## Power-On Self-Test (POST) Error Message

The POST error message index lists the error message and their possible causes. The most likely cause is listed first.

**NOTE:** Perform the FRU replacement or actions in the sequence shown in FRU/Action column, if the FRU replacement does not solve the problem, put the original part back in the computer. Do not replace a non-defective FRU.

This index can also help you determine the next possible FRU to be replaced when servicing a computer.

If the symptom is not listed, see “Undetermined Problems” on page 80.

The following lists the error messages that the BIOS displays on the screen and the error symptoms classified by function.

**NOTE:** Most of the error messages occur during POST. Some of them display information about a hardware device, e.g., the amount of memory installed. Others may indicate a problem with a device, such as the way it has been configured.

**NOTE:** If the system fails after you make changes in the BIOS Setup Utility menus, reset the computer, enter Setup and install Setup defaults or correct the error.

# Index of Error Messages

### Error Message List

| Error Messages | FRU/Action in Sequence |
|---|---|
| Failure Fixed Disk | Reconnect hard disk drive connector.<br>“Load Default Settings” in BIOS Setup Utility.<br>Hard disk drive<br>Main Board |
| Stuck Key | see “Keyboard or Auxiliary Input Device Check” on page 70 . |
| Keyboard error | see “Keyboard or Auxiliary Input Device Check” on page 70. |
| Keyboard Controller Failed | see “Keyboard or Auxiliary Input Device Check” on page 70. |
| Keyboard locked - Unlock key switch | Unlock external keyboard |
| Monitor type does not match CMOS - Run Setup | Run “Load Default Settings” in BIOS Setup Utility. |
| Shadow RAM Failed at offset: nnnn | BIOS ROM<br>Main Board |
| System RAM Failed at offset: nnnn | DIMM<br>Main Board |
| Extended RAM Failed at offset: nnnn | DIMM<br>Main Board |
| System battery is dead - Replace and run Setup | Replace RTC battery and Run BIOS Setup Utility to reconfigure system time, then reboot system. |
| System CMOS checksum bad - Default configuration used | RTC battery<br>Run BIOS Setup Utility to reconfigure system time, then reboot system. |
| System timer error | RTC battery<br>Run BIOS Setup Utility to reconfigure system time, then reboot system.<br>Main Board |
| Real time clock error | RTC battery<br>Run BIOS Setup Utility to reconfigure system time, then reboot system.<br>Main Board |
| Previous boot incomplete - Default configuration used | Run “Load Default Settings” in BIOS Setup Utility.<br>RTC battery<br>Main Board |
| Memory size found by POST differed from CMOS | Run “Load Default Settings” in BIOS Setup Utility.<br>DIMM<br>Main Board |
| Diskette drive A error | Check the drive is defined with the proper diskette type in BIOS Setup Utility<br>See “External Diskette Drive Check” on page 70. |
| Incorrect Drive A type - run SETUP | Check the drive is defined with the proper diskette type in BIOS Setup Utility<br>See “External Diskette Drive Check” on page 70. |
| System cache error - Cache disabled | Main Board |
| CPU ID: | Main Board |
| DMA Test Failed | DIMM<br>Main Board |
| Software NMI Failed | DIMM<br>Main Board |
| Fail-Safe Timer NMI Failed | DIMM<br>Main Board |

### Error Message List

| Error Messages | FRU/Action in Sequence |
|---|---|
| Device Address Conflict | Run “Load Default Settings” in BIOS Setup Utility.<br>RTC battery<br>Main Board |
| Allocation Error for device | Run “Load Default Settings” in BIOS Setup Utility.<br>RTC battery<br>Main Board |
| Failing Bits: nnnn | DIMM<br>BIOS ROM<br>Main Board |
| Fixed Disk n | None |
| Invalid System Configuration Data | BIOS ROM<br>Main Board |
| I/O device IRQ conflict | Run “Load Default Settings” in BIOS Setup Utility.<br>RTC battery<br>Main Board |
| Operating system not found | Enter Setup and see if fixed disk and drive A: are properly identified.<br>Diskette drive<br>Hard disk drive<br>Main Board |

### Error Message List

| No beep Error Messages | FRU/Action in Sequence |
|---|---|
| No beep, power-on indicator turns off and LCD is blank. | Power source (battery pack and power adapter). See “Power System Check” on page 71.<br>Ensure every connector is connected tightly and correctly.<br>Reconnect the DIMM.<br>LED board.<br>Main Board. |
| No beep, power-on indicator turns on and LCD is blank. | Power source (battery pack and power adapter). See “Power System Check” on page 71.<br>Reconnect the LCD connector<br>Hard disk drive<br>LCD inverter ID<br>LCD cable<br>LCD Inverter<br>LCD<br>Main Board |
| No beep, power-on indicator turns on and LCD is blank. But you can see POST on an external CRT. | Reconnect the LCD connectors.<br>LCD inverter ID<br>LCD cable<br>LCD inverter<br>LCD<br>Main Board |
| No beep, power-on indicator turns on and a blinking cursor shown on LCD during POST. | Ensure every connector is connected tightly and correctly.<br>Main Board |
| No beep during POST but system runs correctly. | Speaker<br>Main Board |

# Index of Symptom-to-FRU Error Message

### LCD-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| LCD backlight doesn't work<br>LCD is too dark<br>LCD brightness cannot be adjusted<br>LCD contrast cannot be adjusted | Enter BIOS Utility to execute “Load Setup Default Settings”, then reboot system.<br>Reconnect the LCD connectors.<br>Keyboard (if contrast and brightness function key doesn't work).<br>LCD inverter ID<br>LCD cable<br>LCD inverter<br>LCD<br>Main Board |
| Unreadable LCD screen<br>Missing pels in characters<br>Abnormal screen<br>Wrong color displayed | Reconnect the LCD connector<br>LCD inverter ID<br>LCD cable<br>LCD inverter<br>LCD<br>Main Board |
| LCD has extra horizontal or vertical lines displayed. | LCD inverter ID<br>LCD inverter<br>LCD cable<br>LCD<br>Main Board |

### Indicator-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| Indicator incorrectly remains off or on, but system runs correctly | Reconnect the inverter board<br>Inverter board<br>Main Board |

### Power-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| Power shuts down during operation | Power source (battery pack and power adapter). See “Power System Check” on page 71.<br>Battery pack<br>Power adapter<br>Hard drive & battery connection board<br>Main Board |
| The system doesn’t power-on. | Power source (battery pack and power adapter). See “Power System Check” on page 71.<br>Battery pack<br>Power adapter<br>Hard drive & battery connection board<br>Main Board |
| The system doesn’t power-off. | Power source (battery pack and power adapter). See “Power System Check” on page 71.<br>Hold and press the power switch for more than 4 seconds.<br>Main Board |
| Battery can’t be charged | See “Check the Battery Pack” on page 71.<br>Battery pack<br>Main Board |

### PCMCIA/Smart Card-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| System cannot detect the PC Card (PCMCIA) | PCMCIA/Smart Card slot assembly<br>Main Board |
| System cannot detect the Smart Card | Smart Card<br>PCMCIA/Smart Card slot assembly<br>Main Board |
| PCMCIA/Smart Card slot pin is damaged. | PCMCIA/Smart Card slot assembly |

### Memory-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| Memory count (size) appears different from actual size. | Enter BIOS Setup Utility to execute “Load Default Settings, then reboot system.<br>DIMM<br>Main Board |

### Speaker-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| In Windows, multimedia programs, no sound comes from the computer. | Audio driver<br>Speaker<br>Main Board |
| Internal speakers make noise or emit no sound. | Speaker<br>Main Board |

### Power Management-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| The system will not enter hibernation | Keyboard (if control is from the keyboard)<br>Hard disk drive<br>Main Board |
| The system doesn't enter hibernation mode and four short beeps every minute. | See “Hibernation Mode” on page 25.<br>Press Fn+F4 and see if the computer enters hibernation mode.<br>Touchpad<br>Keyboard<br>Hard disk connection board<br>Hard disk drive<br>Main Board |
| The system doesn’t enter standby mode after closing the LCD | See “Standby Mode” on page 25.<br>LCD cover switch<br>Main Board |
| The system doesn't resume from hibernation mode. | See “Hibernation Mode” on page 25.<br>Hard disk connection board<br>Hard disk drive<br>Main Board |
| The system doesn't resume from standby mode after opening the LCD. | See “Standby Mode” on page 25.<br>LCD cover switch<br>Main Board |
| Battery fuel gauge in Windows doesn’t go higher than 90%. | Remove battery pack and let it cool for 2 hours.<br>Refresh battery (continue use battery until power off, then charge battery).<br>Battery pack<br>Main Board |

