Gateway NV42 Series
Service Guide

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

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Revision History

Please refer to the table below for the updates made on this service guide.

Date	Chapter	Updates

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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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System Specifications

Features

Below is a brief summary of the computer's many features:

Operating System

- Genuine Windows® 7 Home Premium 64 bit
- Genuine Windows® 7 Home Basic 64 bit

Platform

- AMD Athlon™ 64 X2 dual-core processor TK-42
- AMD Athlon™ 64 single-core processor TF-20
- Chipset: RS780MN, SB710

System Memory

- Dual-Channel DDR2 SDRAM support
- Up to 2 GB of DDR2 667 MHz memory, upgradeable to 4 GB using two soDIMM modules

Display

- 14" HD 1366 x 768 pixel resolution, high-brightness (220-nit) Gateway Ultrabright™ TFT LCD, supporting simultaneous multi-window viewing
- 16:9 aspect ratio
- 8 ms response time

Storage subsystem

- 120/160/250/320/500 GB or larger hard disk drive
- Media card reader, supporting:
  - Secure Digital™ (SD) Card
  - MultiMediaCard (MMC)
  - Reduced-Size Multimedia Card (RS-MMC)
  - Memory Stick® (MS)
  - Memory Stick PRO™ (MS PRO)

Audio

- Optimized 2nd Generation Dolby® Sound Room®9 audio enhancement, featuring Dolby® Headphone, Dolby® Natural Bass, Dolby® Sound Space Expander
- High-definition audio support
- S/PDIF (Sony/Philips Digital Interface)8 support for digital speakers

- MS-Sound compatible
- Built-in microphone

Dimensions and Weight

- 342 x 241 x 39.3 mm
- Weight: ~2.4 kg (including 6-cell Li-Ion cylindrical battery pack)

Communication

- Gateway Video Conference, featuring:
  - Integrated high-def webcam with 640 x 480 @ 30 fps resolution image capture1
- WLAN1, 2: Intel® Wireless WiFi Link 5100/5300 (dual-band quad-mode 802.11a/b/g/Draft-N) Wi-Fi CERTIFIED® wireless LAN card
- WPAN1: Bluetooth® 2.0+EDR (Enhanced Data Rate)
- LAN: Gigabit Ethernet, Wake-on-LAN ready
- Modem: 56K ITU V.92 with PTT approval10

Power subsystem

- ACPI 3.0 CPU power management standard: supports Standby and Hibernation power-saving modes
- 48.8 W 4400 mAh 6-cell Li-ion battery pack:
  - Up to 3-hour battery life
  - 3-pin 65 W AC adapter
- ENERGY STAR® compliant

Privacy control

- BIOS user, supervisor, HDD passwords
- Kensington lock slot

Special keys and controls

- 86-/87-/91-key keyboard
- Gateway EZ Pad™ touchpad pointing device
- 9 function keys, four cursor keys, Windows® key, international language support
- Capacitive-touch launch keys: Gateway PowerSave, Gateway MyBackup, touchpad lock, Wi-Fi®, volume up/down/mute

I/O interface

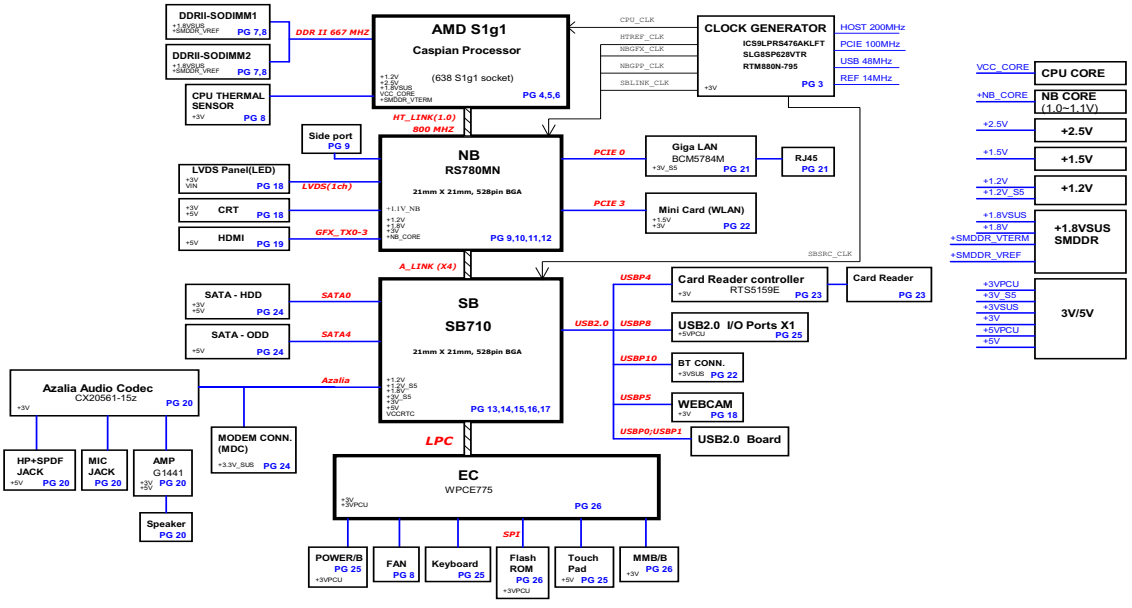
- Media card reader
- Three USB 2.0 ports
- HDMI™ port with HDCP support
- External display (VGA) port
- Headphone/speaker/line-out jack with S/PDIF support
- Microphone-in jack
- Ethernet (RJ-45) port

- Modem (RJ-11) port
- DC-in jack for AC adapter

Environment

- Temperature:
  - Operating: 5 °C to 35 °C (41 °F to 95 °F)
  - Non-operating: -20 °C to 65 °C (-4 °F to 149°F)
- Humidity (non-condensing):
  - Operating: 20% to 80%
  - Non-operating: 20% to 80%

System Block Diagram



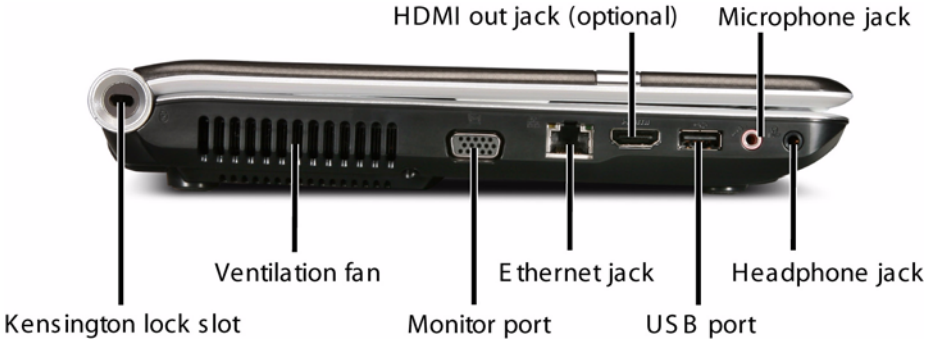
Gateway Notebook tour

This section contains information about the external features and functions of the computer.

Front View

Icon	Item	Description
	Memory card reader	Insert a memory card from a digital camera, MP3 player, PDA, or cellular telephone into the memory card reader. The memory card reader supports Memory Stick®, Memory Stick Pro®, Mini Secure Digital®, MultiMediaCard™, RS-MultiMediaCard™, Secure Digital™, and xD-Picture Card™ cards.
	Ventilation fan	Helps cool internal components. **Warning:** Do not work with the notebook resting on your lap. If the air vents are blocked, the notebook may become hot enough to harm your skin. **Caution:** Do not block or insert objects into these slots. If these slots are blocked, your notebook may overheat resulting in unexpected shutdown or permanent damage to the notebook. **Caution:** Provide adequate space around your notebook so air vents are not obstructed. Do not use the notebook on a bed, sofa, rug, or other similar surface.

Left View

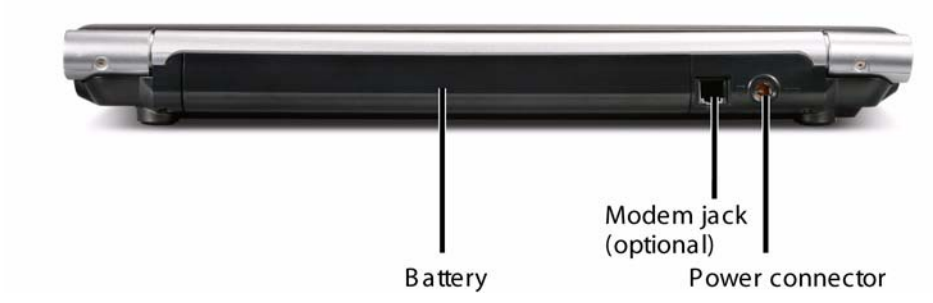


Icon	Item	Description
	Kensington™ lock slot	Secure your notebook to an object by connecting a Kensington cable lock to this slot.
	Ventilation fan	Helps cool internal components. **Warning:** Do not work with the notebook resting on your lap. If the air vents are blocked, the notebook may become hot enough to harm your skin. **Caution:** Do not block or insert objects into these slots. If these slots are blocked, your notebook may overheat resulting in unexpected shutdown or permanent damage to the notebook. **Caution:** Provide adequate space around your notebook so air vents are not obstructed. Do not use the notebook on a bed, sofa, rug, or other similar surface.
	Monitor port	Plug an analog VGA monitor or projector into this port.
	Ethernet jack	Plug an Ethernet network cable into this jack. Plug the other end of the cable into a cable modem, DSL modem, or an Ethernet network jack.
	USB port	Plug USB devices (such as a diskette drive, flash drive, printer, scanner, camera, keyboard, or mouse) into this port.
	Microphone jack	Plug a microphone into this jack.
	Headphone jack	Plug amplified speakers or headphones into this jack. The built-in speakers are turned off when speakers or headphones are plugged into this jacks. • Headphone with SPDIF support
HDMI	HDMI out jack (optional)	Plug an HDMI device, such as a high definition television, into this optional jack.

Right View

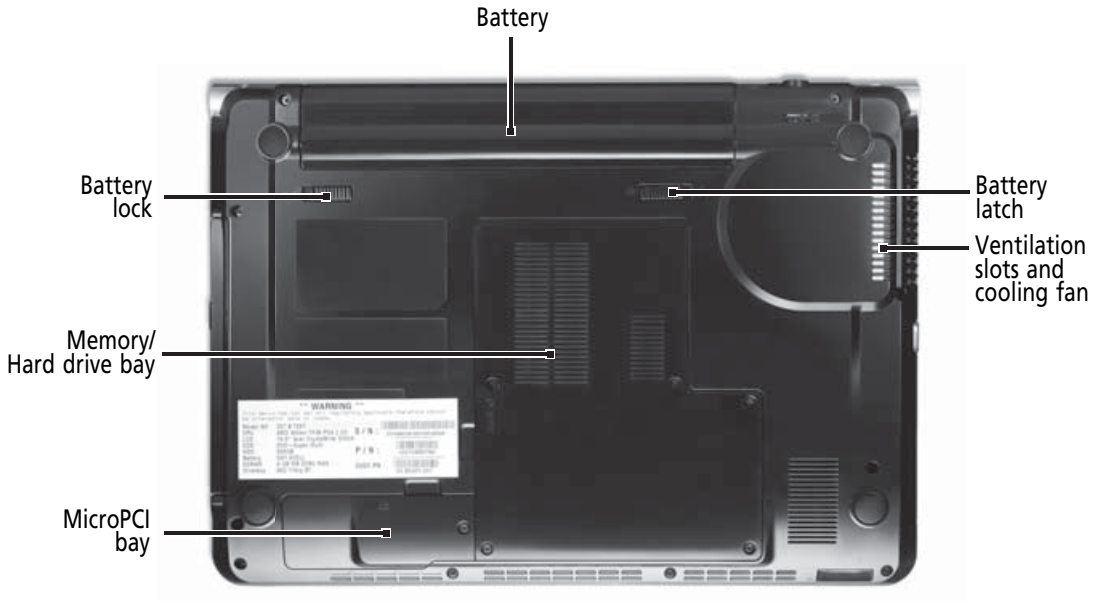
Icon	Item	Description
	DVD drive	Insert CDs or DVDs into this drive.
	USB ports	Plug USB devices (such as a diskette drive, flash drive, printer, scanner, camera, keyboard, or mouse) into these ports.
	Power indicator	Press to turn the power on or off. You can also configure the power button for Sleep/Resume mode.

Rear View



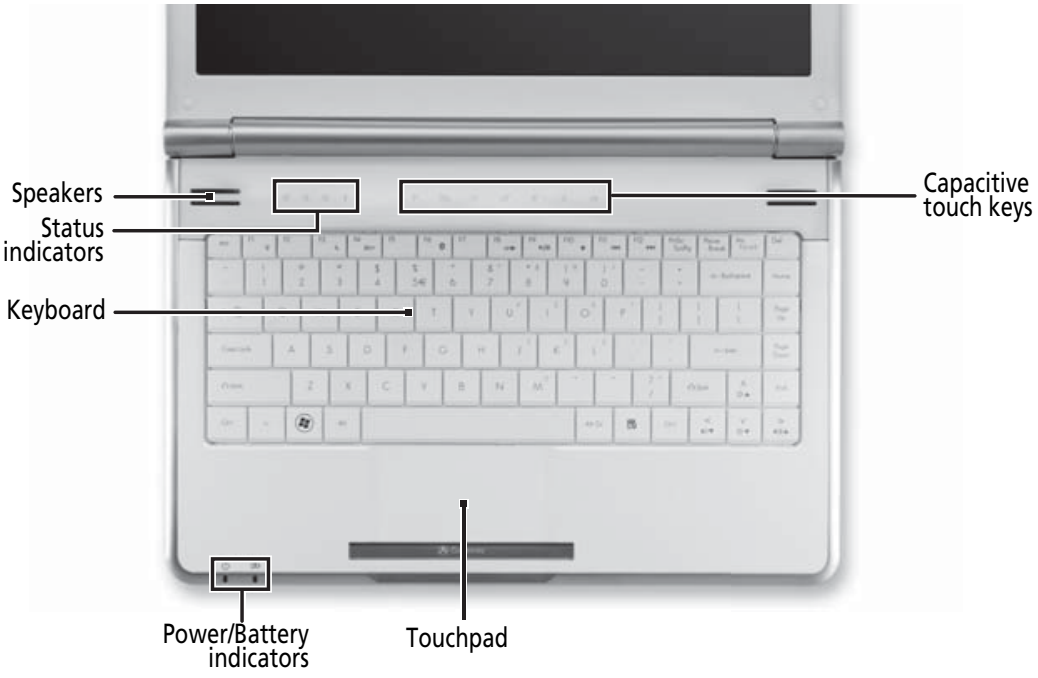
Icon	Item	Description
	Battery	Provides power when the notebook is not plugged into AC power.
	Modem jack (optional)	Plug a dial-up modem cable into this optional jack.
	Power connector	Plug the AC adapter cable into this connector.

Bottom View



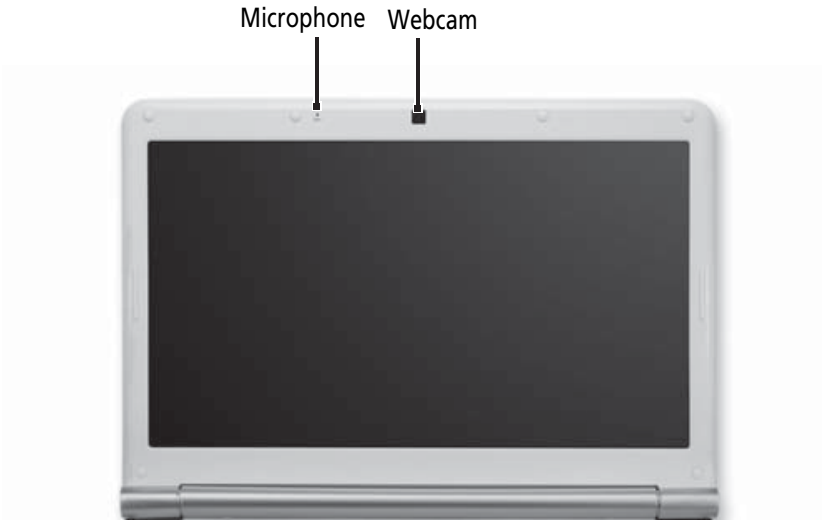
Icon	Item	Description
	Battery	Provides power when the notebook is not plugged into AC power.
	Battery lock	Slide to unlock the battery.
	Battery latch	Slide to release the battery.
m-PCI	MicroPCI bay	MicroPCI modules are located in this bay.
	Memory bay	Memory modules are located in this bay.
	Hard drive bay	The hard drive is located in this bay.
	Ventilation slots and cooling fan	Helps cool internal components. **Warning:** Do not work with the notebook resting on your lap. If the air vents are blocked, the notebook may become hot enough to harm your skin. **Caution:** Do not block or insert objects into these slots. If these slots are blocked, your notebook may overheat resulting in unexpected shutdown or permanent damage to the notebook. **Caution:** Provide adequate space around your notebook so air vents are not obstructed. Do not use the notebook on a bed, sofa, rug, or other similar surface.

Keyboard Area (selected models)



Icon	Item	Description
	Speakers	Left and right speaker deliver stereo output.
	Status indicators	Inform you when a drive is in use or when a button has been pressed that affects how the keyboard is used. See “Status Indicators” on page 11.
	Keyboard	Provides all the features of a full-sized, computer keyboard.
	Power indicator	• LED on - Notebook is on. • LED blinking - Notebook is in Sleep or Hybrid Sleep mode. • LED off - Notebook is off.
	Battery charge indicator	• LED orange - Battery is fully charged. • LED blinking orange - Battery is charging. • LED blinking red - Battery charge is very low. • LED solid red - Battery is malfunctioning. **Important:** This LED only lights up when your notebook is connected to AC power or the battery charge is very low.
	TouchPad	Provides all the functionality of a mouse.
	Capacitive touch keys	Press to access capacitive touch key function.

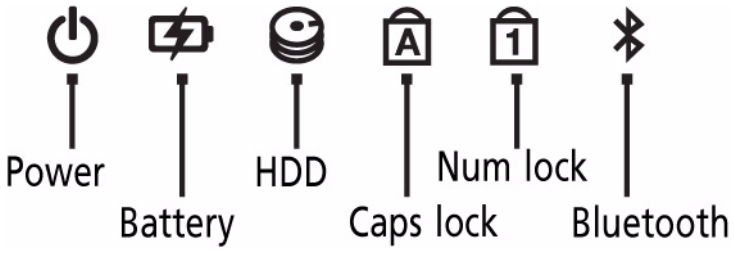
LCD Panel



Icon	Item	Description
	Webcam	Use to let others see who they are communicating with when making VoIP calls.
	Microphone	Use to talk through when making Voice over Internet Protocol (VoIP) calls.

Status Indicators

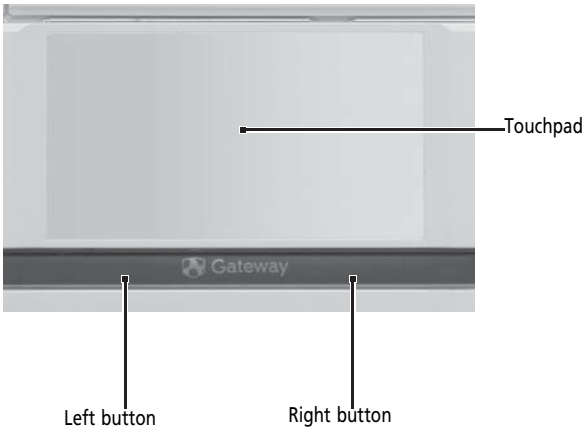
The computer has several easy-to-read status indicators. The front panel indicators are visible even when the computer cover is closed.



Icon	Item	Description
	Power indicator	• LED on - Notebook is on. • LED blinking - Notebook is in Sleep or Hybrid Sleep mode. • LED off - Notebook is off.
	Battery charge indicator	• LED blue - Battery is fully charged. • LED red - Battery is charging. **Important:** This LED only lights up when your notebook is connected to AC power.
	Hard drive	• LED blinking - The drive is being accessed. • LED off - The drive is not being accessed.
	Caps lock	• LED on - Caps lock is turned on. • LED off - Caps lock is turned off.
	Num lock	• LED on - Num lock is turned on. • LED off - Num lock is turned off.
	Bluetooth	• LED on - Bluetooth communication is turned on. • LED off - Bluetooth communication is turned off.

TouchPad Basics

The following items show you how to use the TouchPad:



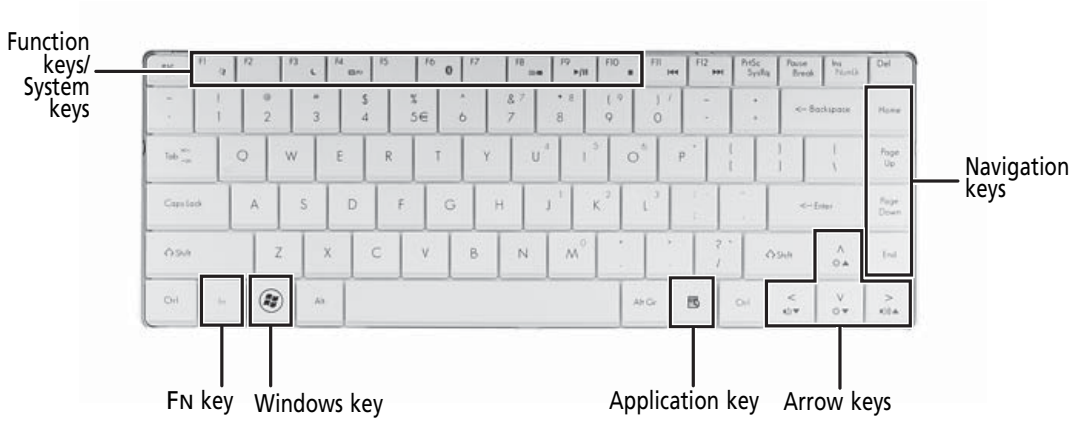
- Move your finger across the TouchPad to move the cursor.
- Press the left and right buttons located beneath the TouchPad to perform selection and execution functions. These two buttons are similar to the left and right buttons on a mouse. Tapping on the TouchPad is the same as clicking the left button.

Function	Left Button	Right Button	Main TouchPad
Execute	Quickly click twice.		Tap twice (at the same speed as double-clicking a mouse button).
Select	Click once.		Tap once.
Drag	Click and hold, then use finger on the TouchPad to drag the cursor.		Tap twice (at the same speed as double-clicking a mouse button); rest your finger on the TouchPad on the second tap and drag the cursor.
Access context menu		Click once.	

NOTE: When using the TouchPad, keep it - and your fingers - dry and clean. The TouchPad is sensitive to finger movement; hence, the lighter the touch, the better the response. Tapping too hard will not increase the TouchPad's responsiveness.

Using the Keyboard

Your Gateway NV42 has a close-to-full-sized keyboard and an embedded numeric keypad, separate cursor, lock, function and special keys.



Key Types

The keyboard has several different types of keys. Some keys perform specific actions when pressed alone and other actions when pressed in combination with another key.

Icon	Key Type	Description
	Function keys	Press these keys labeled F1 to F12 to perform actions in programs. For example, pressing F1 may open help. Each program uses different function keys for different purposes. See the program documentation to find out more about the function key actions.
	System keys	Press these colored keys in combination with the Fn key to perform specific actions. See “System Keys” on page 15.
	Navigation keys	Press these keys to move the cursor to the beginning of a line, to the end of a line, up the page, down the page, to the beginning of a document, or to the end of a document.
	Fn key	Press the Fn key in combination with a colored system key to perform a specific action.
	Windows key	Press this key to open the Windows Start menu. This key can also be used in combination with other keys to open utilities. See “Windows Keys” on page 14.
	Application key	Press this key for quick access to shortcut menus and help assistants in Windows.
	Arrow keys	Press these keys to move the cursor up, down, right, or left.

Windows Keys

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

Key	Description
Windows key	Pressed alone, this key has the same effect as clicking on the Windows Start button; it launches the Start menu. It can also be used with other keys to provide a variety of functions: <**>**:** Open or close the Start menu <**> **+ <D>:** Display the desktop <**> **+ <E>:** Open Windows Explore <**> **+ <F>:** Search for a file or folder <**> **+ <G>:** Cycle through Sidebar gadgets <**> **+ <L>:** Lock your computer (if you are connected to a network domain), or switch users (if you're not connected to a network domain) <**> **+ <M>:** Minimizes all windows <**> **+ <R>:** Open the Run dialog box <**> **+ <T>:** Cycle through programs on the taskbar <**> **+ <U>:** Open Ease of Access Center <**> **+ <X>:** Open Windows Mobility Center <**> **+ <BREAK>:** Display the System Properties dialog box <**> **+ <SHIFT+M>:** Restore minimized windows to the desktop <**> **+ <TAB>:** Cycle through programs on the taskbar by using Windows Flip 3-D <**> **+ <SPACEBAR>:** Bring all gadgets to the front and select Windows Sidebar **<CTRL> +** <**> **+ <F>:** Search for computers (if you are on a network) **<CTRL> +** <**> **+ <TAB>:** Use the arrow keys to cycle through programs on the taskbar by using Windows Flip 3-D **Note:** Depending on your edition of Windows Vista, some shortcuts may not function as described.

System Keys

The computer employs hotkeys or key combinations to access most of the computer's controls like screen brightness, Bluetooth and WiFi.

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

Hotkey	Icon	Description
Fn + F1		Turn the capacitive touch key LEDs on or off. For more information, see "Using the status indicators" on page 24.
Fn + F3		Enter Sleep mode or Hybrid Sleep mode. Press the power button to leave Sleep mode.
Fn + F4		Toggle the notebook display in the following order: • The LCD • An external monitor or projector (a monitor or projector must be plugged into the monitor port or HDMI port on your notebook) • Both displays at the same time
Fn + F6		Turn the optional Bluetooth radio on or off. **Warning:** Radio frequency wireless communication can interfere with equipment on commercial aircraft. Current aviation regulations require wireless devices to be turned off while traveling in an airplane. Bluetooth communication devices are examples of devices that provide wireless communication. **Important:** The wireless network switch must be in the ON position for this button to work.
Fn + F7		Mute the sound. Press the key combination again to restore the sound.
Fn + F8		Turns the display screen backlight off to save power. Press any key to return.
Fn + F9		Play/ Pause—Plays or pauses the CD or DVD.
Fn + F10		Stop—Stops playing the CD or DVD.
Fn + F11		Previous—Skips back one CD track or DVD chapter.
Fn + 12		Next—Skips ahead one CD track or DVD chapter.

Hardware Specifications and Configurations

Processor

Item	Specification
CPU type	AMD Turion/Sempron
CPU package	Micro-PGA packaging, 638-pin
Core Logic	• AMD Turion/Sempron CPUs • RS780MN • SB710
Chipset	• WPCE775 integrated power controller and keyboard controller • Integrated RS780MN VGA chip.
Features	• Supports the mobile and desktop Athlon 64/Athlon 64FX/ Athlon X2/Sempron/Turion 64 processors, including S1 socket CPUs. • Support for DDR2 system memories up to DDR2-667, with a maximum memory clock speed of 667MHz. • Integrated VGA. • One x4 A-Link Express II interface (PCI Express 1.1 compliant) for connection to an AMD Southbridge. • Support PCI bus at 33MHz. • Supports four SATA ports, complying with the SATA 1.0a specification • 5 OHCI and 1 EHCI Host controllers to support 12 USB ports

Processor Specifications

Item	CPU Speed	Cores	Bus Speed (MHz)	Mfg. Tech	Cache Size	Package	Acer P/N
Athlon TF20	1.6 GHz	1		65 nm	512 kB	S1	KC.ATF02.200
Athlon TF36	2.0 GHz	1			256 kB	S1	KC.ATF02.360
Athlon TF38	2.2 GHz	1			256 kB	S1	KC.ATF02.380
AthlonX2 TK42	1.6 GHz	2		65 nm	1 MB	S1	KC.ATK02.420

CPU Fan Tru Value Table

CPU Temperature at Diode (°C)		Fan Speed (RPM)	SPL Spec (dBA)
33	38	2700	28
40	45	3000	31
52	47	3300	34
60	67	3800	37
72	75	4000	40
92	89	4800	

- Throttling 50%: On= 84°C; OFF=86°C
- OS shut down at 100°C; H/W shut down(PH1) at 110°C

Graphics

Item	Specification
Display support	Dual independent display support
Colors	16.7 million colors
External resolution/refresh rate	• 2048 x 1536: 75/60 Hz • 1920 x 1440: 85/75/60 Hz • 1920 x 1200: 75/60 Hz • 1920 x 1080: 100/85/75/60 Hz • 1680 x 945: 100/85/75/60 Hz • 1600 x 1200: 120/100/85/75/60 Hz • 1600 x 900: 120/100/85/75/60 Hz • 1400 x 1050: 85/75/60 Hz • 1366 x 768: 85/75/60 Hz • 1280 x 1024: 120/100/85/75/60 Hz • 1280 x 960: 85/75/60 Hz • 1280 x 768: 85/75/60 Hz • 1280 x 720: 100/85/75/60 Hz • 1024 x 768: 120/100/85/75/60 Hz • 800 x 600: 120/100/85/72/60 Hz

System Memory

Item	Specification
Memory controller	Built in
Memory size	N/A
DIMM socket number	2
Supports memory size per socket	2 GB
Supports maximum memory size	4 GB
Supports DIMM type	DDR II 800/677Mhz SDRAM memory interface design
Supports DIMM Speed	800/677Mhz SDRAM

System Storage

Item	Specification
HDD	• 9.5mm height, 2.5" HDD • Easily removable with no more than four screws • SATA bus • 160-500GB • 5400 rpm • SATA connector BTO

Hard Disk Drive Interface

Item	Hard Disk Specification					
Vendor & Model Name	Seagate ST9160310AS	Seagate ST9250315AS	Seagate ST9320320AS	Seagate ST9500325AS	Hitachi HTS54 3216L9A300	Hitachi HTS545025B9 A300
Capacity (GB)	160	250	320	500	160	250
Bytes per sector	512	512	512	512	512	512
Data heads	2	2	4	4	2	2
Drive Format						
Disks	1	1	2	2 1		1
Spindle speed (RPM)	5400	5400	5400	5400	5400	5400
Performance Specifications						
Buffer size	8 MB	8 MB	8MB	8 MB	8 MB	8MB
Interface	SATA	SATA	SATA	SATA	SATA	SATA
Fast data transfer rate (Mbits/sec, max)	830	1175	830	1175	845	875
Media data transfer rate (Mbytes/sec max)	300	300	300	300	300	300
DC Power Requirements						
Voltage tolerance	5V ±5%	5V ±5%	5V ±5%	5V ±5%	5V ±5%	5V ±5%

Item	Hard Disk Specification					
Vendor & Model Name	Hitachi HTS545032B9 A300	Hitachi HTS545050B9 A300	Toshiba MK1655GSX	Toshiba MK2555GSX	Toshiba MK3255GSX	Toshiba MK5055GSX
Capacity (GB)	320	500	160	250	320	500
Bytes per sector	512	512	512	512	512	512

Item	Hard Disk Specification					
Data heads	2	4	2	2	4	4
Drive Format						
Disks	1	2	1	1	2	2
Spindle speed (RPM)	5400	5400	5400	5400	5400	5400
Performance Specifications						
Buffer size	8 MB	8 MB	8MB	8 MB	8 MB	8MB
Interface	SATA	SATA	SATA	SATA	SATA	SATA
Fast data transfer rate (Mbits/sec, max)	875	875	363 ~ 952 typical	363 ~ 952 typical	363 ~ 952 typical	363 ~ 952 typical
Media data transfer rate (Mbytes/sec max)	300	300	300	300	300	300
DC Power Requirements						
Voltage tolerance	5V ±5%	5V ±5%	5V ±5%	5V ±5%	5V ±5%	5V ±5%

Item	Hard Disk Specification			
Vendor & Model Name	Western Digital WD1600BEVT-22ZCTO	Western Digital WD2500BEVT-22ZCT0	Western Digital WD3200BEVT-22ZCT0	Western Digital WD5000BEVT-22ZAT0
Capacity (GB)	160	250	320	500
Bytes per sector	512	512	512	512
Data heads	2	4	3	4
Drive Format				
Disks	1	2	2	2
Spindle speed (RPM)	5400	5400	5400	5400
Performance Specifications				
Buffer size	8 MB	8 MB	8MB	8 MB
Interface	SATA	SATA	SATA	SATA
Fast data transfer rate (Mbits/sec, max)	N/A	N/A	N/A	N/A
Media data transfer rate (Mbytes/sec max)	300	300	300	300
DC Power Requirements				
Voltage tolerance	5V ±5%	5V ±5%	5V ±5%	5V ±5%

Optical Disk Drive

Item	Specification
Type	8X DVD-Super Multi double-layer drive
Performance Specification	
Transfer rate (MB/sec)	10.8
Buffer Memory	2MB
Read/write speeds	·Read: 24X CD-ROM, 24X CD-R, 24X CD-RW, 8X DVD-ROM, 8X DVD-R, 8X DVD+R, 6X DVD-ROM DL (double-layer), 6X DVD-R DL (double-layer), 6X DVD+R DL (double-layer), 6X DVD-RW, 6X DVD+RW, 5X DVD-RAM ·Write: 24X CD-R, 16X CD-RW, 8X DVD-R, 8X DVD+R, 4X DVD-R DL (double-layer), 4X DVD+R DL (double-layer), 6X DVD-RW, 8X DVD+RW, 5X DVD-RAM
Interface	SATA
Loading mechanism	Drawer-Type
Power Requirement	
Input Voltage	DC 5 V +/- 5%

BIOS

Item	Specification
BIOS vendor	Phoenix
BIOS Version	2301
BIOS ROM type	Flash
BIOS ROM size	16 MB

LCD 10.1”

Item	Specification			
Vendor/model name	AU Optronics	Chi Mei	Samsung	LG
Screen Diagonal (mm)	354.95	354.95	354.95	354.95
Active Area (mm)	309.40 X 173.95	309.40 X 173.95	309.40 X 173.95	309.40 X 173.95
Display resolution (pixels)	1366x768	1366x768	1366x768	1366x768
Pixel Pitch (mm)	0.2265X0.2265	0.2265X0.2265	0.2265X0.2265	0.2265X0.2265
Typical White Luminance (cd/m^2) also called Brightness	200	220	220	220
Contrast Ratio	500	650	500	500
Response Time (Optical Rise Time/Fall Time) msec	8	8	8	8
Typical Power Consumption (watt)	4.8	4.8	3.2	4.5
Weight (without inverter)	350	355	360	350
Physical Size (mm)	324x192.5x5.2	324x192.5x5.2	324x192.5x5.2	324x192.5x5.2
Electrical Interface	1 ch. LVDS	1 ch. LVDS	LVDS	LVDS
Viewing Angle (degree) Horizontal (Right)/CR = 10 (Left) Vertical (Upper)/CR = 10 (Lower)	 45/45 (typical) 15/35 (typical)	 45/45 (typical) 20/45 (typical)	 45/45 (typical) 15/35 (typical)	 40/40 (min) 10/30 (min)

Audio Interface

Item	Specifications
Audio Controller	• Conexant CX-20561-15Z Azalia Codec • Amplifier GMT G1441
Audio onboard or option	Built-in
Mono or Stereo	Stereo
Resolution	2.1
Compatibility	Headphone-out with S/PDIF, Line-In and Microphone-In.2 stereo ADCs support 16/20/24-bit PCM format recording simultaneously.
Sampling Rate.	All DACs supports 16/20/24-bit, 44.1k/48k/96k/192kHz sample rate.All ADCs supports 16/20/24-bit, 44.1k/48k/96k/192kHz sample rate.Two independent S/PDIF-OUT converters support 16/20/24-bit, 44.1k/48k/88.2k/96k/192kHz sample rate. One for normal S/PDIF output, the other one output an independent digital stream to HDMI transmitter.
Internal Microphone	• Digital MICRO PHONE ZK2(HFM-M101-006-L19-G) • Digital MICRO PHONE ZK2(A-OA2408FM-018)
Internal speaker/ Quantity	Two Med-High Speakers (2W/4Ohm) and one Subwoofer (3W/4Ohm)

LAN Interface

Item	Specification
LAN Chipset	Broadcom BCM5784M 10/100/1000 Mbps Gigabit Ethernet LAN Controller with Integrated Transceiver
Features	• Integrated 10/100/1000BASE-T transceiver • Automatic MDI crossover function • PCIe v1.1 compliant • 10/100/1000BASE-T full-duplex/half-duplex MAC • Receive side scaling (RSS) for multicore processors • Complies with IEEE 802.3, 802.3u, 802.3ab, and • 02.1p • Supports iSCSI boot • FLASH Auto-Sense mode • IPv4 and IPv6 large send offload and checksum • offload (LSO/TCO) • Wake on LAN (WOL) support meeting the ACPI • requirements • Statistics for SNMP MIB II, Ethernet-like MIB, and • Ethernet MIB (IEEE 802.3z, Clause 30) • SMBus interface supporting Alert Standard Format • (ASF) v2.0 • Self-boot feature, utilizing smaller EEPROM size • Serial flash memory support • PCI Express CLKREQ support • Energy Detect/Cable Sense • Super Low Power Mode, for ultra-low power • consumption • 68-pin QFN package

Keyboard

Item	Specification
Type	flat keyboard
Total number of keypads	84
Windows logo key	Yes
Internal & external keyboard work simultaneously	Plug USB keyboard to the USB port directly: Yes

Mini Card

Item	Specification
Number Supported	1
Features	• 1 mini card slot for WLAN (half-size) • 52 pin connector

Bluetooth interface

Item	Specification
Chipset	• Foxconn Bluetooth FOX_ T60H928.11 Bluetooth module

Item	Specification
Features	• Embedded USB solution with antenna • Bluetooth 2.0+EDR • Bluetooth control for BT optical mouse
Specifications	• Radio Technology FHSS • Operating Frequency: 2402 ~ 2480MHz ISM band • Channel Numbers: 79 channels with 1MHz BW • Transmitter Output Power: -4~4dBm output power for class2 operation • Receiver Sensitivity:-78dBm @ 0.1% BER (Max) • Maximum Receiver Signal: -10dBm • Operating Voltage: 3.3V+/-0.3V • Interface:USB2.0

Wireless LAN

Item	Specification
Type	IEEE802.11 b/g Half PCI-e Card
Features	• IEEE 802.11 b/g • PCI-Express Half Mini card (H2 type)

Battery

Item	Specification
Vendor & model name	SIMPLO AS-2009C, SANYO AS-2009C
Battery Type	Li-ion
Pack capacity	4400mAh
Number of battery cell	6
Package configuration	3S2P

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 (when "Press <F2> to enter Setup" message is prompted on the bottom of screen).

Press **F2** to enter setup. The default parameter of F12 Boot Menu is set to "disabled". If you want to change boot device without entering BIOS Setup Utility, please set the parameter to "enabled".

Press <F12> during POST to enter multi-boot menu. In this menu, user can change boot device without entering BIOS SETUP Utility.

Navigating the BIOS Utility

There are six menu options: Information, Main, Advanced, Security, Boot, and Exit.

Follow these instructions:

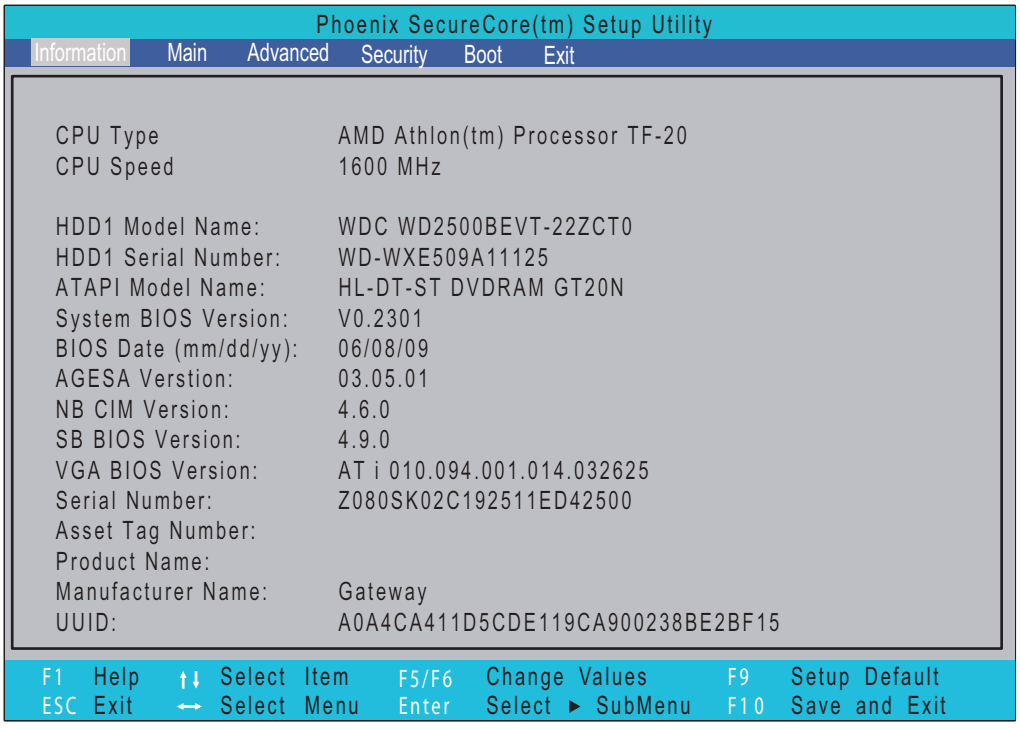
- To choose a menu, use the left and right arrow keys.
- To choose an item, use the up and down arrow keys.
- To change the value of a parameter, press **F5** or **F6**.
- A plus sign (+) indicates the item has sub-items. Press **Enter** to expand this item.
- Press **Esc** while you are in any of the menu options to go to the Exit menu.
- In any menu, you can load default settings by pressing **F9**. You can also press **F10** to save any changes made and exit the BIOS Setup Utility.

NOTE: You can change the value of a parameter if it is enclosed in square brackets. Navigation keys for a particular menu are shown on the bottom of the screen. Help for parameters are found in the Item Specific Help part of the screen. Read this carefully when making changes to parameter values. **Please note that system information is subject to different models**.

Gateway NV42 AMD BIOS

Information

The Information screen displays a summary of your computer hardware information.



NOTE: The screen above is for your reference only. Actual values may differ according to model.