### Power Management-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| System hangs intermittently. | See “Thermal and Fan Utility” on page 38.<br>Reconnect hard disk/CD-ROM drives.<br>Hard disk connection board<br>Main Board |

### Peripheral-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| System configuration does not match the installed devices. | Enter BIOS Setup Utility to execute “Load Default Settings”, then reboot system.<br>Reconnect hard disk/CD-ROM/diskette drives. |
| External display does not work correctly. | Press Fn+F5, LCD/CRT/Both display switching<br>See “Running PQA Diagnostics Program” on page 39.<br>Main Board |
| USB does not work correctly | See “Running PQA Diagnostics Program” on page 39<br>Main Board |
| Print problems. | Ensure the “Parallel Port” in the “Onboard Devices Configuration” of BIOS Setup Utility is set to Enabled.<br>Onboard Devices Configuration<br>Run printer self-test.<br>Printer driver<br>Printer cable<br>Printer<br>Main Board |
| Serial or parallel port device problems. | Ensure the “Serial Port” in the Devices Configuration” of BIOS Setup Utility is set to Enabled.<br>Device driver<br>Device cable<br>Device<br>Main Board |

### Keyboard/Touchpad-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| Keyboard (one or more keys) does not work. | Reconnect the keyboard cable.<br>Keyboard<br>Main Board |
| Touchpad does not work. | Reconnect touchpad cable.<br>Touchpad board<br>Main Board |

### Modem-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| Internal modem does not work correctly. | modem board<br>Main Board |

**NOTE:** If you cannot find a symptom or an error in this list and the problem remains, see “Undetermined Problems” on page 80.

### LAN-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| Internal LAN does not work correctly. | LAN board<br>Main Board |

### Wireless LAN-Related Symptoms

| Symptom / Error | Action in Sequence |
|---|---|
| Internal wireless LAN does not work correctly. | right or left antenna kits<br>wireless LAN board<br>Main Board |

## Intermittent Problems

Intermittent system hang problems can be caused by a variety of reasons that have nothing to do with a hardware defect, such as: cosmic radiation, electrostatic discharge, or software errors. FRU replacement should be considered only when a recurring problem exists.

When analyzing an intermittent problem, do the following:

1. Run the advanced diagnostic test for the main board in loop mode at least 10 times.
2. If no error is detected, do not replace any FRU.
3. If any error is detected, replace the FRU. Rerun the test to verify that there are no more errors.

## Undetermined Problems

The diagnostic problems does not identify which adapter or device failed, which installed devices are incorrect, whether a short circuit is suspected, or whether the system is inoperative.

Follow these procedures to isolate the failing FRU (do not isolate non-defective FRU).

**NOTE:** Verify that all attached devices are supported by the computer.

**NOTE:** Verify that the power supply being used at the time of the failure is operating correctly. (See "Power System Check" on page 71):

1. Power-off the computer.
2. Visually check them for damage. If any problems are found, replace the FRU.
3. Remove or disconnect all of the following devices:
   - ❑ Non-Acer devices
   - ❑ Printer, mouse, and other external devices
   - ❑ Battery pack
   - ❑ Hard disk drive
   - ❑ DIMM
   - ❑ CD-ROM/Floppy diskette drive Module
   - ❑ PC Cards
4. Power-on the computer.
5. Determine if the problem has changed.
6. If the problem does not recur, reconnect the removed devices one at a time until you find the failing FRU.
7. If the problem remains, replace the following FRU one at a time. Do not replace a non-defective FRU:
   - ❑ Main Board
   - ❑ LCD assembly

## Index of AFlash BIOS Error Message

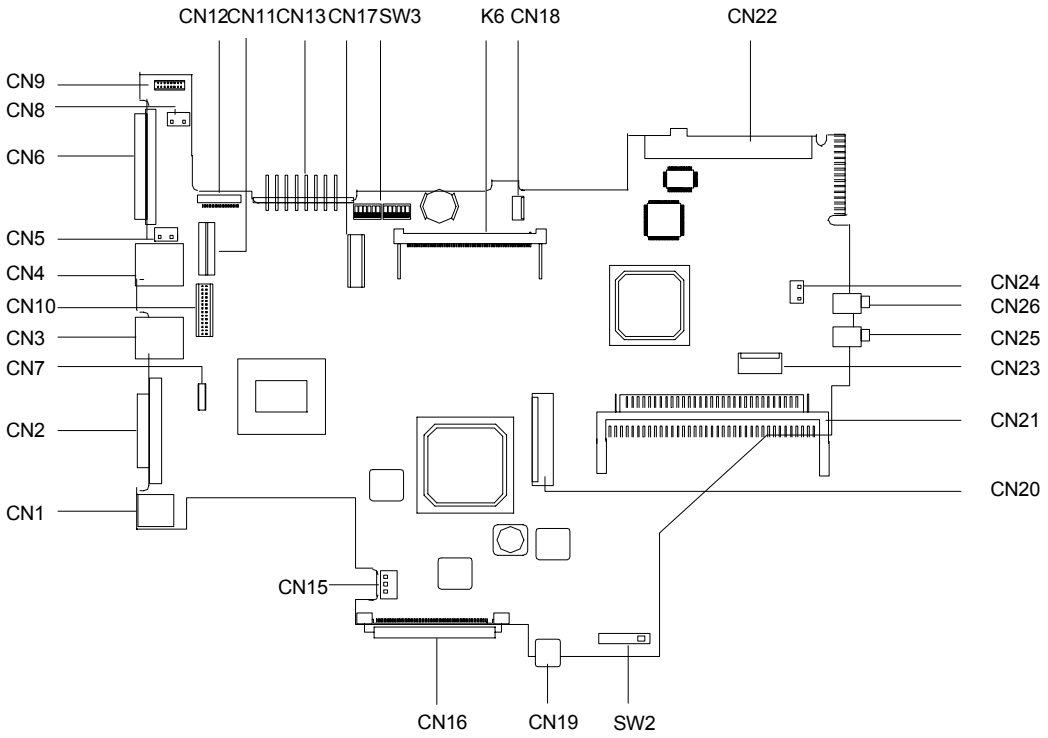
| Error Message | Action in Sequence |
|---|---|
| Hardware Error | See “System Diagnostic Diskette” on page 39 |
| VPD Checksum Error | Reboot the system and then restart with this diskette. |
| BIOS Update Program Error | Turn off the power and restart the system. |
| System Error | Make sure this AFlash BIOS diskette for this model. |
| Without AC adapter | make sure to connect AC adapter |
| Battery Low | make sure to install a highly charged battery, and reboot system. |

## Index of PQA Diagnostic Error Code, Message

| Error Code | Message | Action in Sequence |
|---|---|---|
| 16XXX | Backup battery error | Backup battery |
| 01XXX | CPU or main board error | Reload BIOS default setting.<br>Main Board |
| 02XXX | Memory error | DIMM<br>Main Board |
| 03XXX | Keyboard error | Reset Keyboard<br>Keyboard<br>Main Board |
| 04XXX | Video error | Main Board |
| 05XXX | Parallel Port error | Main Board |
| 06XXX | Serial port or main board error | Main Board |
| 07XXX | Diskette drive error | Diskette drive<br>Main Board |
| 08XXX | Hard disk error | Reload BIOS default setting<br>Hard disk<br>Main Board |
| 09XXX | CD-ROM error | Reset CD-ROM cable<br>CD-ROM drive<br>Main Board |
| 10XXX | Co-processor error | Main Board |
| 11XXX | Pointing device error | Reset Keyboard<br>Keyboard<br>Main Board |
| 12XXX | Cache test error | Main Board |