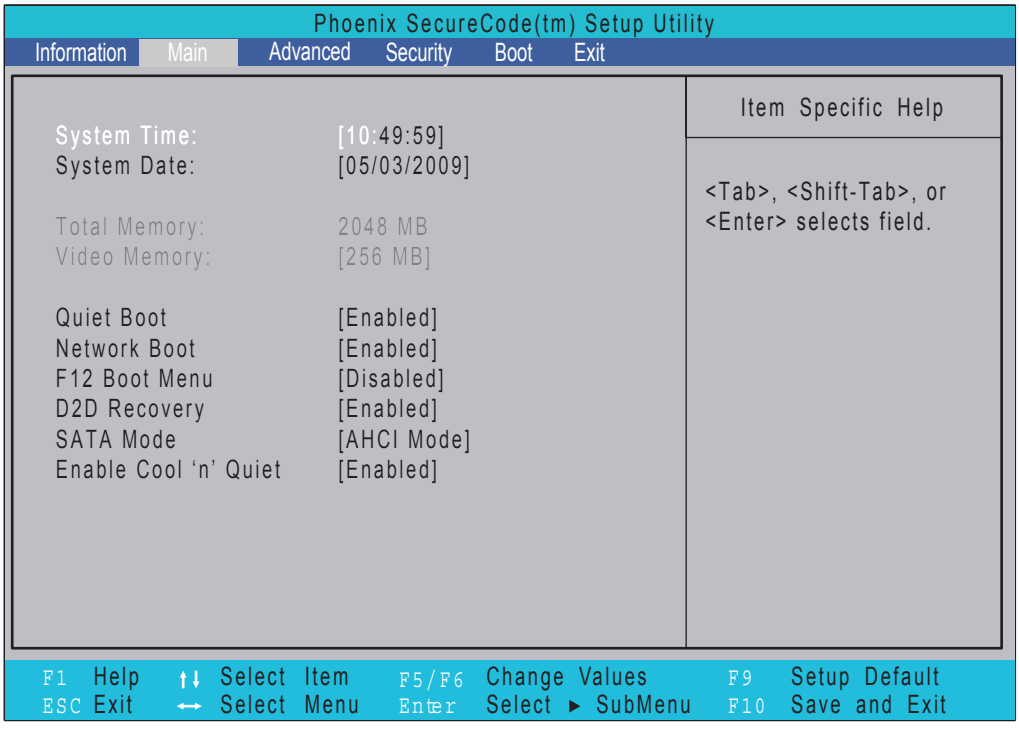
The table below describes the parameters in this screen.

Parameter	Description
CPU Type	This field shows the CPU type and speed of the system.
CPU Speed	This field shows the speed of the CPU.
HDD1 Model Name	This field shows the model name of HDD1 installed on primary IDE master.
HDD1 Serial Number	This field displays the serial number of HDD1 installed on primary IDE master.
ATAPI Model Name	This field shows the model name of the Optical device installed in the system.
System BIOS Version	Displays system BIOS version.
BIOS Date	This field displays the BIOS date of the system.
AGESA Version	This field displays the AGESA version of the system.
NB CIM Version	This field displays the NB CIM version of the system.
SB CIM Version	This field displays the SB CIM version of the system.
VGA BIOS Version	This field displays the VGA firmware version of the system.
Serial Number	This field displays the serial number of the unit.
Asset Tag Number	This field displays the asset tag number of the system.
Product Name	This field displays the product name of the system.
Manufacturer Name	This field displays the manufacturer of this system.

Parameter	Description
UUID Number	Universally Unique Identifier (UUID) is an identifier standard used in software construction, standardized by the Open Software Foundation (OSF) as part of the Distributed Computing Environment (DCE).

Main

The Main screen allows the user to set the system time and date as well as enable and disable boot option and recovery.



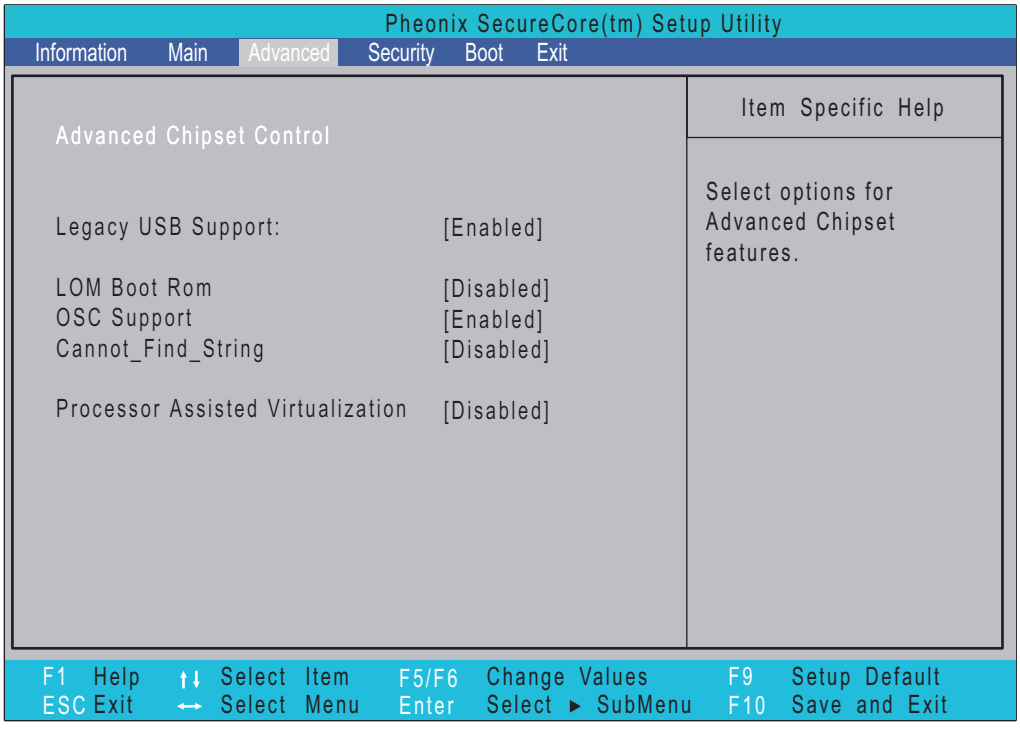
NOTE: The screen above is for your reference only. Actual values may differ.

The table below describes the parameters in this screen.

Parameter	Description	Format/Option
System Time	Sets the system time. The hours are displayed with 24-hour format.	Format: HH:MM:SS (hour:minute:second)
System Date	Sets the system date.	Format MM/DD/YYYY (month/day/year)
Total Memory	This field reports the memory size of the system.	N/A
Video Memory	This field shows the memory allocated for the video graphics.	N/A
Quiet Boot	Allows startup to skip certain tests while booting, decreasing the time needed to boot the system.	Option: **Enabled** or Disabled
Network Boot	Enables, disables the system boot from LAN (remote server).	Option: **Enabled** or Disabled
F12 Boot Menu	Enables, disables Boot Menu during POST.	Option: **Enabled** or Enabled
D2D Recovery	Enables, disables D2D Recovery function. The function allows the user to create a hidden partition on hard disc drive to store operation system and restore the system to factory defaults.	Option: **Enabled** or Disabled
SATA Mode	Control the mode in which the SATA controller should operate.	Option: **AHCI** or IDE
Enable Cool 'n' Quiet	Enables, disables Cool 'n' Quiet. The function reduces the clock rate and voltage when the processor is idle for lower power consumption and heat generation.	Option: **Enabled** or Disabled

Advanced

The Advanced screen allows you to enable and disable advanced chipset options.

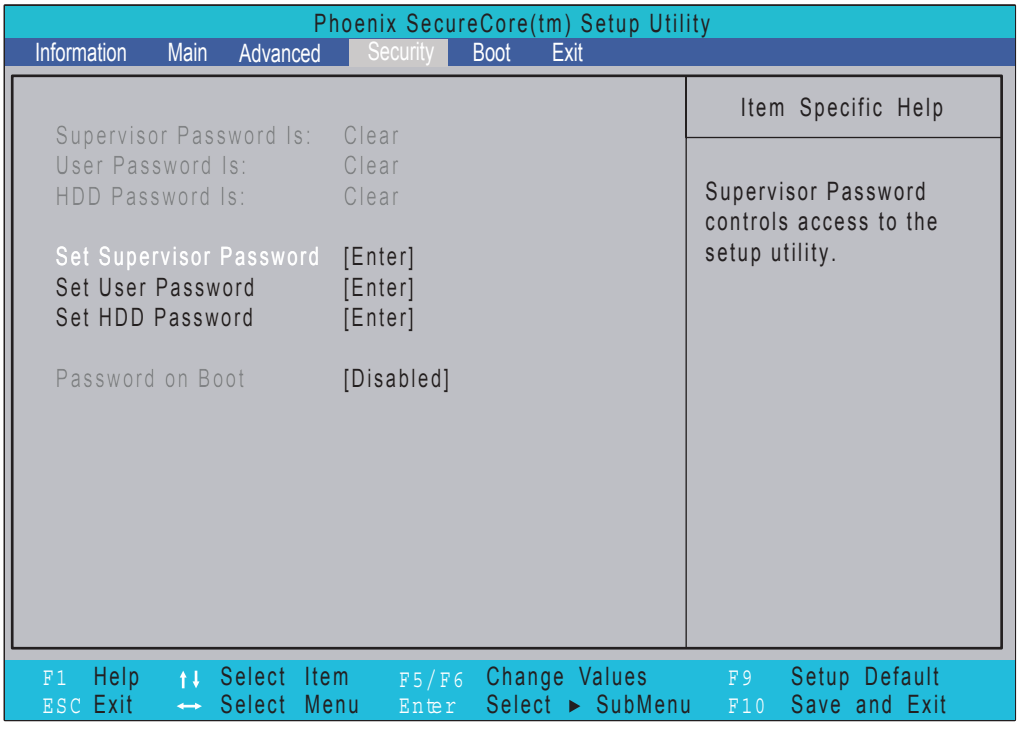


The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Option
Legacy USB Support	Enables, disables Legacy USB Support. The function allows the BIOS to interact with a USB keyboard.	Option: **Enabled** or Disabled
LOM Boot Rom	Enables, disables LOM Boot Rom.	Option: Enabled or **Disabled**
OSC Support	Enables, disables operating system command support.	Option: **Enabled** or Disabled
Cannot_Find_String	Enables, disables Cannot_Find_String command error message.	Option: Enabled or **Disabled**
Processor Assisted Virtualization	Enables, disables Processor Assisted Virtualization.	Option: Enabled or **Disabled**

Security

The Security screen contains parameters that help safeguard and protect your computer from unauthorized use.



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

Parameter	Description	Option
Supervisor Password Is	Shows the setting of the Supervisor password	**Clear** or Set
User Password Is	Shows the setting of the user password.	**Clear** or Set
HDD Password Is	Shows the setting of the hard disk password.	**Clear** or Set
Set Supervisor Password	Press Enter to set the supervisor password. When set, this password protects the BIOS Setup Utility from unauthorized access. The user can not either enter the Setup menu nor change the value of parameters.	N/A
Set User Password	Press Enter to set the user password. When user password is set, this password protects the BIOS Setup Utility from unauthorized access. The user can enter Setup menu only and does not have right to change the value of parameters.	N/A
Set HDD Password	Enter HDD Password.	N/A
Password on Boot	Defines whether a password is required or not while the events defined in this group happened. The following sub-options are all requires the Supervisor password for changes and should be grayed out if the user password was used to enter setup.	**Disabled** or Enabled

NOTE: When you are prompted to enter a password, you have three tries before the system halts. Don't forget your password. If you forget your password, you may have to return your notebook computer to your dealer to reset it.

Setting a Password

Follow these steps as you set the user or the supervisor password:

1. Use the ↑ and ↓ keys to highlight the Set Supervisor Password parameter and press the **Enter** key. The Set Supervisor Password box appears:

2. Type a password in the “Enter New Password” field. The password length can not exceed 8 alphanumeric characters (A-Z, a-z, 0-9, not case sensitive). Retype the password in the “Confirm New Password” field.

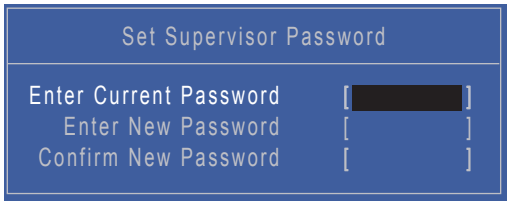
IMPORTANT: Be very careful when typing your password because the characters do not appear on the screen.

3. Press **Enter**. After setting the password, the computer sets the User Password parameter to “Set”.
4. If desired, you can opt to enable the Password on boot parameter.
5. When you are done, press F10 to save the changes and exit the BIOS Setup Utility.

Removing a Password

Follow these steps:

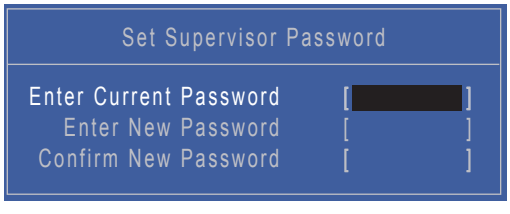
1. Use the ↑ and ↓ keys to highlight the Set Supervisor Password parameter and press the **Enter** key. The Set Password box appears:



2. Type the current password in the Enter Current Password field and press **Enter**.
3. Press **Enter** twice **without** typing anything in the Enter New Password and Confirm New Password fields. The computer then sets the Supervisor Password parameter to “Clear”.
4. When you have changed the settings, press u to save the changes and exit the BIOS Setup Utility.

Changing a Password

1. Use the ↑ and ↓ keys to highlight the Set Supervisor Password parameter and press the **Enter** key. The Set Password box appears.



2. Type the current password in the Enter Current Password field and press **Enter**.
3. Type a password in the Enter New Password field. Retype the password in the Confirm New Password field.
4. Press **Enter**. After setting the password, the computer sets the User Password parameter to “Set”.
5. If desired, you can enable the Password on boot parameter.

6. When you are done, press F10 to save the changes and exit the BIOS Setup Utility.

If the verification is OK, the screen will display as following.

The password setting is complete after the user presses **Enter**.

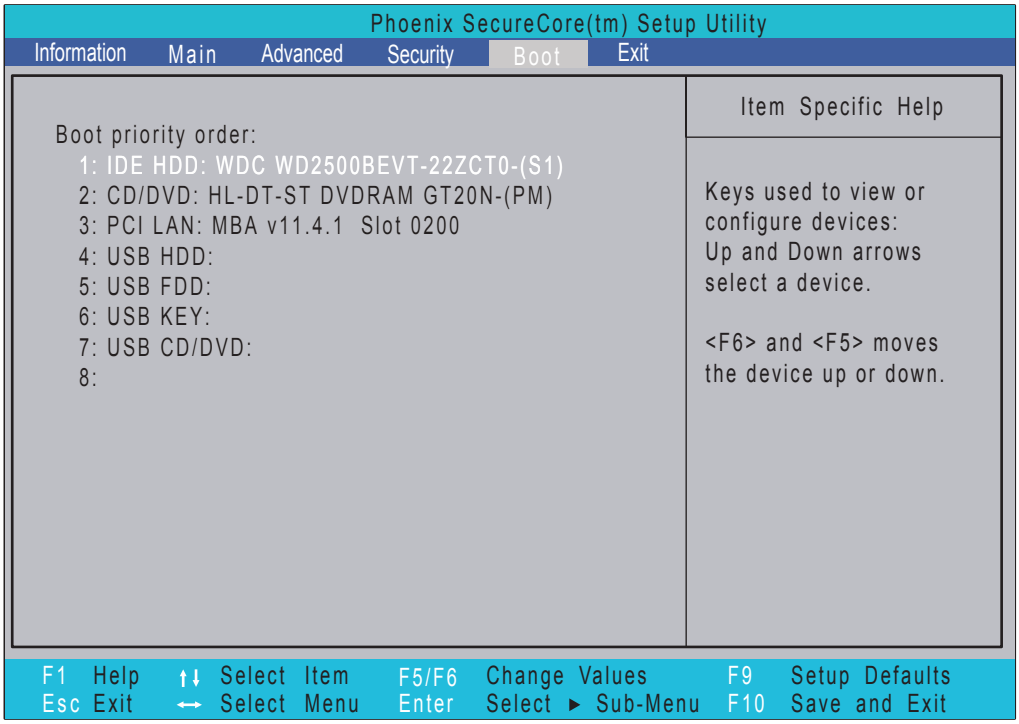
If the current password entered does not match the actual current password, the screen will show you the Setup Warning.

If the new password and confirm new password strings do not match, the screen will display the following message.

Boot

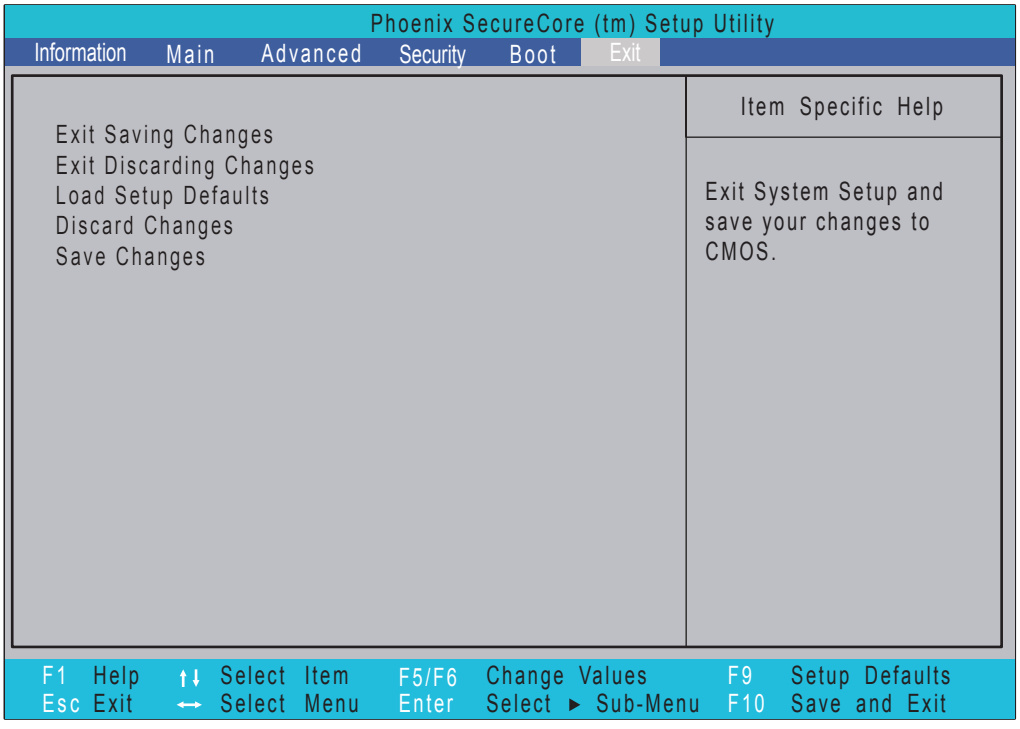
This menu allows the user to decide the order of boot devices to load the operating system. Bootable devices includes the USB diskette drives, the onboard hard disk drive and the DVD drive in the module bay.

Select Boot Devices to select specific devices to support boot.



Exit

The Exit screen allows you to save or discard any changes you made and quit the BIOS Utility.



The table below describes the parameters in this screen.

Parameter	Description
Exit Saving Changes	Exit System Setup and save your changes to CMOS.
Exit Discarding Changes	Exit utility without saving setup data to CMOS.
Load Setup Default	Load default values for all SETUP item.
Discard Changes	Load previous values from CMOS for all SETUP items.
Save Changes	Save Setup Data to CMOS.

BIOS Flash Utility

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

- New versions of system programs
- New features or options
- Restore a BIOS when it becomes corrupted.

Use the Flash16 utility to update the system BIOS flash ROM.

NOTE: Do not install memory-related drivers (XMS, EMS, DPMI) when you use the Flash16 Utility.

NOTE: Please use the AC adaptor power supply when you run the flashit utility. If the battery pack does not contain enough power to finish the BIOS flash, you may not boot the system because the BIOS is not completely loaded.

Using the Flash16 Utility to Update the BIOS

Follow the steps below to run the Flash16 Utility.

1. Prepare a bootable diskette.
2. Copy the flash utilities to the bootable diskette.
3. Boot the system from the bootable diskette.
4. Run Phlash16.exe z08_2301.wph /mode=3 /x. After flashing the BIOS the system will restart.
5. During POST, press F2 to enter into the BIOS setup screen.
6. Navigate to the Exit page, choose Load Setup Defaults then press ENTER.
7. When a Setup Confirmation appears, choose 'Yes’. The system will restart with the BIOS settings inlcuded in the utility.

WinFlash Utility

Perform the following steps to use the WinFlash Utility:

1. Double-click the WinFlash executable.
2. Click **OK** to begin the update. WinFlash closes all applications and shuts down the system.

NOTE: Place only one ***.wph** file with flash32.exe in the same folder when executing this procedure.

Remove HDD/BIOS Password Utilities

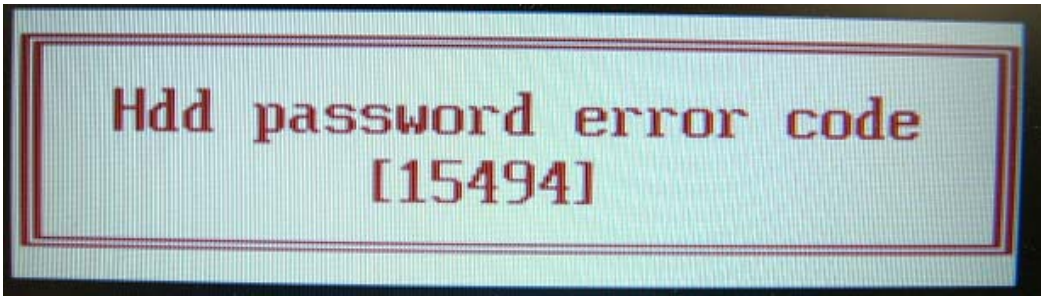
This section provides you with details about removing HDD/BIOS password:

Remove HDD Password:

If you key in the wrong HDD password three times, an error is generated.

To reset the HDD password, perform the following steps:

1. An error code is generated for unlocking the HDD. Note down this code.



2. Run **HDD_PW.EXE** in DOS Mode.
3. Create the unlock code by inserting the numbers noted in the previous step into the following format:

   hdd_pw 15494 0

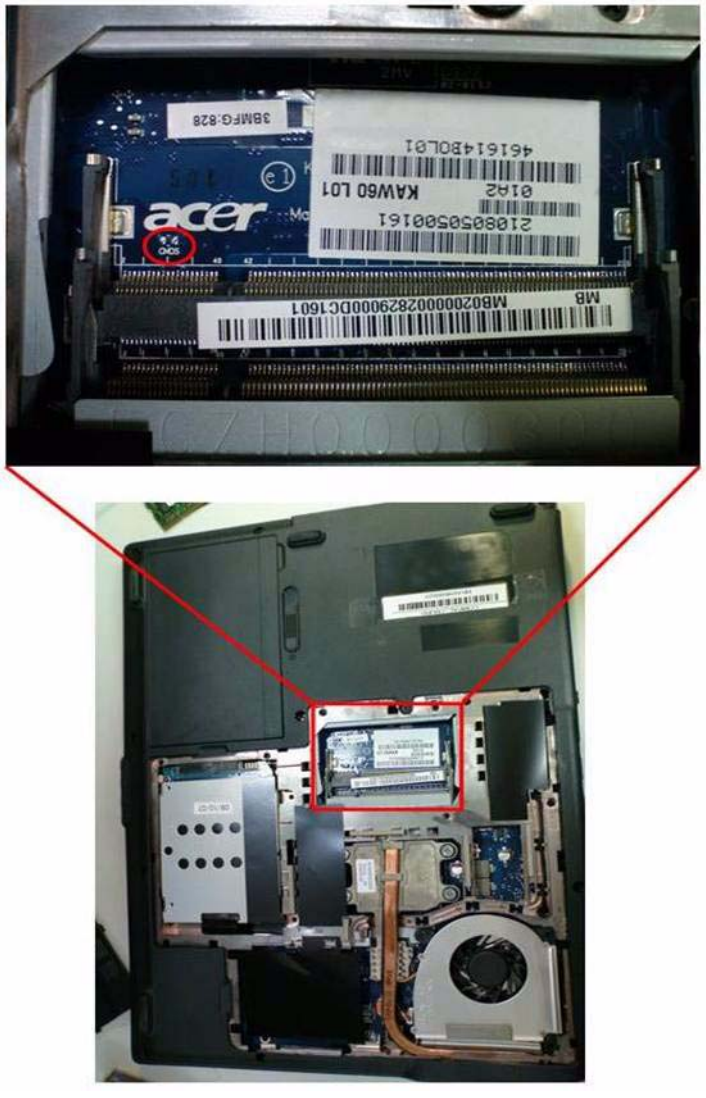
4. Select 2 to obtain the password. The following passwords can be used for unlocking the HDD.

   Password: 0KJFN42
   Password: UVEIQ96

5. Shut down the computer by pressing down the Power button for 4 seconds.
6. Turn on the computer and key in the password to unlock the HDD.

Removing BIOS Passwords:

To clear the User or Supervisor passwords through hardware, open the WLAN door and use a metal instrument to short the **J1** jumper.



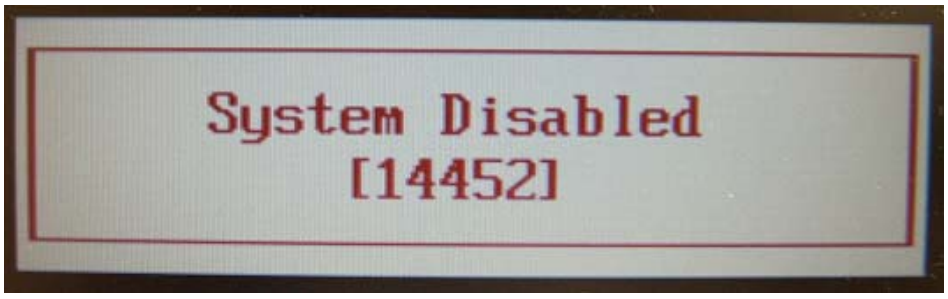
Cleaning BIOS Passwords

To clean the User or Supervisor passwords using software utilities, perform the following steps:

If you key in the wrong BIOS password three times, an error is generated.

To reset the BIOS password, perform the following steps:

1. An error code is generated for unlocking the BIOS. Note down this code.



2. Create the unlock code by inserting the numbers noted in the previous step into the following format:

   bios_pw 14452 0

3. Select 2 to obtain the password. The following passwords can be used for unlocking the BIOS

   Password: qjjg9vy
   Password: 07yqmjd
   Password: cjl14tm
   Password: 6mbzjaj

4. Shut down the computer by pressing down the Power button for 4 seconds.
5. Turn on the computer and key in the password to unlock the BIOS.
6. Press **1** or **2** to clean the desired password shown on the screen.

Using Boot Sequence Selector

The Boot Sequence Selector allows the boot order to be changed without accessing the BIOS. To use Boot Sequence Selector, perform the following steps:

1. Enter into DOS.
2. Execute **BS.exe** to display the usage screen.

3. Select the desired boot sequence by entering the corresponding sequence. For example, enter **BS2** to change the boot sequence to HDD | CD ROM | LAN | Floppy.

Using DMITools

The DMI (Desktop Management Interface) Tool copies BIOS information to EEPROM to be used in the DMI pool for hardware management.

When the BIOS displays **Verifying DMI pool data** it is checking that the table correlates with the hardware before sending to the operating system (Windows, etc.).

To update the DMI Pool, perform the following steps:

1. Boot into DOS.
2. Execute **dmitools**. The following messages report to screen to confirm completion:
   - dmitools /r ==> Read dmi string from bios
   - dmitools /wm xxxx ==> Write manufacturer name to eeprom (max. 16 characters)
   - dmitools /wp xxxx ==> Write product name to eeprom (max. 16 characters)
   - dmitools /ws xxxx ==> Write serial number to eeprom (max. 22 characters)
   - dmitools /wu xxxx ==> Write uuid to eeprom
   - dmitools /wa xxxx ==> Write asset tag to eeprom (max. 32 characters)

The following examples show the commands and the corresponding output information.

Read DMI Information from Memory

Input:

dmitools /r

Output:

Manufacturer (Type1, Offset04h): Acer

Product Name (Type1, Offset05h): TravelMate xxxxx

Serial Number (Type1, Offset07h): 01234567890123456789

UUID String (Type1, Offset08h): xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx

Asset Tag (Type3, Offset04h): Acer Asstag

Write Product Name to EEPROM

Input:

dmitools /wp Acer

Write Serial Number to EEPROM

Input:

dmitools /ws 01234567890123456789

4). Write UUID to EEPROM (Create UUID from Intel WFM20.pdf)

Input:

dmitools /wu

5). Write Asset Tag to EEPROM

Input:

dmitools /wa Acer Asstag

NOTE: When using any of the Write options, restart the system to make the new DMI data effective.

Using the LAN MAC EEPROM Utility

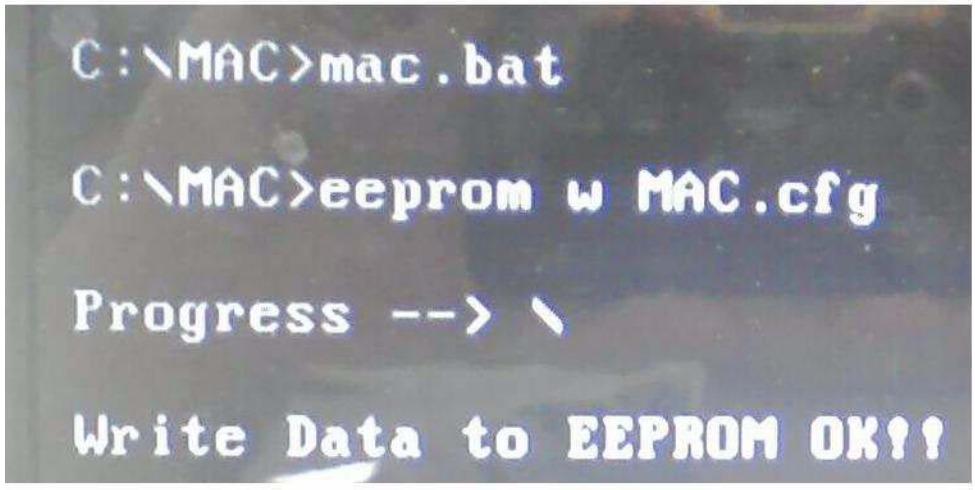
You can use the MAC.BAT utility to write the MAC.CFG file to the EEPROM under DOS mode.

1. Use a text editor (for example: Notepad) to open the MAC.CFG file. You can see the MAC.CFG contents as below:

WriteData = ‘001122334455'	MAC value
StartAddr=7A	MAC address
WriteLeng=6	MAC value length
KeepByte=0	don’t care

- WriteData= '001122334455' <------- MAC value
- StartAddr=7A <------- MAC address
- WriteLeng=6 <------- MAC value length
- KeepByte=0 <------- can be any value

2. Boot into DOS.
3. Execute **MAC.BAT** to write MAC information to eeprom.


C:\MAC>mac.bat
C:\MAC>eeprom w MAC.cfg
Progress --> \
Write Data to EEPROM OK!!

Machine Disassembly and Replacement

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

Disassembly Requirements

To disassemble the computer, you need the following tools:

- Wrist grounding strap and conductive mat for preventing electrostatic discharge
- Flat screwdriver
- Philips screwdriver
- Plastic flat screwdriver
- Plastic tweezers

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

Related Information

The product previews seen in the disassembly procedures may not represent the final product color or configuration.

General Information

Pre-disassembly Instructions

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.

3. Place the system on a flat, stable surface.
4. Remove the battery pack.

Disassembly Process

The disassembly process is divided into the following sections:

- External components disassembly
- Main unit disassembly
- LCD module disassembly

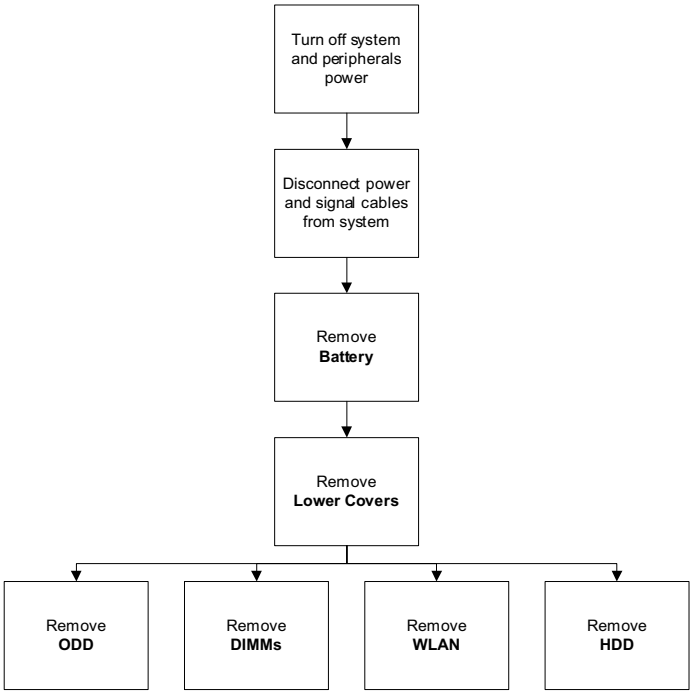
The flowcharts provided in the succeeding disassembly sections illustrate the entire disassembly sequence. Observe the order of the sequence to avoid damage to any of the hardware components. For example, if you want to remove the Mainboard, you must first remove the Keyboard then disassemble the inside assembly frame in that order.

Main Screw List

Screw	Quantity	Part Number
M2.0*3.5-I-NI-NYLOK	4	86.T23V7.005
M2.0*3.0-I-NI-NYLOK	16	86.A08V7.005
M2.5*6.0-I(BNI)(NYLOK)	35	86.W0907.002
M3.0 D 3L K 5.0 D ZK NL	2	86.AZ802.001

External Module Disassembly Process

External Modules Disassembly Flowchart



Screw List

Step	Screw	Quantity	Part No.
ODD Module	M2.5*6.0	1	86.W0907.002
	M2*3	2	86.A08V7.005
WLAN Module	M2*3	1	86.A08V7.005
HDD Module	M2.5*6.0	2	86.W0907.002
	M3*3	2	86.N2802.005

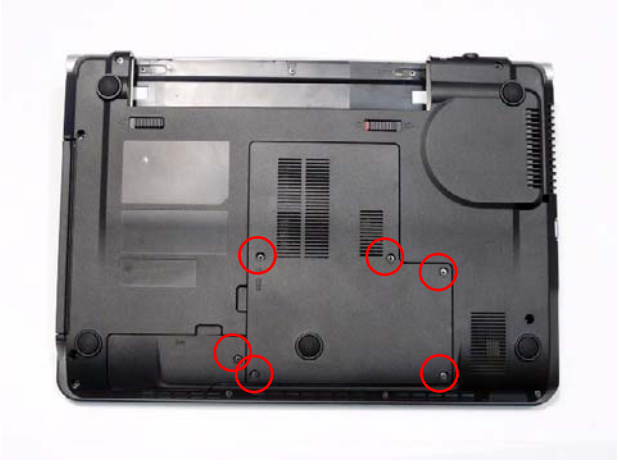
Removing the Battery Pack

1. Turn the computer over.
2. Slide the battery lock/unlock latch to the unlock position.

3. Slide and hold the battery release latch to the release position (1), then slide out the battery pack from the main unit (2).

Removing the Lower Covers

1. See “Removing the Battery Pack” on page 46.
2. Loosen the six captive screws in the Memory and Wireless Covers.



3. Lift the Wireless Cover up to remove.

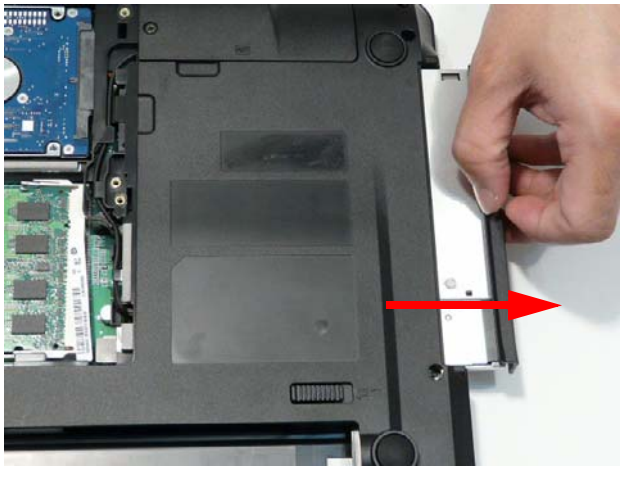
4. Lift the Memory Cover up to remove.

Removing the ODD Module

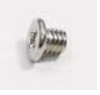
1. See “Removing the Lower Covers” on page 47.
2. Remove the single screw securing the ODD Module in place.

Step	Size	Quantity	Screw Type
ODD Module	M2.5*6.0	1	

3. Slide the ODD Module out of the Lower Cover as shown.



4. Remove the two screws securing the ODD Bracket to the ODD Module.

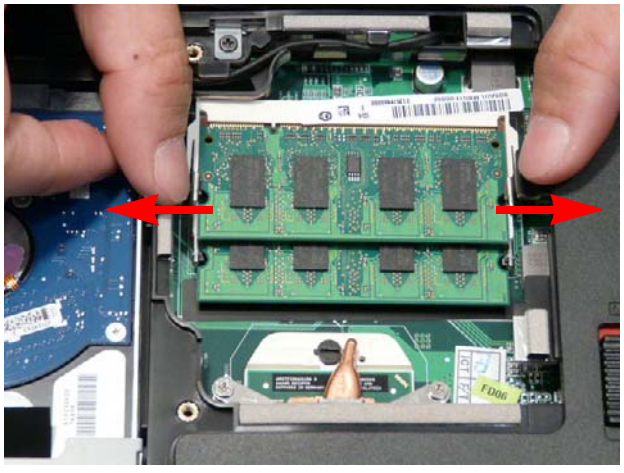
Step	Size	Quantity	Screw Type
ODD Module	M2*3	2	

5. Remove the bracket from the ODD Module.

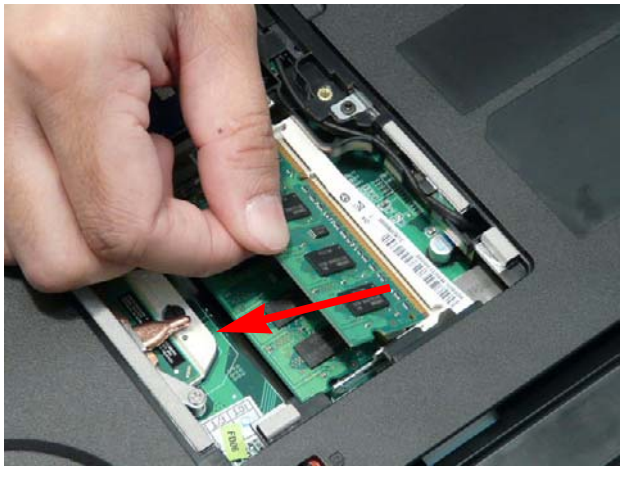
6. Remove the ODD Bezel by rotating the bezel downward, away from the module.

Removing the DIMM Modules

1. See “Removing the Lower Covers” on page 47.
2. Push out the release latches on both sides of the DIMM socket to release the DIMM module.



3. Remove the DIMM module.



4. Repeat for the second DIMM Module.

Removing the WLAN Module

1. See “Removing the Lower Covers” on page 47.
2. Disconnect the antenna cables from the WLAN Module.

IMPORTANT: The black cable attaches to the **Main** terminal and the white cable attaches to the **AUX** terminal.

3. Move the antennas away and remove the single screw on the WLAN Module.

Step	Size	Quantity	Screw Type
WLAN Module	M2*3	1	

4. Detach the WLAN Module from the WLAN socket.

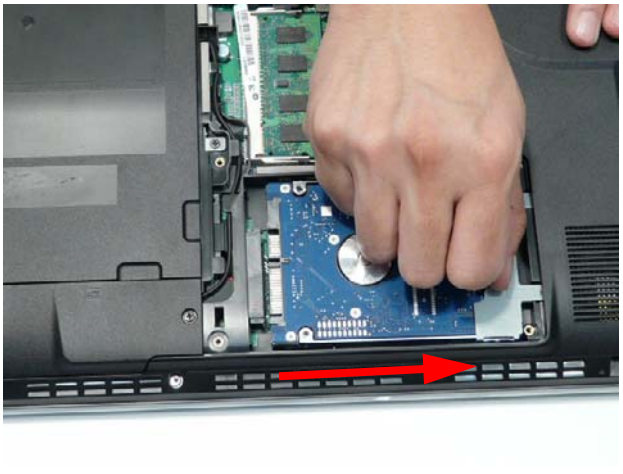
NOTE: When reattaching the antennas, ensure the cables are tucked into the chassis to prevent damage.

Removing the HDD Module

1. See “Removing the Lower Covers” on page 47.
2. Remove the two screws securing the HDD to the Lower Cover.

Step	Size	Quantity	Screw Type
HDD Module	M2.5*6.0	2	

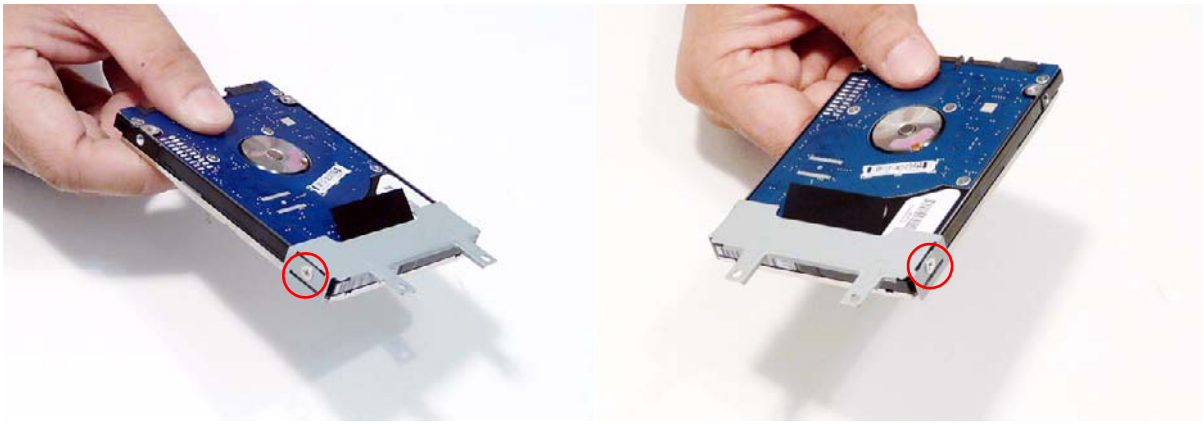
3. Slide the HDD Module in the direction of the arrow to disconnect the interface.



4. Lift the HDD Module clear of the Lower Cover as shown.

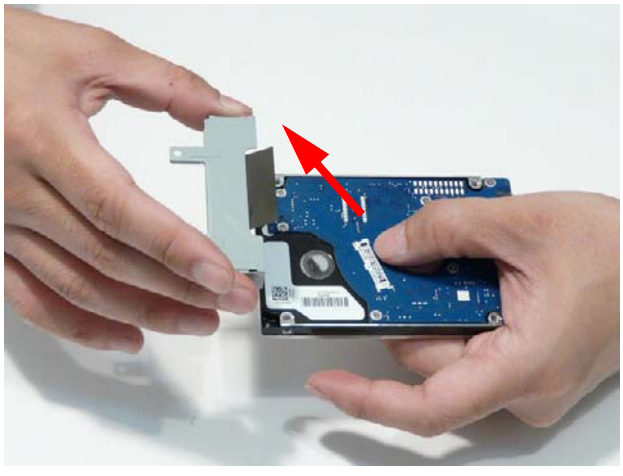
NOTE: To prevent damage to device, avoid pressing down on it or placing heavy objects on top of it.

5. Remove the two screws securing the HDD to the Carrier.



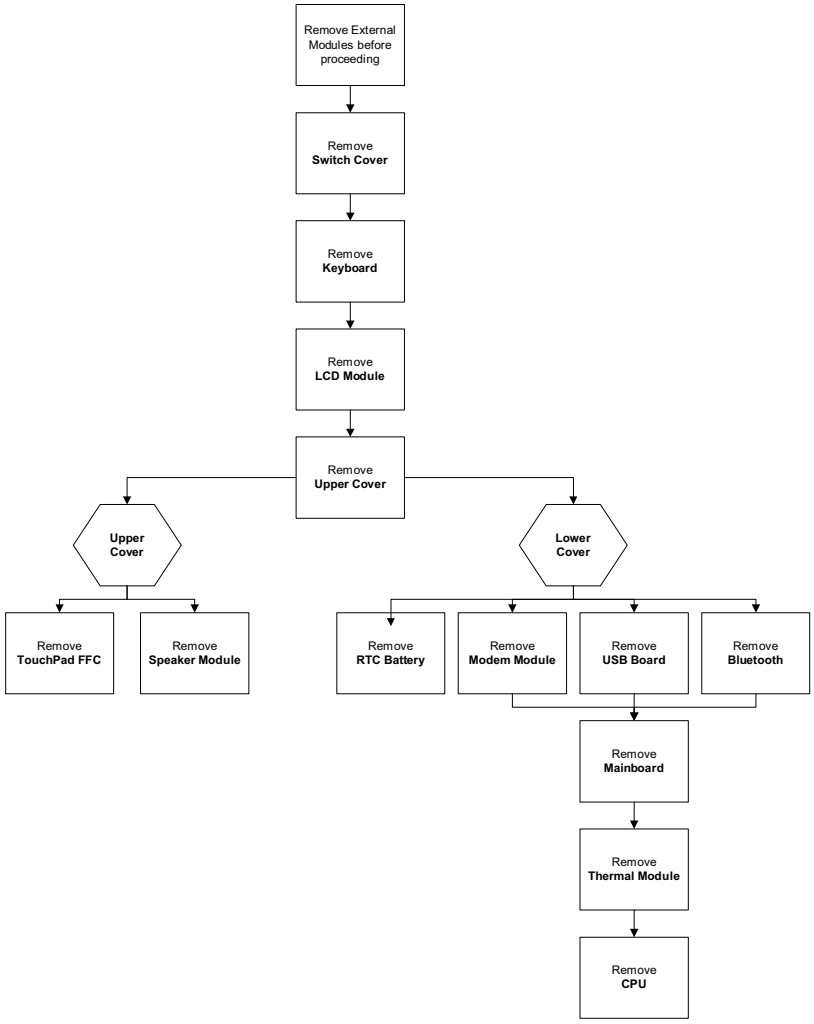
Step	Size	Quantity	Screw Type
HDD Module	M3*3	2	

6. Remove the HDD from the Carrier as shown.



Main Unit Disassembly Process

Main Unit Disassembly Flowchart



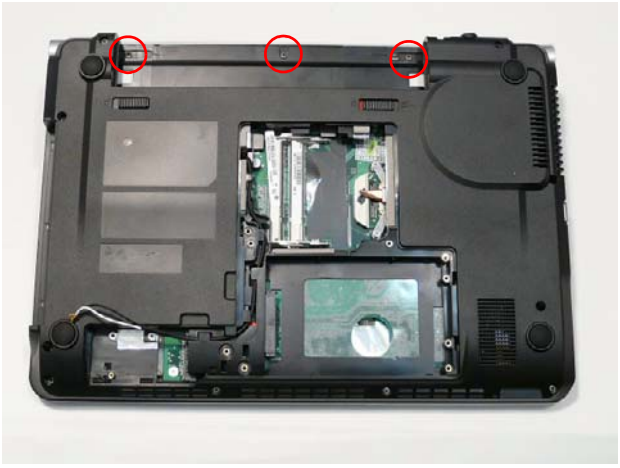
Screw List

Step	Screw	Quantity	Part No.
Switch Cover	M2.5*6.0	3	86.W0907.002
LCD Module	M2.5*6.0	4	86.W0907.002
Upper Cover	M2.5*6.0	8	86.W0907.002
	M2.5*6.0	10	86.W0907.002
Speaker Modules	M2*3	4	86.A08V7.005
Modem Board	M2*3	2	86.A08V7.005
USB Board	M2*3	1	86.A08V7.005
Mainboard	M2.5*6.0	1	86.W0907.002

Removing the Switch Cover

IMPORTANT: The Media Board attached to the underside of the Switch Cover cannot be replaced individually. If the Media Board malfunctions, replace the entire Switch Cover assembly.

1. See “Removing the Battery Pack” on page 46.
2. Remove the three screws securing the Switch Cover to the Upper Cover.

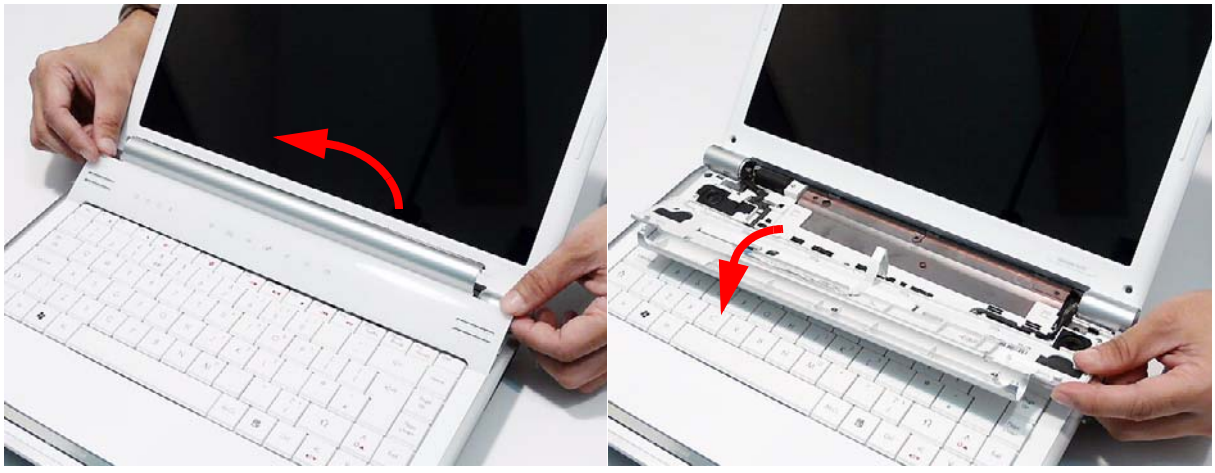


Step	Size	Quantity	Screw Type
Switch Cover	M2.5*6.0	3	

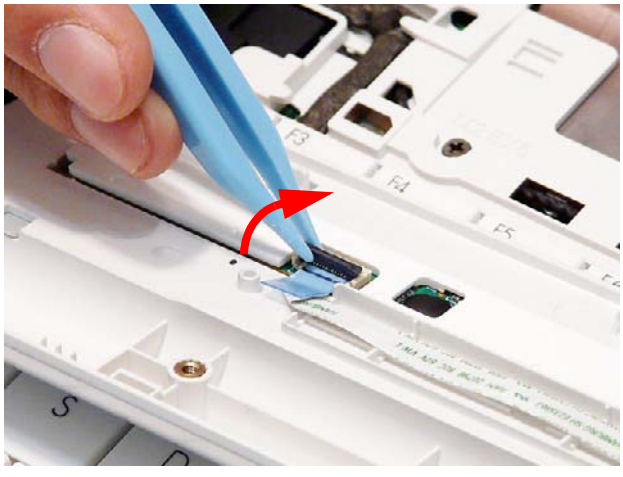
3. Open the LCD Panel to approximately 45° and stand the computer on edge.
4. Insert a suitable plastic tool in to the right side screw hole and push the Switch Cover to release the securing clips.

5. Turn the computer over rotate the Switch Cover as shown to expose the underside.

IMPORTANT: Do not remove the Switch Cover from the Upper Cover; the Media Board FFC is still attached to the Switch Cover.



6. Open the FFC locking latch and disconnect the Media Board FFC as shown.



7. Lift the FFC to detach the adhesive securing it in place.

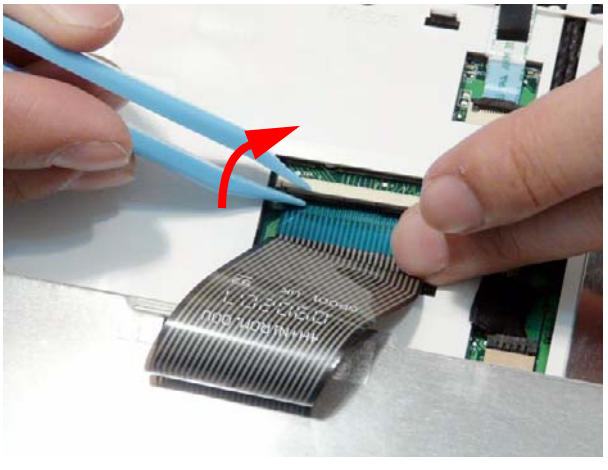
8. Lift the Switch Cover clear of the Upper Cover.

Removing the Keyboard

1. See “Removing the Switch Cover” on page 56.
2. Grasp the Keyboard and lift upward as shown.

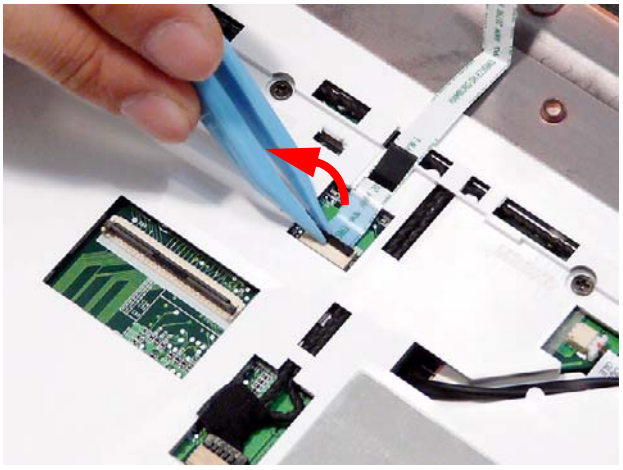
3. Turn the Keyboard over and place it on the TouchPad area as shown.

4. Lift the Keyboard FFC securing latch as shown.

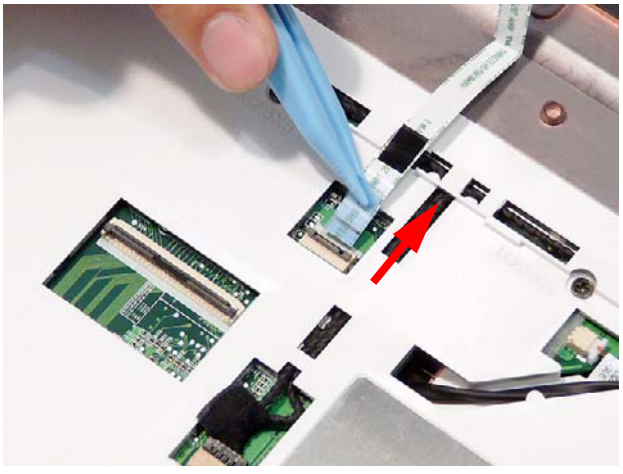


5. Disconnect the FFC and remove the Keyboard.

6. Lift the Switch Cover FFC securing latch as shown.

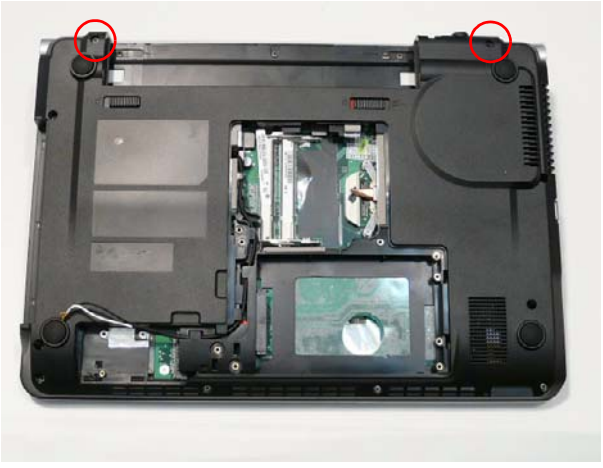


7. Remove the Switch Cover FFC from the Upper Cover.

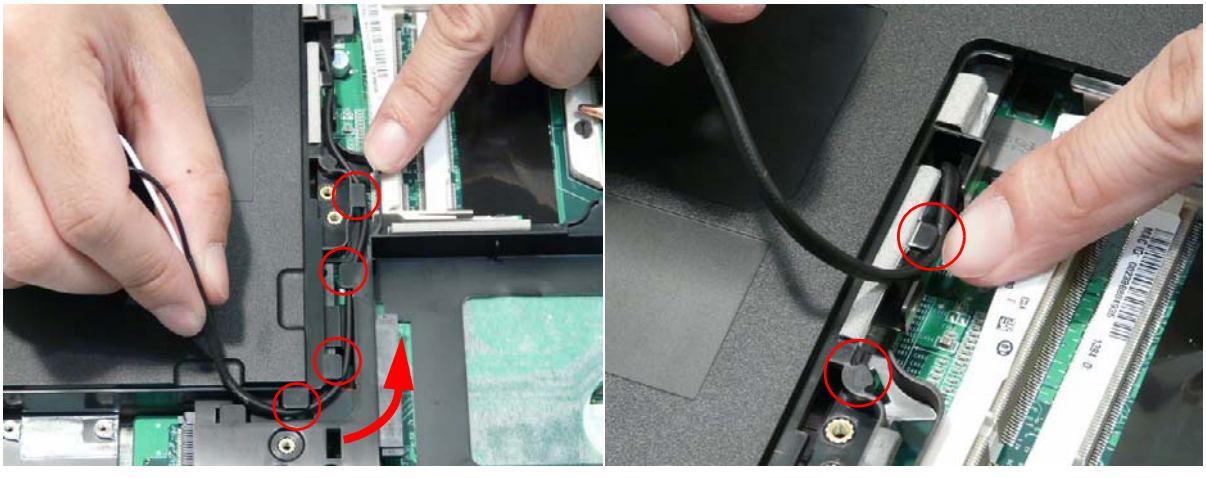


Removing the LCD Module

1. See “Removing the Keyboard” on page 58.
2. Turn the computer over. Remove the two screws securing the LCD Module to Lower Cover.

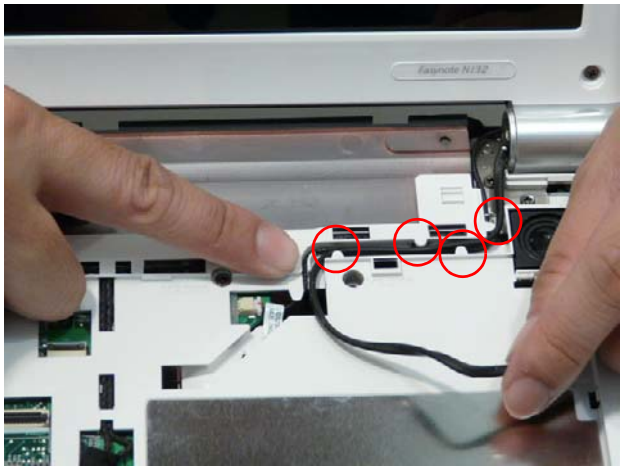


3. Remove the Antenna cables from the cable channel as shown. Ensure that the cables are free from all clips.

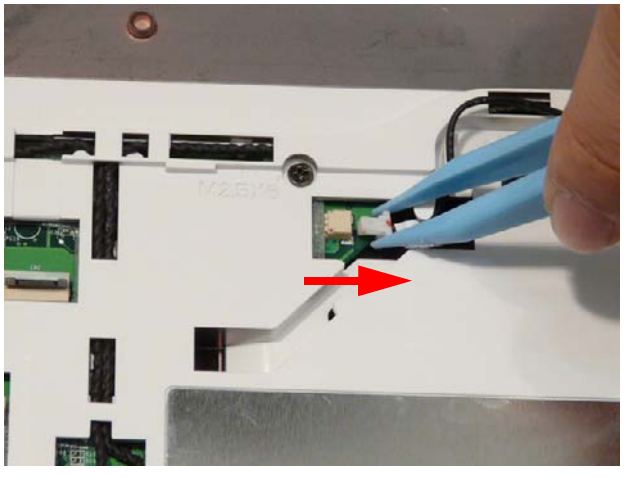


4. Carefully pull the Antenna cables through from the underside of the computer.

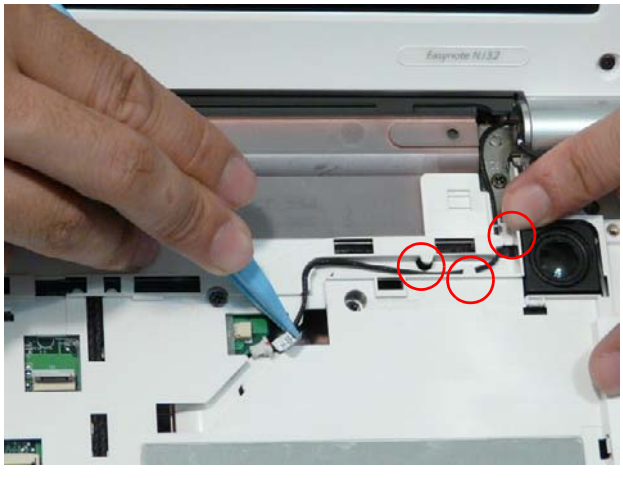
5. Turn the computer over and remove the Antennas from the Upper Cover cable channel. Ensure that the cables are free from all clips all the way to the hinge well.



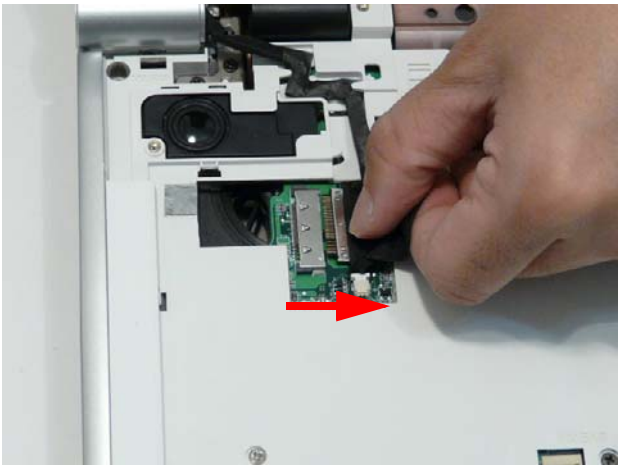
6. Disconnect the Power Board cable from the Mainboard.



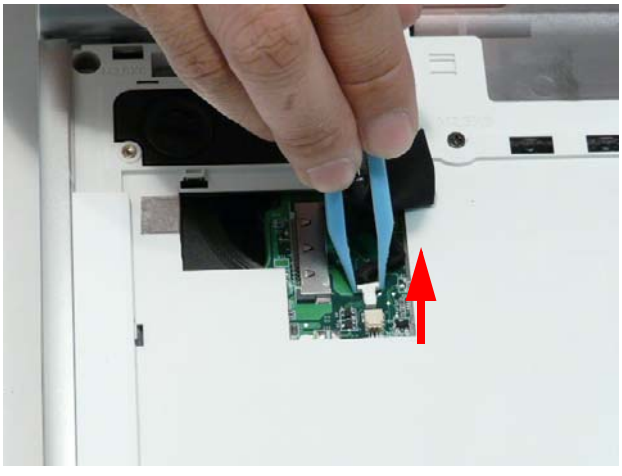
7. Remove the Power Board cable from the Upper Cover cable channel. Ensure that the cable is free from all clips all the way to the hinge well.



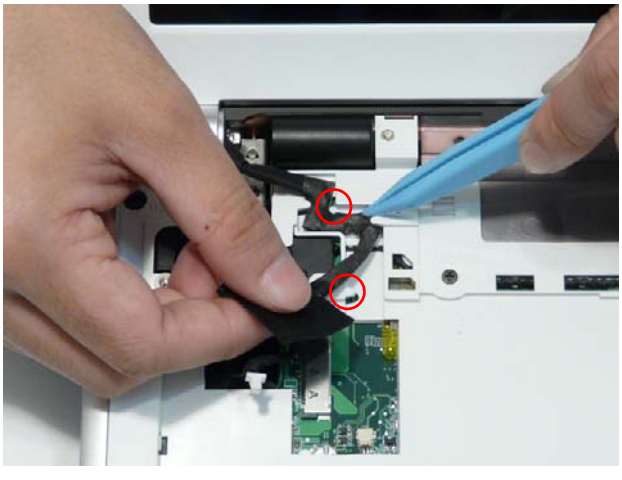
8. Disconnect the LVDS cable from the Mainboard.



9. Disconnect the Microphone cable from the Mainboard.



10. Remove the LVDS and Microphone cables from the Upper Cover cable channel. Ensure that the cables are free from all clips all the way to the hinge well.

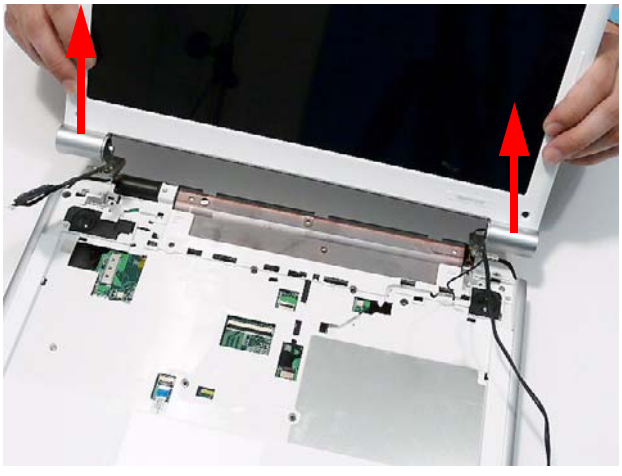


11. Remove the four screws securing the LCD Module to the Upper Cover.

Step	Size	Quantity	Screw Type
LCD Module	M2.5*6.0	4	

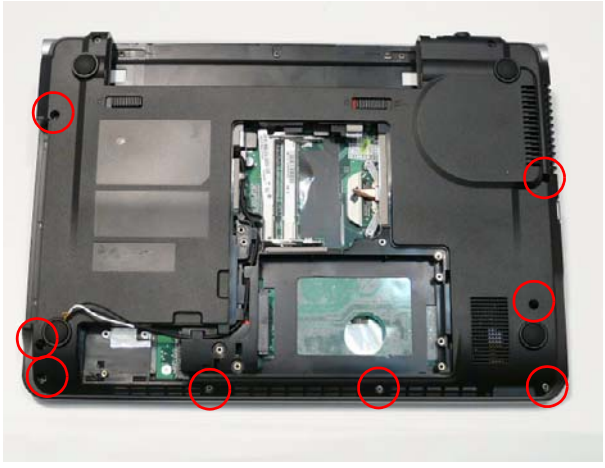
IMPORTANT: Ensure all cables are clear of the lower cover before removing the LCD module.

12. Grasp the module with both hands and lift upwards.



Removing the Upper Cover

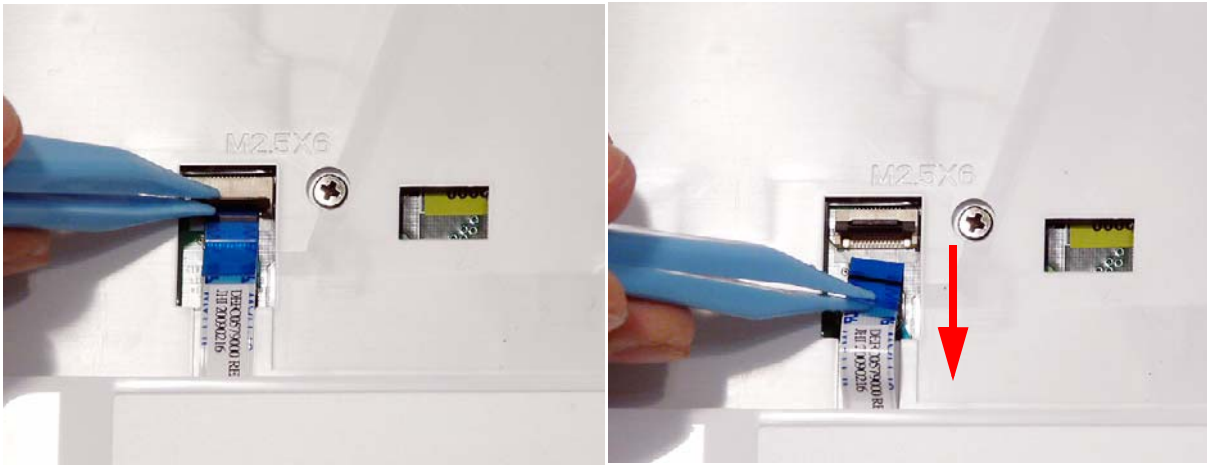
1. See “Removing the LCD Module” on page 60.
2. Turn the computer over. Remove the eight securing screws.



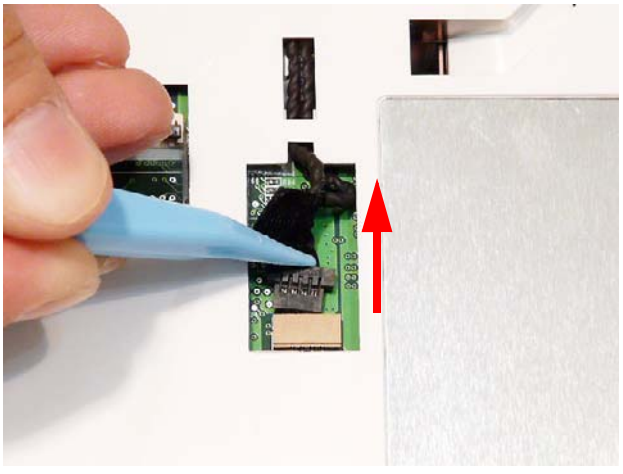
Step	Size	Quantity	Screw Type
Upper Cover	M2.5*6.0	8	

3. Turn the computer over and disconnect the following cables from the Mainboard.

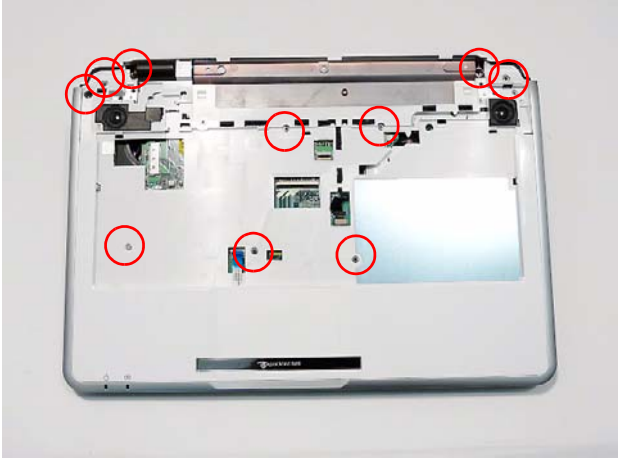
4. Open the FFC securing latch and disconnect A as shown.



5. Disconnect B as shown.



6. Remove the nine screws securing the Upper Cover.



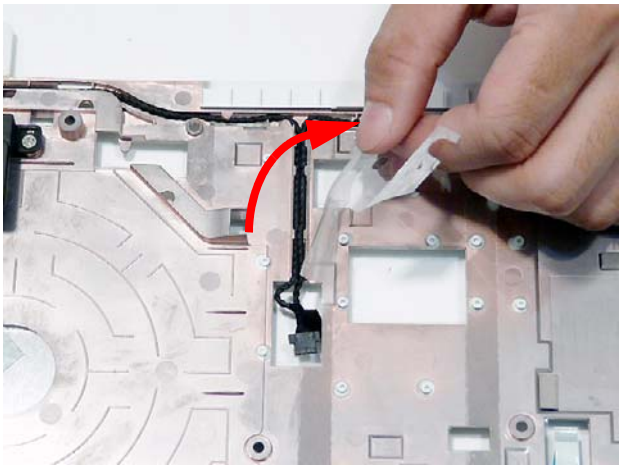
Step	Size	Quantity	Screw Type
Upper Cover	M2.5*6.0	10	

7. Lift the Upper Cover clear of the computer as shown.

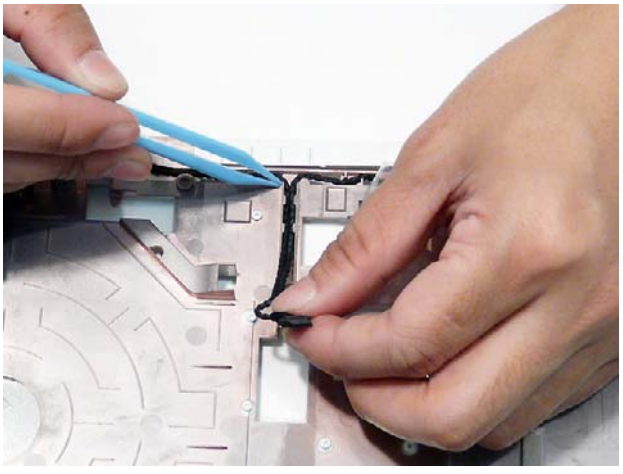
Removing the Speaker Modules

CAUTION: Select models include speaker pads to reduce sound vibration. Do not remove these pads during disassembly.

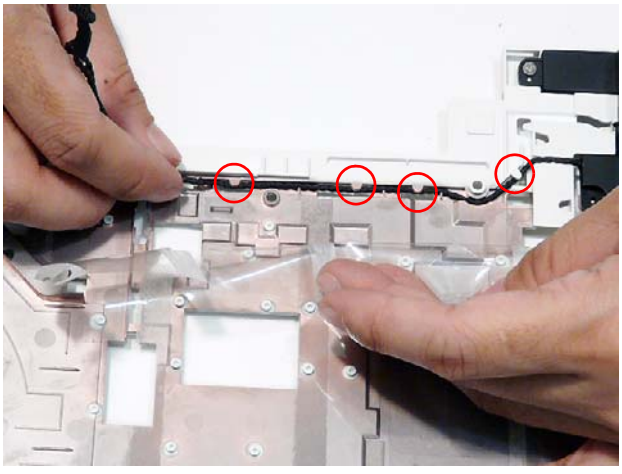
1. See “Removing the Upper Cover” on page 64.
2. Lift the plastic covering away from the Upper Cover to expose the Speaker cables.



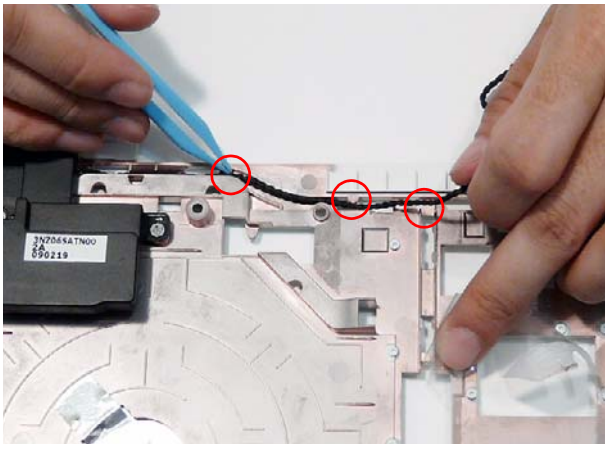
3. Remove the Speaker cables from the cable channel. Ensure that the cables are free from all cable clips.



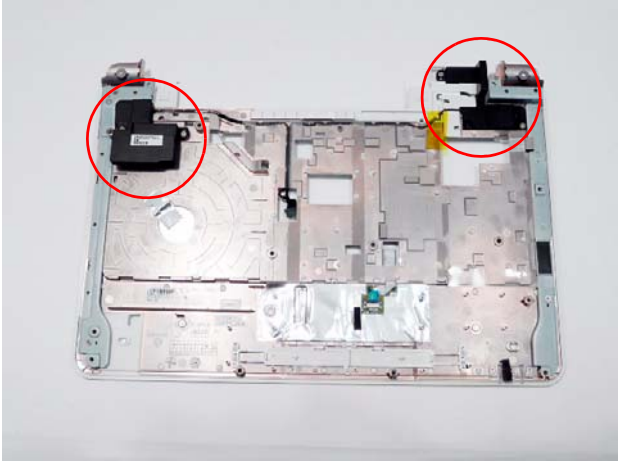
4. Continue removing the cable from the right side cable channel. Ensure that the cable is free from all cable clips.

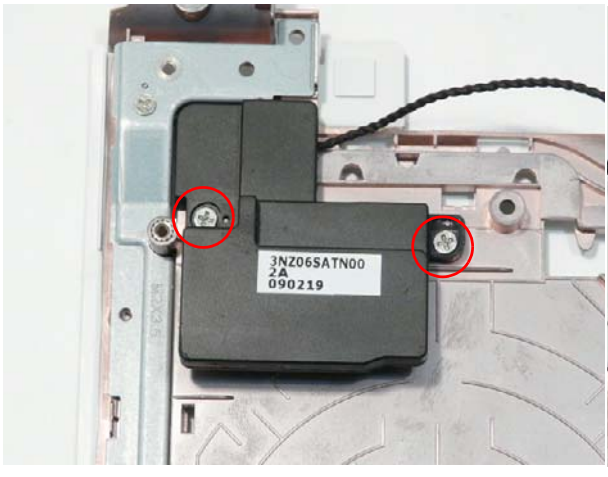


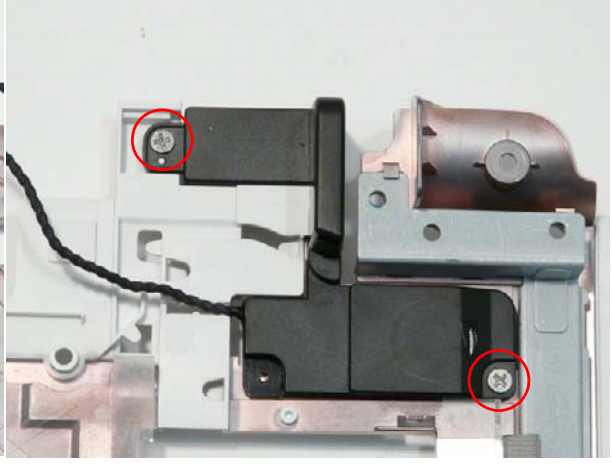
5. Remove the cable from the left side cable channel. Ensure that the cable is free from all cable clips.



6. Remove the four securing screws from the Speaker Modules.

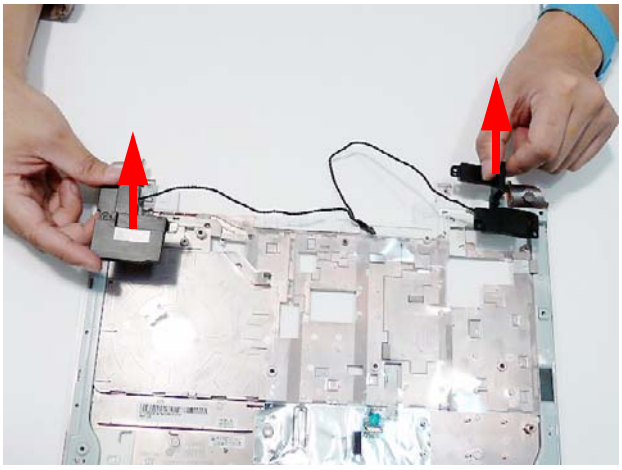






Step	Size	Quantity	Screw Type
Speaker Modules	M2*3	4	

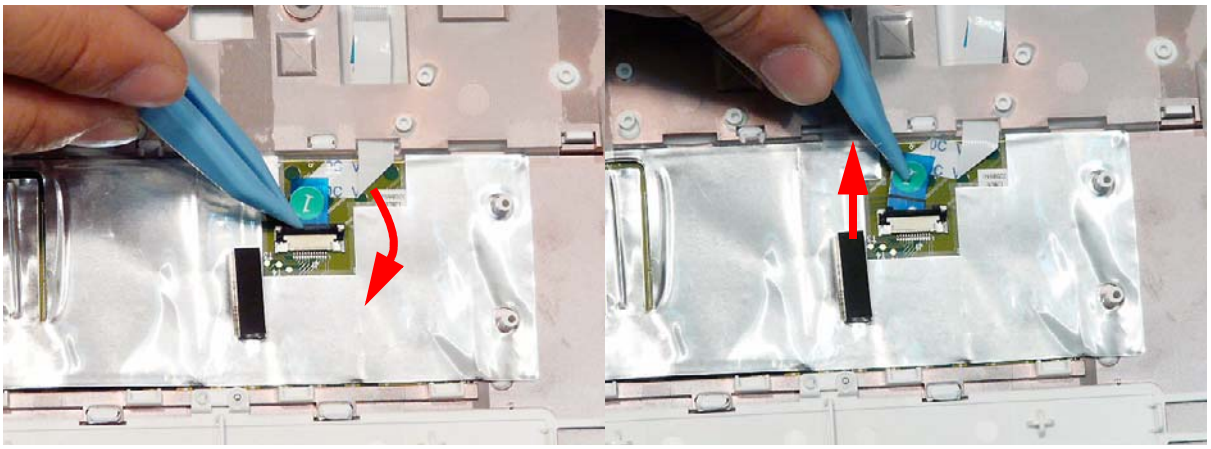
7. Lift the Speaker Modules clear of the Upper Cover.



Removing the TouchPad FFC

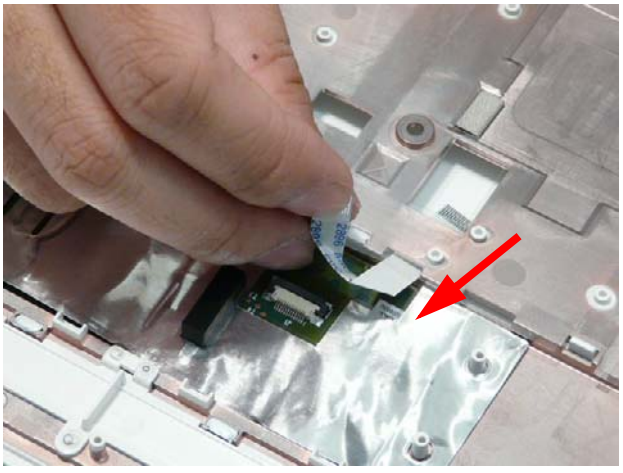
IMPORTANT: It is not possible to remove the TouchPad individually. If the TouchPad malfunctions, follow the disassembly steps to remove any additional components on the Upper Cover and replace the entire Upper Cover.

1. See “Removing the Upper Cover” on page 64.
2. Open the TouchPad FFC locking latch and disconnect the FFC as shown.



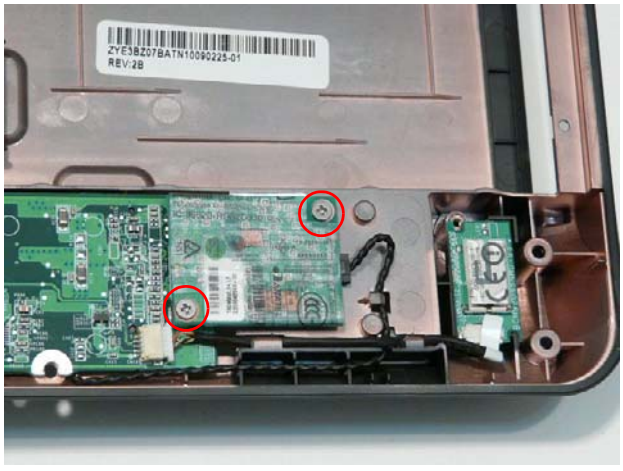
3. Carefully pull the FFC through the Upper Cover as shown.

IMPORTANT: Take care not to tear the FFC pull tab during removal.



Removing the Modem Board

1. See “Removing the Upper Cover” on page 64.
2. Remove the two securing screws from the Modem Board.

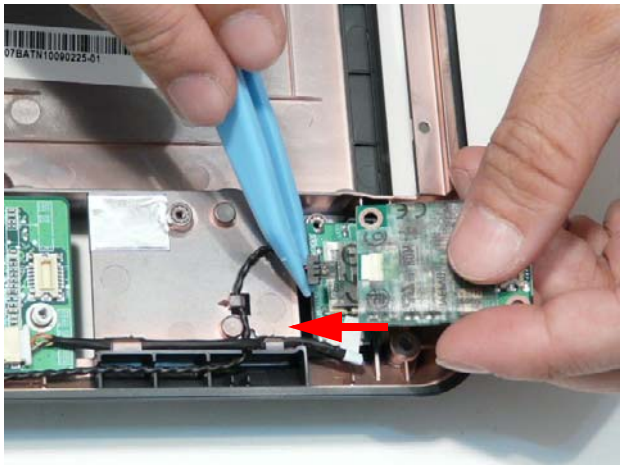


Step	Size	Quantity	Screw Type
Modem Board	M2*3	2	

3. Lift the Modem Board clear of the Lower Cover.

IMPORTANT: Do not remove the Modem from the Lower Cover; the Modem cable is still attached to the module.

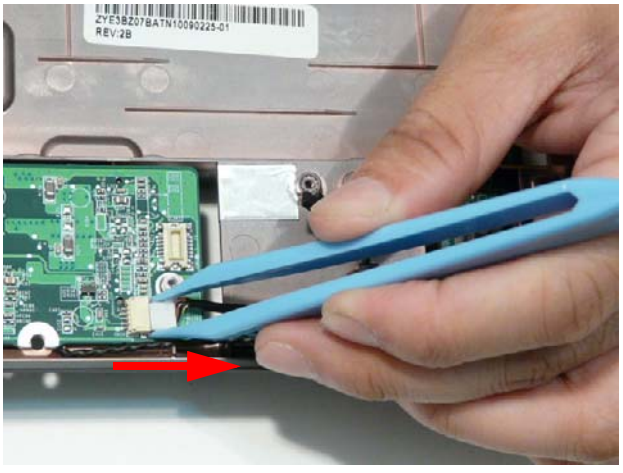
4. Turn the Modem Board over and disconnect the Modem cable as shown.



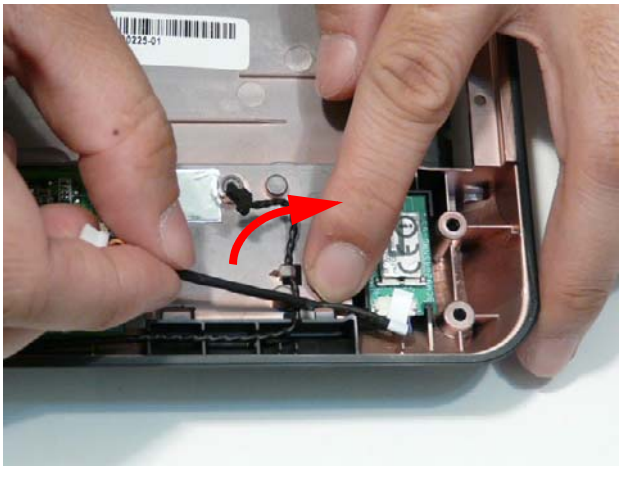
5. Remove the Modem Board from the Lower Cover.