# Jumper and Connector Information

## Top View




| | | | |
|---|---|---|---|
| CN 1 | DC-in port | CN 17 | Modem board connector |
| CN 2 | External monitor port | K6 | Mini PCI socket |
| CN 3 | LAN port | CN 18 | Touch PAD connector |
| CN 4 | Modem port | CN 22 | Hard disk drive connector |
| CN 5 | RJ45 connector | CN 24 | Internal MIC connector |
| CN 6 | Expansion port | CN 26 | Line-in jack/external MIC jack |
| CN 7 | LCD signal connector | CN 25 | Speaker/Headphone-out jack |
| CN 8 | 2NT/speaker connector | CN 23 | Smart Card connector |
| CN 9 | USB daughter board connector | CN 21 | PCMCIA socket connector |
| CN 10 | Inverter connector | CN 20 | Keyboard connector |
| CN 11 | LED connector | CN 19 | IEEE 1394 port |
| CN 12 | BlueTooth connector | CN 16 | EasyLink Combo Drive port |
| CN 13 | Battery module connector | SW2 | Power switch |
| CN 15 | FAN connector | | |

## SW3 Switch Settings

| | SW3-1 | SW3-2 | SW3-3 |
|---|---|---|---|
| English KBD | ON | ON | ON |
| Japan KBD | OFF | ON | ON |
| Europe KBD | ON | OFF | ON |

### SW3-6: Check password

SW3-6 = ON, Enable

SW3-6 = OFF, Disable

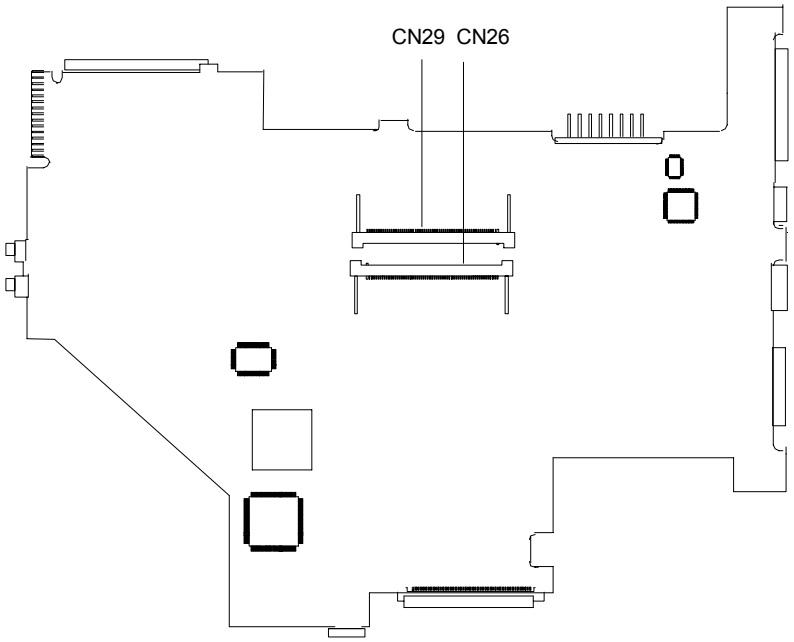
### SW3-7: BIOS boot block erasable

SW3-7 = OFF, Disable

SW3-7 = ON, Enable

### SW3-4, SW3-5, SW3-8: Reserve

## Bottom View




CN29 - DIMM 1 socket

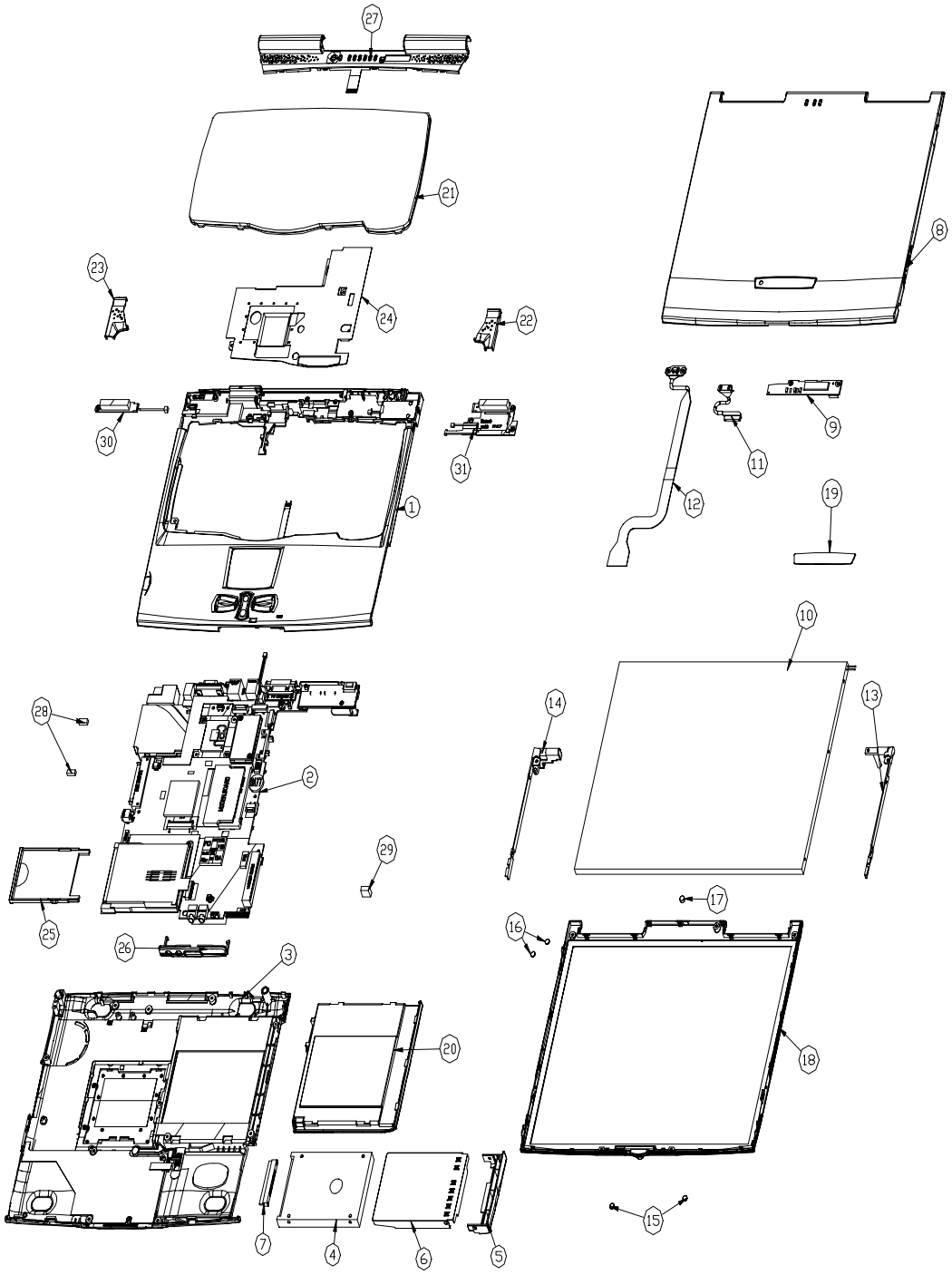
CN26 - DIMM 2 socket

# FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of TravelMate 350. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

Please note that WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted on the printed Service Guide. For ACER AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code from those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

**NOTE:** To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional Acer office on how to return it.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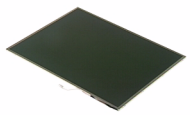
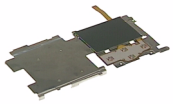
| Picture | No. | Partname | Description | Part No. |
|---|---|---|---|---|
| Memory | | | | |
|  | NS | Memory SODIMM 64M NEC | SODIMM 64M W17064I8NC8622A(NEC | 72.17064.C0N |
| | | Memory SODIMM 64M Winbond | SODIMM 64M W9864CASA-75(WINBON | 72.09864.B0E |
| | | Memory SODIMM 64M PC100 PSC | SODIMM 64M P464S3D24U1-11 PC10 | 72.46424.00N |
| | | Memory SODIMM 128M NEC | SODIMM 128M W17128IHNC86220(NE | 72.17128.00N |
| | | Memory SDIMM 128M Mitsubishi | SDIMM 128M MH16S64AVS-7TA | 72.16S64.C0N |
| | | Memory SODIMM 128M Winbond | SODIMM 128M W9812CASA-75(WINBO | 72.09812.B0E |
| | | Memory SODIMM 128M Siemens | SODIMM 128 HYS64V16220GDL-8-C2 | 72.64162.C0N |
| LCD | | | | |
|  | NS | LCD Module 13.3” LG | Assy LCD Module 13.3”LG TM350 | 6M.45H06.011 |
|  | NS | LCD 13.3” TFT LG.PHIL/ LP133X8-A2AC | LCD 13.3” LG.PHIL/ LP133X8-A2AC | 56.0740F.021 |
|  | 11 | Inverter Cable | C.A Inverter Wire 15P(MAPI) | 50.45H01.001 |
|  | NS | LCD Cable | C.A LCD Coaxial(LG-LP133X8) | 50.45H05.001 |
|  | NS | LCD Panel | LCD Panel LG133X8 Assy | 60.45H04.011 |

| Picture | No. | Partname | Description | Part No. |
|---|---|---|---|---|
|  | NS | LCD Hinge Pack | HING PACK FOR TM350 | 6K.45H01.001 |
|  | NS | LCD Bezel | LCD Bezel Assy for LG133X8 | 60.45H05.011 |
|  | NS | Inverter Board Sumdia | Inverter 13” IV5090/T REV.2A | 19.21030.C21 |
|  | NS | LCD Module 13.3” TFT ADT | Assy LCD Module 13.3” ADT TM350 | 6M.45H05.001 |
|  | 10 | LCD 13.3” XGA TFT ADT/ L133X2-3 | LCD 13.3”XGA ADT/ L133X2-3 | 56.0749C.061 |
|  | 11 | Inverter Cable | C.A Inverter Wire 15P(MAPI) | 50.45H01.001 |
|  | 12 | LCD Cable | C.A ADT133 LCD Coax Cable(MAPI | 50.45H02.001 |

| Picture | No. | Partname | Description | Part No. |
|---|---|---|---|---|
|  | 8 | LCD Panel | LCD Panel Assy(MAPI) | 60.45H04.001 |
|  | NS | Hinge Pack | HING PACK FOR TM350 | 6K.45H01.002 |
|  | 18 | LCD Bezel | LCD Bezel Assy(MAPI) | 60.45H05.001 |
|  | 9 | Inverter Board Ambit/ T62I174.00 | Inverter T62I174.00 MAGPIE | 19.21030.B01 |
| HDD/ Hard Disk Drive | | | | |
|  | NS | HDD Module 10G IBM | Assy HDD Module 10G IBM TM350 | 6M.45H03.031 |
|  | 6 | HDD Case | Assy HDD PLT TM330 | 60.40C15.001 |
|  | 7 | HDD Connector | CONN CTR ML 22P HH98227-A2(HDD | 20.80056.022 |

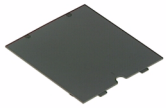
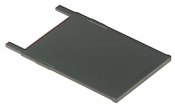
| Picture | No. | Partname | Description | Part No. |
|---|---|---|---|---|
|  | 4 | HDD 10G IBM/DJSA-210 | HDD 9.5MM 10G IBM/ DJSA-210 | 56.02A75.041 |
|  | 5 | HDD Bezel | HDD Cover(MAPI) | 42.45H04.001 |
|  | NS | HDD Module 5G IBM | Assy HDD Module 5G IBM TM350 | 6M.45H03.021 |
|  | NS | HDD 9.5MM 5G IBM/DJSA-205 | HDD 9.5MM 5G IBM/ DJSA-205 | 56.02017.021 |
|  | 6 | HDD Case | Assy HDD PLT TM330 | 60.40C15.001 |
|  | 7 | HDD Connector | CONN CTR ML 22P HH98227-A2(HDD | 20.80056.022 |
|  | 5 | HDD Bezel | HDD Cover(MAPI) | 42.45H04.001 |

| Picture | No. | Partname | Description | Part No. |
|---|---|---|---|---|
| Combo Module | | | | |
|  | NS | DVD-FDD Combo Module ADDO/DF2205 | DVD Combo Bay FDD ADDO/DF2205 | 90.40C28.009 |
|  | NS | FDD 1.44M Mitsumi/D353F3-Z | FDD 1.44M MIT/D353F3-Z TM340 | 56.01049.001 |
|  | NS | DVD-ROM 6X MKE/SR-8174 | DVD 6X MKE/SR-8174 ADDON TM340 | 56.22001.001 |
|  | NS | CDROM-FDD Combo Module TEAC | CD-ROM/FDD Combo TEAC/CF2405 | 90.40C28.019 |
| Microphone | | | | |
|  | NS | Microphone w/Rubber | Assy Microphone w/ rubber TM350 | 6M.45H01.001 |
| Heatsink | | | | |
|  | NS | CPU Heatsink w/Fan | Heatpipe Module Assy(MAPI) | 60.45H16.001 |
| Speaker | | | | |
|  | NS | Speaker 35X16X4.3 | Speaker 35X16X4.3 ZK-351601Q | 23.40031.071 |

| Picture | No. | Partname | Description | Part No. |
|---|---|---|---|---|
| Video Capture Kit | | | | |
|  | NS | USB Video Capture Kit (V6+) | USB Video Capture Kit (V6+) | 91.16848.503 |
| Keyboard | | | | |
|  | 21 | Keyboard 84key US Darfon | KB DEF US 84 | 99.N1282.001 |
| Pointing Device | | | | |
|  | NS | TouchPad Module | ASSY T/P Module (MAPI) | 60.45H06.011 |
| Cables | | | | |
|  | NS | Modem Cable | C.A MDC MAGPIE | 50.45H04.001 |
|  | NS | Power Cord 125V 3PIN | Cord 125V UL 3P K01081B1183WP | 27.01618.051 |
| | NS | I/O Port Cable 100/25+9PIN | C.A 100/25+9P 217MM IO B-NOTE | 50.42F10.001 |
| Main board | | | | |
|  | NS | Main board/MAGPIE PIII 650MHZ | MAGPIE TM350TE MNBOARD RPIII650 | 55.45H01.001 |
| | | Main board/MAGPIE PIII 700MHZ | MAGPIE TM351TEV PIII700 M/B | 55.45H01.011 |

| Picture | No. | Partname | Description | Part No. |
|---|---|---|---|---|
|  | NS | PCMCIA/Smart Card Slot | CONN Cardbus&PCMCIA SKT 52539 | 21.H0027.001 |
|  | NS | EMI Plate | Base EMI Plate (MAPI) | 40.45H05.001 |
| Boards | | | | |
|  | NS | Modem 56K Ambit/ U98M005.01 | Modem MDC Ambit/ U98M005.01 | 54.09011.301 |
|  | NS | USB/PS2 Board | MAGPIE TM350 USB & PS2 Board | 55.45H02.011 |
|  | NS | LAN Board 10/100M Ambit/ 82559 | LAN Card 10/100M Ambit/ 82559 | 54.03093.001 |
| Adapter | | | | |
|  | NS | Adapter 60W 3PIN LITEON/ PA-1600-02AE | ADT 3P PA-1600-02AE W/ACER LOG | 25.10068.091 |
| | | Adapter 60W 3PIN DELTA/ ADP-60DB | ADT 60W 90-264V ADP-60DB BB 3P | 25.10064.111 |
| Battery | | | | |
|  | NS | RTC Battery LI 3V | BTY LI 3V CR1220 36MAH | 23.20004.091 |

| Picture | No. | Partname | Description | Part No. |
|---|---|---|---|---|
|  | 20 | Battery LI-ON Sanyo | Battery Module(MAPI) | 60.45H03.001 |
| Case/Cover/Bracket Assembly | | | | |
|  | NS | I/O Bracket | I/O Bracket ASSY | 60.45H23.001 |
|  | 26 | Audio Cover | Audio Cover Assy(MAPI) | 60.45H08.001 |
|  | NS | Hinge Cap Pack | HING Pack Cap for TM350 | 6K.45H02.001 |
|  | 24 | CPU EMI Plate | CPU EMI Plate(MAPI) | 34.35H01.001 |
|  | 27 | Middle Cover | Middle Cover Assy(MAPI) | 60.45H10.001 |
|  | NS | LED Board w/ Cable | LED Assy(MAPI) | 60.45H07.001 |