Removing the Bluetooth Module

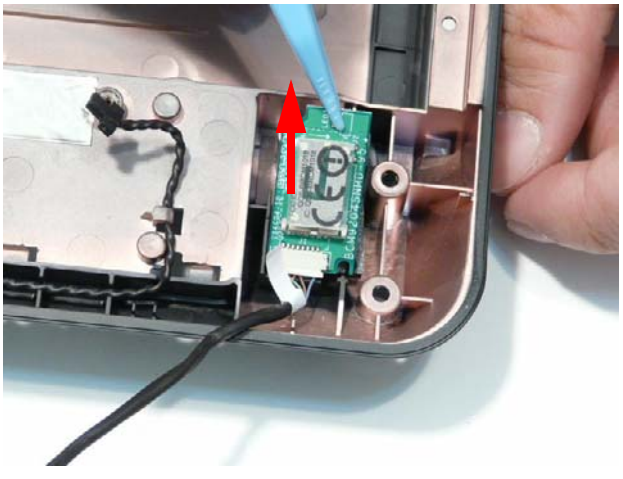
1. See “Removing the Upper Cover” on page 64.
2. Disconnect the Bluetooth cable from the Mainboard.



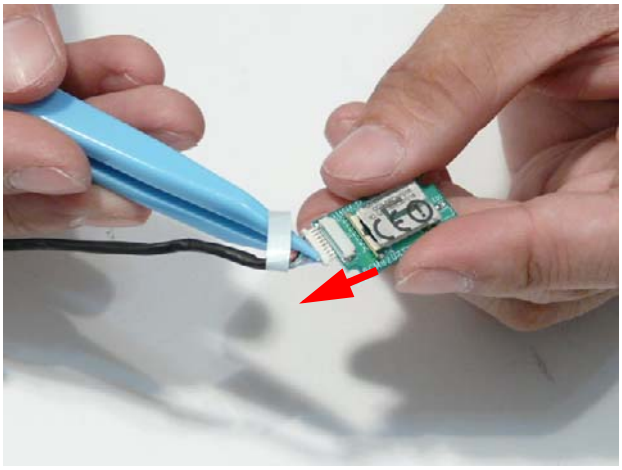
3. Remove the Bluetooth cable from the cable channel as shown.



4. Lift the Bluetooth Module upward to disengage the adhesive holding the module in place.

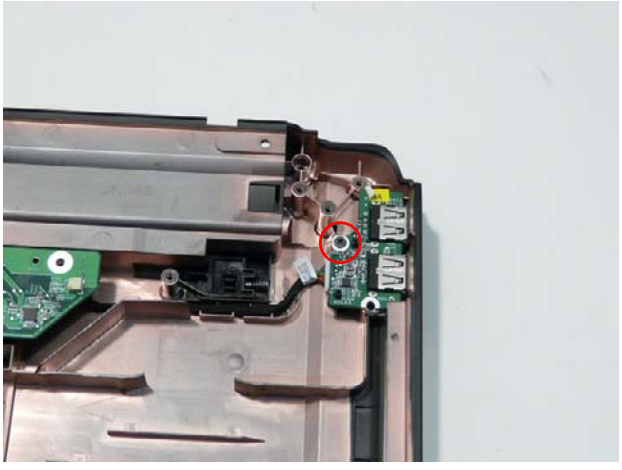


5. Disconnect the Bluetooth cable from the module.



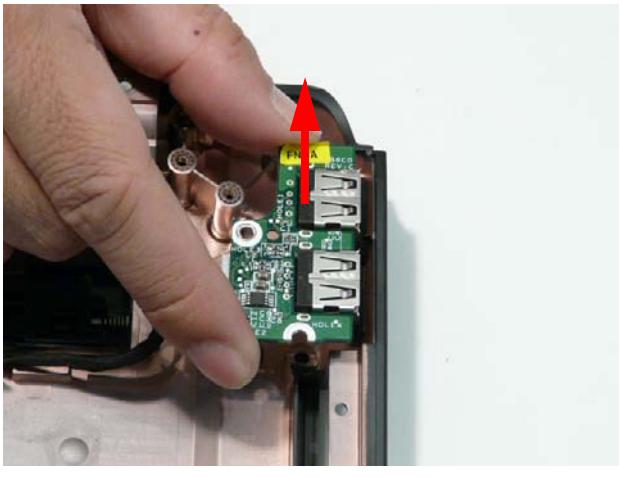
Removing the USB Board

1. See “Removing the Upper Cover” on page 64.
2. Remove the single screws securing the USB Board to the Lower Cover.

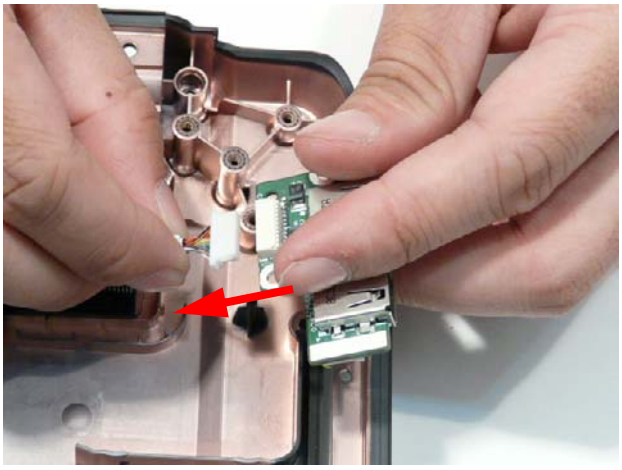


Step	Size	Quantity	Screw Type
USB Board	M2*3	1	

3. Lift the USB Board clear of the Lower Cover.

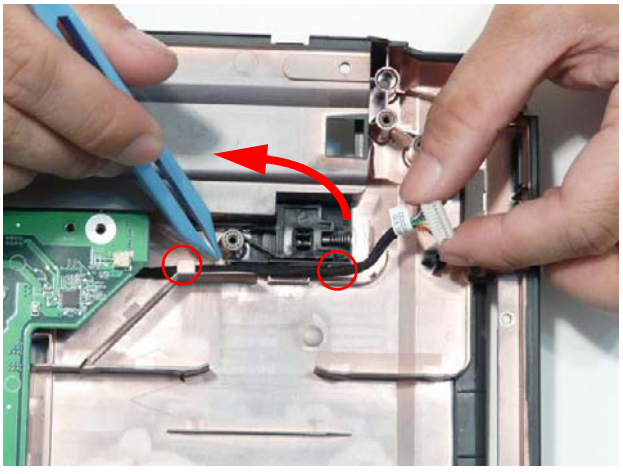


4. Turn the USB Board over and disconnect the USB cable from the board.

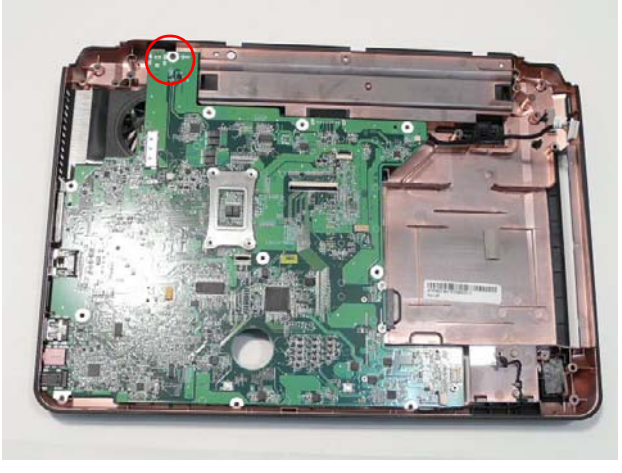


Removing the Mainboard

1. See “Removing the LCD Module” on page 60.
2. See “Removing the Modem Board” on page 72.
3. See “Removing the Bluetooth Module” on page 74.
4. Remove the USB cable from the cable channel. Ensure that the cable is free from all cable clips.

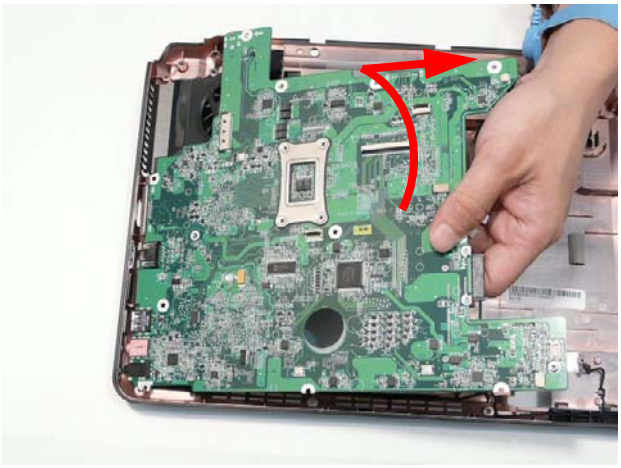


5. Remove the single screw securing the Mainboard to the Lower Cover.

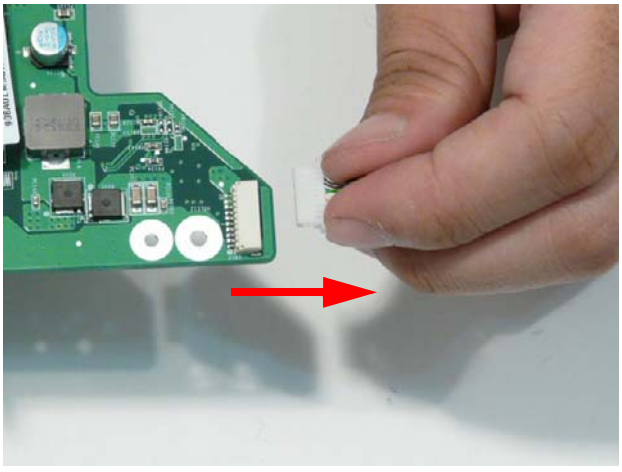


Step	Size	Quantity	Screw Type
Mainboard	M2.5*6.0	1	

6. Lift the Mainboard right side first as shown and remove it from the Lower Cover.



7. Disconnect the USB Board cable from the Mainboard as shown.

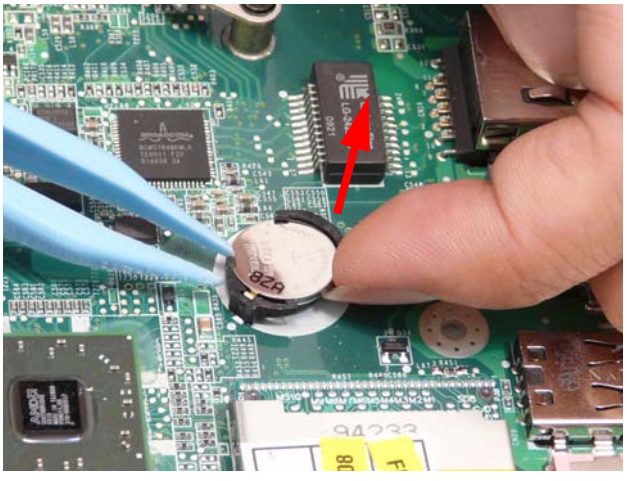


Removing the RTC Battery

IMPORTANT: Follow local regulations for disposal of all batteries.

1. See “Removing the Upper Cover” on page 64.
2. Turn the Mainboard over and locate the RTC Battery.

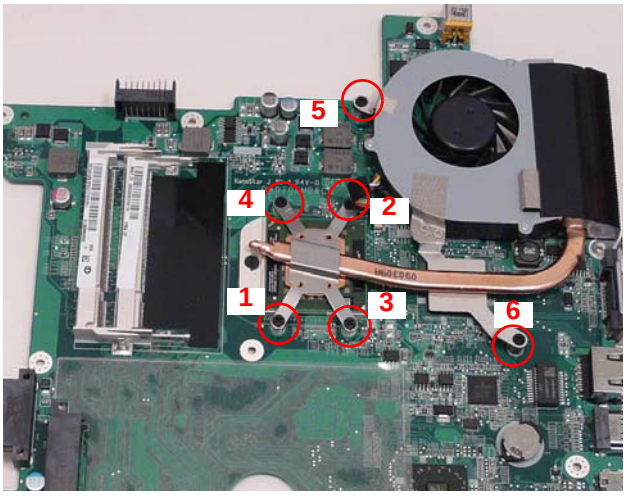
3. Carefully bend back the plastic arm using a pair of plastic tweezers. With your opposite hand, lift out the RTC battery.



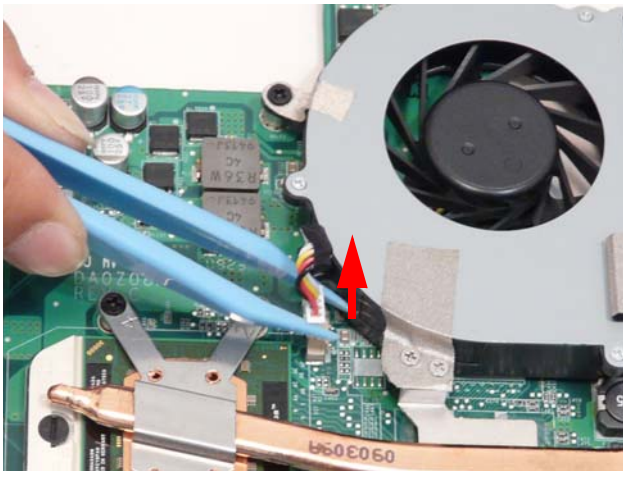
Removing the Thermal Module

1. See “Removing the Mainboard” on page 78.
2. Turn the Mainboard CPU side up, and place it on a clean surface.
3. Loosen the five captive screws in the Thermal Module in numerical order from 5 to 1.

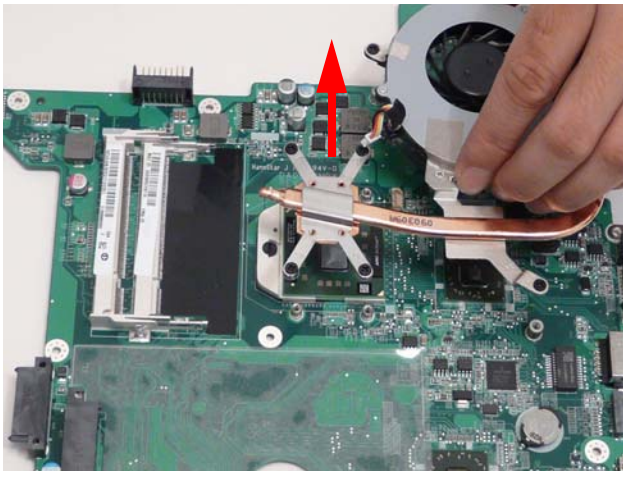
NOTE: The Thermal Module is secured with six screws on models with VGA support.



4. Disconnect the Fan power cable from the Mainboard.

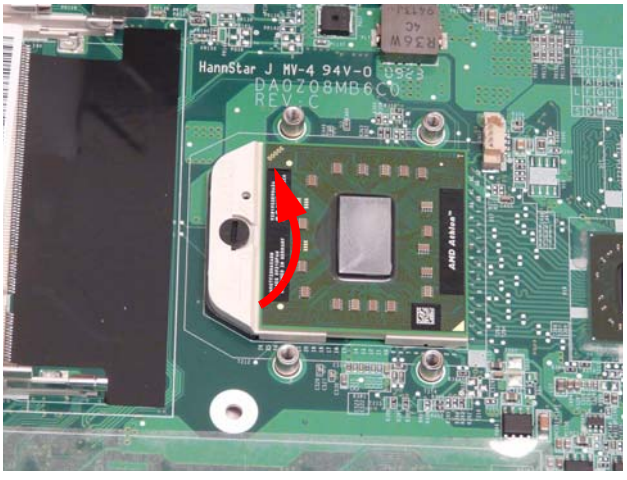


5. Lift the Thermal Module clear of the Mainboard.

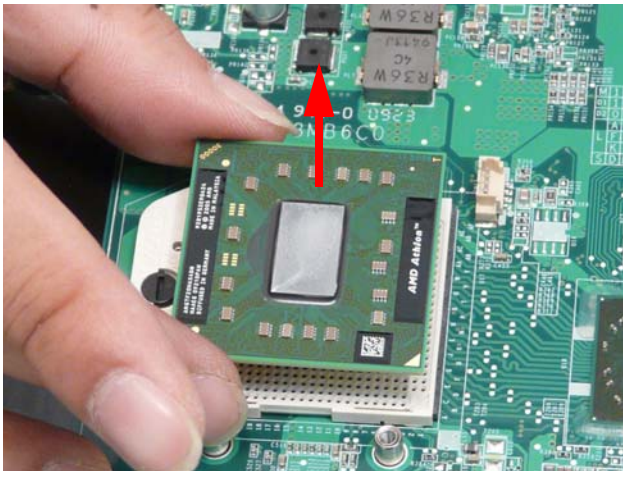


Removing the CPU

1. See “Removing the Thermal Module” on page 81.
2. Using a flat bladed screw driver, rotate the CPU screw 180° to release the CPU from the socket.



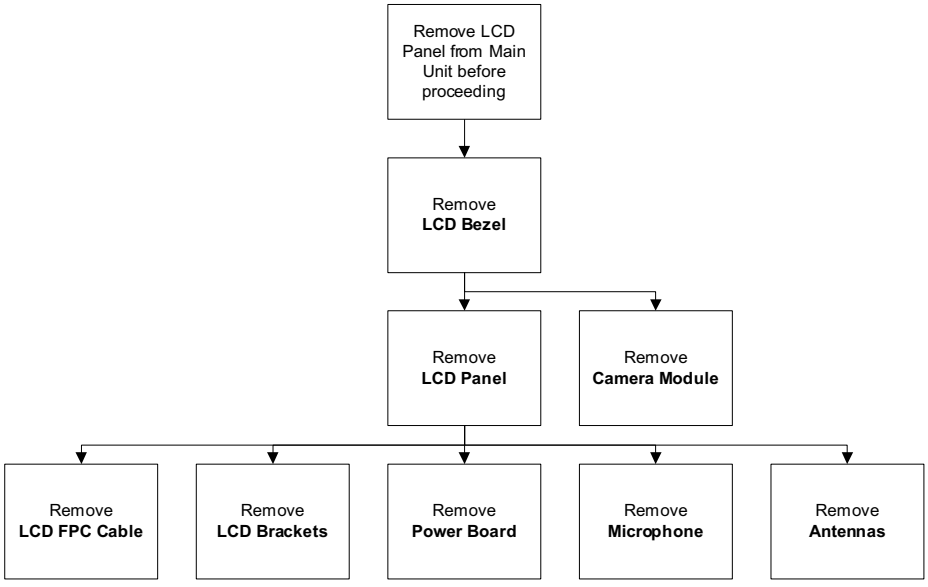
3. Lift the CPU clear of the socket.



LCD Module Disassembly Process

IMPORTANT: Cable paths and positioning may not represent the actual model. During the removal and replacement of components, ensure all available cable channels and clips are used and that the cables are replaced in the same position.

LCD Module Disassembly Flowchart

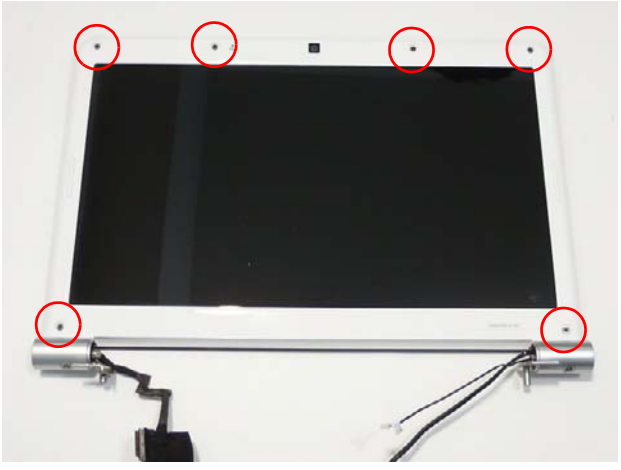


Screw List

Step	Screw	Quantity	Part No.
LCD Bezel	M2.5*6.0	6	86.W0907.002
	M2*3	2	86.A08V7.005
LCD Panel	M2*3.5	4	86.T23V7.005
LCD Brackets	M2*3	4	86.A08V7.005

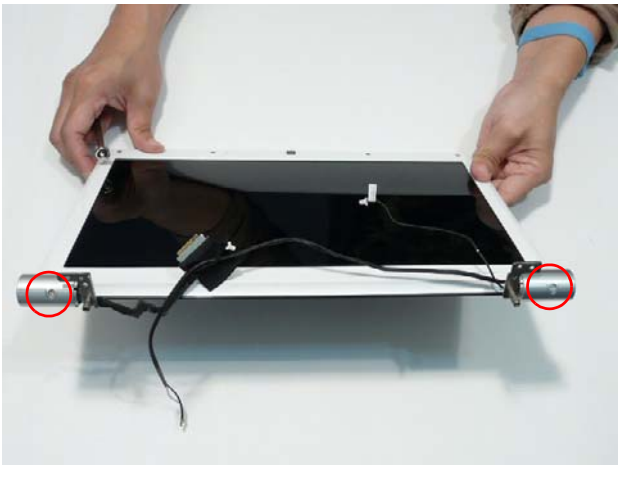
Removing the LCD Bezel

1. See “Removing the LCD Module” on page 60.
2. Remove the six screw caps and screws from the LCD Bezel.



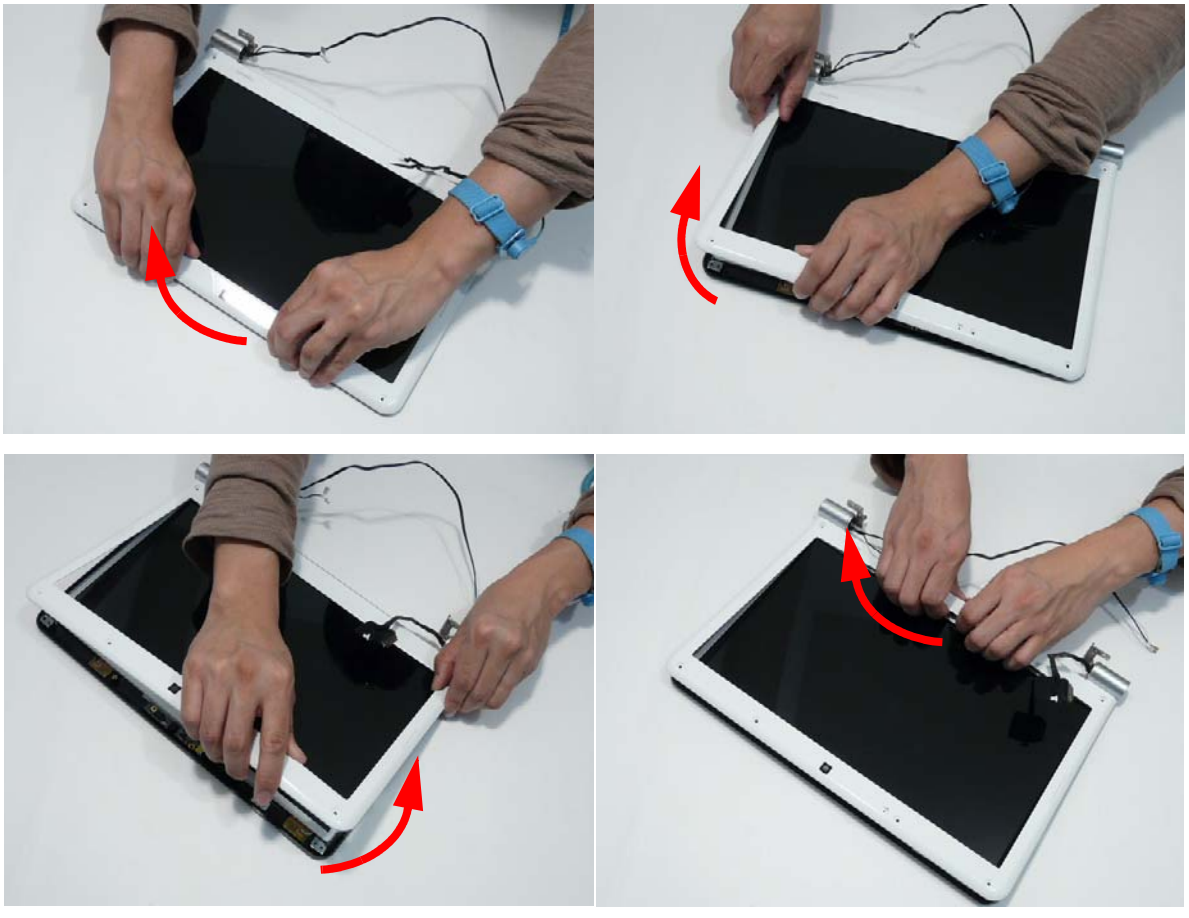
Step	Size	Quantity	Screw Type
LCD Bezel	M2.5*6.0	6	

3. Remove the two securing screw from the hinges as shown.



Step	Size	Quantity	Screw Type
LCD Bezel	M2*3	2	

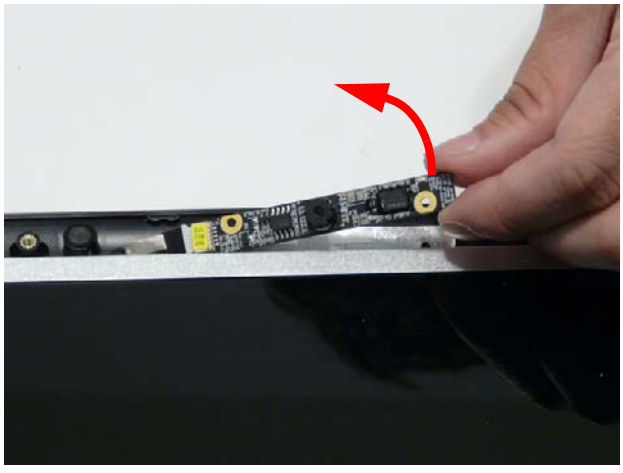
4. Starting from the inside top edge, pry the Bezel away from the panel. Continue moving down the sides until the Bezel is removed. If necessary, use a plastic pry to release the corners of the Bezel.



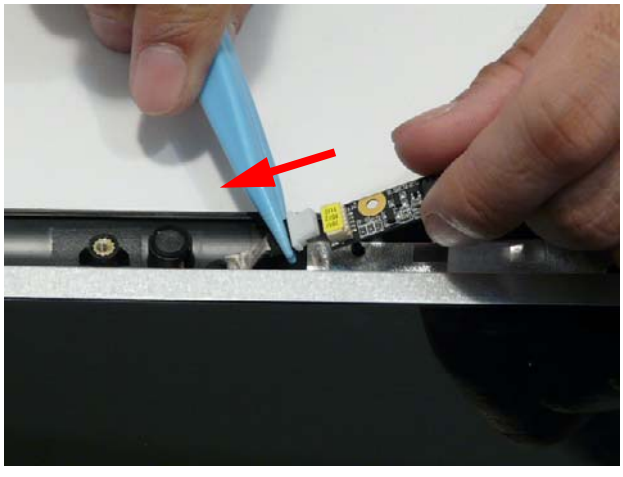
5. Lift up the Bezel and remove it from the LCD Module.

Removing the Camera Board

1. See “Removing the LCD Bezel” on page 84.
2. Remove the Camera Board from the LCD Module.



3. Disconnect the cable from the Camera Board as shown.

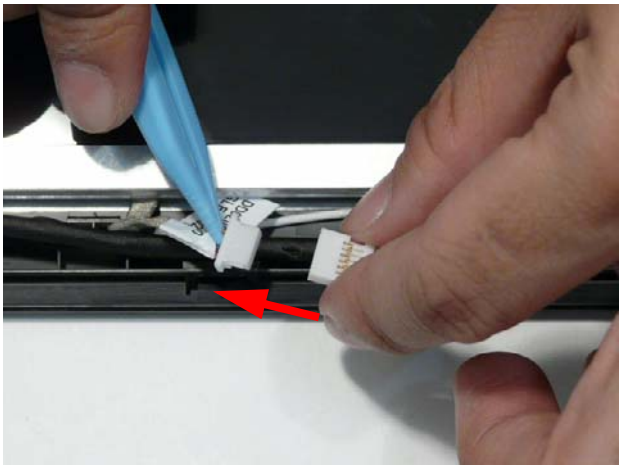


Removing the LCD Panel

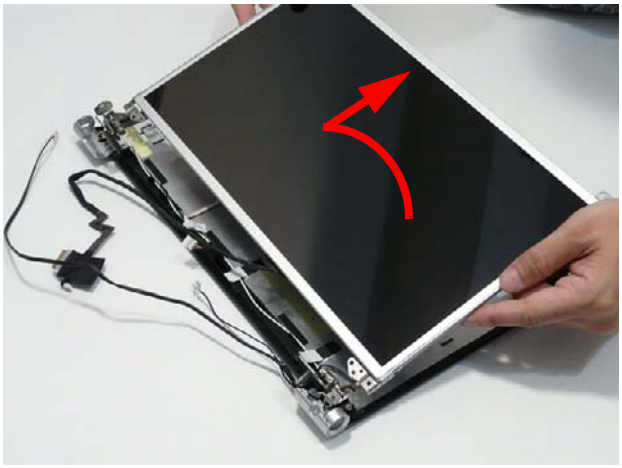
1. See “Removing the Camera Board” on page 86.
2. Remove the four securing screws from the LCD Panel.

Step	Size	Quantity	Screw Type
LCD Panel	M2*3.5	4	

3. Disconnect the Microphone connector as shown.

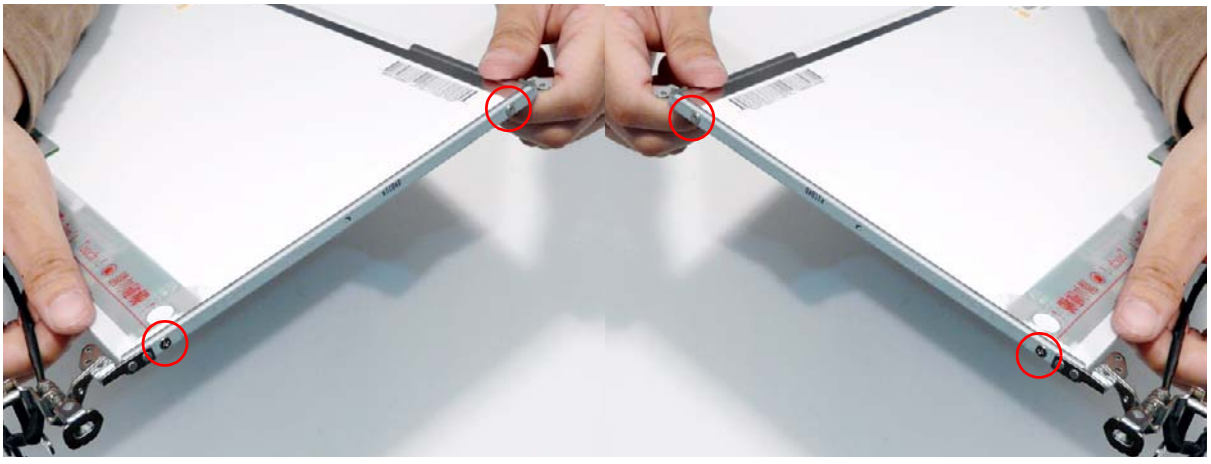


4. Remove the LCD Panel rear edge first. Place it on a clean surface.



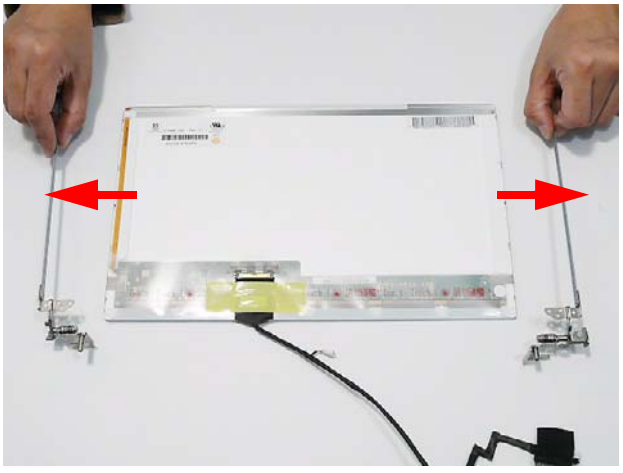
Removing the LCD Brackets and FPC Cable

1. See “Removing the LCD Panel” on page 87.
2. Remove the four securing screws (two each side) from the LCD Panel brackets.

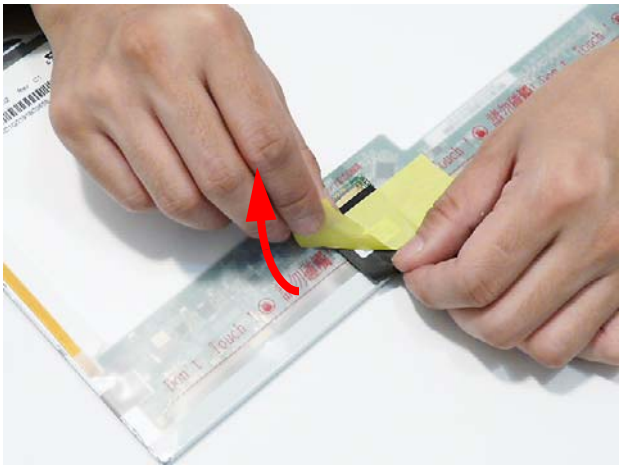


Step	Size	Quantity	Screw Type
LCD Brackets	M2*3	4	

3. Remove the brackets from the LCD Panel.

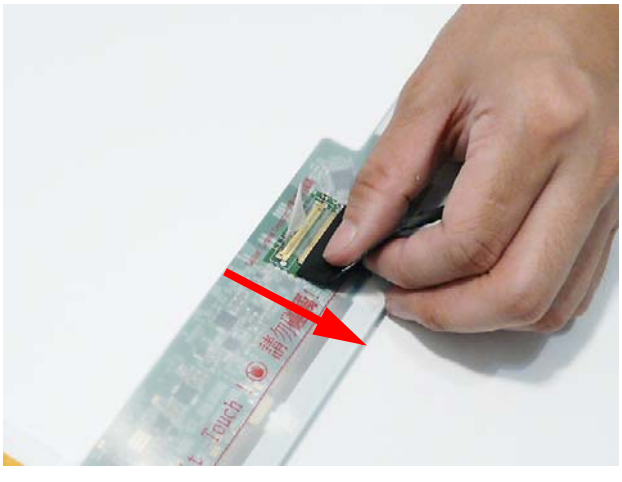


4. Carefully lift the adhesive tape protecting the cable connector.



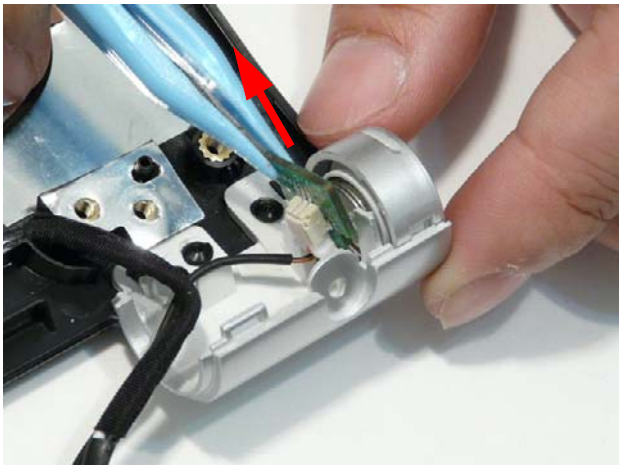
5. Carefully lift the adhesive tape securing the cable to the panel.

6. Disconnect the cable from the LCD panel as shown.

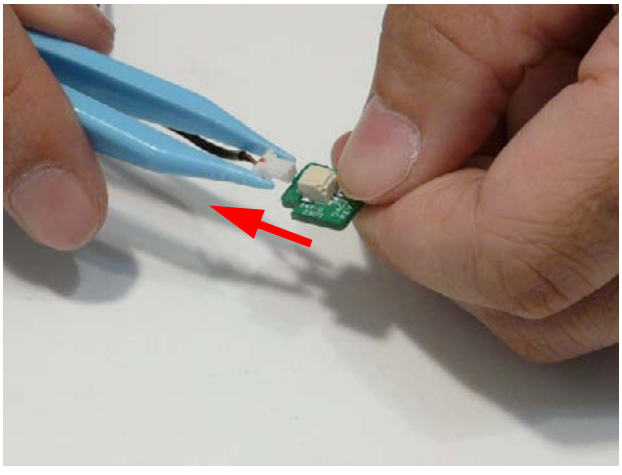


Removing the Power Board

1. See “Removing the LCD Panel” on page 87.
2. Lift the Power Board from the right LCD Hinge as shown.

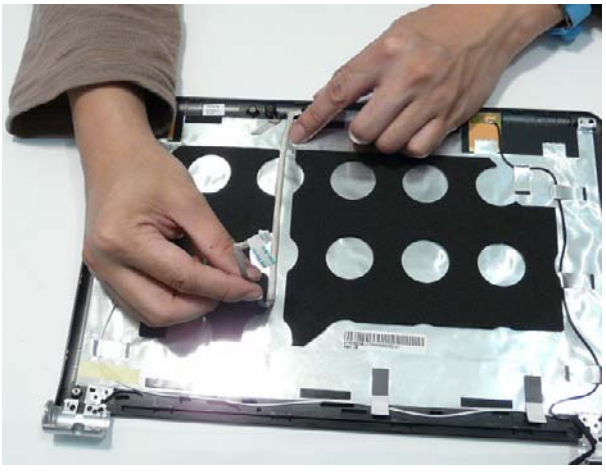
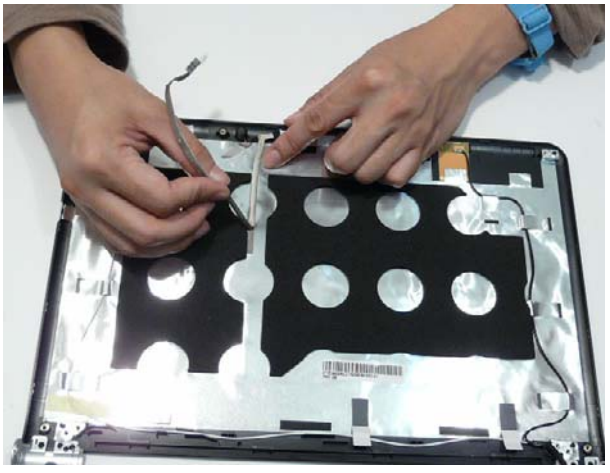


3. Disconnect the cable from the Power Board connector.



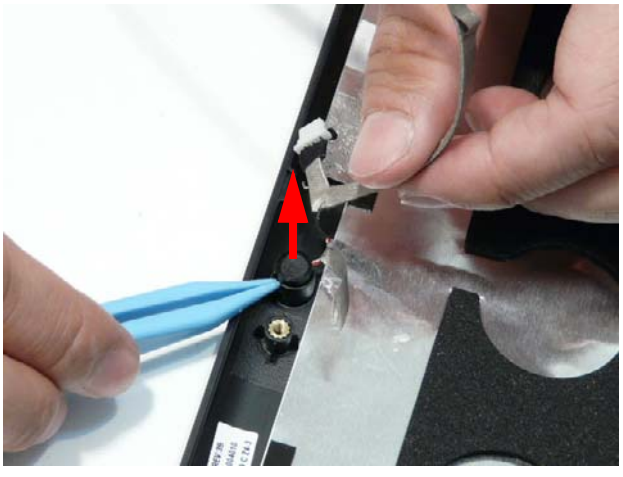
Removing the Microphone Module

1. See “Removing the LCD Bezel” on page 84.
2. Lift the Microphone cable to detach the adhesive securing it in place.

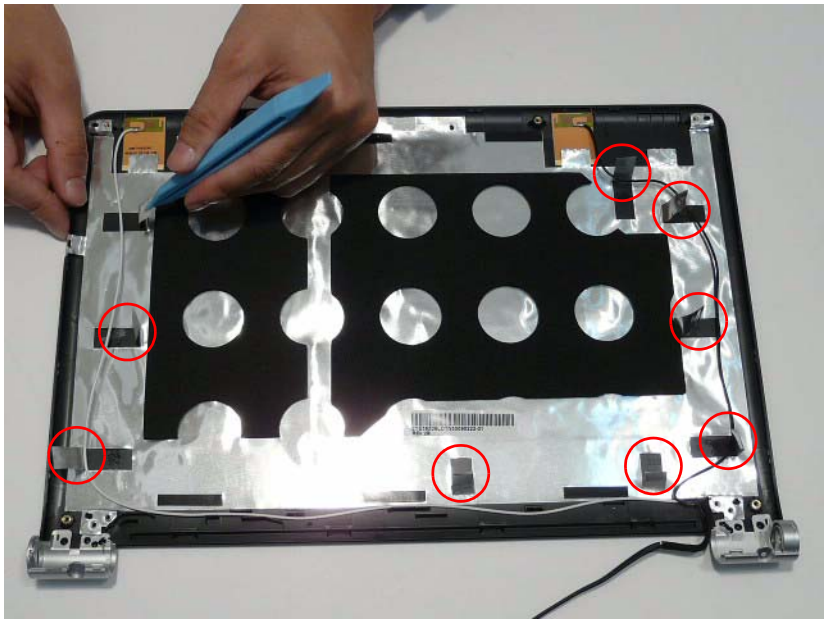
3. Lift the adhesive strip securing the Microphone Module to the LCD Module.

4. Remove the Microphone from the LCD Module.



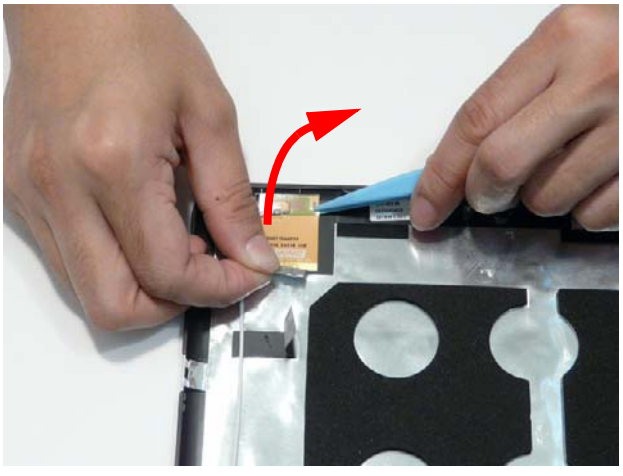
Removing the Antennas

1. See “Removing the LCD Panel” on page 87.
2. Lift all the adhesive tabs securing the left and right Antenna cables in place.



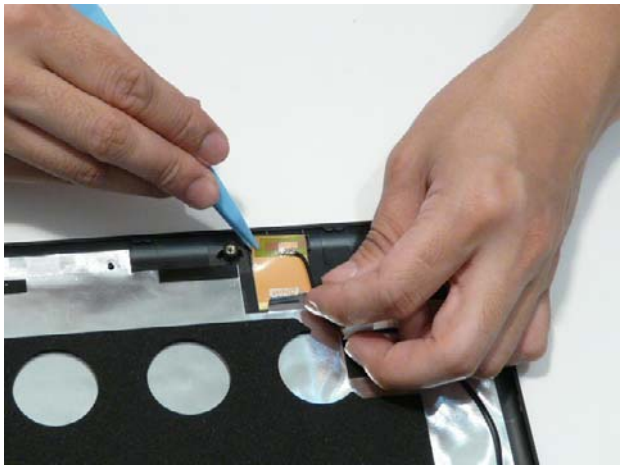
3. Lift the adhesive pad securing the left Antenna pad to the module. Carefully pry up the Antenna pad, as shown, and remove the pad from the LCD Module.