| Picture | No. | Partname | Description | Part No. |
|---|---|---|---|---|
|  | 1 | Upper Case w/ speaker, touchpad, MIC | Upper Case Assy(MAPI) | 60.45H12.001 |
|  | 3 | Lower Case | Lower Case Assy(MAPI) | 60.45H11.001 |
|  | NS | Memory Cover | DIMM Cover Assy | 60.45H13.001 |
| Miscellaneous | | | | |
| | 19 | Acer Logo | LBL ABS TM600/Acer | 40.42F09.001 |
|  | 25 | PCMCIA Dummy Card | Card Dummy PCMCIA PA+ABS TM330 | 42.40C20.001 |
| | NS | Power Button | Power Knob Assy(MAPI) | 60.45H09.001 |
| | NS | Foot Rubber | Rubber Foot | 47.42F01.001 |
|  | 15 | LCD Cushion | LCD Cushion | 47.40C01.001 |
| | 16 | LCD Screw Mylar | LCD Screw Mylar (MAPI) | 40.45H08.001 |
|  | 17 | LCD Screw Rubber | LCD Screw Rubber (H=3) MAPI | 47.45H01.001 |

| Picture | No. | Partname | Description | Part No. |
|---|---|---|---|---|
|  | NS | Video Capture Kit Rubber | Rubber Camera TM340 | 47.40F07.002 |
|  | NS | Name Plate | Name Plate, TM350(For 350TE) | 40.40F04.121 |
|  | NS | Smart Card | Smart Card, TM350, 85.6*54MM | 42.45H17.001 |
| Wireless Communication Device | | | | |
|  | NS | Wireless 802.11 Antenna Left | Antenna 802.11 | 25.90013.011 |
|  | NS | Wireless 802.11 Antenna Right | Antenna Intel_802_Antenna_R | 25.90013.021 |
|  | NS | Wireless 802.11 module | Module 802.11 MAGPIE | 25.H0002.001 |
| Screws | | | | |
| | NS | CPU EMI Plate, LCD, Inverter, Lower Case, Upper Case Screw | M2X4 (Screw Head High=0.3)MAPI | 86.9A332.4R0 |
| | NS | I/O Port Bracket Screw | SCRW HEX NUT W/ Washer #4 NI BT | 34.00015.211 |
| | NS | Modem Board, USB Board, Battery Connector, PCMCIA Slot, Mainboard, Spk, TouchPad Bracket Screw | Screw M2X4 (Head 0.3) NYLOK | 86.00A23.320 |

| Picture | No. | Partname | Description | Part No. |
|---|---|---|---|---|
| | NS | CPU EMI Plate, LCD Hinge, KB, Lower Case Screw | Screw M2.5X6 | 86.9A353.6R0 |
| | NS | HDD Case Screw | Screw M3*4L W/F NI | 86.5A524.4R0 |
| | NS | LCD Hinge, LCD Cable Screw | SRW M2.5*8L B/ZN NYLOK 700 | 86.9A353.8R0 |
| | NS | LCD Bezel Screw | Screw M2.5*4L NI | 86.9A553.4R0 |
| | NS | HDD Cover Screw | HDD Screw M2X7 | 86.00A10.120 |
| | NS | Heatsink Screw | M2X4 (Big Head) MAPI | 86.3A352.4R0 |
| | NS | LED Board Screw | Screw Tapping 2X2.5 | 86.45H01.001 |

# Model Definition and Configuration

**TravelMate 350 Model Number Definitions**

| Model | LCD | CPU | Memory | Hard Disk Drive | CD/DVD-ROM | Floppy Disk Drive | Battery |
|---|---|---|---|---|---|---|---|
| 350TE | 13.3” TFT | P-III 650 | 64 MB | 6 GB | 24x ext. | External | Li-Ion |
| 350TEV | 13.3” TFT | P-III 650 | 64 MB | 6 GB | 6x DVD | External | Li-Ion |
| 352TE | 13.3” TFT | P-III 700 | 128 MB | 12 GB | 24x ext. | External | Li-Ion |
| 352TEV | 13.3” TFT | P-III 700 | 128MB | 12 GB | 6x DVD | External | Li-Ion |

# Test Compatible Components

This computer's compatibility is tested and verified by Acer's internal testing department. All of its system functions are tested under Windows 98, Windows 2000 , Windows NT and Windows ME environment.

Refer to the following lists for components, adapter cards, and peripherals which have passed these tests. Regarding configuration, combination and test procedures, please refer to the TravelMate 350 Compatibility Test Report released by the Acer Mobile System Testing Department.

# Microsoft Windows 98 Environment Test

| Item | Specifications |
|---|---|
| Processor | Intel PIII 650MHz<br>Intel PIII 700MHz<br>Intel PIII 750MHz |
| Memory | 64MB SDRAM<br>128MB SDRAM |
| LCD | 13.3 TFT LCD LG<br>13.3 TFT LCD ADT |
| Floppy Disk Drive | Mitsumi 3.5” FDD (support 3 mode) |
| Hard Disk Drive | IBM 5GB<br>IBM 10GB<br>IBM 20GB |
| CD-ROM | 24X CD ROM Drive |
| DVD-ROM | 6X DVD ROM Drive |
| Battery | Sanyo Li-Ion Battery |
| Adapter | Lite- On |
| Network Adapters | |
| LAN<br>Ethernet/10baseT/100baseT | 3Com Etherlink III<br>3Com 10/100 16 bits Fast Etherlink<br>D-link Ethernet<br>Xircom Credit Card Ethernet Adapter<br>Xircom CreditCard Ethernet Adapter IIps<br>Xircom CreditCard Ethernet Adapter 10/100 |
| LAN<br>Token Ring | Madge Smart 16/4 RingNode MK2@<br>3Com TokenLink III 16/4<br>IBM Turbo 16/4 TokenRing PC Card |
| Multi-Function Card | 3Com Ethernet III LAN+33.6 Modem Global PC Card Combo<br>3Com 10/100 Fast EtherLink LAN+56K<br>D-Link Winconnect 33.6 LAN/Fax modem combo<br>Xircom CreditCard Ethernet 10/100 + Modem 56<br>Xircom Credit Card Ethernet + Modem 33.6 |
| CardBus | 3Com Fast EtherLink XL CardBus<br>3Com 10/100 LAN CardBus<br>Intel EtherExpress PRO/100 Mobile Adapter<br>TDK CardBus Ethernet 10/100 Base TX<br>D-Link Fast Ethernet Cardbus 10/100mbps<br>IBM 10/100 EtherJet Cardbus Adapter (32-bit)<br>Xircom Cardbus Ethernet 10/100<br>Intel Built-in LAN |
| Other | JetEye Wireless Infrared Connection (Internet function by IR)<br>Xircom Pocket Internet III |
| Modem Adapter | |
| Modem (up to 28.8K) | TDK V34 28.8/14.4 Data Fax PCMCIA |
| Modem (up to 33.6) | Megahertz 33.6 PC Card Modem<br>Hayes Optima 336 V34+Fax for PCMCIA W/EZjack<br>IBM PCMCIA Data /Fax Modem International 33.6/14.4 |

| Item | Specifications |
|---|---|
| Modem (up to 56K ) | Pretec Modem 56K<br>ActionTec DataLink 56Kbps Fax/Modem<br>TDK V.90/K56Kflex Data/Fax Modem<br>Xircom CREDITCARD MODEM 56<br>USR Megahertz 56K modem<br>IBM 56K Double Jack Modem |
| ISDN | USR Megahertz ISDN 128K<br>IBM ISDN Internet PC Card |
| I/O Peripheral | |
| I/O Display | IBM G72<br>IBM 9514-B04 TFT Monitor<br>IBM P70<br>Acer AcerView 98i<br>Compaq Color Monitor V70<br>NEC 20” Color Monitor<br>NANAO Flex Scan E35F |
| I/O - Keyboard | IBM 104key Keyboard Black<br>Chicony Keyboard (USB)<br>IBM Numeric Keypad III<br>Compaq, Compaq Keyboard<br>IBM, US English KBD (PS/AT Style)<br>Microsoft Natural KBD USB<br>IBM 104key Keyboard Black<br>IBM 5576-B01 Windows Keyboard (JP)<br>Acer 101 keyboard |
| I/O - Mouse | IBM PS Style Mouse (Black)<br>Logitech USB Wheel Mouse<br>Acer Aspire USB mouse (USB)<br>Fu Hwa USB mouse<br>IBM PS/2 Mini Mouse II<br>Logitech PS Style Mouse<br>Microsoft Inteli Mouse USB<br>Microsoft Serial mouse |
| I/O - Projector | Mitsubishi LVP-X100A |
| I/O - Parallel (Printer) | IBM Network Printer 17<br>CANON Color Bubble Jet BJC600<br>EPSON Stylus Color 740<br>EPSON, EPSON Color Imaging<br>CANON, CANON LASER SHOT B406GII<br>HP DeskJet 880C printer (USB)<br>HP DeskJet 890C<br>HP LaserJet 6MP<br>CANON USB Printer |
| I/O - Parallel (Scanner) | Logitech PageScan Color<br>HP ScanJet 3300C Color Scanner (USB)<br>HP DeskJet 970Cxi<br>Acer AcerScan Prisa 620s |

| Item | Specifications |
|---|---|
| I/O - USB | Sanwa USB HUB (self-power)<br>USB, USB HUB 4 PORTS TI-CHIPS<br>USB, USB HUB 4 PORT - ATMEL<br>EIZO I. Station USB HUB<br>ELECOM USB HUB 4-port |
| I/O - USB Modem | Best Data USB 56K V.90 Modem Speakerphone<br>BLASTER USB BLASTER Modem 56K V.90 |
| I/O - USB (Speaker) | JS USB Digital Speaker<br>AIWA MultiMedia Digital Speaker System (USB) |
| I/O - USB (Joystick) | USB Rockfire Avant Garde Flightstick<br>Microsoft SIDEWINDER Precision PRO (USB) |
| I/O - USB Camera | Intel Create and Share Camera Pack<br>Intel Digital Camera<br>Kodak DVC 300 (Digital-Video-Camera)<br>Kodak USB-Base Camera<br>IBM,  IBM PS Camera |
| I/O Adapter | |
| PCMCIA - SCSI | Adaptec 1480A slim SCSI CB<br>Adaptec SlimSCSI APA-1460AB<br>NewMedia BUS Toaster PCMCIA to SCSI |
| PCMCIA - CDROM | IBM Portable 20x Speed CD-ROM Drive w/ SOUND (JP)<br>Panasonic 4x Portable CD-ROM Sound Player<br>Panasonic 20x Portable CD-ROM Player |
| PCMCIA - ATA | Sundisk ATA 15MB<br>VIPER 170E<br>IBM Travel Kit 340MB microdrive<br>I.O Data HardDisk PC Card |
| PCMCIA - Other | Sony - DCR TRV - 10/ACCKIT M90 (1394 Camera) with Video Capture PC card DVBK-CW200 |
| PCMCIA | |
| USB Device | Nokia Cellular Data Suite 1.2 (support IR) w/ 6150<br>Nokia Card Phone<br>Nokia Cellular Data Card (PCMCIA) w/ 8110 or 6150<br>Motorola, Digital Cellular Fax and Data Modem CELLect 3 GSM/ DCS1800 w/ cd928+<br>Ericsson, Mobile Office DC23 w/ PH388<br>Ericsson Mobile Office D127 w/ GF768 |

# Microsoft Windows 2000 Environment Test

| Item | Specifications |
|---|---|
| Processor | Intel PIII 650MHz<br>Intel PIII 700MHz<br>Intel PIII 750MHz |
| Memory | 64MB SDRAM<br>128MB SDRAM |
| LCD | 13.3 TFT LCD LG<br>13.3 TFT LCD ADT |
| Floppy Disk Drive | Mitsumi 3.5” FDD (support 3 mode) |
| Hard Disk Drive | IBM 5GB<br>IBM 10GB<br>IBM 20GB |
| CD-ROM | 24X CD ROM Drive |
| DVD-ROM | 6X DVD ROM Drive |
| Battery | Sanyo Li-Ion Battery |
| Adapter | Lite- On |
| Network Adapters | |
| LAN<br>Ethernet/10baseT/100baseT | 3Com Etherlink III<br>3Com 10/100 16 bits Fast Etherlink<br>D-link Ethernet<br>Xircom Credit Card Ethernet Adapter<br>Xircom CreditCard Ethernet Adapter IIps<br>Xircom CreditCard Ethernet Adapter 10/100 |
| LAN<br>Token Ring | Madge Smart 16/4 RingNode MK2@<br>3Com TokenLink III 16/4<br>IBM Turbo 16/4 TokenRing PC Card |
| Multi-Function Card | 3Com Ethernet III LAN+33.6 Modem Global PC Card Combo<br>3Com 10/100 Fast EtherLink LAN+56K<br>D-Link Winconnect 33.6 LAN/Fax modem combo<br>Xircom CreditCard Ethernet 10/100 + Modem 56<br>Xircom Credit Card Ethernet + Modem 33.6 |
| CardBus | 3Com Fast EtherLink XL CardBus<br>3Com 10/100 LAN CardBus<br>Intel EtherExpress PRO/100 Mobile Adapter<br>TDK CardBus Ethernet 10/100 Base TX<br>D-Link Fast Ethernet Cardbus 10/100mbps<br>IBM 10/100 EtherJet Cardbus Adapter (32-bit)<br>Xircom Cardbus Ethernet 10/100<br>Intel Built-in LAN |
| Other | Jeteye Wireless Infrared Connection (Internet function by IR)<br>Xircom Pocket Internet III |
| Modem Adapter | |
| Modem (up to 28.8K) | TDK V34 28.8/14.4 Data Fax PCMCIA |
| Modem (up to 33.6) | Megahertz 33.6 PC Card Modem<br>Hayes Optima 336 V34+Fax for PCMCIA W/EZjack<br>IBM PCMCIA Data /Fax Modem International 33.6/14.4 |

| Item | Specifications |
|---|---|
| Modem (up to 56K ) | Pretec Modem 56K<br>ActionTec DataLink 56Kbps Fax/Modem<br>TDK V.90/K56Kflex Data/Fax Modem<br>Xircom CREDITCARD MODEM 56<br>USR Megahertz 56K modem<br>IBM 56K Double Jack Modem |
| ISDN | USR Megahertz ISDN 128K<br>IBM ISDN Internet PC Card |
| I/O Peripheral | |
| I/O Display | IBM G72<br>IBM 9514-B04 TFT Monitor<br>IBM P70<br>Acer AcerView 98i<br>Compaq Color Monitor V70<br>NEC 20” Color Monitor<br>NANAO Flex Scan E35F |
| I/O - Keyboard | IBM 104key Keyboard Black<br>Chicony Keyboard (USB)<br>IBM Numeric Keypad III<br>Compaq, Compaq Keyboard<br>IBM, US English KBD (PS/AT Style)<br>Microsoft Natural KBD USB<br>IBM 104key Keyboard Black<br>IBM 5576-B01 Windows Keyboard (JP)<br>Acer 101 keyboard |
| I/O - Mouse | IBM PS Style Mouse (Black)<br>Logitech USB Wheel Mouse<br>Acer Aspire USB mouse (USB)<br>Fu Hwa USB mouse<br>IBM PS/2 Mini Mouse II<br>Logitech PS Style Mouse<br>Microsoft Inteli Mouse USB<br>Microsoft Serial mouse |
| I/O - Projector | Mitsubishi LVP-X100A |
| I/O - Parallel (Printer) | IBM Network Printer 17<br>CANON Color Bubble Jet BJC600<br>EPSON Stylus Color 740<br>EPSON, EPSON Color Imaging<br>CANON, CANON LASER SHOT B406GII<br>HP DeskJet 880C printer (USB)<br>HP DeskJet 890C<br>HP LaserJet 6MP<br>CANON USB Printer |
| I/O - Parallel (Scanner) | Logitech PageScan Color<br>HP ScanJet 3300C Color Scanner (USB)<br>HP DeskJet 970Cxi<br>Acer AcerScan Prisa 620s |
| I/O - USB | Sanwa USB HUB (self-power)<br>USB, USB HUB 4 PORTS TI-CHIPS<br>USB, USB HUB 4 PORT - ATMEL<br>EIZO I. Station USB HUB<br>ELECOM USB HUB 4-port |