IMPORTANT: A strong adhesive is used to secure the Antenna pad in place. Take care not to bend the pad during removal.



4. Lift the adhesive pad securing the right Antenna pad to the module. Carefully pry up the Antenna pad, as shown, and remove the pad from the LCD Module.

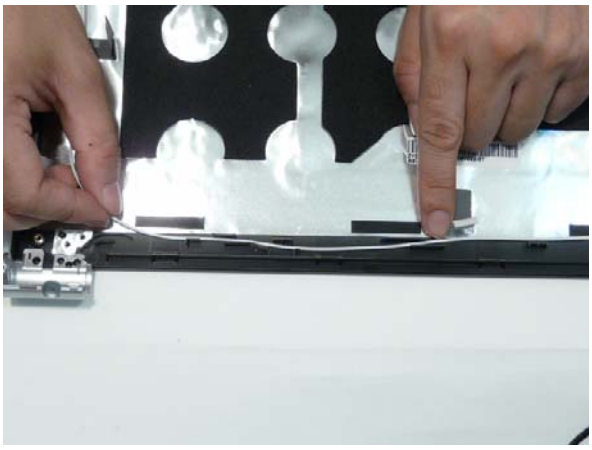
IMPORTANT: A strong adhesive is used to secure the Antenna pad in place. Take care not to bend the pad during removal.



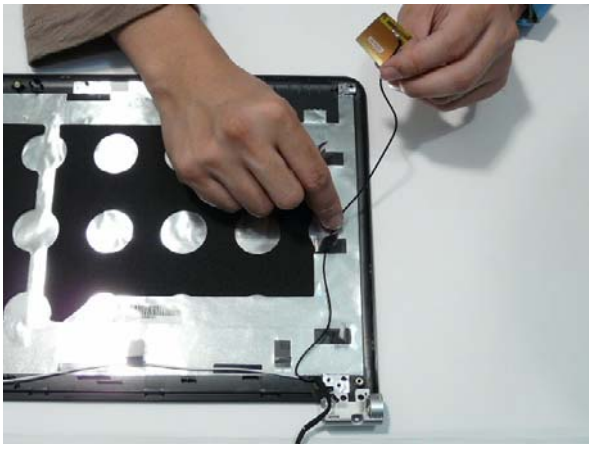
LCD Module Reassembly Procedure

Replacing the Antennas

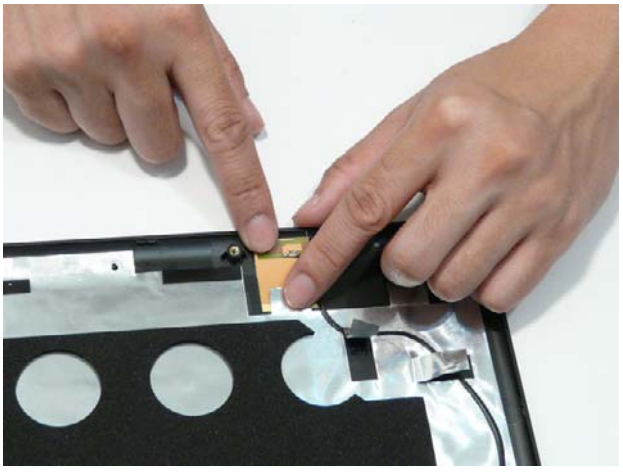
1. Replace the WLAN Antenna cable as shown, using all available cable clips.



2. Replace the adhesive tape to secure the WLAN cable in place.



3. Replace the adhesive tape securing the WLAN Antenna pad.



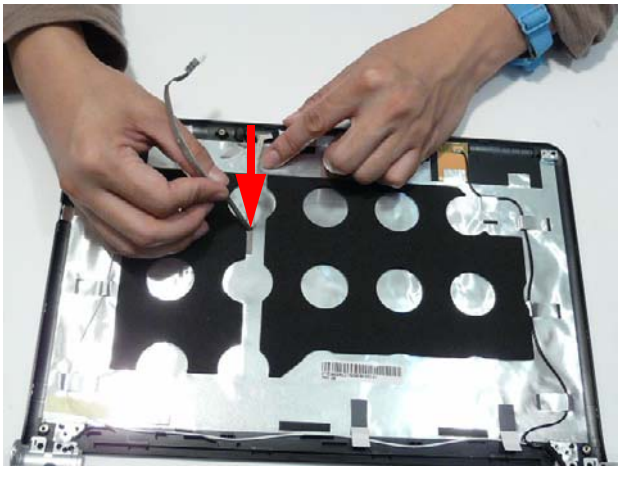
4. Repeat the procedure for the other antenna cable and pad.

5. The LCD Module appears as follows when the WLAN Antennas are correctly installed.

Replacing the Microphone Board

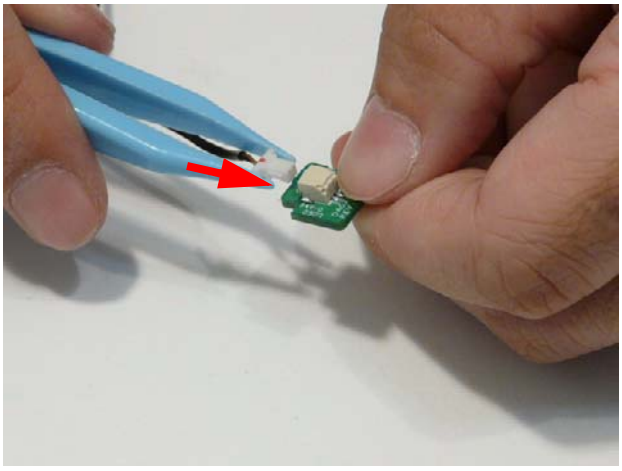
1. Place the Microphone in the LCD Module and press down to secure it in place.

2. Adhere the microphone cable to the back of the LCD panel as shown below.

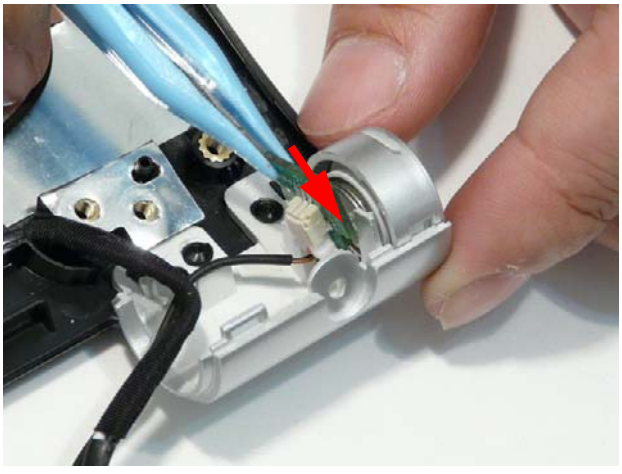


Replacing the Power Board

3. Connect the cable to the Power Board connector.



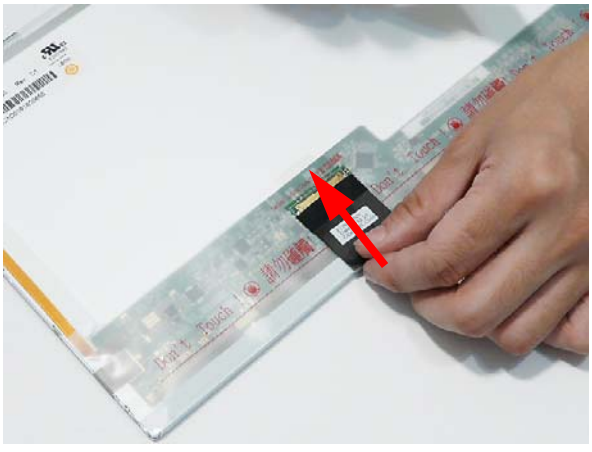
4. Insert the Power Board into the right LCD Hinge as shown.



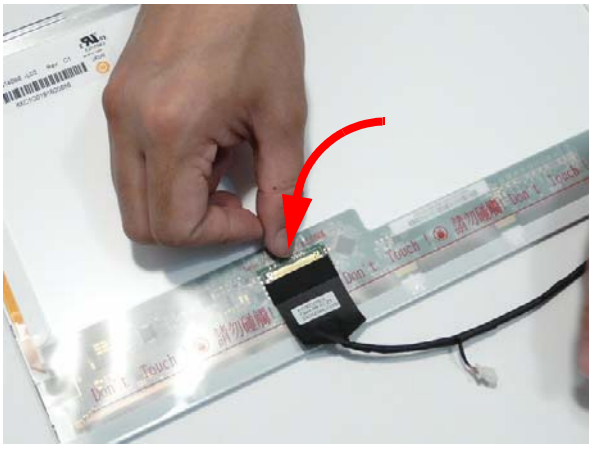
Replacing the LCD Brackets and FPC Cable

Step	Size	Quantity	Screw Type
LCD Brackets	M2*3	4	

1. Insert the LCD Cable into the panel connector as shown.



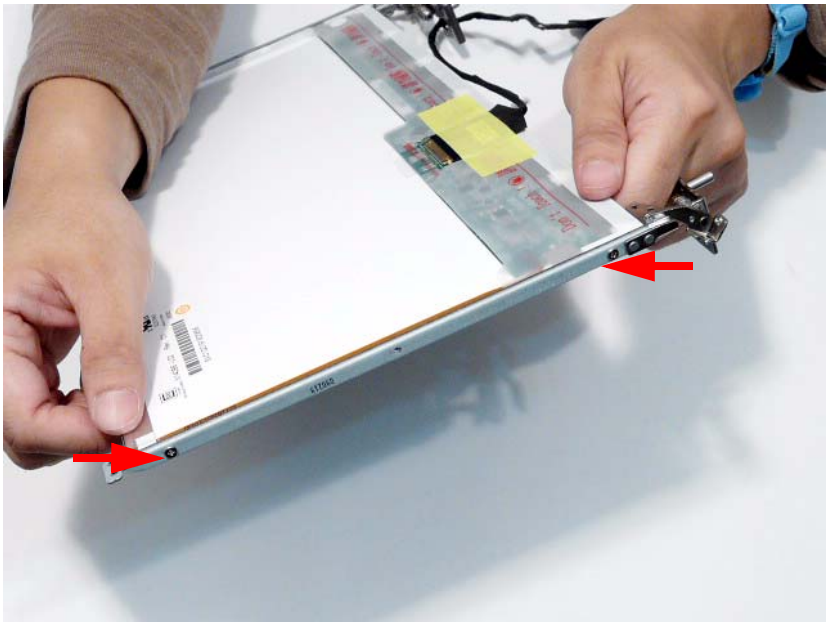
2. Secure the connector by replacing the adhesive strip as shown.



3. Replace the adhesive protection strip as shown.

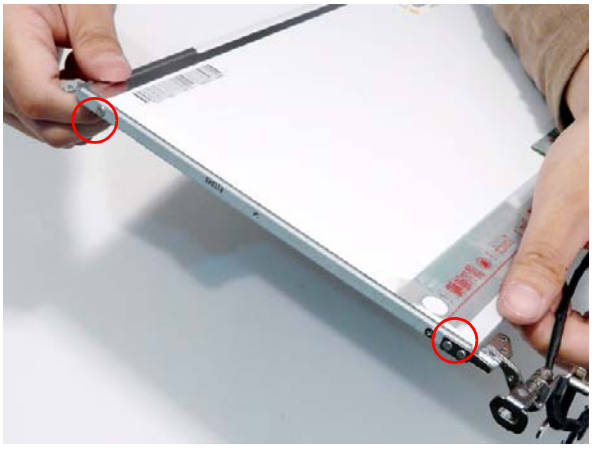
IMPORTANT: Ensure that the LCD Cable runs in front of the brackets to avoid trapping when the Bezel is replaced.

4. Align the screw holes and replace the left and right LCD brackets as shown.



[

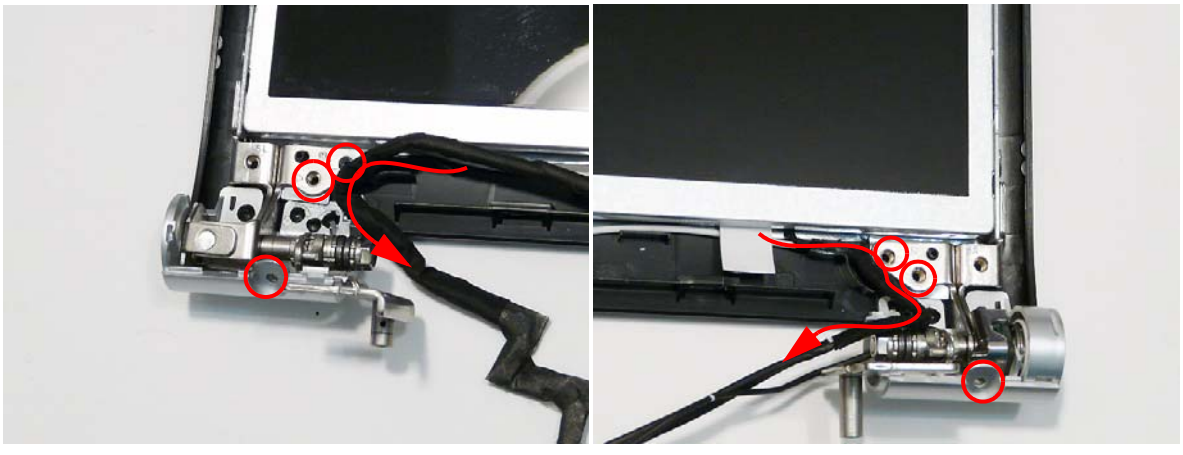
5. Secure the brackets to the panel using four bracket screws (two each side).



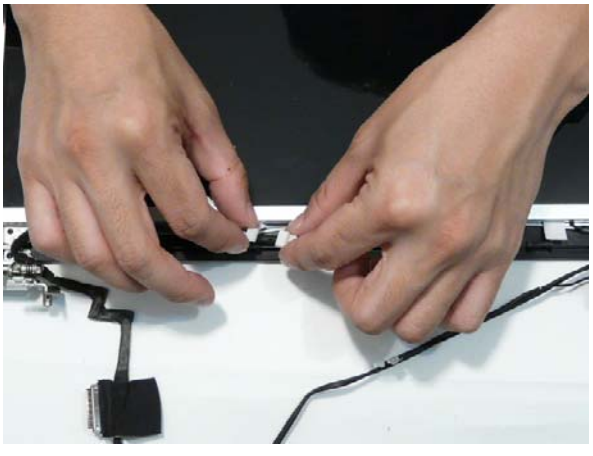
Replacing the LCD Panel

1. Insert the LCD Panel rear edge first.

2. Ensure that the WLAN and FPC cables pass through the guide wells as shown and that screw holes are aligned properly.



3. Connect the Microphone connector to the FPC cable as shown.

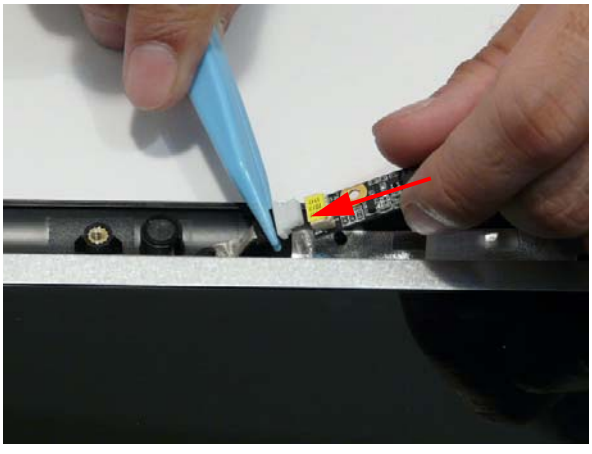


4. Replace the four securing screws for the LCD Panel.

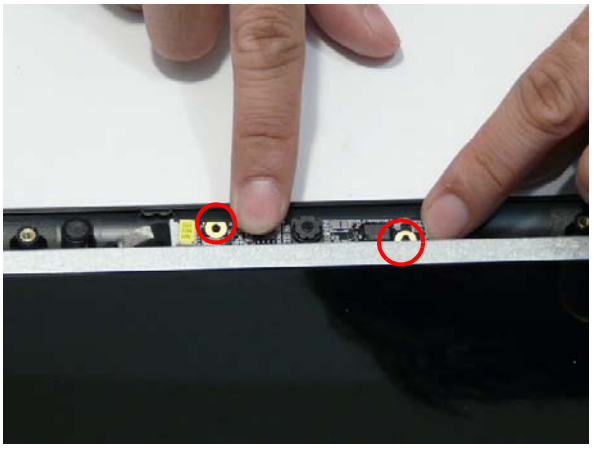
Step	Size	Quantity	Screw Type
LCD Panel	M2.5*3	4	

Replacing the Camera Board

1. Connect the Camera cable as shown.



2. Ensure that the locating pins are correctly positioned and place the Camera Board in the LCD Module. Press down to secure it in place

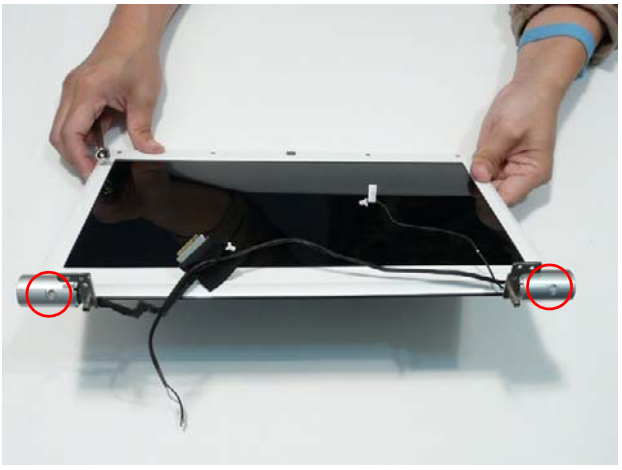


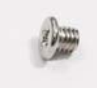
Replacing the LCD Bezel

1. Place the Bezel onto the LCD Module starting with the bottom edge. Take care to ensure that the cables are exiting the hinge and are not being pinched by the bezel.

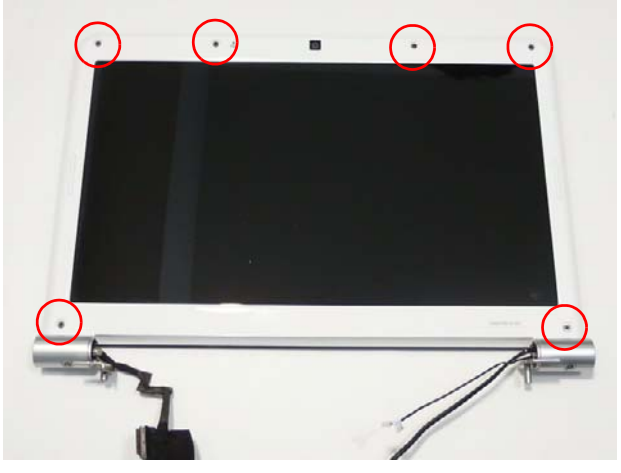
2. Starting from the bottom edge and working up to the top corners, press the Bezel into the panel.

3. Replace the two securing screws for the hinges as shown.



Step	Size	Quantity	Screw Type
LCD Bezel	M2*3	2	

4. Replace the six screws and screw caps for the LCD Bezel.

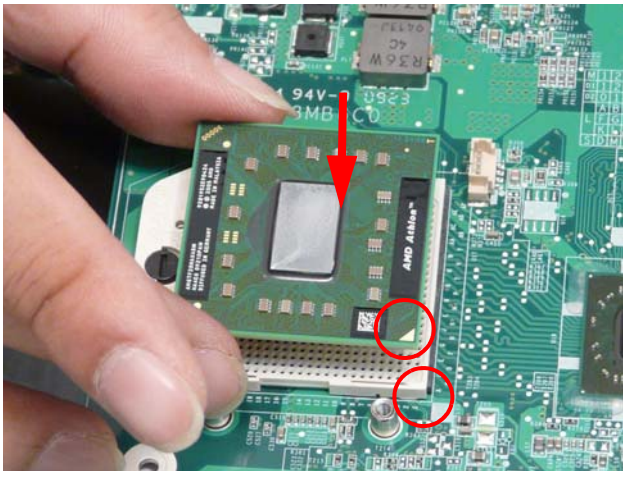


Step	Size	Quantity	Screw Type
LCD Bezel	M2.5*6.0	6	

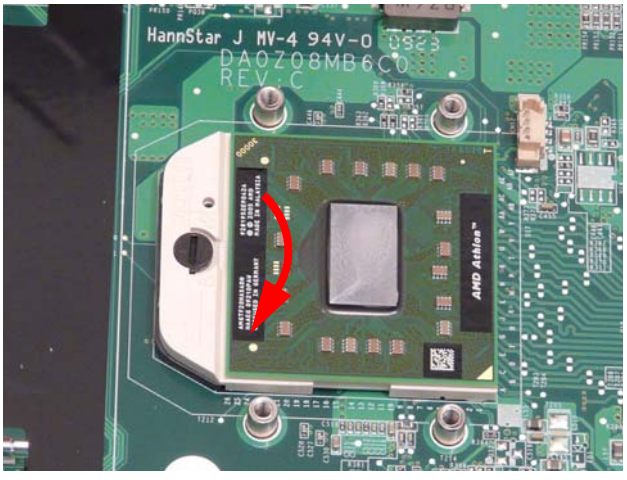
Main Unit Reassembly Procedure

Replacing the CPU

1. Insert the CPU into the socket. Be sure to align the pins correctly.



2. Using a flat bladed screw driver, rotate the CPU screw 180° to lock the CPU into the socket.



Replacing the Thermal Module

IMPORTANT: Ensure all heat pads are in place before replacing the Thermal Module.

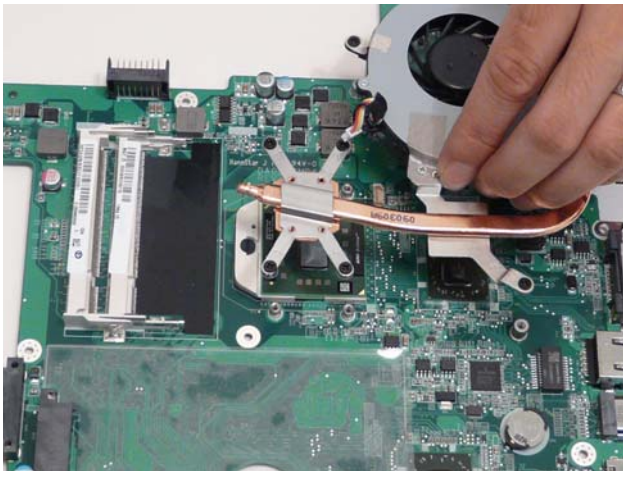
The following thermal pads are approved for use:

- Silmore GP50
- Honeywell
- Jet Motor 7762

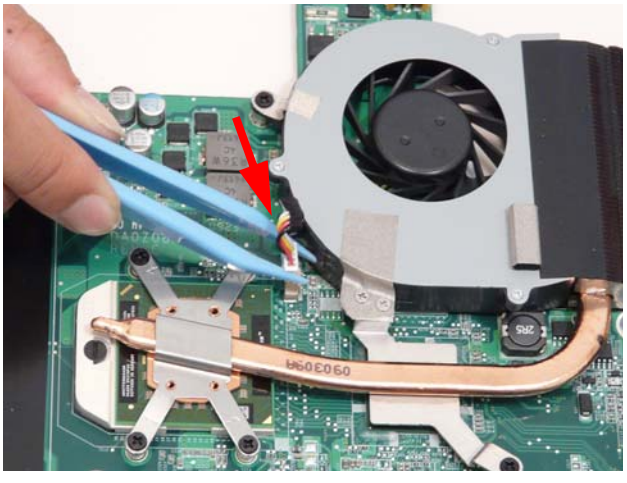
The following thermal pads are approved for use:

- Eapus XR-PE

1. Remove all traces of thermal grease from the CPU using a lint-free cloth or cotton swab and Isopropyl Alcohol, Acetone, or other approved cleaning agent.
2. Apply a small amount of thermal grease to the centre of the CPU—there is no need to spread the grease manually, the force used during the installation of the Thermal Module is sufficient.
3. Place the Thermal Module on the Mainboard as shown.

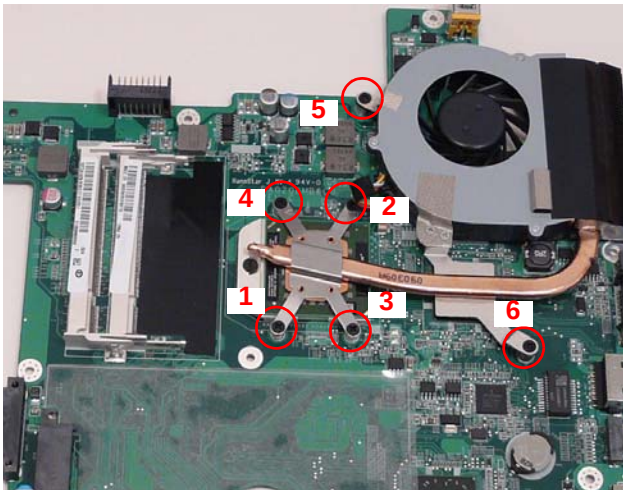


4. Connect the Fan power cable to the Mainboard.



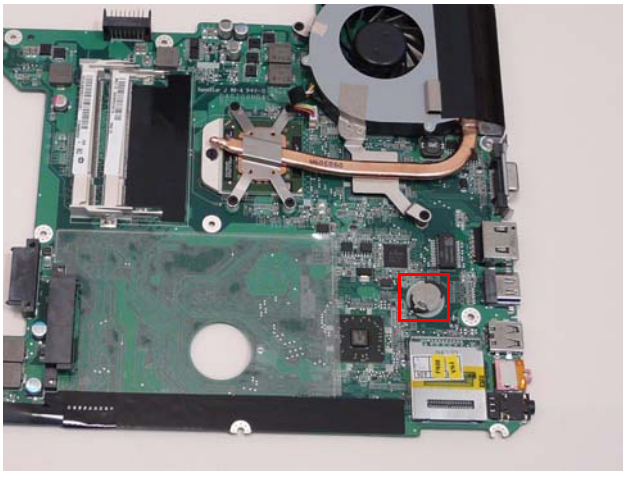
5. Insert and tighten the five captive screws in the Thermal Module in numerical order from 1 to 5.

NOTE: The Thermal Module is secured with six screws on models with VGA support.

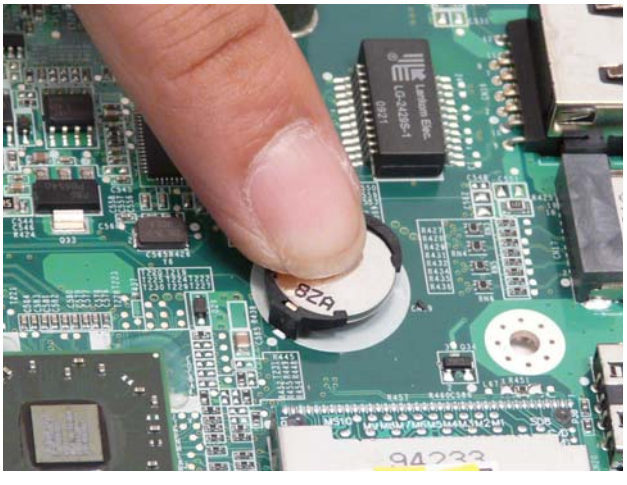


Replacing the RTC Battery

1. Locate the defective RTC battery. The Mainboard must be removed from the Lower Cover to access the battery.

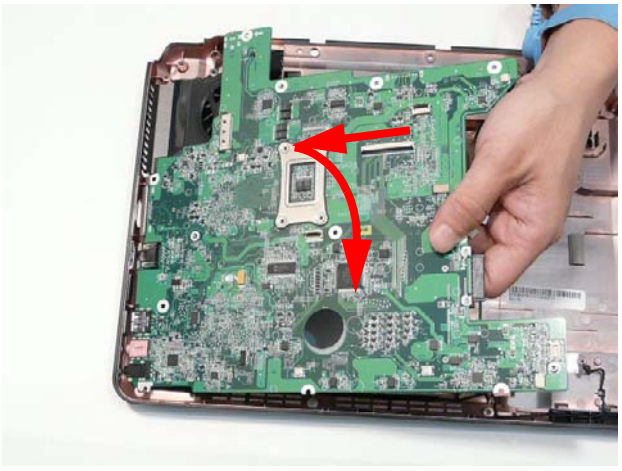


2. Insert the replacement battery into the Mainboard socket.



Replacing the Mainboard

1. Insert the Mainboard right side first as shown and insert it into the Lower Cover, making sure to properly align the screw holes.

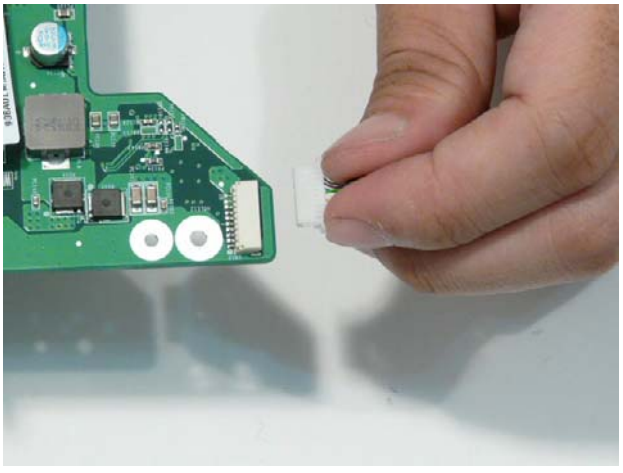


2. Insert the single screw to secure the Mainboard to the Lower Cover.

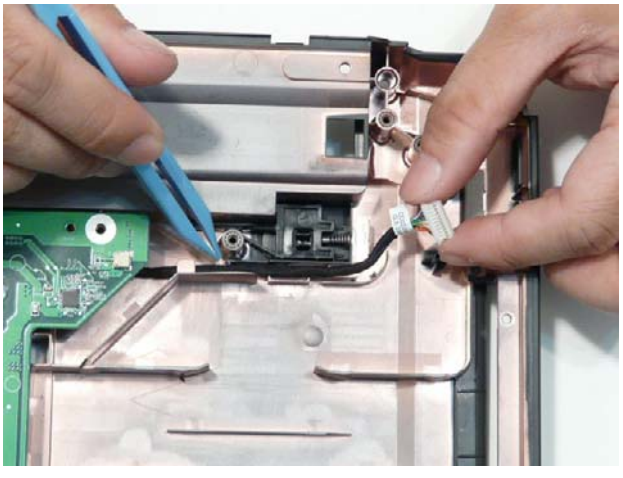
Step	Size	Quantity	Screw Type
Mainboard	M2.5*6.0	1	

Replacing the USB Board

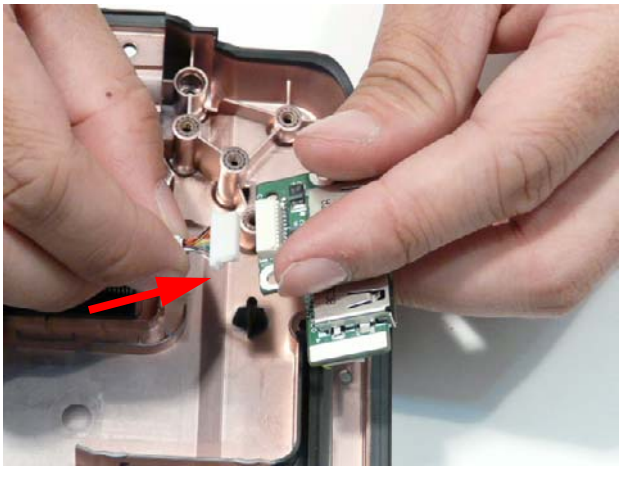
1. Connect the USB Board cable to the Mainboard as shown.



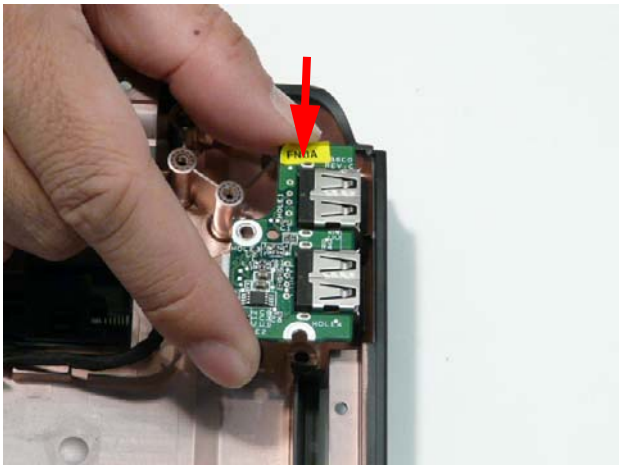
2. Insert the USB cable into the cable channel.



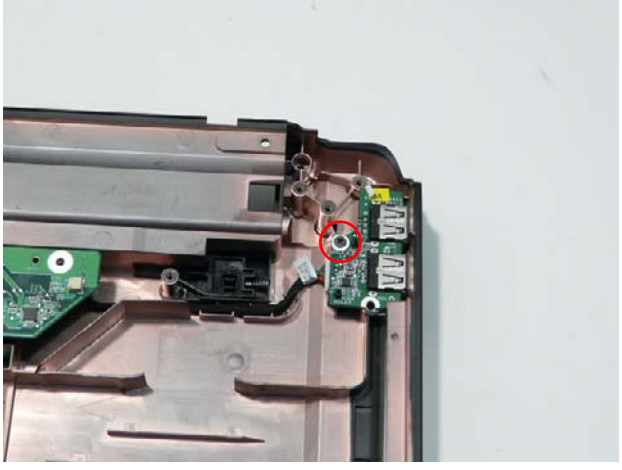
3. Connect the USB cable to the board.



4. Turn the USB board over and place into the Lower Cover



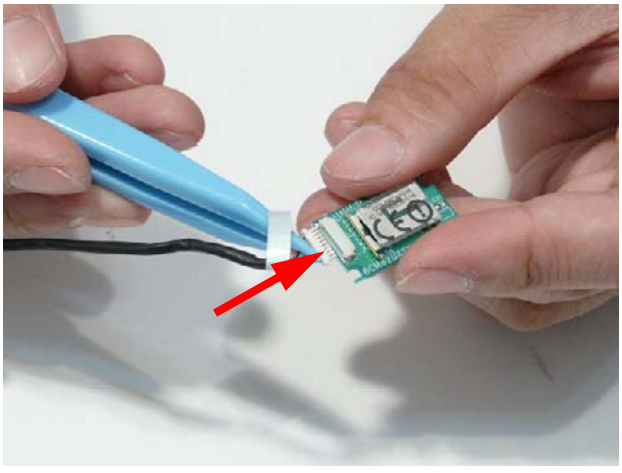
5. Insert the single screw to secure the USB Board to the Lower Cover.



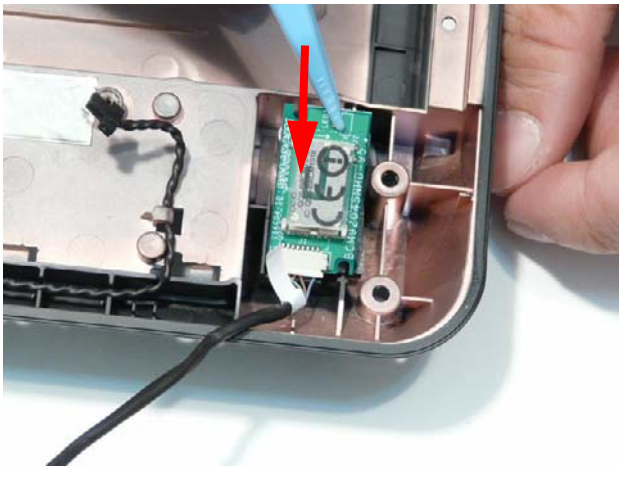
Step	Size	Quantity	Screw Type
USB Board	M2*3	1	

Replacing the Bluetooth Module

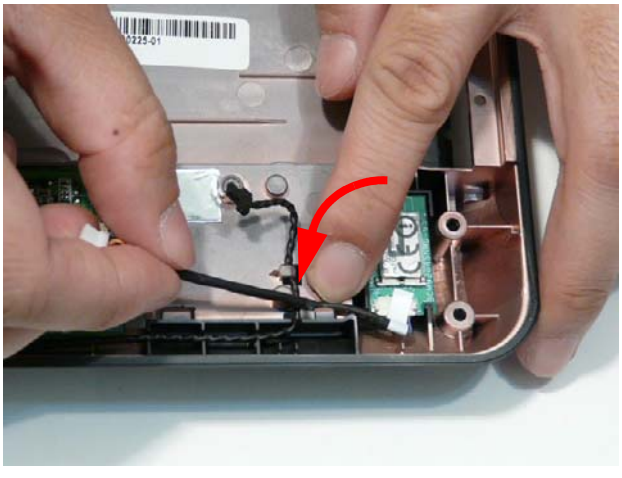
1. Connect the Bluetooth cable to the module.



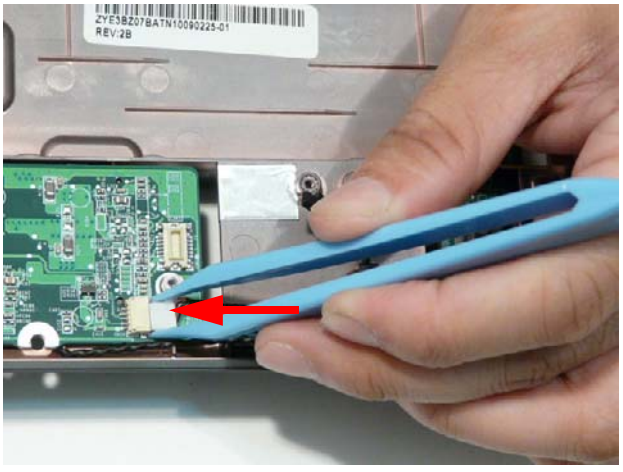
2. Replace the adhesive in the lower cover if necessary.
3. Place the Bluetooth Module in the lower cover as shown and press against the adhesive to secure the module in place.



4. Insert the Bluetooth cable into the cable channel as shown.

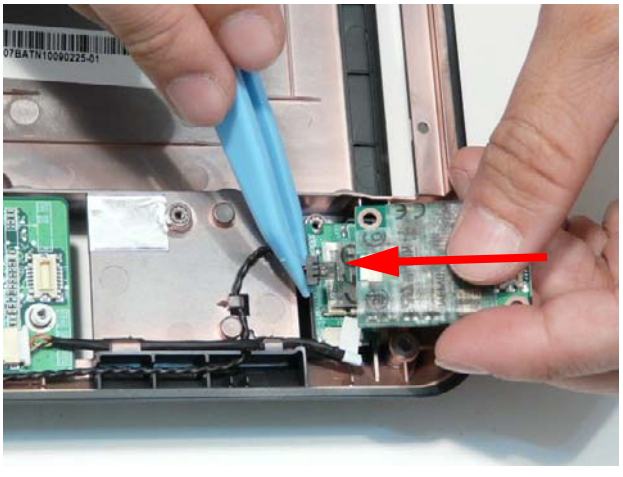


5. Connect the Bluetooth cable to the Mainboard.



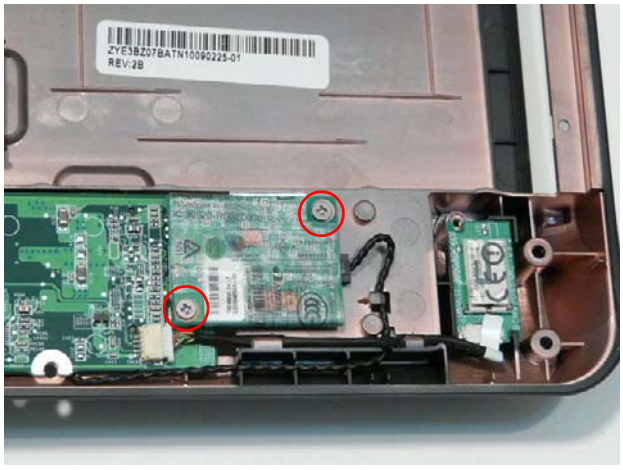
Replacing the Modem Board

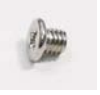
1. Connect the Modem cable as shown.



2. Flip the Modem Board over and set into the Lower Cover.

3. Secure the modem board in place using two screws.

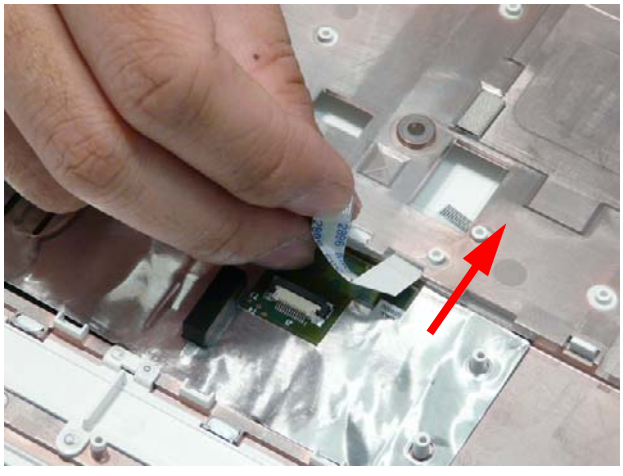


Step	Size	Quantity	Screw Type
Modem Board	M2*3	2	

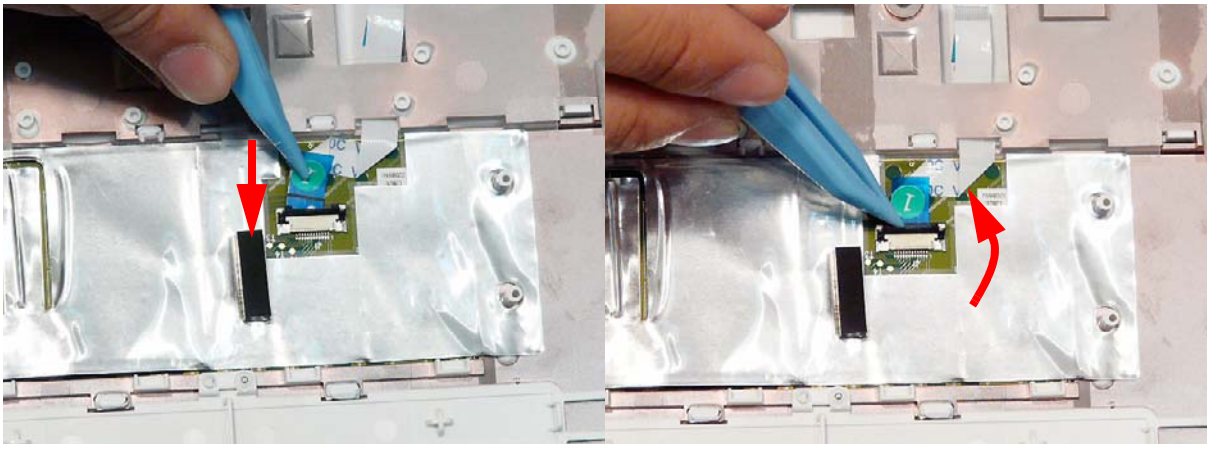
Replacing the TouchPad FFC

IMPORTANT: It is not possible to remove the TouchPad individually. If the TouchPad malfunctions, follow the disassembly steps to remove any additional components on the Upper Cover and replace the entire Upper Cover.