| Item | Specifications |
|---|---|
| I/O - USB Modem | Best Data USB 56K V.90 Modem Speakerphone<br>BLASTER USB BLASTER Modem 56K V.90 |
| I/O - USB (Speaker) | JS USB Digital Speaker<br>AIWA MultiMedia Digital Speaker System (USB) |
| I/O - USB (Joystick) | USB Rockfire Avant Garde Flightstick<br>Microsoft SIDEWINDER Precision PRO (USB) |
| I/O - USB Camera | Intel Create and Share Camera Pack<br>Intel Digital Camera<br>Kodak DVC 300 (Digital-Video-Camera)<br>Kodak USB-Base Camera<br>IBM, IBM PS Camera |
| I/O Adapter | |
| PCMCIA - SCSI | Adaptec 1480A slim SCSI CB<br>Adaptec SlimSCSI APA-1460AB<br>NewMedia BUS Toaster PCMCIA to SCSI |
| PCMCIA - CDROM | IBM Portable 20x Speed CD-ROM Drive w/ SOUND (JP)<br>Panasonic 4x Portable CD-ROM Sound Player<br>Panasonic 20x Portable CD-ROM Player |
| PCMCIA - ATA | Sundisk ATA 15MB<br>VIPER 170E<br>IBM Travel Kit 340MB microdrive<br>I.O Data HardDisk PC Card |
| PCMCIA - Other | Sony - DCR TRV - 10/ACCKIT M90 (1394 Camera) with Video Capture PC card DVBK-CW200 |
| PCMCIA | |
| USB Device | Nokia Cellular Data Suite 1.2 (support IR) w/ 6150<br>Nokia Card Phone<br>Nokia Cellular Data Card (PCMCIA) w/ 8110 or 6150<br>Motorola, Digital Cellular Fax and Data Modem CELLect 3 GSM/ DCS1800 w/ cd928+<br>Ericsson, Mobile Office DC23 w/ PH388<br>Ericsson Mobile Office D127 w/ GF768 |

# Windows Millenium Environment Test

| Item | Specifications |
|---|---|
| Processor | Intel PIII 650MHz<br>Intel PIII 700MHz<br>Intel PIII 750MHz |
| Memory | 64MB SDRAM<br>128MB SDRAM |
| LCD | 13.3 TFT LCD LG<br>13.3 TFT LCD ADT |
| Floppy Disk Drive | Mitsumi 3.5” FDD (support 3 mode) |
| Hard Disk Drive | IBM 5GB<br>IBM 10GB<br>IBM 20GB |
| CD-ROM | 24X CD ROM Drive |
| DVD-ROM | 6X DVD ROM Drive |
| Battery | Sanyo Li-Ion Battery |
| Adapter | Lite- On |
| Network Adapters | |
| LAN<br>Ethernet/10baseT/100baseT | 3Com Etherlink III<br>D-link Ethernet<br>Xircom Credit Card Ethernet Adapter<br>Xircom CreditCard Ethernet Adapter 10/100 |
| LAN<br>Token Ring | Madge Smart 16/4 RingNode MK2@<br>3Com TokenLink III 16/4<br>IBM Turbo 16/4 TokenRing PC Card |
| Multi-Function Card | 3Com Ethernet III LAN+33.6 Modem Global PC Card Combo<br>3Com 10/100 Fast EtherLink LAN+56K<br>D-Link Winconnect 33.6 LAN/Fax modem combo<br>Xircom CreditCard Ethernet 10/100 + Modem 56<br>Xircom Credit Card Ethernet + Modem 33.6 |
| CardBus | 3Com Fast EtherLink XL CardBus<br>3Com 10/100 LAN CardBus<br>Intel EtherExpress PRO/100 Mobile Adapter<br>TDK CardBus Ethernet 10/100 Base TX<br>D-Link Fast Ethernet Cardbus 10/100mbps<br>IBM 10/100 EtherJet Cardbus Adapter (32-bit)<br>Xircom Cardbus Ethernet 10/100<br>Intel Built-in LAN |
| Modem Adapter | |
| Modem (up to 28.8K) | TDK V34 28.8/14.4 Data Fax PCMCIA |
| Modem (up to 33.6) | Megahertz 33.6 PC Card Modem<br>Hayes Optima 336 V34+Fax for PCMCIA W/EZjack<br>IBM PCMCIA Data /Fax Modem International 33.6/14.4 |
| Modem (up to 56K ) | Pretec Modem 56K<br>ActionTec DataLink 56Kbps Fax/Modem<br>TDK V.90/K56Kflex Data/Fax Modem<br>Xircom CREDITCARD MODEM 56<br>USR Megahertz 56K modem<br>IBM 56K Double Jack Modem |

| Item | Specifications |
|---|---|
| ISDN | USR Megahertz ISDN 128K<br>IBM ISDN Internet PC Card |
| I/O Peripheral | |
| I/O Display | IBM G72<br>IBM 9514-B04 TFT Monitor<br>IBM P70<br>Acer AcerView 98i<br>Compaq Color Monitor V70<br>NEC 20” Color Monitor<br>NANAO Flex Scan E35F |
| I/O - Keyboard | IBM 104key Keyboard Black<br>Chicony Keyboard (USB)<br>IBM Numeric Keypad III<br>Compaq, Compaq Keyboard<br>IBM, US English KBD (PS/AT Style)<br>Microsoft Natural KBD USB<br>IBM 104key Keyboard Black<br>IBM 5576-B01 Windows Keyboard (JP)<br>Acer 101 keyboard |
| I/O - Mouse | IBM PS Style Mouse (Black)<br>Logitech USB Wheel Mouse<br>Acer Aspire USB mouse (USB)<br>Fu Hwa USB mouse<br>IBM PS/2 Mini Mouse II<br>Logitech PS Style Mouse<br>Microsoft Inteli Mouse USB<br>IBM ThinkPad Mobile Mouse<br>IBM Numeric KeyPad III<br>Microsoft Intelli Mouse Explorer<br>Logitech MouseMan Wheel USB Comb for DOSV &iMAC<br>Microsoft Serial mouse |
| I/O - Projector | Mitsubishi LVP-X100A |
| I/O - Parallel (Printer) | IBM Network Printer 17<br>CANON Color Bubble Jet BJC600<br>EPSON Stylus Color 740<br>EPSON, EPSON Color Imaging<br>CANON, CANON LASER SHOT B406GII<br>HP DeskJet 880C printer (USB)<br>HP DeskJet 890C<br>HP LaserJet 6MP<br>CANON USB Printer |
| I/O - Parallel (Scanner) | Logitech PageScan Color<br>HP ScanJet 3300C Color Scanner (USB)<br>HP DeskJet 970Cxi<br>Acer AcerScan Prisa 620s |
| I/O - USB | Sanwa USB HUB (self-power)<br>USB, USB HUB 4 PORTS TI-CHIPS<br>EIZO I. Station USB HUB<br>Panasonic USB Speaker<br>3Com USB Network Interface<br>Iomega USB ZIP250<br>ELECOM USB HUB 4-port |

| Item | Specifications |
|---|---|
| I/O - USB Modem | Best Data USB 56K V.90 Modem Speakerphone<br>BLASTER USB BLASTER Modem 56K V.90 |
| I/O - USB (Speaker) | JS USB Digital Speaker<br>AIWA MultiMedia Digital Speaker System (USB) |
| I/O - USB (Joystick) | USB Rockfire Avant Garde Flightstick<br>Microsoft SIDEWINDER Precision PRO (USB) |
| I/O - USB Camera | Intel Create and Share Camera Pack<br>Kodak DVC 300 (Digital-Video-Camera)<br>IBM, IBM PS Camera |
| I/O Adapter | |
| PCMCIA - SCSI | Adaptec 1480A slim SCSI CB<br>Adaptec SlimSCSI APA-1460AB<br>NewMedia BUS Toaster PCMCIA to SCSI |
| PCMCIA - CDROM | IBM Portable 20x Speed CD-ROM Drive w/ SOUND (JP)<br>Panasonic 4x Portable CD-ROM Sound Player<br>Panasonic 20x Portable CD-ROM Player |
| PCMCIA - ATA | Sundisk ATA 15MB<br>VIPER 170E<br>IBM Travel Kit 340MB microdrive<br>I.O Data HardDisk PC Card<br>IBM 340MB MicroDrive + PC Card Adapter<br>SONY Memory Stick (64MB) + PC Card Adapter<br>EPSON Flash Packer 6MB |
| PCMCIA - Other | IBM Portable Drive Bay<br>IEEE1394 interface PCMCIA Card<br>Lacie, LACIE IEEE1394 (Fire Wire) Hard Drive<br>Sony - DCR TRV - 10/ACCKIT M90 (1394 Camera) with Video Capture PC card DVBK-CW200 |