1. Carefully insert the FFC through the Upper Cover as shown.



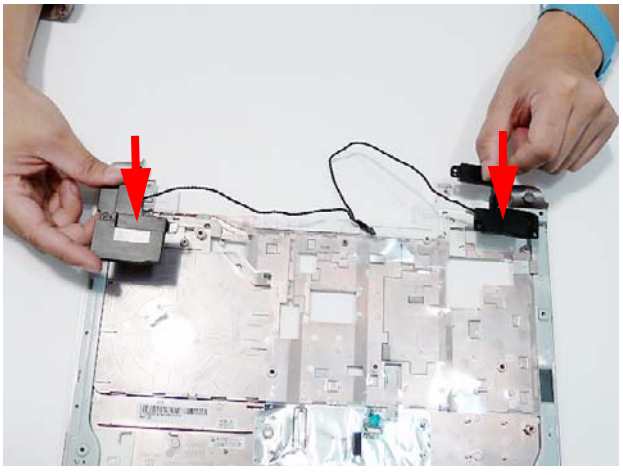
2. Connect the FFC as shown and close the TouchPad FFC locking latch.



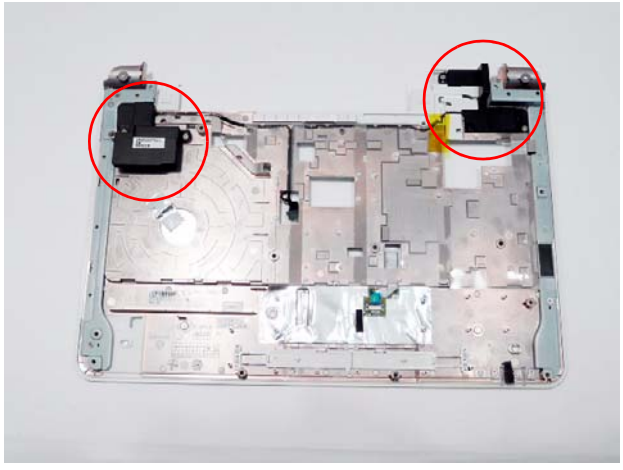
Replacing the Speaker Modules

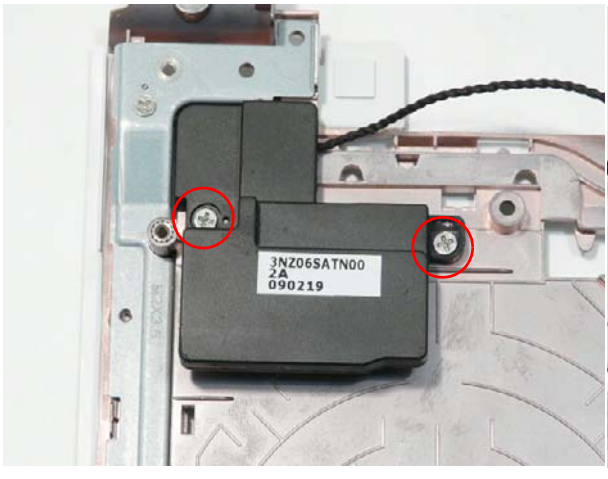
IMPORTANT: Follow the instructions in “Removing the Upper Cover” on page 64 to access the speaker modules.

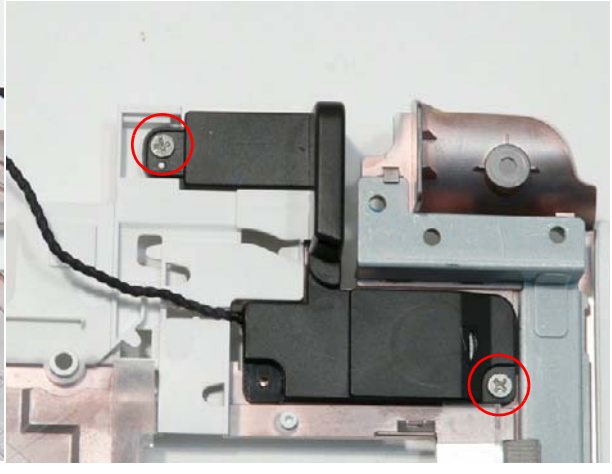
1. Place the Speakers on the underside of the Upper Cover, taking care to align the mounting screws.



2. Replace the four securing screws for the Speaker Modules.

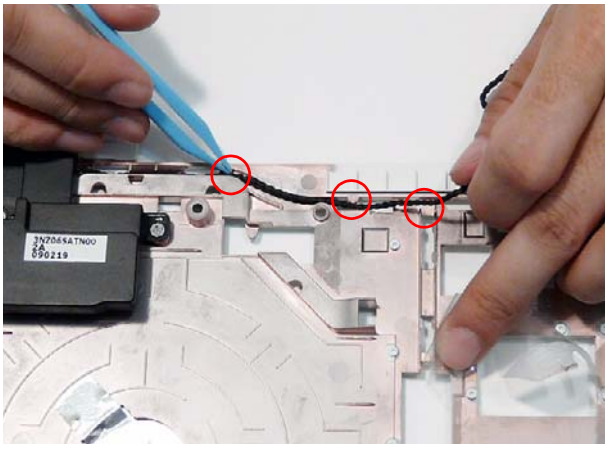




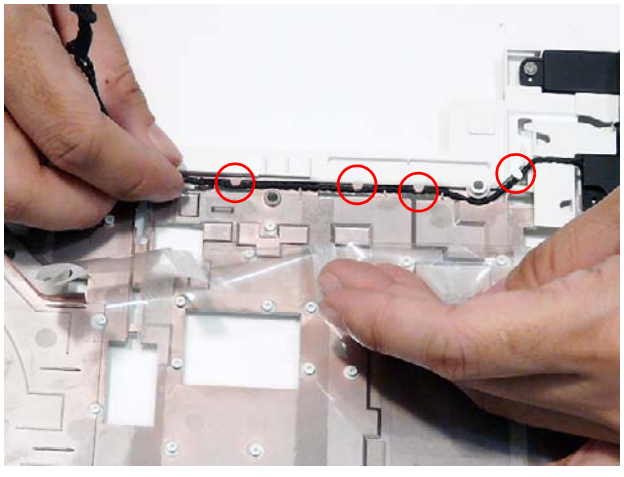


Step	Size	Quantity	Screw Type
Speaker Modules	M2*3	4	

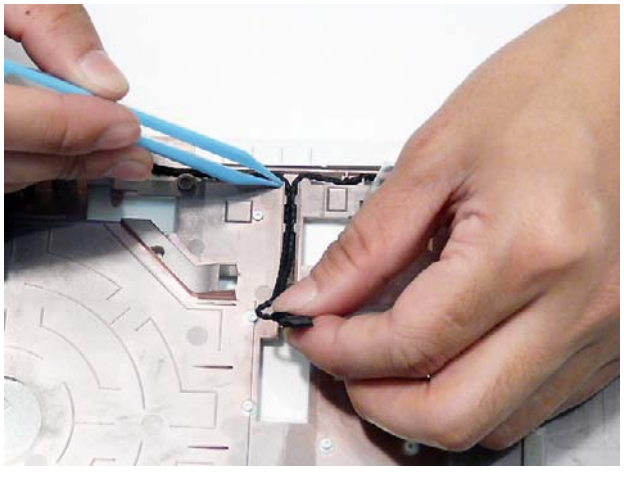
3. Insert the left speaker cable into the left side cable channel.



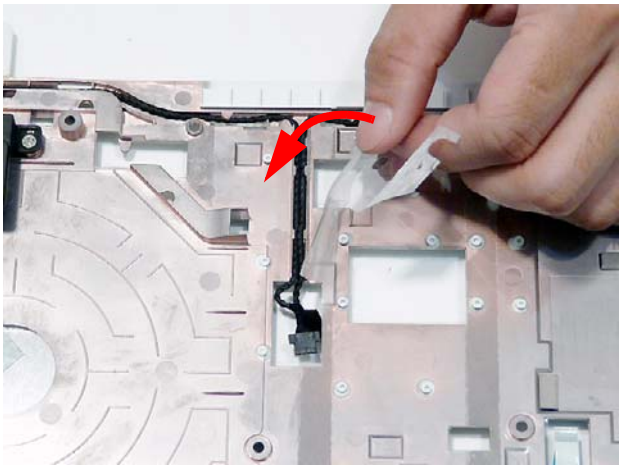
4. Insert the right speaker cable into the right side cable channel.



5. Insert the Speaker cables into the center cable channel.



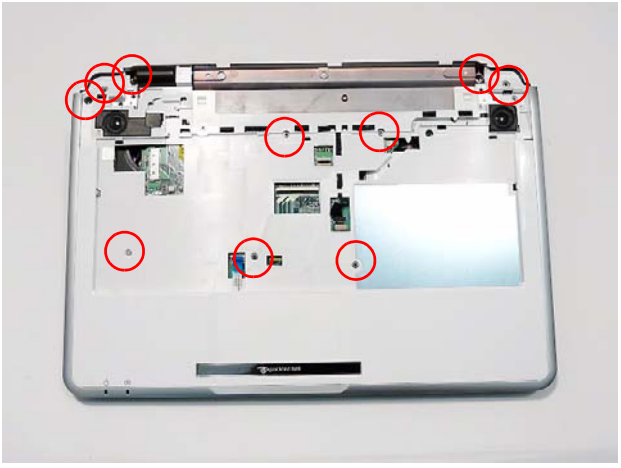
6. Replace the plastic covering on the Upper Cover.



Replacing the Upper Cover

1. Place the Upper Cover onto the Lower Cover assembly as shown.

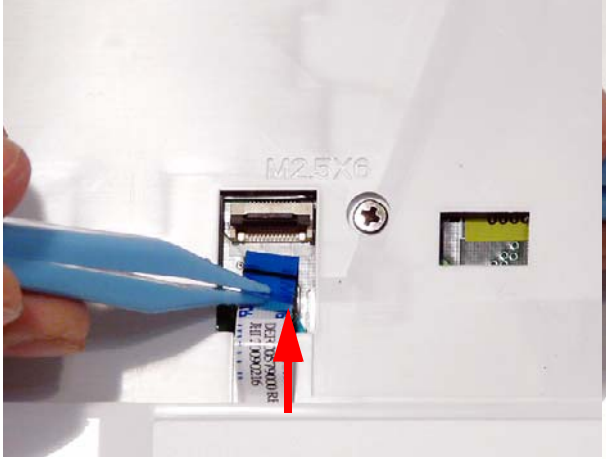
2. Replace the nine screws to secure the Upper Cover.

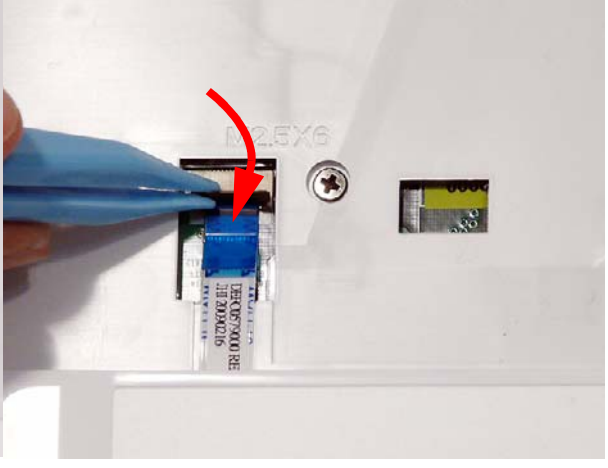


Step	Size	Quantity	Screw Type
Upper Cover	M2.5*6.0	10	

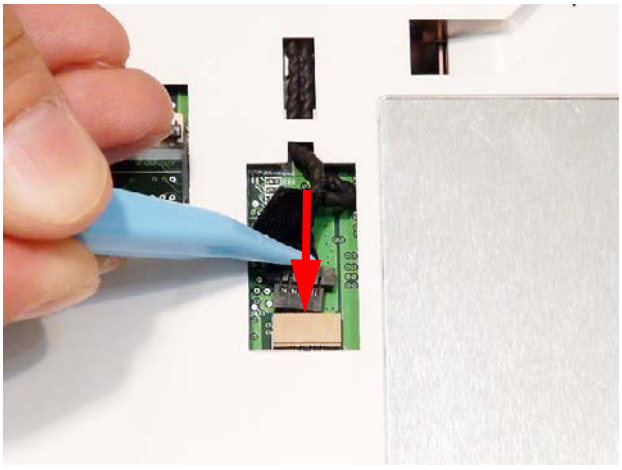
3. Reconnect the following cables to the Mainboard.

4. Open the FFC securing latch and connect A as shown.

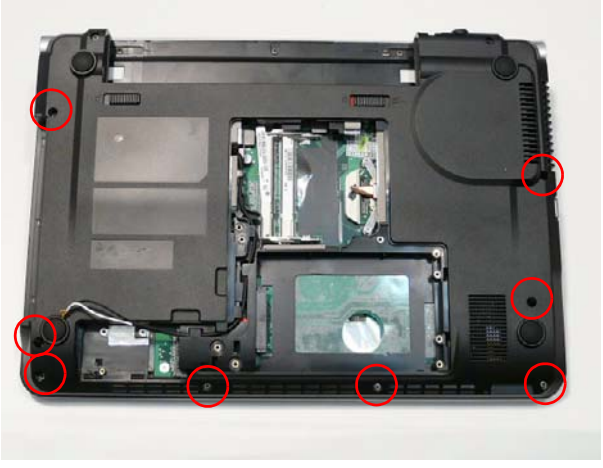




5. Connect B as shown.



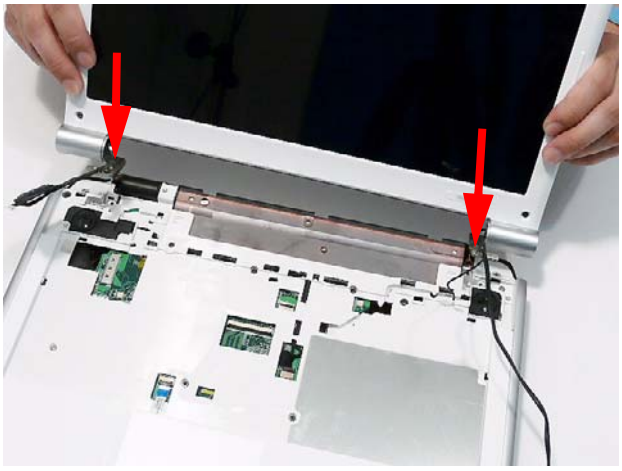
6. Turn the computer over. Replace the eight securing screws.



Step	Size	Quantity	Screw Type
Upper Cover	M2.5*6.0	8	

Replacing the LCD Module

1. Insert the module into the Main Unit, taking care to align the mounting pins with the sockets on the main unit.

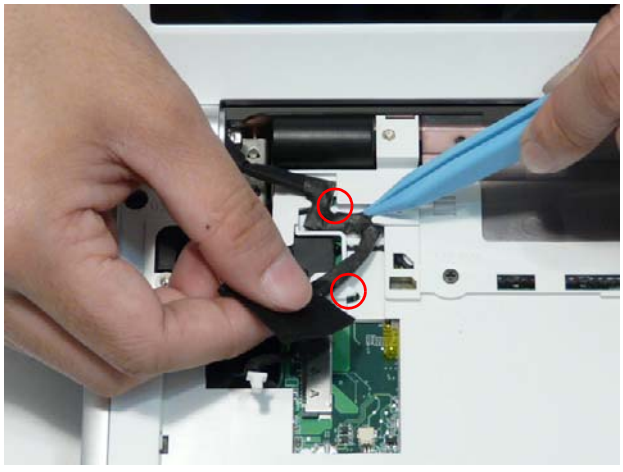


2. Insert the four screws to secure the LCD Module to the Upper Cover.

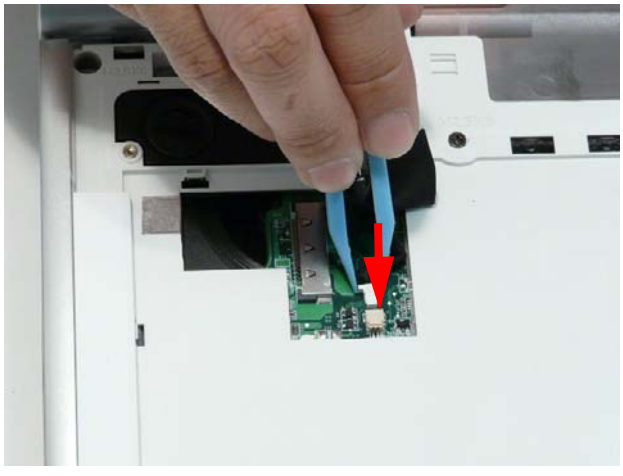
Step	Size	Quantity	Screw Type
LCD Module	M2.5*6.0	4	

IMPORTANT: Ensure all cables are clear of the lower cover before replacing the LCD module.

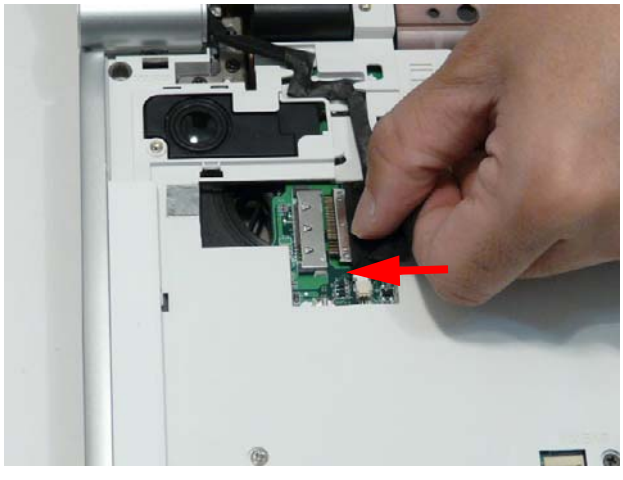
3. Insert the LVDS/Microphone cable into the Upper Cover cable channel.



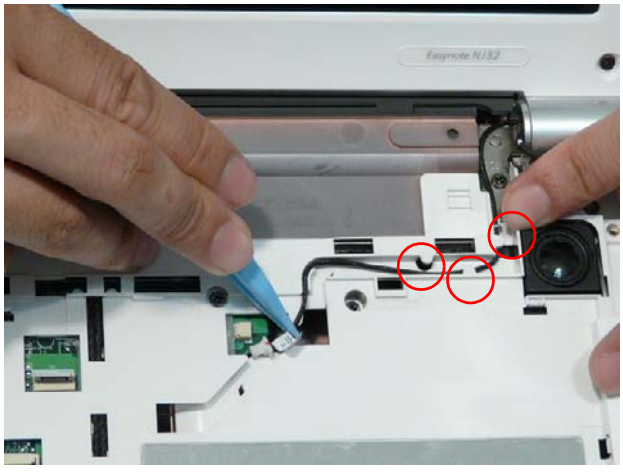
4. Connect the Microphone/Camera connector to the Mainboard.



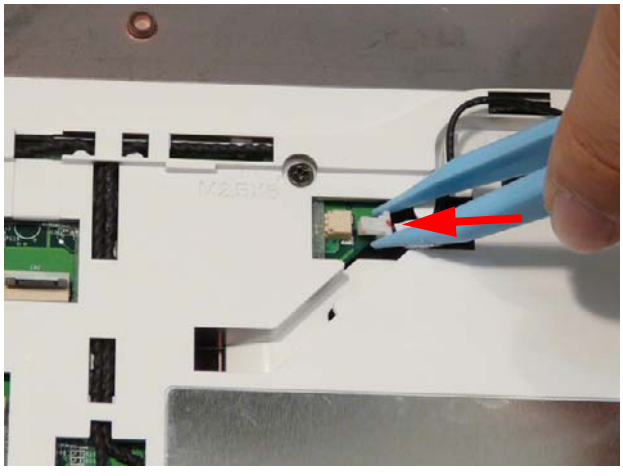
5. Connect the LVDS cable to the Mainboard.



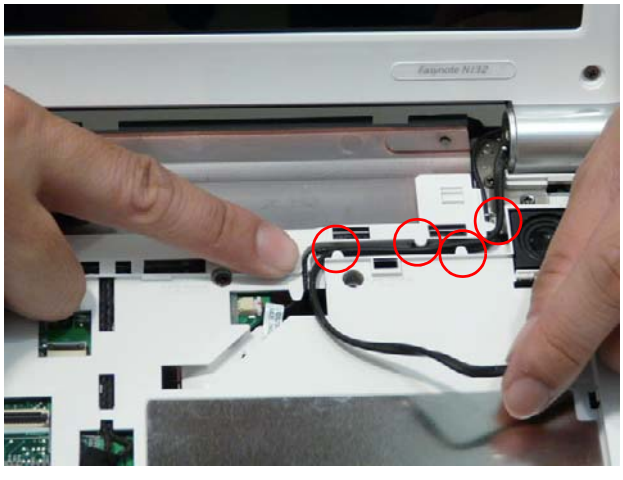
6. Insert the Power Board cable into the Upper Cover cable channel.



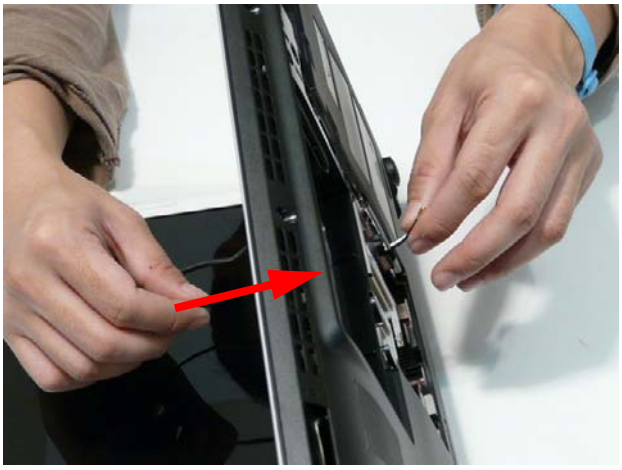
7. Connect the Power Board cable to the Mainboard.



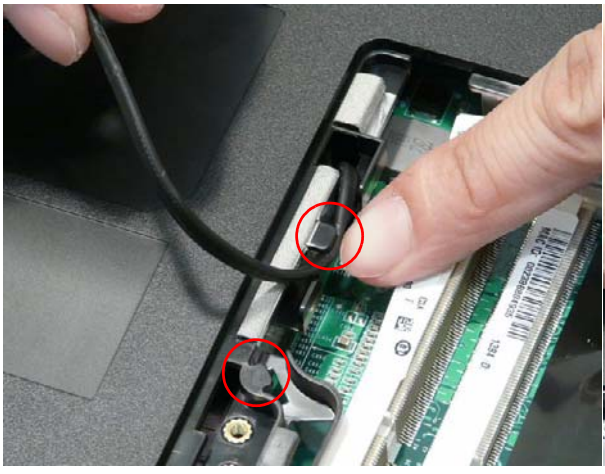
8. Turn the computer over and insert the Antennas into the Upper Cover cable channel.

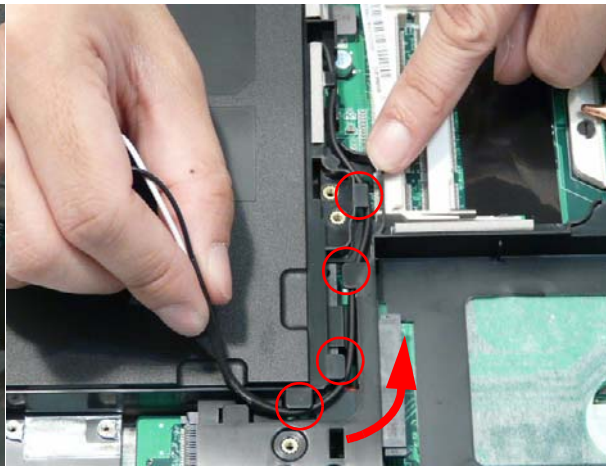


9. Carefully push the Antenna cables through to the underside of the computer.

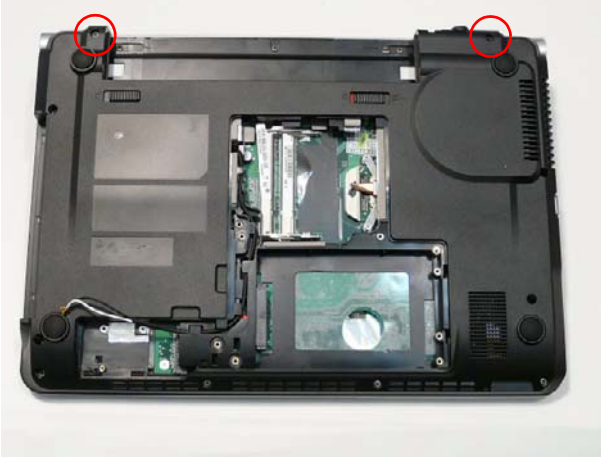


10. Insert the Antenna cables into the cable channel as shown.





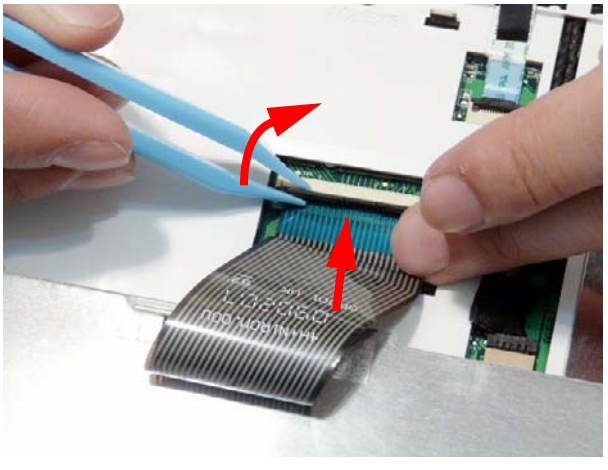
11. Turn the computer over. Replace the two screws to secure the LCD Module to the Lower Cover.



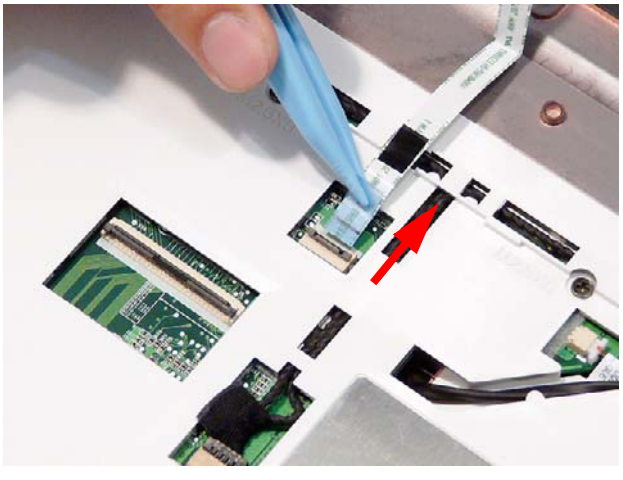
Replacing the Keyboard

1. Turn the Keyboard over and place it on the TouchPad area as shown.

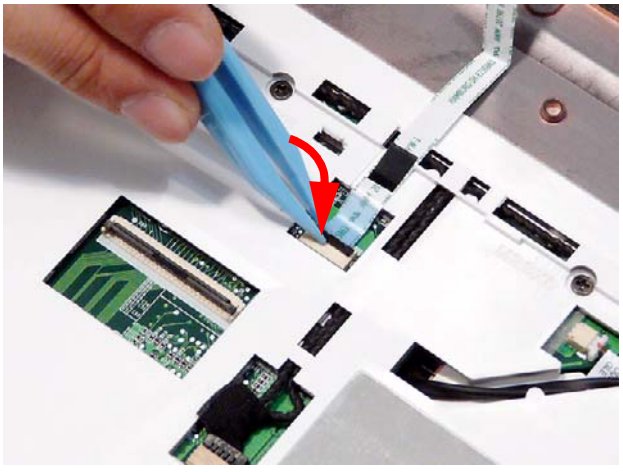
2. Connect the Keyboard FFC and push down on the Keyboard FFC securing latch as shown.



3. . Insert the Switch Cover FFC into the Mainboard.



4. Push down on the Switch Cover FFC securing latch as shown.



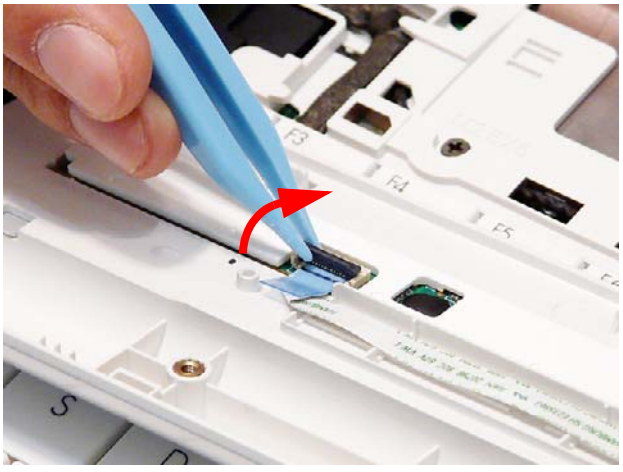
5. Flip the Keyboard over and push into place.

Replacing the Switch Cover

IMPORTANT: The Media Board attached to the underside of the Switch Cover cannot be replaced individually. If the Media Board malfunctions, replace the entire Switch Cover assembly.

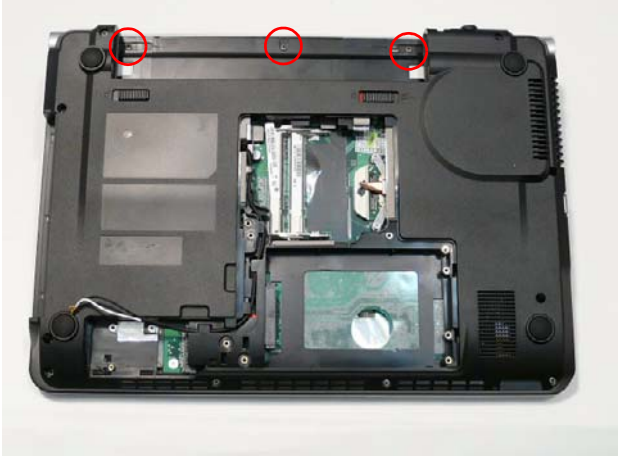
1. Lay the switch cover upside down on top of the keyboard.
2. Press down on the FFC to reattach the adhesive and secure it in place.

3. Connect the Media Board FFC and close the FFC locking latch as shown.



4. Rotate the Switch Cover and push into place along the top edge.

5. Replace the three screws to secure the Switch Cover to the Upper Cover.

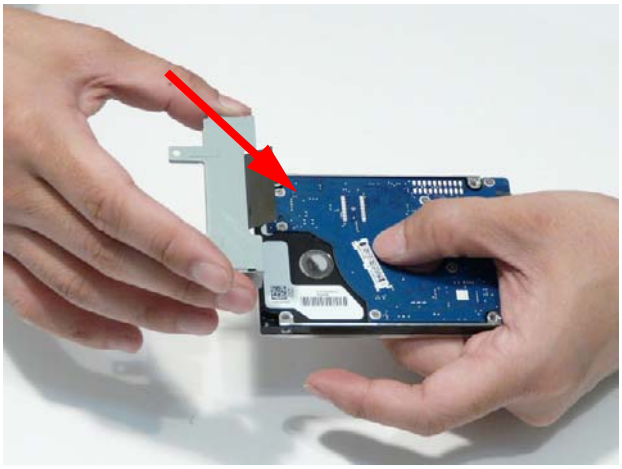


Step	Size	Quantity	Screw Type
Switch Cover	M2.5*6.0	3	

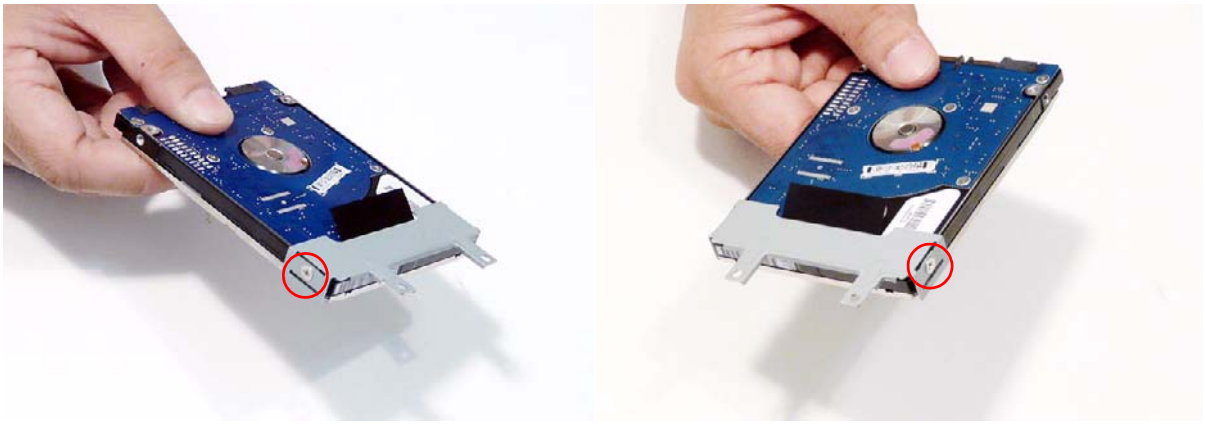
External Module Reassembly

Replacing the HDD Module

1. Replace the HDD Carrier as shown.

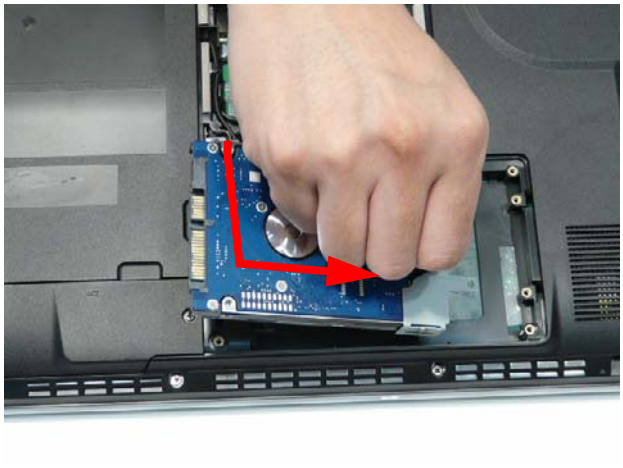


2. Replace the two screws to secure the HDD to the Carrier.

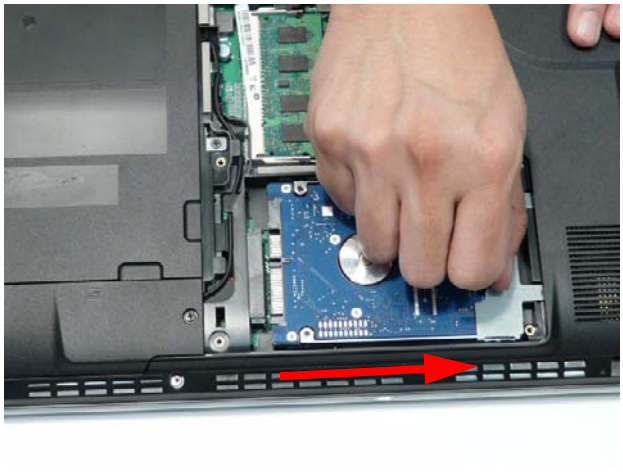


Step	Size	Quantity	Screw Type
HDD Module	M3*3	2	

3. Insert the HDD Module into the Lower Cover as shown.



4. Slide the HDD Module in the direction of the arrow to connect the interface.



5. Replace the two screws to secure the HDD to the Lower Cover.

Step	Size	Quantity	Screw Type
HDD Module	M2.5*6.0	2	

NOTE: To prevent damage to device, avoid pressing down on it or placing heavy objects on top of it.

Replacing the WLAN Module

1. Insert the WLAN Module into the WLAN socket.

2. Move the antennas away and insert the single screw on the WLAN Module.

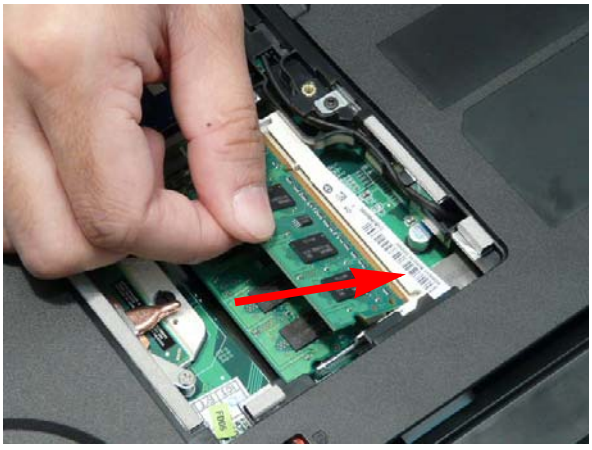
Step	Size	Quantity	Screw Type
WLAN Module	M2*3	1	

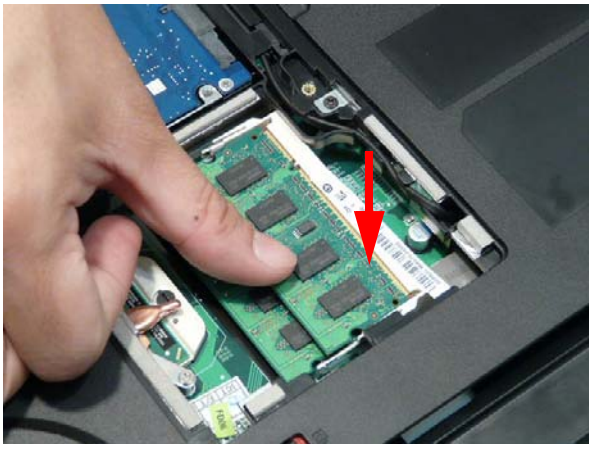
3. Connect the antenna cables to the WLAN Module.

IMPORTANT: The black cable attaches to the **Main** terminal and the white cable attaches to the **AUX** terminal.

Replacing the DIMM Module

1. Insert the DIMM Module in to the DIMM slot.
2. Press the module down to complete the installation.





Replacing the ODD module

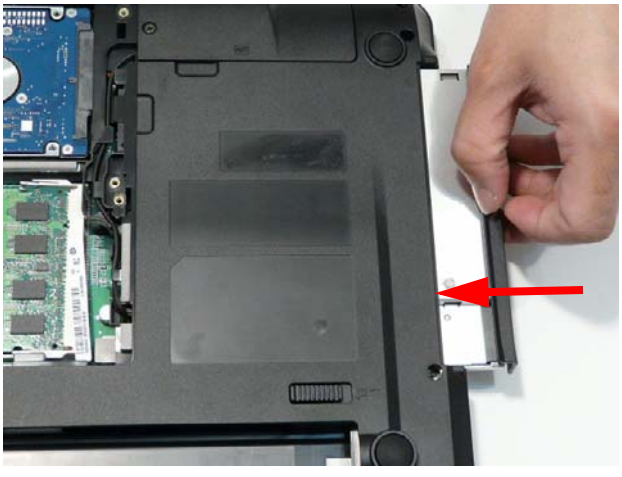
1. Replace the ODD Bezel by inserting the bottom of the bezel and rotating upwards.

2. Replace the bracket on the ODD Module.

3. Replace the two screws to secure the ODD Bracket to the ODD Module.

Step	Size	Quantity	Screw Type
ODD Module	M2*3	2	

4. Slide the ODD Module into the Lower Cover as shown.



5. Replace the single screw to secure the ODD Module in place.

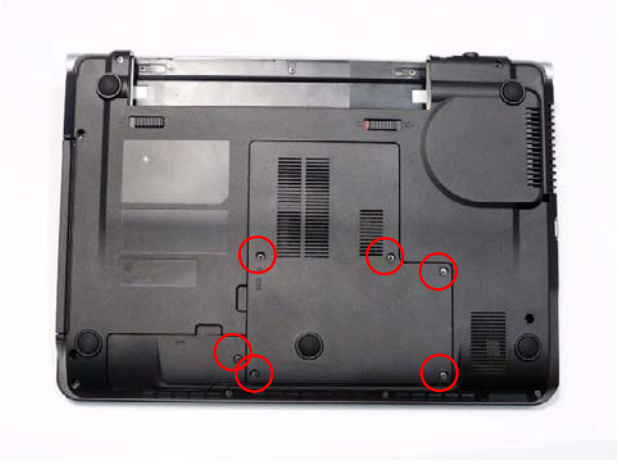
Step	Size	Quantity	Screw Type
ODD Module	M2.5*6.0	1	

Replacing the Lower Covers

1. Replace the Memory Cover and press down around the perimeter to snap it in to place.

2. Replace the Wireless Cover and press down around the perimeter to snap it in to place.

3. Secure the covers in place with the captive screws.



Replacing the Battery

1. Insert the battery pack in to the main unit.

2. Slide the battery lock/unlock latch to the lock position.

Troubleshooting

Common Problems

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.

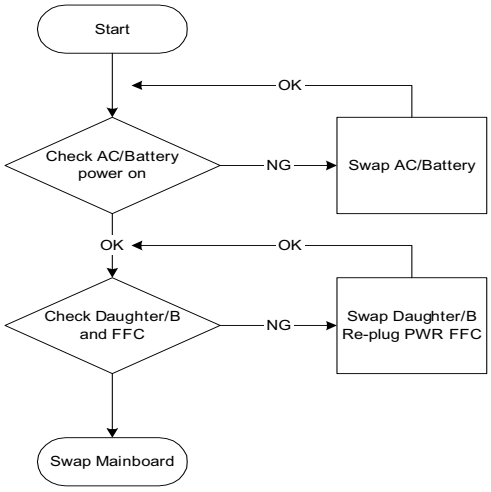
1. Obtain the failing symptoms in as much detail as possible.
2. Verify the symptoms by attempting to re-create the failure by running the diagnostic test or by repeating the same operation.
3. Use the following table with the verified symptom to determine which page to go to.

Symptoms (Verified)	Go To
Power On Issue	Page 136
No Display Issue	Page 137
LCD Failure	Page 139
Internal Keyboard Failure	Page 140
TouchPad Failure	Page 140
Internal Speaker Failure	Page 141
Internal Microphone Failure	Page 142
Right Side USB Failure	Page 144
Power Button Failure	Page 144
Other Functions Failure	Page 145
Intermittent Problems	Page 146
Undetermined Problems	Page 146

4. If the Issue is still not resolved, see “Online Support Information” on page 185.

Power On Issue

If the system doesn't power on, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:



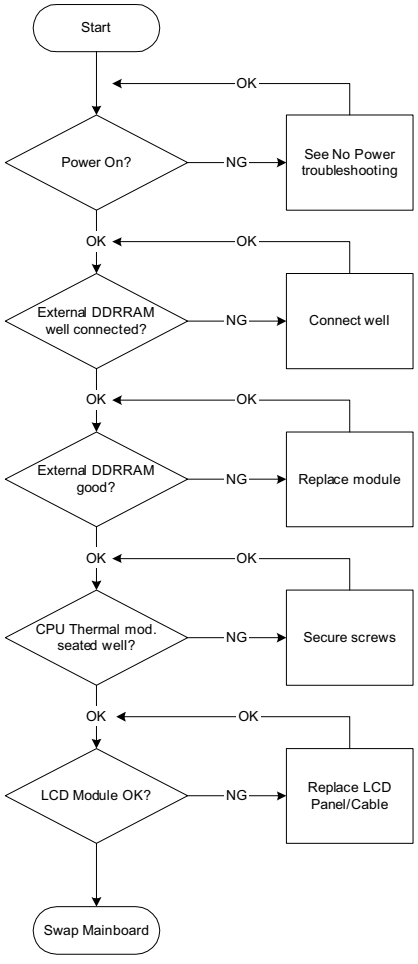
Computer Shuts Down Intermittently

If the system powers off at intervals, perform the following actions one at a time to correct the problem.

1. Check the power cable is properly connected to the computer and the electrical outlet.
2. Remove any extension cables between the computer and the outlet.
3. Remove any surge protectors between the computer and the electrical outlet. Plug the computer directly into a known good electrical outlet.
4. Remove all external and non-essential hardware connected to the computer that are not necessary to boot the computer to the failure point.
5. Remove any recently installed software.
6. If the Issue is still not resolved, see "Online Support Information" on page 185.

No Display Issue

If the **Display** doesn't work, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:



No POST or Video

If the POST or video doesn't display, perform the following actions one at a time to correct the problem.

1. Make sure that the internal display is selected. On this notebook model, switching between the internal display and the external display is done by pressing **Fn+F5**. Reference Product pages for specific model procedures.
2. Make sure the computer has power by checking at least one of the following occurs:
   - Fans start up
   - Status LEDs light up

   If there is no power, see "Power On Issue" on page 136.
3. Drain any stored power by removing the power cable and battery and holding down the power button for 10 seconds. Reconnect the power and reboot the computer.
4. Connect an external monitor to the computer and switch between the internal display and the external display is by pressing **Fn+F5** (on this model).

   If the POST or video appears on the external display, see "LCD Failure" on page 139.

5. Disconnect power and all external devices including port replicators or docking stations. Remove any memory cards and CD/DVD discs. Restart the computer.

   If the computer boots correctly, add the devices one by one until the failure point is discovered.

6. Reseat the memory modules.
7. Remove the drives (see “Disassembly Process” on page 44).
8. If the Issue is still not resolved, see “Online Support Information” on page 185.

Abnormal Video Display

If video displays abnormally, perform the following actions one at a time to correct the problem.

1. Reboot the computer.
2. If permanent vertical/horizontal lines or dark spots display in the same location, the LCD is faulty and should be replaced. See “Disassembly Process” on page 44.
3. If extensive pixel damage is present (different colored spots in the same locations on the screen), the LCD is faulty and should be replaced. See “Disassembly Process” on page 44.
4. Adjust the brightness to its highest level. See the User Manual for instructions on adjusting settings.

   NOTE: Ensure that the computer is not running on battery alone as this may reduce display brightness.

   If the display is too dim at the highest brightness setting, the LCD is faulty and should be replaced. See “Disassembly Process” on page 44.
5. Check the display resolution is correctly configured:
   a. Minimize or close all Windows.
   b. If display size is only abnormal in an application, check the view settings and control/mouse wheel zoom feature in the application.
   c. If desktop display resolution is not normal, right-click on the desktop and select **Personalize→ Display Settings**.
   d. Click and drag the Resolution slider to the desired resolution.
   e. Click **Apply** and check the display. Readjust if necessary.
6. Roll back the video driver to the previous version if updated.
7. Remove and reinstall the video driver.
8. Check the Device Manager to determine that:
   - The device is properly installed. There are no red Xs or yellow exclamation marks.
   - There are no device conflicts.
   - No hardware is listed under Other Devices.
9. If the Issue is still not resolved, see “Online Support Information” on page 185.
10. Run the Windows Memory Diagnostic from the operating system DVD and follow the onscreen prompts.
11. If the Issue is still not resolved, see “Online Support Information” on page 185.

Random Loss of BIOS Settings

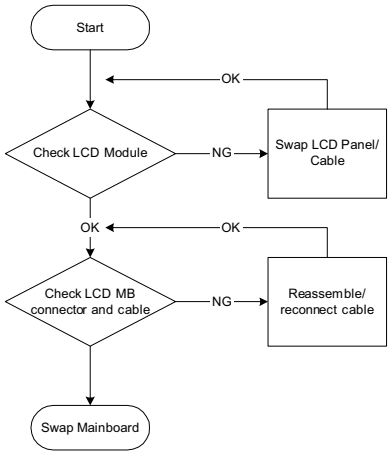
If the computer is experiencing intermittent loss of BIOS information, perform the following actions one at a time to correct the problem.

1. If the computer is more than one year old, replace the CMOS battery.
2. Run a complete virus scan using up-to-date software to ensure the computer is virus free.
3. If the computer is experiencing HDD or ODD BIOS information loss, disconnect and reconnect the power and data cables between devices.

   If the BIOS settings are still lost, replace the cables.
4. If HDD information is missing from the BIOS, the drive may be defective and should be replaced.
5. Replace the Motherboard.
6. If the Issue is still not resolved, see “Online Support Information” on page 185.

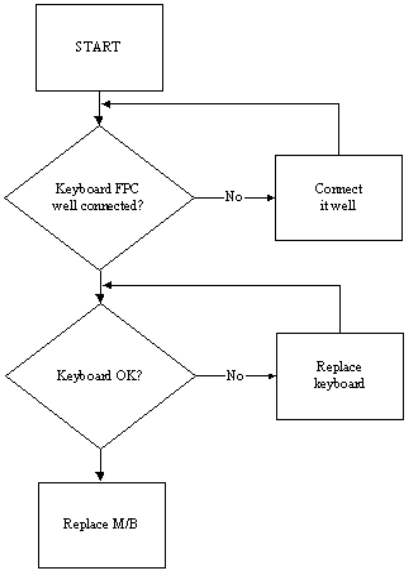
LCD Failure

If the **LCD** fails, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:



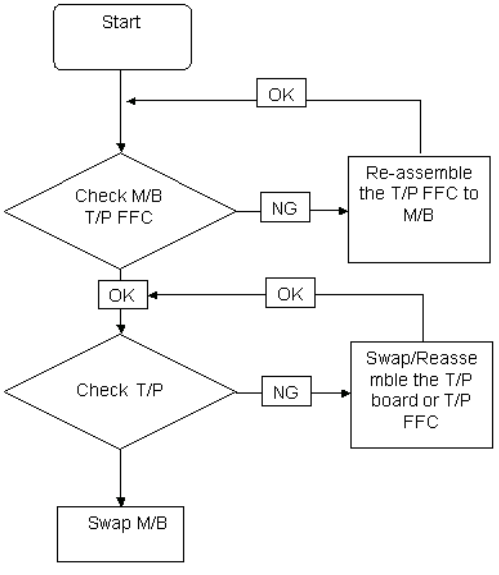
Built-In Keyboard Failure

If the built-in **Keyboard** fails, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:



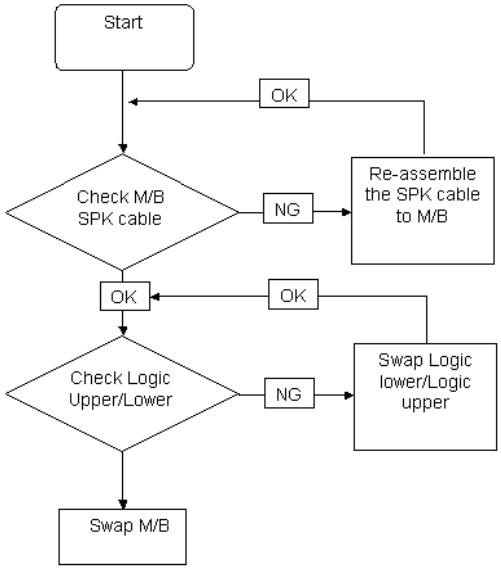
TouchPad Failure

If the **TouchPad** doesn't work, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:



Internal Speaker Failure

If the internal **Speakers** fail, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:



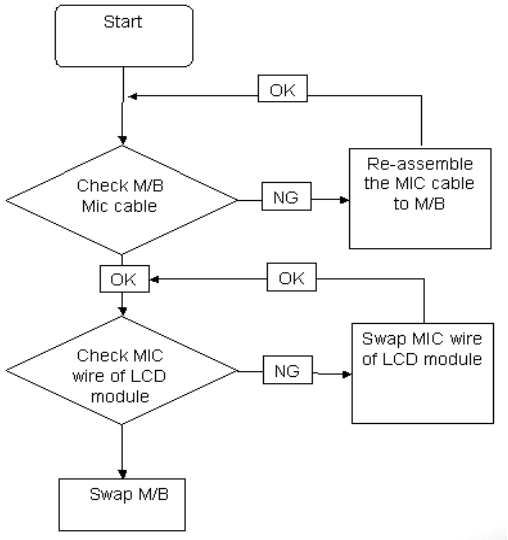
Sound Problems

If sound problems are experienced, perform the following actions one at a time to correct the problem.

1. Reboot the computer.
2. Navigate to **Start→ Control Panel→ System and Maintenance→ System→ Device Manager**. Check the Device Manager to determine that:
   - The device is properly installed.
   - There are no red Xs or yellow exclamation marks.
   - There are no device conflicts.
   - No hardware is listed under Other Devices.
3. Roll back the audio driver to the previous version, if updated recently.
4. Remove and reinstall the audio driver.
5. Ensure that all volume controls are set mid range:
   a. Click the volume icon on the taskbar and drag the slider to 50. Ensure that the volume is not muted.
   b. Click Mixer to verify that other audio applications are set to 50 and not muted.
6. Navigate to **Start→ Control Panel→ Hardware and Sound→ Sound**. Ensure that Speakers are selected as the default audio device (green check mark).
   NOTE: If Speakers does not show, right-click on the **Playback** tab and select **Show Disabled Devices** (clear by default).
7. Select Speakers and click **Configure** to start **Speaker Setup**. Follow the onscreen prompts to configure the speakers.
8. Remove and recently installed hardware or software.
9. Restore system and file settings from a known good date using **System Restore**.
   If the issue is not fixed, repeat the preceding steps and select an earlier time and date.
10. Reinstall the Operating System.
11. If the Issue is still not resolved, see “Online Support Information” on page 185.

Internal Microphone Failure

If the internal **Microphone** fails, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:



Microphone Problems

If internal or external **Microphones** do no operate correctly, perform the following actions one at a time to correct the problem.

1. Check that the microphone is enabled. Navigate to **Start**→ **Control Panel**→ **Hardware and Sound**→ **Sound** and select the **Recording** tab.
2. Right-click on the **Recording** tab and select **Show Disabled Devices** (clear by default).
3. The microphone appears on the **Recording** tab.
4. Right-click on the microphone and select **Enable**.
5. Select the microphone then click **Properties**. Select the **Levels** tab.
6. Increase the volume to the maximum setting and click **OK**.
7. Test the microphone hardware:
   a. Select the microphone and click **Configure**.
   b. Select **Set up microphone**.
   c. Select the microphone type from the list and click **Next**.
   d. Follow the onscreen prompts to complete the test.
8. If the Issue is still not resolved, see “Online Support Information” on page 185.

HDD Not Operating Correctly

If the **HDD** does not operate correctly, perform the following actions one at a time to correct the problem.

1. Disconnect all external devices.
2. Run a complete virus scan using up-to-date software to ensure the computer is virus free.
3. Run the Windows Vista Startup Repair Utility:
   a. insert the Windows Vista Operating System DVD in the ODD and restart the computer.
   b. When prompted, press any key to start to the operating system DVD.
   c. The **Install Windows** screen displays. Click **Next**.
   d. Select **Repair your computer**.
   e. The **System Recovery Options** screen displays. Click **Next**.
   f. Select the appropriate operating system, and click **Next**.

   NOTE: Click **Load Drivers** if controller drives are required.

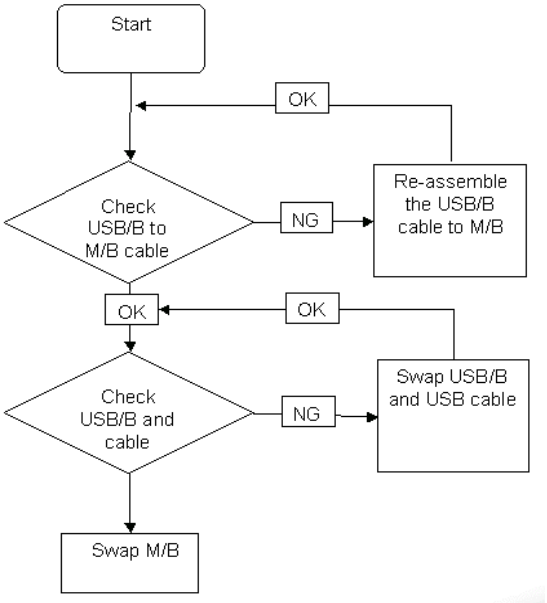
   g. Select **Startup Repair**.
   h. Startup Repair attempts to locate and resolve issues with the computer.
   i. When complete, click **Finish**.

   If an issue is discovered, follow the onscreen information to resolve the problem.
4. Run the Windows Memory Diagnostic Tool. For more information see Windows Help and Support.
5. Restart the computer and press F2 to enter the BIOS Utility. Check the BIOS settings are correct and that CD/DVD drive is set as the first boot device on the Boot menu.
6. Ensure all cables and jumpers on the HDD and ODD are set correctly.
7. Remove any recently added hardware and associated software.
8. Run the Windows Disk Defragmenter. For more information see Windows Help and Support.
9. Run Windows Check Disk by entering **chkdsk /r** from a command prompt. For more information see Windows Help and Support.
10. Restore system and file settings from a known good date using **System Restore**.

    If the issue is not fixed, repeat the preceding steps and select an earlier time and date.
11. Replace the HDD. See “Disassembly Process” on page 44.

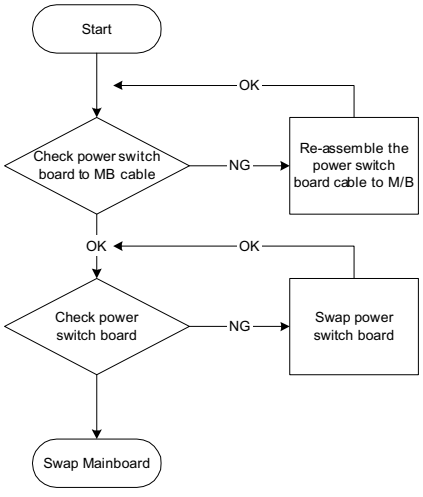
USB Failure (Rightside)

If the rightside **USB** port fails, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:



Power Button Failure

If the Power Button fails, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:



External Mouse Failure

If an external **Mouse** fails, perform the following actions one at a time to correct the problem.

1. Try an alternative mouse.
2. If the mouse uses a wireless connection, insert new batteries and confirm there is a good connection. See the mouse user manual.
3. If the mouse uses a USB connection, try an alternate USB port.
4. Try an alternative program to verify mouse operation. Reinstall the program experiencing mouse failure.
5. Restart the computer.
6. Remove any recently added hardware and associated software.
7. Remove any recently added software and reboot.
8. Restore system and file settings from a known good date using **System Restore**.

   If the issue is not fixed, repeat the preceding steps and select an earlier time and date.
9. Run the Event Viewer to check the events log for errors. For more information see Windows Help and Support.
10. Roll back the mouse driver to the previous version if updated recently.
11. Remove and reinstall the mouse driver.
12. Check the Device Manager to determine that:
    - The device is properly installed. There are no red Xs or yellow exclamation marks.
    - There are no device conflicts.
    - No hardware is listed under Other Devices.
13. If the Issue is still not resolved, see “Online Support Information” on page 185.

Other Failures

If the CRT Switch, Dock, LAN Port, external MIC or Speakers, PCI Express Card, 5-in-1 Card Reader or Volume Wheel fail, perform the following general steps to correct the problem. Do not replace a non-defective FRUs:

1. Check Drive whether is OK.
2. Check Test Fixture is ok.
3. Swap M/B to Try.

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 system 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 On Issue” on page 136):

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 acb
    - Hard disk drive
    - DIMM
    - CD-ROM/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:
    - System board
    - LCD assembly

POST Code Reference Tables

These tables describe the POST codes and components of the POST process.

Chipset POST Codes

The following table details the chipset POST codes and functions used in the POST.

Code	Beeps	POST Routine Description
02h		Verify Real Mode
03h		Disable Non-Maskable Interrupt (NMI)
04h		Get CPU type
06h		Initialize system hardware
08h		Initialize chipset with initial POST values
09h		Set IN POST flag
0Ah		Initialize CPU registers
0Bh		Enable CPU cache
0Ch		Initialize caches to initial POST values
0Eh		Initialize I/O component
0Fh		Initialize the local bus IDE
10h		Initialize Power Management
11h		Load alternate registers with initial POST values
12h		Restore CPU control word during warm boot
13h		Initialize PCI Bus Mastering devices
14h		Initialize keyboard controller
16h	1-2-2-3	BIOS ROM checksum
17h		Initialize cache before memory autosize
18h	8254	timer initialization
1Ah	8237	DMA controller initialization
1Ch		Reset Programmable Interrupt Controller
20h	1-3-1-1	Test DRAM refresh
22h	1-3-1-3	Test 8742 Keyboard Controller
24h		Set ES segment register to 4 GB
26h		Enable A20 line
28h		Autosize DRAM
29h		Initialize POST Memory Manager
2Ah		Clear 512 KB base RAM
2Ch	1-3-4-1	RAM failure on address line xxxx*
2Eh	1-3-4-3	RAM failure on data bits xxxx* of low byte of memory bus
2Fh		Enable cache before system BIOS shadow
30h	1-4-1-1	RAM failure on data bits xxxx* of high byte of memory bus
32h		Test CPU bus-clock frequency
33h		Initialize Phoenix Dispatch Manager
36h		Warm start shut down
38h		Shadow system BIOS ROM
3Ah		Autosize cache

Code	Beeps	POST Routine Description
3Ch		Advanced configuration of chipset registers
3Dh		Load alternate registers with CMOS values
42h		Initialize interrupt vectors
45h		POST device initialization
46h	2-1-2-3	Check ROM copyright notice
48h		Check video configuration against CMOS
49h		Initialize PCI bus and devices
4Ah		Initialize all video adapters in system
4Bh		QuietBoot start (optional)
4Ch		Shadow video BIOS ROM
4Eh		Display BIOS copyright notice
50h		Display CPU type and speed
51h		Initialize EISA board
52h		Test keyboard
54h		Set key click if enabled
58h	2-2-3-1	Test for unexpected interrupts
59h		Initialize POST display service
5Ah		Display prompt **Press F2 to enter SETUP**
5Bh		Disable CPU cache
5Ch		Test RAM between 512 and 640 KB
60h		Test extended memory
62h		Test extended memory address lines
64h		Jump to UserPatch1
66h		Configure advanced cache registers
67h		Initialize Multi Processor APIC
68h		Enable external and CPU caches
69h		Setup System Management Mode (SMM) area
6Ah		Display external L2 cache size
6Bh		Load custom defaults (optional)
6Ch		Display shadow-area message
6Eh		Display possible high address for UMB recovery
70h		Display error messages
72h		Check for configuration errors
76h		Check for keyboard errors
7Ch		Set up hardware interrupt vectors
7Eh		Initialize coprocessor if present
80h		Disable onboard Super I/O ports and IRQs
81h		Late POST device initialization
82h		Detect and install external RS232 ports
83h		Configure non-MCD IDE controllers
84h		Detect and install external parallel ports
85h		Initialize PC-compatible PnP ISA devices
86h		Re-initialize onboard I/O ports.

Code	Beeps	POST Routine Description
87h		Configure Motherboard Configurable Devices (optional)
88h		Initialize BIOS Data Area
89h		Enable Non-Maskable Interrupts (NMIs)
8Ah		Initialize Extended BIOS Data Area
8Bh		Test and initialize PS/2 mouse
8Ch		Initialize floppy controller
8Fh		Determine number of ATA drives (optional)
90h		Initialize hard-disk controllers
91h		Initialize local-bus hard-disk controllers
92h		Jump to UserPatch2
93h		Build MPTABLE for multi-processor boards
95h		Install CD ROM for boot
96h		Clear huge ES segment register
97h		Fixup Multi Processor table
98h	1-2	Search for option ROMs. One long, two short beeps on checksum failure
99h		Check for SMART Drive (optional)
9Ah		Shadow option ROMs
9Ch		Set up Power Management
9Dh		Initialize security engine (optional)
9Eh		Enable hardware interrupts
9Fh		Determine number of ATA and SCSI drives
A0h		Set time of day
A2h		Check key lock
A4h		Initialize Typematic rate
A8h		Erase F2 prompt
AAh		Scan for F2 key stroke
ACh		Enter SETUP
AEh		Clear Boot flag
B0h		Check for errors
B2h		POST done - prepare to boot operating system
B4h	1	One short beep before boot
B5h		Terminate QuietBoot (optional)
B6h		Check password (optional)
B9h		Prepare Boot
BAh		Initialize DMI parameters
BBh		Initialize PnP Option ROMs
BCh		Clear parity checkers
BDh		Display MultiBoot menu
BEh		Clear screen (optional)
BFh		Check virus and backup reminders
C0h		Try to boot with INT 19
C1h		Initialize POST Error Manager (PEM)
C2h		Initialize error logging

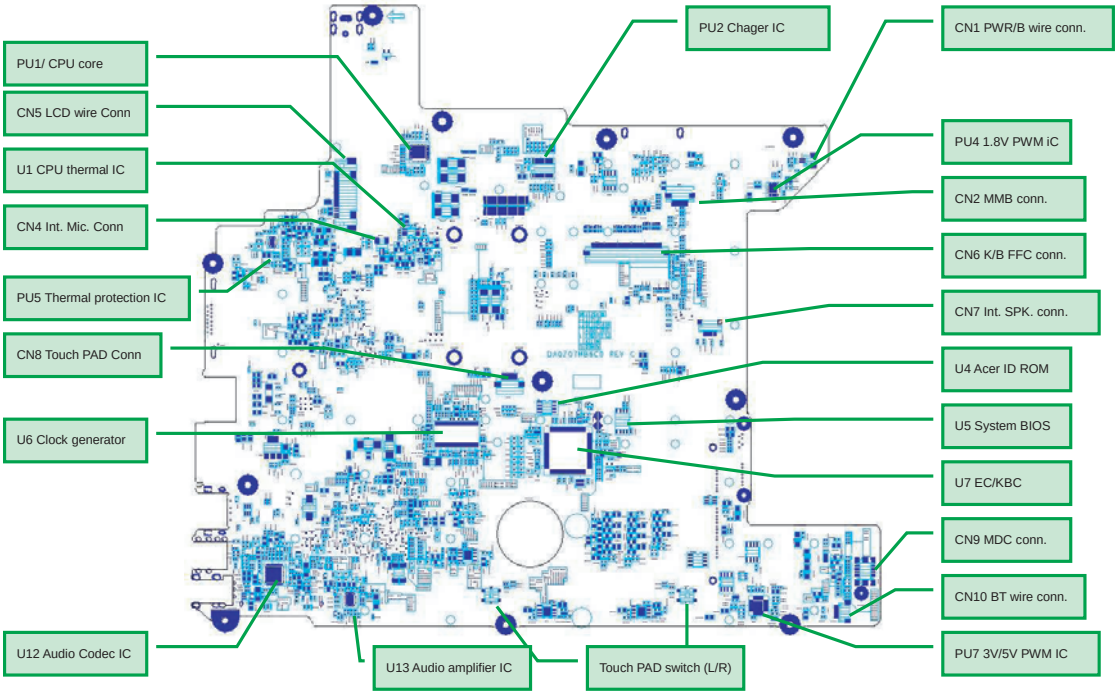
Code	Beeps	POST Routine Description
C3h		Initialize error display function
C4h		Initialize system error handler
C5h		PnPnd dual CMOS (optional)
C6h		Initialize notebook docking (optional)
C7h		Initialize notebook docking late
C8h		Force check (optional)
C9h		Extended checksum (optional)
D2h		Unknown interrupt

Code	Beeps	For Boot Block in Flash ROM
E0h		Initialize the chipset
E1h		Initialize the bridge
E2h		Initialize the CPU
E3h		Initialize system timer
E4h		Initialize system I/O
E5h		Check force recovery boot
E6h		Checksum BIOS ROM
E7h		Go to BIOS
E8h		Set Huge Segment
E9h		Initialize Multi Processor
EAh		Initialize OEM special code
EBh		Initialize PIC and DMA
ECh		Initialize Memory type
EDh		Initialize Memory size
EEh		Shadow Boot Block
EFh		System memory test
F0h		Initialize interrupt vectors
F1h		Initialize Run Time Clock
F2h		Initialize video
F3h		Initialize System Management Mode
F4h	1	Output one beep before boot
F5h		Boot to Mini DOS
F6h		Clear Huge Segment
F7h		Boot to Full DOS

* If the BIOS detects error 2C, 2E, or 30 (base 512K RAM error), it displays an additional word-bitmap (xxxx) indicating the address line or bits that failed. For example, **2C 0002** means address line 1 (bit one set) has failed. **2E 1020** means data bits 12 and 5 (bits 12 and 5 set) have failed in the lower 16 bits. Note that error 30 cannot occur on 386SX systems because they have a 16 rather than 32-bit bus. The BIOS also sends the bitmap to the port-80 LED display. It first displays the check point code, followed by a delay, the high-order byte, another delay, and then the low-order byte of the error. It repeats this sequence continuously.

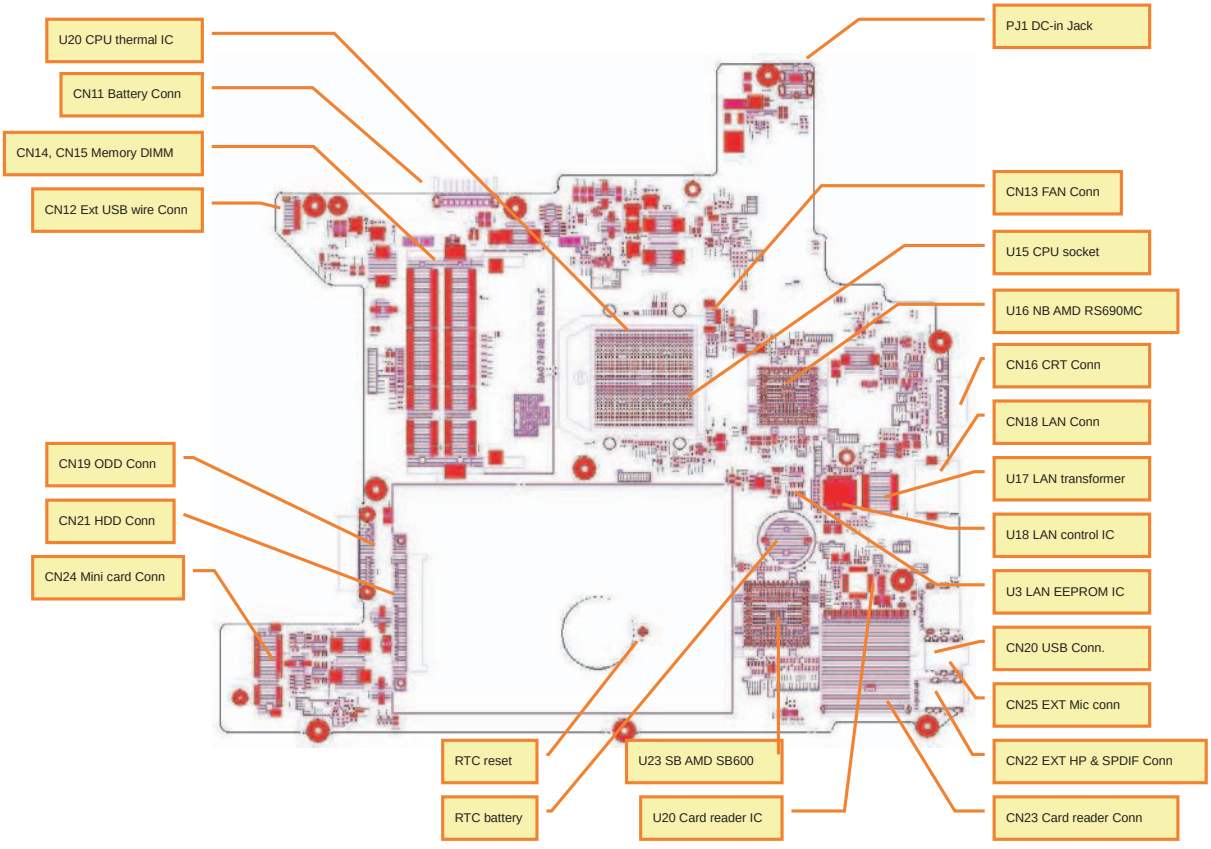
Jumper and Connector Locations

Top View



Item	Description	Item	Description
PU1	CPU Core	CN9	MDC Connector
PU2	Charger IC	CN10	Bluetooth Cable Connector
PU4	C1.8V PWM IC	U1	CPU Thermal IC
PU5	Thermal protection IC	U4	ID ROM
PU7	3V/5V PWM IC	U5	System BIOS
CN1	PWR/B Wire Connector	U6	Clock Generator
CN2	MMB Connector	U7	EC/KBC
CN4	Internal Mic Connector	U12	Audio Codec IC
CN5	LCD Wire Connector	U13	Audio Amplifier IC
CN7	Internal Speaker Connector		Touch PAD switch
CN8	Touch Pad Connector		

Bottom View



Item	Description	Item	Description
CN11	Battery Connector	CN24	Mini Card Connector
CN12	External USB cable connector	PJ1	DC-in Jack
CN13	Fan Connector		RTC Reset
CN14	Memory DIMM		RTC Battery
CN15	Memory DIMM	U3	LAN EEPROM IC
CN16	CRT Connector	U15	CPU Socket
CN18	LAN Connector	U16	NB AMD RS690MC
CN19	ODD Connector	U17	LAN Transformer
CN20	USB Connector	U18	LAN Control IC
CN21	Hard drive Connector	U20	Card Reader IC
CN22	Ext HP & SPDIF Connector	U20	CPU Thermal IC
CN23	Card Reader Connector	U23	SB AMD SB600

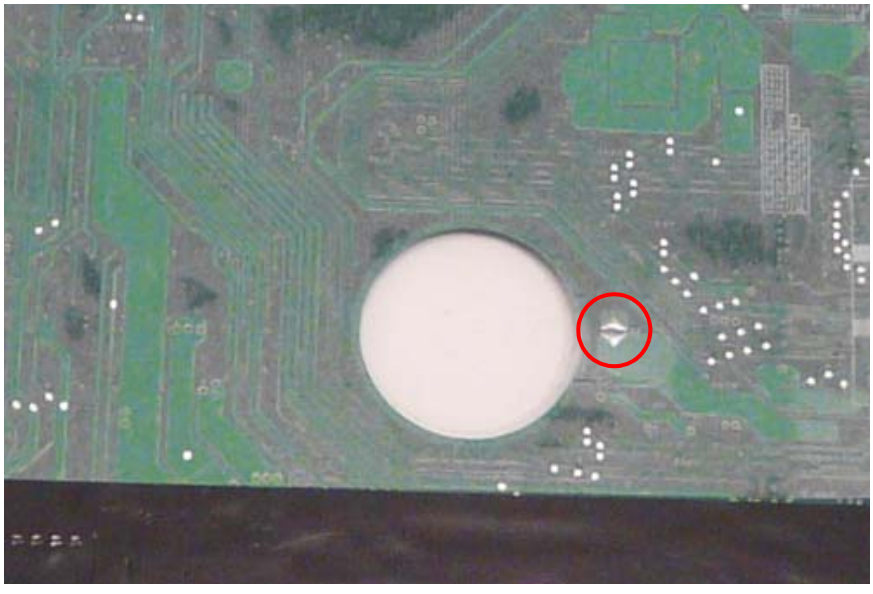
Clearing Password Check and BIOS Recovery

This section provides you the standard operating procedures of clearing password and BIOS recovery for Z08. Z08 provides one Hardware Open Gap on the main board for clearing password check, and one Hotkey for enabling BIOS Recovery.

Clearing Password Check

Hardware Open Gap Description

Item	Description	Location
G3	Clear CMOS Jumper	Memory Bay



Steps for Clearing BIOS Password Check

If users set BIOS Password (Supervisor Password and/or User Password) for a security reason, BIOS will ask the password during systems POST or when systems enter to BIOS Setup menu. However, once it is necessary to bypass the password check, users need to short the HW Gap to clear the password by the following steps:

1. Power off the system, and unplug the AC and Battery from the machine.
2. Open the Hard Drive and RAM doors.
3. Remove the Hard drive
4. Find the HW Gap on M/B as shown in the picture.
5. Use an electric conductivity tool to short the two points of HW Gap G3.
6. Plug in AC, keeping the HW Gap shorted, and press Power Button to power on the system till BIOS POST finishes. Then remove the tool from the HW Gap.
7. Restart system. Press F2 key to enter BIOS Setup menu.

If there is no Password request, the BIOS Password has been successfully cleared. Otherwise, please follow the steps and try again.

NOTE: The steps are only for clearing BIOS Password (Supervisor Password and User Password).

BIOS Recovery by Crisis Disk

Steps for BIOS Recovery from USB Storage:

Before doing this, prepare the Crisis USB key. The Crisis USB key can be made by executing the Crisis Disk program in another system with Windows XP OS.

Follow the steps below:

1. Modify the ROM archive file name from ***Zg5 BIOS*** to ***ZG5ia32.fd***.
2. Save the ROM file along with ***Flashit.exe*** (BIOS flash tool) to the root directory of the USB storage disk.
3. Plug USB storage disk into the USB port.
4. Press **Fn + ESC + Power** buttons. Remove your finger from the Power button but keep the Fn + Esc keys pressed till the Power button flashes once.

Note: During the first iteration, the LED of the USB disk flashes for about 3 - 7 minutes. After this, the system restarts. You can check the BIOS version after the system restarts. If correct, the crisis system is set up correctly.

FRU (Field Replaceable Unit) List

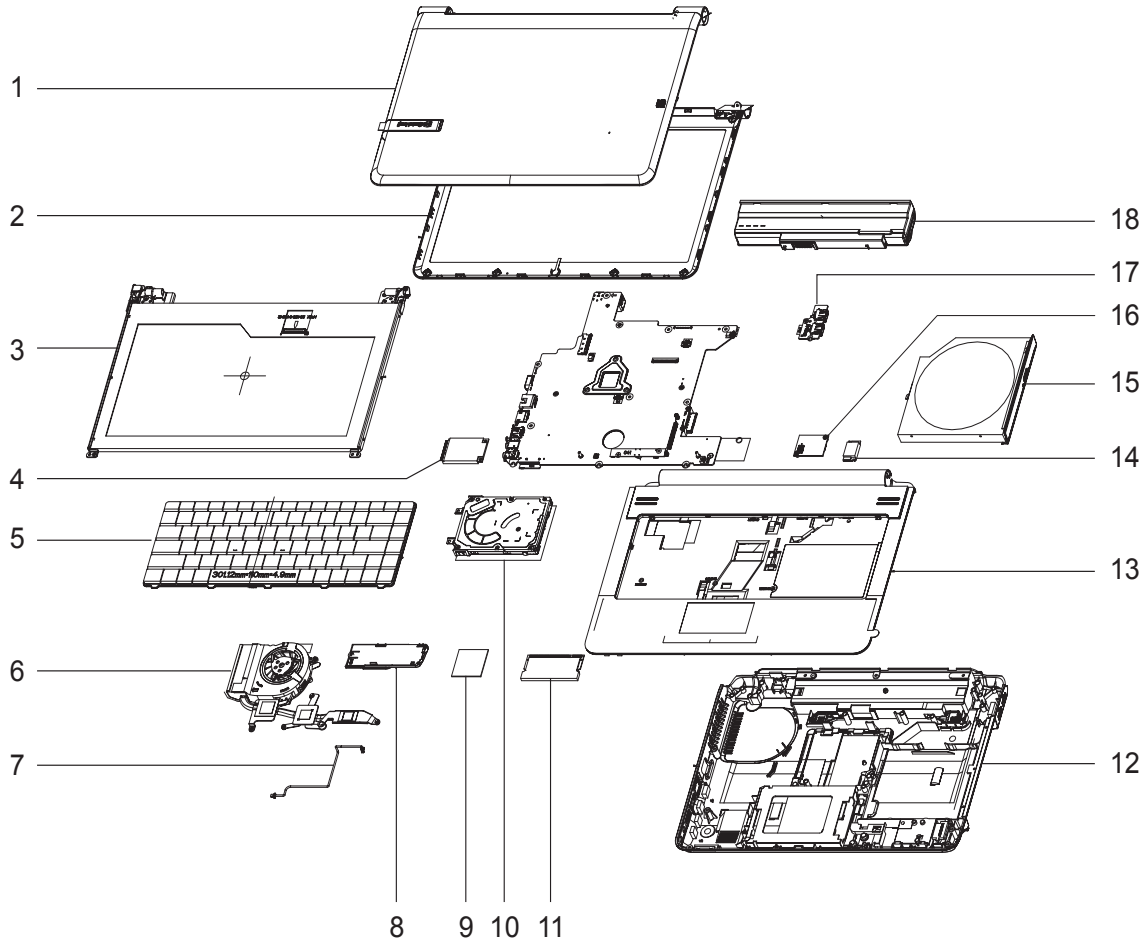
This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of Gateway NV42. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

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.