# Microsoft Windows NT  Environment Test

| Item | Specifications |
|---|---|
| Processor | Intel PIII 650MHz<br>Intel PIII 700MHz<br>Intel PIII 750MHz |
| Memory | 64MB SDRAM<br>128MB SDRAM |
| LCD | 13.3 TFT LCD LG<br>13.3 TFT LCD ADT |
| Floppy Disk Drive | Mitsumi 3.5” FDD (support 3 mode) |
| Hard Disk Drive | IBM 5GB<br>IBM 10GB<br>IBM 20GB |
| CD-ROM | 24X CD ROM Drive |
| DVD-ROM | 6X DVD ROM Drive |
| Battery | Sanyo Li-Ion Battery |
| Adapter | Lite- On |
| Network Adapters | |
| LAN<br>Ethernet/10baseT/100baseT | 3Com Etherlink III<br>3Com 10/100 16 bits Fast Etherlink<br>D-link Ethernet<br>Xircom Credit Card Ethernet Adapter<br>Xircom CreditCard Ethernet Adapter IIps<br>Xircom CreditCard Ethernet Adapter 10/100 |
| LAN<br>Token Ring | Madge Smart 16/4 RingNode MK2@<br>3Com TokenLink III 16/4<br>IBM Turbo 16/4 TokenRing PC Card |
| Multi-Function Card | 3Com Ethernet III LAN+33.6 Modem Global PC Card Combo<br>3Com 10/100 Fast EtherLink LAN+56K<br>D-Link Winconnect 33.6 LAN/Fax modem combo<br>Xircom CreditCard Ethernet 10/100 + Modem 56<br>Xircom Credit Card Ethernet + Modem 33.6 |
| CardBus | 3Com Fast EtherLink XL CardBus<br>3Com 10/100 LAN CardBus<br>Intel EtherExpress PRO/100 Mobile Adapter<br>TDK CardBus Ethernet 10/100 Base TX<br>D-Link Fast Ethernet Cardbus 10/100mbps<br>IBM 10/100 EtherJet Cardbus Adapter (32-bit)<br>Xircom Cardbus Ethernet 10/100<br>Intel Built-in LAN |
| Other | Jeteye Wireless Infrared Connection (Internet function by IR)<br>Xircom Pocket Internet III |
| Modem Adapter | |
| Modem (up to 28.8K) | TDK V34 28.8/14.4 Data Fax PCMCIA |
| Modem (up to 33.6) | Megahertz 33.6 PC Card Modem<br>Hayes Optima 336 V34+Fax for PCMCIA W/EZjack<br>IBM PCMCIA Data /Fax Modem International 33.6/14.4 |

| Item | Specifications |
|---|---|
| Modem (up to 56K ) | Pretec Modem 56K<br>ActionTec DataLink 56Kbps Fax/Modem<br>TDK V.90/K56Kflex Data/Fax Modem<br>Xircom CREDITCARD MODEM 56<br>USR Megahertz 56K modem<br>IBM 56K Double Jack Modem |
| ISDN | USR Megahertz ISDN 128K |
| I/O Peripheral | |
| I/O Display | IBM G72<br>IBM 9514-B04 TFT Monitor<br>IBM P70<br>Acer AcerView 98i<br>Compaq Color Monitor V70<br>NEC 20” Color Monitor<br>NANAO Flex Scan E35F |
| I/O - Keyboard | IBM 104key Keyboard Black<br>Chicony Keyboard (USB)<br>IBM Numeric Keypad III<br>Compaq, Compaq Keyboard<br>IBM, US English KBD (PS/AT Style<br>Microsoft Natural KBD USB<br>IBM 104key Keyboard Black<br>IBM 5576-B01 Windows Keyboard (JP)<br>Acer 101 keyboard |
| I/O - Mouse | IBM PS Style Mouse (Black)<br>Logitech USB Wheel Mouse<br>Acer Aspire USB mouse (USB)<br>Fu Hwa USB mouse<br>IBM PS/2 Mini Mouse II<br>Logitech PS Style Mouse<br>Microsoft Inteli Mouse USB<br>Microsoft Serial mouse |
| I/O - Projector | Mitsubishi LVP-X100A |
| I/O - Parallel (Printer) | IBM Network Printer 17<br>CANON Color Bubble Jet BJC600<br>EPSON Stylus Color 740<br>EPSON, EPSON Color Imaging<br>CANON, CANON LASER SHOT B406GII<br>HP DeskJet 880C printer (USB)<br>HP DeskJet 890C<br>HP LaserJet 6MP<br>CANON USB Printer |
| I/O - Parallel (Scanner) | Logitech PageScan Color<br>HP ScanJet 3300C Color Scanner (USB)<br>HP DeskJet 970Cxi<br>Acer AcerScan Prisa 620s |
| I/O - USB | Sanwa USB HUB (self-power)<br>USB, USB HUB 4 PORTS TI-CHIPS<br>USB, USB HUB 4 PORT - ATMEL<br>EIZO I. Station USB HUB<br>ELECOM USB HUB 4-port |

| Item | Specifications |
|---|---|
| I/O - USB Modem | Best Data USB 56K V.90 Modem Speakerphone<br>BLASTER USB BLASTER Modem 56K V.90 |
| I/O - USB (Speaker) | JS USB Digital Speaker<br>AIWA MultiMedia Digital Speaker System (USB) |
| I/O - USB (Joystick) | USB Rockfire Avant Garde Flightstick<br>Microsoft SIDEWINDER Precision PRO (USB) |
| I/O - USB Camera | Intel Create and Share Camera Pack<br>Intel Digital Camera<br>Kodak DVC 300 (Digital-Video-Camera)<br>Kodak USB-Base Camera<br>IBM, IBM PS Camera |
| I/O Adapter | |
| PCMCIA - SCSI | Adaptec 1480A slim SCSI CB<br>Adaptec SlimSCSI APA-1460AB<br>NewMedia BUS Toaster PCMCIA to SCSI |
| PCMCIA - CDROM | IBM Portable 20x Speed CD-ROM Drive w/ SOUND (JP)<br>Panasonic 4x Portable CD-ROM Sound Player<br>Panasonic 20x Portable CD-ROM Player |
| PCMCIA - ATA | Sundisk ATA 15MB<br>VIPER 170E<br>IBM Travel Kit 340MB microdrive<br>I.O Data HardDisk PC Card |
| PCMCIA - Other | Sony - DCR TRV - 10/ACCKIT M90 (1394 Camera) with Video Capture PC card DVBK-CW200 |
| PCMCIA | |
| USB Device | Nokia Cellular Data Suite 1.2 (support IR) w/ 6150<br>Nokia Card Phone<br>Nokia Cellular Data Card (PCMCIA) w/ 8110 or 6150<br>Motorola, Digital Cellular Fax and Data Modem CELLect 3 GSM/ DCS1800 w/ cd928+<br>Ericsson, Mobile Office DC23 w/ PH388<br>Ericsson Mobile Office D127 w/ GF768 |

# Online Support Information

This section describes online technical support services available to help you repair your Acer Systems.

If you are a distributor, dealer, ASP or TPM, please refer your technical queries to your local Acer branch office. Acer Branch Offices and Regional Business Units may access our website. However some information sources will require a user i.d. and password. These can be obtained directly from Acer CSD Taiwan.

Acer's Website offers you convenient and valuable support resources whenever you need them.

In the Technical Information section you can download information on all of Acer's Notebook, Desktop and Server models including:

- Service guides for all models
- User's manuals
- Training materials
- Main manuals
- Bios updates
- Software utilities
- Schematics
- Spare parts lists
- Chips
- TABs (Technical Announcement Bulletin)

The service repair section provides you with downloadable information on:

- Troubleshooting guides
- Tooling box information
- Repair instructions for specific models
- Basic repair guidelines
- Debug cards for Acer's latest models

For these purposes, we have included an Acrobat File to facilitate the problem-free downloading of our technical material.

Also contained on this website are:

- Detailed information on Acer's International Traveler's Warranty (ITW)
- Returned material authorization procedures
- An overview of all the support services we offer, accompanied by a list of telephone, fax and email contacts for all your technical queries.

We are always looking for ways to optimize and improve our services, so if you have any suggestions or comments, please do not hesitate to communicate these to us.

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