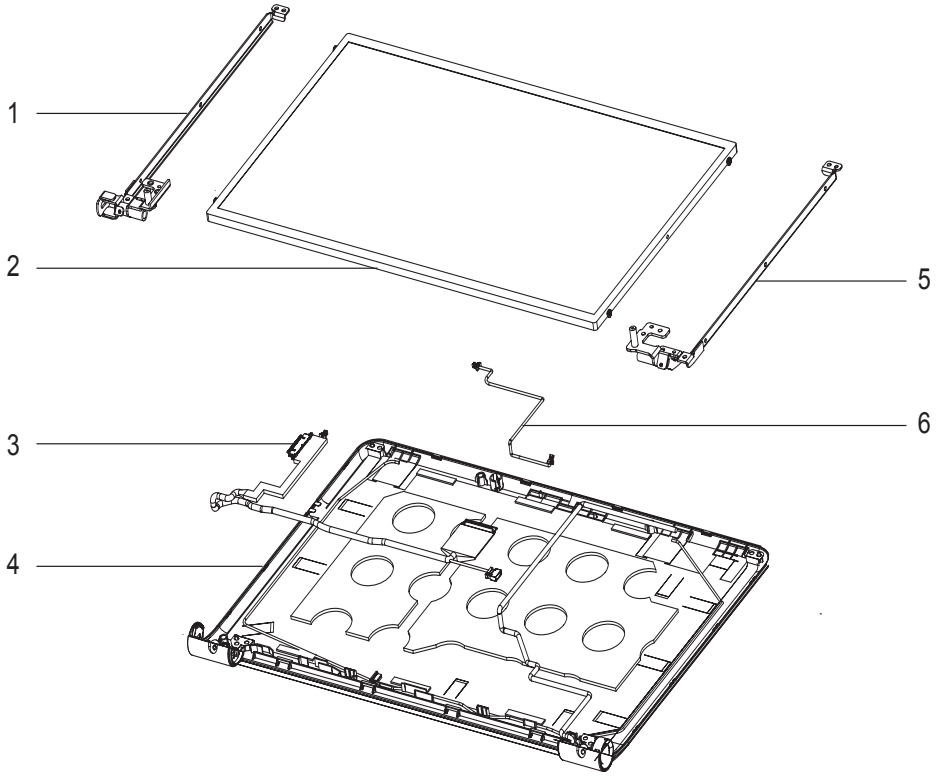
Gateway NV42 Exploded Diagrams

Main Assembly



Item	Description	Part Number	Item	Description	Part Number
1	LCD Cover	60.B5307.003	10	HDD Module	KH.16004.006
2	LCD Bezel	60.WB707.004	11	DIMM Module	KN.2GB0G.012
3	LCD Panel and Hinges (L+R)	LK.14005.006 33.WB707.003 33.WB707.004	12	Lower Cover	60.WB707.002
4	WLAN Board	NI.23600.046	13	Upper Cover	60.WCY07.001
5	Keyboard	KB.I140G.028	14	Bluetooth	BT.21100.006
6	Thermal Module	60.WD507.003	15	ODD Module	KU.00801.030
7	Power Board Cable	50.WB707.003	16	Modem	54.WB707.001
8	Mini PCI Cover	42.WB707.002	17	USB Board	55.WFB07.001
9	CPU	KC.AL002.310	18	Battery	BT.00607.072

LCD Assembly



Item	Description	Part Number
1	LCD Bracket_L	33.WB707.003
2	LCD Panel	LK.14005.006
3	LCD Cable	50.WB707.004
4	LCD Module	6M.WFB07.001
5	LCD Bracket_R	33.WB707.004
6	Power Board Cable	50.WB707.003

Gateway NV42 FRU List

Category	Description	Acer P/N
Adapter		
	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow ADP-65JH DB A, LV5 LED LF	AP.06501.026
	Adapter HIPRO 65W 19V 1.7x5.5x11 Yellow HP-A0652R3B 1LF, LV5 LED LF	AP.0650A.012
	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow SADP-65KB BFJG (OBL)	AP.06501.023
Battery		
	Battery SIMPLO AS-2009C Li-Ion 3S2P PANASONIC 6 cell 4400mAh Main COMMON	BT.00607.072
	Battery SIMPLO AS-2009C Li-Ion 3S2P SAMSUNG 6 cell 4400mAh Main COMMON	BT.00607.073
	Battery SANYO AS-2009C Li-Ion 3S2P SANYO 6 cell 4400mAh Main COMMON	BT.00603.093
Board		
	MODEM CARD T60M955.04	54.WB707.001
	Foxconn Bluetooth FOX BRM 2046 BT2.1 f/w: 861	BT.21100.006 - BH.21100.004
	Foxconn Wireless LAN Atheros HB93 1x2 BGN (HM)	NI.23600.046
	Liteon Wireless LAN Atheris HB93 1x2 BGN (HM) WN6602AH	NI.23600.051
	Foxconn Wirelss LAN Atheros HB95 1x1 BG (HM)	NI.23600.047
	USB BOARD	55.WFB07.001
Cable		
	POWER CORD US 3PIN ROHS	27.TAXV7.001
	POWER CORD(EU) 1.8M 3PBLACK FM010008-010	27.TATV7.001
	POWER CORD AU W/LABEL (3 PIN)	27.A50V7.003
	POWER CORD PRC 3P Y536B30001218008	27.TATV7.004
	POWER CORD UK 3PIN	27.A03V7.004
	POWER CORD US-110V (BSMI)	27.A99V7.002
	POWER CORD SWISS 3 PIN	27.A99V7.004
	PWR CORD(ISR)1.8M 3PBLK FZ0I0008-038	27.TATV7.005
	POWER CORD ITALIAN 3PIN	27.A99V7.005
	POWER CORD(S.A) 1.8M 3BLACK FZ010008-006	27.T48V7.001
	PWR CORD V943B30001218008 DANISH 3P	27.A03V7.006
	BLUETOOTH CABLE	50.WB707.001

Category	Description	Acer P/N
	USB CABLE	50.WB707.002
Case/Cover/Bracket Assembly		
	MIDDLE COVER W/MMB, FFC CABLE	60.WD507.001
	MIDDLE COVER BLACK W/MMB, FFC CABLE	42.WD507.001
	UPPER CASE ASSY GW BLACK W/SPEAKER,TP,TP FFC	60.WCY07.001
	UPPER CASE ASSY GW WHITE W/SPEAKER,TP,TP FFC	60.WB707.001
	LOWER CASE ASSY W/RJ11	60.WB707.002
	LOWER CASE ASSY W/O RJ11	60.B5307.002
	MINI PCI COVER	42.WB707.002
	HDD COVER	42.WB707.003
	DUMMY SD CARD	42.WF807.003
CPU/Processor		
	CPU AMD Athlon L310 PGA 1.2G 1M Dual Core	KC.AL002.310
	CPU AMD Athlon TF20 PGA 1.6G 512K 638 15W G2	KC.ATF02.200
	CPU AMD AthlonX2 TK42 1.6G 1M 638 20W G2	KC.ATK02.420
Super Multi Drive		
	TOSHIBA Super-Multi DRIVE 12.7mm Tray DL 8X TS-L633B LF W/O bezel SATA Add to:	KU.00801.030
	HLDS Super-Multi DRIVE 12.7mm Tray DL 8X GT20N LF W/O bezel SATA	KU.0080D.040
	SONY SUPER-MULTI DRIVE 12.7MM TRAY DL 8X AD-7580S LF W/O BEZEL SATA	KU.0080E.017
	PLDS Super-Multi DRIVE 12.7mm Tray DL 8X DS-8A3S LF W/O bezel SATA	KU.0080F.004
	ODD BEZEL - SUPER MULTI BLACK PRINTING	42.WCY07.002
	ODD BRACKET	33.WB707.001

Category	Description	Acer P/N
HDD		
	HDD TOSHIBA 2.5" 5400rpm 160GB MK1655GSX Libra SATA LF F/W: FG011J	KH.16004.006
	HDD WD 2.5" 5400rpm 160GB WD1600BEVT-22ZCTO ML160 SATA LF F/W:11.01A11	KH.16008.022
	HDD SEAGATE 2.5" 5400rpm 250GB ST9250315AS Wyatt SATA LF F/W:0001SDM1	KH.25001.016
	HDD TOSHIBA 2.5" 5400rpm 250GB MK2555GSX Libra SATA LF F/W:FG001J	KH.25004.003
	HDD HGST 2.5" 5400rpm 250GB HTS545025B9A300 Panther B SATA LF F/W:C60F	KH.25007.015
	HDD WD 2.5" 5400rpm 250GB WD2500BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11	KH.25008.021
	HDD TOSHIBA 2.5" 5400rpm 320GB MK3255GSX Libra SATA LF F/W:FG011J	KH.32004.002
	HDD WD 2.5" 5400rpm 320GB WD3200BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11	KH.32008.013
	HDD SEAGATE 2.5" 5400rpm 500GB ST9500325AS Wyatt SATA LF F/W:0001SDM1	KH.50001.011
	HDD TOSHIBA 2.5" 5400rpm 500GB MK5055GSX Libra SATA LF F/W:FG001J	KH.50004.001
	HDD HGST 2.5" 5400rpm 500GB HTS545050B9A300 Panther B SATA LF F/W:C60F	KH.50007.009
	HDD WD 2.5" 5400rpm 500GB WD5000BEVT-22ZAT0 ML250 SATA LF F/W:01.01A01	KH.50008.013
	HDD SEAGATE 2.5" 5400rpm 160GB ST9160314AS Wyatt SATA LF F/W:0001SDM1	KH.16001.042
	HDD SEAGATE 2.5" 5400rpm 320GB ST9320325AS Wyatt SATA LF F/W:0001SDM1	KH.32001.017
	HDD HGST 2.5" 5400rpm 160GB HTS545016B9A300 Panther B SATA LF F/W:C60F	KH.16007.024
	HDD HGST 2.5" 5400rpm 320GB HTS545032B9A300 Panther B SATA LF F/W:	KH.32007.007
	HDD BRACKET	33.WB707.002
Keyboard		
	Keyboard GATEWAY GP-4T white SJV40 14 86KS White US International	KB.I140G.028
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White UK	KB.I140G.027
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White German	KB.I140G.012
	Keyboard GATEWAY GP-4T white SJV40 14 86KS White Arabic	KB.I140G.004
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White Belgium	KB.I140G.005
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White Brazilian Portuguese	KB.I140G.006

Category	Description	Acer P/N
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White CZ/SK	KB.I140G.007
	Keyboard GATEWAY GP-4T white SJV40 14 86KS White Chinese	KB.I140G.008
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White Danish	KB.I140G.009
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White FR/Arabic	KB.I140G.010
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White French	KB.I140G.011
	Keyboard GATEWAY GP-4T white SJV40 14 86KS White Greek	KB.I140G.013
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White Hungarian	KB.I140G.014
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White Italian	KB.I140G.015
	Keyboard GATEWAY GP-4T white SJV40 14 91KS White Japanese	KB.I140G.016
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White Nordic	KB.I140G.017
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White Norwegian	KB.I140G.018
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White Portuguese	KB.I140G.019
	Keyboard GATEWAY GP-4T white SJV40 14 86KS White Russian	KB.I140G.020
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White SLO/CRO	KB.I140G.021
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White Spanish	KB.I140G.022
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White Sweden	KB.I140G.023
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White Swiss/G	KB.I140G.024
	Keyboard GATEWAY GP-4T white SJV40 14 86KS White Thailand	KB.I140G.025
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White Turkish	KB.I140G.026
	Keyboard GATEWAY GP-4T white SJV40 14 86KS White US International w/ Hebrew	KB.I140G.029
	Keyboard GATEWAY GP-4T white SJV40 14 87KS White US w/ Canadian French	KB.I140G.030
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black US International	KB.I140G.083
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black UK	KB.I140G.082
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black German	KB.I140G.067
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Arabic	KB.I140G.059

Category	Description	Acer P/N
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Belgium	KB.I140G.060
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Brazilian Portuguese	KB.I140G.061
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black CZ/SK	KB.I140G.062
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Chinese	KB.I140G.063
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Danish	KB.I140G.064
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black FR/Arabic	KB.I140G.065
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black French	KB.I140G.066
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Greek	KB.I140G.068
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Hungarian	KB.I140G.069
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Italian	KB.I140G.070
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Japanese	KB.I140G.071
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Nordic	KB.I140G.072
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Norwegian	KB.I140G.073
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Portuguese	KB.I140G.074
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Russian	KB.I140G.075
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Spanish	KB.I140G.077
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Sweden	KB.I140G.078
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Swiss/G	KB.I140G.079
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Thailand	KB.I140G.080
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black Turkish	KB.I140G.081
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black US International w/ Hebrew	KB.I140G.084
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black US w/ Canadian French	KB.I140G.085
	Keyboard GATEWAY GP-4T Black SJV40 14 86KS Black SLO/CRO	KB.I140G.076
LCD		

Category	Description	Acer P/N
	LCD MODULE ASSY 14.0 IN LED LCD GW K/K W/ ANTENNA*2 CCD	6M.WFB07.001
	LED LCD AUO 14" WXGA Glare B140XW01 V0 0A LF 220nit 8ms 500:1	LK.14005.006
	LED LCD SAMSUNG 14" WXGA Glare LTN140AT01-G01 LF 220nit 8ms 500:1	LK.14006.009
	LED LCD LPL 14" WXGA Glare LP140WH1-TLA1 LF 220nit 8ms 500:1	LK.14008.001
	LED LCD CMO 14" WXGA Glare N140B6-L02 LF 220nit 8ms 400:1	LK.1400D.004
	LED LCD AUO 14" WXGA Glare B140XW01 V0 1A LF 200nit 8ms 500:1	LK.14005.008
	LED LCD LPL 14" WXGA Glare LP140WH1-TLA2 LF 220nit 8ms 500:1	LK.14008.004
	POWER BOARD	55.WFB07.002
	POWER CABLE	50.WB707.003
	LCD CABLE FOR CCD	50.WB707.004
	LCD BEZEL ASSY WHITE	60.WB707.004
	LCD BRACKET W/HINGE L	33.WB707.003
	LCD BRACKET W/HINGE R	33.WB707.004
	CCD MODULE	57.WB707.001
Mainboard		
	MAINBOARD UMA AMDRS690MC W/CARD READER W/O CPU MEMORY	MB.WFB06.001

Category	Description	Acer P/N
Memory		
	Memory HYNIX SO-DIMM DDRII 667 2GB HMP125S6EFR8C-Y5 LF 128*8 0.055um	KN.2GB0G.012
	Memory SAMSUNG SO-DIMM DDRII 667 1GB M470T2864QZ3-CE6 LF	KN.1GB0B.016
	Memory HYNIX SO-DIMM DDRII 667 1GB HYMP112S64CP6-Y5 LF	KN.1GB0G.012
	Memory NANYA SO-DIMM DDRII 800 1GB NT1GT64UH8D0FN-AD LF 64*16 0.07um	KN.1GB03.025
	Memory SAMSUNG SO-DIMM DDRII 800 1GB M470T2864EH3-CF7 LF 64*16 0.055um	KN.1GB0B.033
	Memory HYNIX SO-DIMM DDRII 800 1GB HYMP112S64CP6-S6 LF 64*16 0.065um	KN.1GB0G.016
	Memory SAMSUNG SO-DIMM DDRII 667 2GB M470T5663QZ3-CE6 LF	KN.2GB0B.003
	Memory HYNIX SO-DIMM DDRII 800 2GB HYMP125S64CP8-S6 LF 128*8 0.065um	KN.2GB0G.007
	Memory SAMSUNG SO-DIMM DDRII 800 2GB M470T5663EH3-CF7 LF 128*8 0.055um	KN.2GB0B.018
Heatsink		
	THERMAL MODULE - UMA	60.WD507.003
Speaker		
	SPEAKER	23.WB707.001
Miscellaneous		
	NAMEPLATE - ENNJ31 BLACK	40.B9607.001
	NAMEPLATE - NV SERIES BLACK	40.WCY07.001
	NAMEPLATE - NV SERIES WHITE	40.WB707.001

Screw List

Category	Description	Acer P/N
Screw		
	SCREW M2.0X3.5-I-NI-NYLOK	86.T23V7.005
	SCREW MM25040ICI1	86.A08V7.014
	SCREW MM25060IL69	86.A08V7.004
	SCREW M2.0*3.0-I-NI-NYLOK	86.A08V7.005
	SCREW M2.5*6.0-I(BNI)(NYLOK)	86.W0907.002

Model Definition and Configuration

Gateway NV42 Series

Model	RO	Country	Acer Part No	Description	CPU
NV4203	WW	WW	S2.WGJ02.001	NV4203 W7HP64WWW1 UMACckM 2*1G/160/BT/6L2.2/5R/ CB_bgn_0.3D_GEc_ES62	AATF20
NV4204	WW	WW	S2.WGK0C.001	NV4204 LINPUSWWW1 UMACcwM 2*1G/160/BT/6L2.2/5R/ CB_bgn_0.3D_GEc_EN11	AATF20
NV4201c	PA	China	LX.WFB0C.002	NV4201c LINPUSWCN1 UMACkkM 1*2G/250/6L2.2/5R/ CB_bgn_0.3D_GEk_EN91	AATF20
NV4202i	AAP	Philippines	LX.WFB01.001	NV4202i EM W7HB64EMWTPH1 UMACkkM 1*2G/320/BT/6L2.2/5R/ CB_bgn_0.3D_GEk_ES61	AAL310
NV4201u	PA	USA	LX.WFB02.001	NV4201u W7HP64WTUS1 UMACkkM 2*2G/320/6L2.2/5R/ CB_bgn_0.3D_GEk_ENP1	AATF20
NV4201i	AAP	Philippines	LX.WFB0C.003	NV4201i LINPUSWTPH1 UMACkkM 1*2G/320/BT/6L2.2/5R/ CB_bgn_0.3D_GEk_EN11	AATK42
NV4201v	AAP	Vietnam	LX.WFB0C.001	NV4201v LINPUSWTVN1 UMACkkM 1*2G/250/BT/6L2.2/5R/ CB_bgn_0.3D_GEk_EN11	AATF20
NV4202	WW	WW	S2.WFB0C.002	NV4202 LINPUSWWW1 UMACkkM 2*1G/250/BT/6L2.2/5R/ CB_bgn_0.3D_GEk_EN11	AATF20
NV4201	WW	WW	S2.WFB0C.001	NV4201 LINPUSWWW1 UMACkkM 2*2G/500_L/BT/6L2.2/5R/ CB_bgn_0.3D_GEk_EN11	AATK42

Model	CPU	LCD	VGA Chip	Memory 1	Memory 2
NV4203	AATF20	NLED14WXGAG	UMA	SO1GBII6	N
NV4204	AATF20	NLED14WXGAG	UMA	SO1GBII6	N
NV4201c	AATF20	NLED14WXGAG	UMA	SO2GBII6	N
NV4202i	AAL310	NLED14WXGAG	UMA	SO2GBII6	N
NV4201u	AATF20	NLED14WXGAG	UMA	SO2GBII6	N
NV4201i	AATK42	NLED14WXGAG	UMA	SO2GBII6	N
NV4201v	AATF20	NLED14WXGAG	UMA	SO2GBII6	N
NV4202	AATF20	NLED14WXGAG	UMA	SO1GBII6	N
NV4201	AATK42	NLED14WXGAG	UMA	SO2GBII6	N

Model	HDD 1(GB)	ODD	Extra SW1	Wireless LAN	Card Reader	Bluetooth
NV4203	N160GB5.4KS	NSM8XS	NIS	3rd WiFi 1x2 BGN	5 in 1-Build in	N
NV4204	N160GB5.4KS	NSM8XS	N	3rd WiFi 1x2 BGN	5 in 1-Build in	N
NV4201c	N250GB5.4KS	NSM8XS	N	3rd WiFi 1x2 BGN	5 in 1-Build in	BT 2.0
NV4202i	N320GB5.4KS	NSM8XS	NIS	3rd WiFi 1x2 BGN	5 in 1-Build in	BT 2.0
NV4201u	N320GB5.4KS	NSM8XS	NIS	3rd WiFi 1x2 BGN	5 in 1-Build in	BT 2.0
NV4201i	N320GB5.4KS	NSM8XS	N	3rd WiFi 1x2 BGN	5 in 1-Build in	BT 2.0
NV4201v	N250GB5.4KS	NSM8XS	N	3rd WiFi 1x2 BGN	5 in 1-Build in	BT 2.0
NV4202	N250GB5.4KS	NSM8XS	N	3rd WiFi 1x2 BGN	5 in 1-Build in	BT 2.0
NV4201	N500GB5.4KS	NSM8XS	N	3rd WiFi 1x2 BGN	5 in 1-Build in	BT 2.0

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® XP Home, Windows® XP Pro 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 Gateway NV42 series Compatibility Test Report released by the Acer Mobile System Testing Department.

Windows XP Environment Test

BRAND	Type	BOM_Name	Description
Adapter			
DELTA	65W	ENNJ31_UMA Ckk2	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow SADP-65KB BFJG LED LF for OBL
DELTA	65W	ENNJ31_UMA Ckk2	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow ADP-65JH DB A, LV5 LED LF
HIPRO	65W	ENNJ31_UMA Ckk2	Adapter HIPRO 65W 19V 1.7x5.5x11 Yellow HP-A0652R3B 1LF, LV5 LED LF
DELTA	65W	ENNJ31_UMA CkkM	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow SADP-65KB BFJG LED LF for OBL
DELTA	65W	ENNJ31_UMA CkkM	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow ADP-65JH DB A, LV5 LED LF
HIPRO	65W	ENNJ31_UMA CkkM	Adapter HIPRO 65W 19V 1.7x5.5x11 Yellow HP-A0652R3B 1LF, LV5 LED LF
DELTA	65W	ENNJ31_UMA CkkM2	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow SADP-65KB BFJG LED LF for OBL
DELTA	65W	ENNJ31_UMA CkkM2	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow ADP-65JH DB A, LV5 LED LF
HIPRO	65W	ENNJ31_UMA CkkM2	Adapter HIPRO 65W 19V 1.7x5.5x11 Yellow HP-A0652R3B 1LF, LV5 LED LF
DELTA	65W	NV42_UMACc kM	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow SADP-65KB BFJG LED LF for OBL
DELTA	65W	NV42_UMACc kM	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow ADP-65JH DB A, LV5 LED LF
HIPRO	65W	NV42_UMACc kM	Adapter HIPRO 65W 19V 1.7x5.5x11 Yellow HP-A0652R3B 1LF, LV5 LED LF
DELTA	65W	NV42_UMACc wM	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow SADP-65KB BFJG LED LF for OBL
DELTA	65W	NV42_UMACc wM	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow ADP-65JH DB A, LV5 LED LF
HIPRO	65W	NV42_UMACc wM	Adapter HIPRO 65W 19V 1.7x5.5x11 Yellow HP-A0652R3B 1LF, LV5 LED LF
DELTA	65W	NV42_UMACk kM	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow SADP-65KB BFJG LED LF for OBL
DELTA	65W	NV42_UMACk kM	Adapter DELTA 65W 19V 1.7x5.5x11 Yellow ADP-65JH DB A, LV5 LED LF
HIPRO	65W	NV42_UMACk kM	Adapter HIPRO 65W 19V 1.7x5.5x11 Yellow HP-A0652R3B 1LF, LV5 LED LF
Audio Codec			
Conexant	Conexant CX-20561-15Z	ENNJ31_UMA Ckk2	Conexant Audio Codec CX-20561-15Z
Conexant	Conexant CX-20561-15Z	ENNJ31_UMA CkkM	Conexant Audio Codec CX-20561-15Z
Conexant	Conexant CX-20561-15Z	ENNJ31_UMA CkkM2	Conexant Audio Codec CX-20561-15Z
Conexant	Conexant CX-20561-15Z	NV42_UMACc kM	Conexant Audio Codec CX-20561-15Z
Conexant	Conexant CX-20561-15Z	NV42_UMACc wM	Conexant Audio Codec CX-20561-15Z
Conexant	Conexant CX-20561-15Z	NV42_UMACk kM	Conexant Audio Codec CX-20561-15Z
Battery			

BRAND	Type	BOM_Name	Description
SANYO	6CELL2.2	ENNJ31_UMACkk2	Battery SANYO AS-2009C Li-Ion 3S2P SANYO 6cell 4400mAh Main COMMON AS09C31
SIMPLO	6CELL2.2	ENNJ31_UMACkk2	Battery SIMPLO AS-2009C Li-Ion 3S2P PANASONIC 6 cell 4400mAh Main COMMON
SIMPLO	6CELL2.2	ENNJ31_UMACkk2	Battery SIMPLO AS-2009C Li-Ion 3S2P SAMSUNG 6 cell 4400mAh Main COMMON
SANYO	6CELL2.2	ENNJ31_UMACkkM	Battery SANYO AS-2009C Li-Ion 3S2P SANYO 6cell 4400mAh Main COMMON AS09C31
SIMPLO	6CELL2.2	ENNJ31_UMACkkM	Battery SIMPLO AS-2009C Li-Ion 3S2P PANASONIC 6 cell 4400mAh Main COMMON
SIMPLO	6CELL2.2	ENNJ31_UMACkkM	Battery SIMPLO AS-2009C Li-Ion 3S2P SAMSUNG 6 cell 4400mAh Main COMMON
SANYO	6CELL2.2	ENNJ31_UMACkkM2	Battery SANYO AS-2009C Li-Ion 3S2P SANYO 6cell 4400mAh Main COMMON AS09C31
SIMPLO	6CELL2.2	ENNJ31_UMACkkM2	Battery SIMPLO AS-2009C Li-Ion 3S2P PANASONIC 6 cell 4400mAh Main COMMON
SIMPLO	6CELL2.2	ENNJ31_UMACkkM2	Battery SIMPLO AS-2009C Li-Ion 3S2P SAMSUNG 6 cell 4400mAh Main COMMON
SANYO	6CELL2.2	NV42_UMACckM	Battery SANYO AS-2009C Li-Ion 3S2P SANYO 6cell 4400mAh Main COMMON AS09C31
SIMPLO	6CELL2.2	NV42_UMACckM	Battery SIMPLO AS-2009C Li-Ion 3S2P PANASONIC 6 cell 4400mAh Main COMMON
SIMPLO	6CELL2.2	NV42_UMACckM	Battery SIMPLO AS-2009C Li-Ion 3S2P SAMSUNG 6 cell 4400mAh Main COMMON
SANYO	6CELL2.2	NV42_UMACcwM	Battery SANYO AS-2009C Li-Ion 3S2P SANYO 6cell 4400mAh Main COMMON AS09C31
SIMPLO	6CELL2.2	NV42_UMACcwM	Battery SIMPLO AS-2009C Li-Ion 3S2P PANASONIC 6 cell 4400mAh Main COMMON
SIMPLO	6CELL2.2	NV42_UMACcwM	Battery SIMPLO AS-2009C Li-Ion 3S2P SAMSUNG 6 cell 4400mAh Main COMMON
SANYO	6CELL2.2	NV42_UMACkkM	Battery SANYO AS-2009C Li-Ion 3S2P SANYO 6cell 4400mAh Main COMMON AS09C31
SIMPLO	6CELL2.2	NV42_UMACkkM	Battery SIMPLO AS-2009C Li-Ion 3S2P PANASONIC 6 cell 4400mAh Main COMMON
SIMPLO	6CELL2.2	NV42_UMACkkM	Battery SIMPLO AS-2009C Li-Ion 3S2P SAMSUNG 6 cell 4400mAh Main COMMON
Bluetooth			
Foxconn	BT 2.1	ENNJ31_UMACkk2	Foxconn Bluetooth BRM 2046 BT2.1 (T60H928.33) f/w:861
Foxconn	BT 2.1	ENNJ31_UMACkkM	Foxconn Bluetooth BRM 2046 BT2.1 (T60H928.33) f/w:861
Foxconn	BT 2.1	ENNJ31_UMACkkM2	Foxconn Bluetooth BRM 2046 BT2.1 (T60H928.33) f/w:861
Foxconn	BT 2.1	NV42_UMACckM	Foxconn Bluetooth BRM 2046 BT2.1 (T60H928.33) f/w:861
Foxconn	BT 2.1	NV42_UMACcwM	Foxconn Bluetooth BRM 2046 BT2.1 (T60H928.33) f/w:861
Foxconn	BT 2.1	NV42_UMACkkM	Foxconn Bluetooth BRM 2046 BT2.1 (T60H928.33) f/w:861
Camera			
Suyin	0.3M DV	ENNJ31_UMACkk2	Suyin 0.3M DV Camellia_2G
Chicony	0.3M DV	ENNJ31_UMACkk2	Chicony 0.3M DV Calla_2G

BRAND	Type	BOM_Name	Description
Suyin	0.3M DV	ENNJ31_UMACkkM	Suyin 0.3M DV Camellia_2G
Chicony	0.3M DV	ENNJ31_UMACkkM	Chicony 0.3M DV Calla_2G
Suyin	0.3M DV	ENNJ31_UMACkkM2	Suyin 0.3M DV Camellia_2G
Chicony	0.3M DV	ENNJ31_UMACkkM2	Chicony 0.3M DV Calla_2G
Suyin	0.3M DV	NV42_UMACckM	Suyin 0.3M DV Camellia_2G
Chicony	0.3M DV	NV42_UMACckM	Chicony 0.3M DV Calla_2G
Suyin	0.3M DV	NV42_UMACcwM	Suyin 0.3M DV Camellia_2G
Chicony	0.3M DV	NV42_UMACcwM	Chicony 0.3M DV Calla_2G
Suyin	0.3M DV	NV42_UMACkkM	Suyin 0.3M DV Camellia_2G
Chicony	0.3M DV	NV42_UMACkkM	Chicony 0.3M DV Calla_2G
Card Reader			
N/A	5 in 1-Build in	ENNJ31_UMACkk2	5 in 1-Build in MS, MS Pro, SD, SC, XD
N/A	5 in 1-Build in	ENNJ31_UMACkkM	5 in 1-Build in MS, MS Pro, SD, SC, XD
N/A	5 in 1-Build in	ENNJ31_UMACkkM2	5 in 1-Build in MS, MS Pro, SD, SC, XD
N/A	5 in 1-Build in	NV42_UMACckM	5 in 1-Build in MS, MS Pro, SD, SC, XD
N/A	5 in 1-Build in	NV42_UMACcwM	5 in 1-Build in MS, MS Pro, SD, SC, XD
N/A	5 in 1-Build in	NV42_UMACkkM	5 in 1-Build in MS, MS Pro, SD, SC, XD
Realtek	RTS5158E-GR	ENNJ31_UMACkk2	Realtek RTS5158E-GR Card Reader: SD/MMC/MS/MS Duo/xD (USB 2.0)
Realtek	RTS5158E-GR	ENNJ31_UMACkkM	Realtek RTS5158E-GR Card Reader: SD/MMC/MS/MS Duo/xD (USB 2.0)
Realtek	RTS5158E-GR	ENNJ31_UMACkkM2	Realtek RTS5158E-GR Card Reader: SD/MMC/MS/MS Duo/xD (USB 2.0)
Realtek	RTS5158E-GR	NV42_UMACckM	Realtek RTS5158E-GR Card Reader: SD/MMC/MS/MS Duo/xD (USB 2.0)
Realtek	RTS5158E-GR	NV42_UMACcwM	Realtek RTS5158E-GR Card Reader: SD/MMC/MS/MS Duo/xD (USB 2.0)
Realtek	RTS5158E-GR	NV42_UMACkkM	Realtek RTS5158E-GR Card Reader: SD/MMC/MS/MS Duo/xD (USB 2.0)
CPU/Processor			
AMD	AAL310	ENNJ31_UMACkk2	CPU AMD Athlon L310 PGA 1.2G 1M Dual Core
AMD	AATF20	ENNJ31_UMACkk2	CPU AMD Athlon TF20 PGA 1.6G 512K 638 15W G2
AMD	AATK42	ENNJ31_UMACkk2	CPU AMD AthlonX2 TK42 1.6G 1M 638 20W G2
AMD	AAL310	ENNJ31_UMACkkM	CPU AMD Athlon L310 PGA 1.2G 1M Dual Core

BRAND	Type	BOM_Name	Description
AMD	AATF20	ENNJ31_UMACkkM	CPU AMD Athlon TF20 PGA 1.6G 512K 638 15W G2
AMD	AATK42	ENNJ31_UMACkkM	CPU AMD AthlonX2 TK42 1.6G 1M 638 20W G2
AMD	ATL510	ENNJ31_UMACkkM	CPU AMD TurionX2 L510 PGA 1.6G 1M 20W
AMD	AAL310	ENNJ31_UMACkkM2	CPU AMD Athlon L310 PGA 1.2G 1M Dual Core
AMD	AATF20	ENNJ31_UMACkkM2	CPU AMD Athlon TF20 PGA 1.6G 512K 638 15W G2
AMD	AATK42	ENNJ31_UMACkkM2	CPU AMD AthlonX2 TK42 1.6G 1M 638 20W G2
AMD	AAL310	NV42_UMACckM	CPU AMD Athlon L310 PGA 1.2G 1M Dual Core
AMD	AATF20	NV42_UMACckM	CPU AMD Athlon TF20 PGA 1.6G 512K 638 15W G2
AMD	AATK42	NV42_UMACckM	CPU AMD AthlonX2 TK42 1.6G 1M 638 20W G2
AMD	AAL310	NV42_UMACcwM	CPU AMD Athlon L310 PGA 1.2G 1M Dual Core
AMD	AATF20	NV42_UMACcwM	CPU AMD Athlon TF20 PGA 1.6G 512K 638 15W G2
AMD	AATK42	NV42_UMACcwM	CPU AMD AthlonX2 TK42 1.6G 1M 638 20W G2
AMD	AAL310	NV42_UMACkkM	CPU AMD Athlon L310 PGA 1.2G 1M Dual Core
AMD	AATF20	NV42_UMACkkM	CPU AMD Athlon TF20 PGA 1.6G 512K 638 15W G2
AMD	AATK42	NV42_UMACkkM	CPU AMD AthlonX2 TK42 1.6G 1M 638 20W G2

Brand	Type	BOM_Name	Description
HDD			
SEAGATE	N160GB5.4KS	ENNJ31_UMACkk2	“HDD SEAGATE 2.5”” 5400rpm 160GB ST9160314AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N160GB5.4KS	ENNJ31_UMACkk2	“HDD TOSHIBA 2.5”” 5400rpm 160GB MK1655GSX Libra SATA LF F/W: FG011J”
HGST	N160GB5.4KS	ENNJ31_UMACkk2	“HDD HGST 2.5”” 5400rpm 160GB HTS545016B9A300 Panther B SATA LF F/W:C60F”
WD	N160GB5.4KS	ENNJ31_UMACkk2	“HDD WD 2.5”” 5400rpm 160GB WD1600BEVT-22ZCTO ML160 SATA LF F/W:11.01A11”
SEAGATE	N250GB5.4KS	ENNJ31_UMACkk2	“HDD SEAGATE 2.5”” 5400rpm 250GB ST9250315AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N250GB5.4KS	ENNJ31_UMACkk2	“HDD TOSHIBA 2.5”” 5400rpm 250GB MK2555GSX Libra SATA LF F/W:FG001J”
HGST	N250GB5.4KS	ENNJ31_UMACkk2	“HDD HGST 2.5”” 5400rpm 250GB HTS545025B9A300 Panther B SATA LF F/W:C60F”
WD	N250GB5.4KS	ENNJ31_UMACkk2	“HDD WD 2.5”” 5400rpm 250GB WD2500BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11”

Brand	Type	BOM_Name	Description
SEAGATE	N320GB5.4 KS	ENNJ31_UMACkk 2	“HDD SEAGATE 2.5”” 5400rpm 320GB ST9320325AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N320GB5.4 KS	ENNJ31_UMACkk 2	“HDD TOSHIBA 2.5”” 5400rpm 320GB MK3255GSX Libra SATA LF F/W:FG011J”
HGST	N320GB5.4 KS	ENNJ31_UMACkk 2	“HDD HGST 2.5”” 5400rpm 320GB HTS545032B9A300 Panther B SATA LF F/W: C60F”
WD	N320GB5.4 KS	ENNJ31_UMACkk 2	“HDD WD 2.5”” 5400rpm 320GB WD3200BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11”
SEAGATE	N500GB5.4 KS	ENNJ31_UMACkk 2	“HDD SEAGATE 2.5”” 5400rpm 500GB ST9500325AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N500GB5.4 KS	ENNJ31_UMACkk 2	“HDD TOSHIBA 2.5”” 5400rpm 500GB MK5055GSX Libra SATA LF F/W:FG001J”
HGST	N500GB5.4 KS	ENNJ31_UMACkk 2	“HDD HGST 2.5”” 5400rpm 500GB HTS545050B9A300 Panther B SATA LF F/W:C60F”
WD	N500GB5.4 KS	ENNJ31_UMACkk 2	“HDD WD 2.5”” 5400rpm 500GB WD5000BEVT-22ZAT0 ML250 SATA LF F/W:01.01A01”
SEAGATE	N160GB5.4 KS	ENNJ31_UMACkk M	“HDD SEAGATE 2.5”” 5400rpm 160GB ST9160314AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N160GB5.4 KS	ENNJ31_UMACkk M	“HDD TOSHIBA 2.5”” 5400rpm 160GB MK1655GSX Libra SATA LF F/W: FG011J”
HGST	N160GB5.4 KS	ENNJ31_UMACkk M	“HDD HGST 2.5”” 5400rpm 160GB HTS545016B9A300 Panther B SATA LF F/W:C60F”
WD	N160GB5.4 KS	ENNJ31_UMACkk M	“HDD WD 2.5”” 5400rpm 160GB WD1600BEVT-22ZCTO ML160 SATA LF F/W:11.01A11”
SEAGATE	N250GB5.4 KS	ENNJ31_UMACkk M	“HDD SEAGATE 2.5”” 5400rpm 250GB ST9250315AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N250GB5.4 KS	ENNJ31_UMACkk M	“HDD TOSHIBA 2.5”” 5400rpm 250GB MK2555GSX Libra SATA LF F/W:FG001J”
HGST	N250GB5.4 KS	ENNJ31_UMACkk M	“HDD HGST 2.5”” 5400rpm 250GB HTS545025B9A300 Panther B SATA LF F/W:C60F”
HGST	N250GB5.4 KS	ENNJ31_UMACkk M	“HDD HGST 2.5”” 5400rpm 250GB HTS545025B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm”
WD	N250GB5.4 KS	ENNJ31_UMACkk M	“HDD WD 2.5”” 5400rpm 250GB WD2500BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11”
SEAGATE	N320GB5.4 KS	ENNJ31_UMACkk M	“HDD SEAGATE 2.5”” 5400rpm 320GB ST9320325AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N320GB5.4 KS	ENNJ31_UMACkk M	“HDD TOSHIBA 2.5”” 5400rpm 320GB MK3255GSX Libra SATA LF F/W:FG011J”
HGST	N320GB5.4 KS	ENNJ31_UMACkk M	“HDD HGST 2.5”” 5400rpm 320GB HTS545032B9A300 Panther B SATA LF F/W: C60F”
HGST	N320GB5.4 KS	ENNJ31_UMACkk M	“HDD HGST 2.5”” 5400rpm 320GB HTS545032B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm”
WD	N320GB5.4 KS	ENNJ31_UMACkk M	“HDD WD 2.5”” 5400rpm 320GB WD3200BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11”

Brand	Type	BOM_Name	Description
SEAGATE	N500GB5.4 KS	ENNJ31_UMACkk M	“HDD SEAGATE 2.5”” 5400rpm 500GB ST9500325AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N500GB5.4 KS	ENNJ31_UMACkk M	“HDD TOSHIBA 2.5”” 5400rpm 500GB MK5055GSX Libra SATA LF F/W:FG001J”
HGST	N500GB5.4 KS	ENNJ31_UMACkk M	“HDD HGST 2.5”” 5400rpm 500GB HTS545050B9A300 Panther B SATA LF F/ W:C60F”
HGST	N500GB5.4 KS	ENNJ31_UMACkk M	“HDD HGST 2.5”” 5400rpm 500GB HTS545050B9A300 Panther B SATA LF F/ W:C60F Disk imbalance criteria = 0.014g-cm”
WD	N500GB5.4 KS	ENNJ31_UMACkk M	“HDD WD 2.5”” 5400rpm 500GB WD5000BEVT-22ZAT0 ML250 SATA LF F/W:01.01A01”
SEAGATE	N160GB5.4 KS	ENNJ31_UMACkk M2	“HDD SEAGATE 2.5”” 5400rpm 160GB ST9160314AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N160GB5.4 KS	ENNJ31_UMACkk M2	“HDD TOSHIBA 2.5”” 5400rpm 160GB MK1655GSX Libra SATA LF F/W: FG011J”
HGST	N160GB5.4 KS	ENNJ31_UMACkk M2	“HDD HGST 2.5”” 5400rpm 160GB HTS545016B9A300 Panther B SATA LF F/ W:C60F”
WD	N160GB5.4 KS	ENNJ31_UMACkk M2	“HDD WD 2.5”” 5400rpm 160GB WD1600BEVT-22ZCTO ML160 SATA LF F/W:11.01A11”
SEAGATE	N250GB5.4 KS	ENNJ31_UMACkk M2	“HDD SEAGATE 2.5”” 5400rpm 250GB ST9250315AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N250GB5.4 KS	ENNJ31_UMACkk M2	“HDD TOSHIBA 2.5”” 5400rpm 250GB MK2555GSX Libra SATA LF F/W:FG001J”
HGST	N250GB5.4 KS	ENNJ31_UMACkk M2	“HDD HGST 2.5”” 5400rpm 250GB HTS545025B9A300 Panther B SATA LF F/ W:C60F”
WD	N250GB5.4 KS	ENNJ31_UMACkk M2	“HDD WD 2.5”” 5400rpm 250GB WD2500BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11”
SEAGATE	N320GB5.4 KS	ENNJ31_UMACkk M2	“HDD SEAGATE 2.5”” 5400rpm 320GB ST9320325AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N320GB5.4 KS	ENNJ31_UMACkk M2	“HDD TOSHIBA 2.5”” 5400rpm 320GB MK3255GSX Libra SATA LF F/W:FG011J”
HGST	N320GB5.4 KS	ENNJ31_UMACkk M2	“HDD HGST 2.5”” 5400rpm 320GB HTS545032B9A300 Panther B SATA LF F/W: C60F”
WD	N320GB5.4 KS	ENNJ31_UMACkk M2	“HDD WD 2.5”” 5400rpm 320GB WD3200BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11”
SEAGATE	N500GB5.4 KS	ENNJ31_UMACkk M2	“HDD SEAGATE 2.5”” 5400rpm 500GB ST9500325AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N500GB5.4 KS	ENNJ31_UMACkk M2	“HDD TOSHIBA 2.5”” 5400rpm 500GB MK5055GSX Libra SATA LF F/W:FG001J”
HGST	N500GB5.4 KS	ENNJ31_UMACkk M2	“HDD HGST 2.5”” 5400rpm 500GB HTS545050B9A300 Panther B SATA LF F/ W:C60F”
WD	N500GB5.4 KS	ENNJ31_UMACkk M2	“HDD WD 2.5”” 5400rpm 500GB WD5000BEVT-22ZAT0 ML250 SATA LF F/W:01.01A01”
SEAGATE	N160GB5.4 KS	NV42_UMACckM	“HDD SEAGATE 2.5”” 5400rpm 160GB ST9160314AS Wyatt SATA LF F/W:0001SDM1”

Brand	Type	BOM_Name	Description
TOSHIBA	N160GB5.4 KS	NV42_UMACckM	“HDD TOSHIBA 2.5”” 5400rpm 160GB MK1655GSX Libra SATA LF F/W: FG011J”
HGST	N160GB5.4 KS	NV42_UMACckM	“HDD HGST 2.5”” 5400rpm 160GB HTS545016B9A300 Panther B SATA LF F/W:C60F”
WD	N160GB5.4 KS	NV42_UMACckM	“HDD WD 2.5”” 5400rpm 160GB WD1600BEVT-22ZCTO ML160 SATA LF F/W:11.01A11”
SEAGATE	N250GB5.4 KS	NV42_UMACckM	“HDD SEAGATE 2.5”” 5400rpm 250GB ST9250315AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N250GB5.4 KS	NV42_UMACckM	“HDD TOSHIBA 2.5”” 5400rpm 250GB MK2555GSX Libra SATA LF F/W:FG001J”
HGST	N250GB5.4 KS	NV42_UMACckM	“HDD HGST 2.5”” 5400rpm 250GB HTS545025B9A300 Panther B SATA LF F/W:C60F”
WD	N250GB5.4 KS	NV42_UMACckM	“HDD WD 2.5”” 5400rpm 250GB WD2500BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11”
SEAGATE	N320GB5.4 KS	NV42_UMACckM	“HDD SEAGATE 2.5”” 5400rpm 320GB ST9320325AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N320GB5.4 KS	NV42_UMACckM	“HDD TOSHIBA 2.5”” 5400rpm 320GB MK3255GSX Libra SATA LF F/W:FG011J”
HGST	N320GB5.4 KS	NV42_UMACckM	“HDD HGST 2.5”” 5400rpm 320GB HTS545032B9A300 Panther B SATA LF F/W: C60F”
WD	N320GB5.4 KS	NV42_UMACckM	“HDD WD 2.5”” 5400rpm 320GB WD3200BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11”
SEAGATE	N500GB5.4 KS	NV42_UMACckM	“HDD SEAGATE 2.5”” 5400rpm 500GB ST9500325AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N500GB5.4 KS	NV42_UMACckM	“HDD TOSHIBA 2.5”” 5400rpm 500GB MK5055GSX Libra SATA LF F/W:FG001J”
HGST	N500GB5.4 KS	NV42_UMACckM	“HDD HGST 2.5”” 5400rpm 500GB HTS545050B9A300 Panther B SATA LF F/W:C60F”
WD	N500GB5.4 KS	NV42_UMACckM	“HDD WD 2.5”” 5400rpm 500GB WD5000BEVT-22ZAT0 ML250 SATA LF F/W:01.01A01”
SEAGATE	N160GB5.4 KS	NV42_UMACcwM	“HDD SEAGATE 2.5”” 5400rpm 160GB ST9160314AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N160GB5.4 KS	NV42_UMACcwM	“HDD TOSHIBA 2.5”” 5400rpm 160GB MK1655GSX Libra SATA LF F/W: FG011J”
HGST	N160GB5.4 KS	NV42_UMACcwM	“HDD HGST 2.5”” 5400rpm 160GB HTS545016B9A300 Panther B SATA LF F/W:C60F”
WD	N160GB5.4 KS	NV42_UMACcwM	“HDD WD 2.5”” 5400rpm 160GB WD1600BEVT-22ZCTO ML160 SATA LF F/W:11.01A11”
SEAGATE	N250GB5.4 KS	NV42_UMACcwM	“HDD SEAGATE 2.5”” 5400rpm 250GB ST9250315AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N250GB5.4 KS	NV42_UMACcwM	“HDD TOSHIBA 2.5”” 5400rpm 250GB MK2555GSX Libra SATA LF F/W:FG001J”
HGST	N250GB5.4 KS	NV42_UMACcwM	“HDD HGST 2.5”” 5400rpm 250GB HTS545025B9A300 Panther B SATA LF F/W:C60F”

Brand	Type	BOM_Name	Description
WD	N250GB5.4 KS	NV42_UMACcwM	“HDD WD 2.5”” 5400rpm 250GB WD2500BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11”
SEAGATE	N320GB5.4 KS	NV42_UMACcwM	“HDD SEAGATE 2.5”” 5400rpm 320GB ST9320325AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N320GB5.4 KS	NV42_UMACcwM	“HDD TOSHIBA 2.5”” 5400rpm 320GB MK3255GSX Libra SATA LF F/W:FG011J”
HGST	N320GB5.4 KS	NV42_UMACcwM	“HDD HGST 2.5”” 5400rpm 320GB HTS545032B9A300 Panther B SATA LF F/W: C60F”
WD	N320GB5.4 KS	NV42_UMACcwM	“HDD WD 2.5”” 5400rpm 320GB WD3200BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11”
SEAGATE	N500GB5.4 KS	NV42_UMACcwM	“HDD SEAGATE 2.5”” 5400rpm 500GB ST9500325AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N500GB5.4 KS	NV42_UMACcwM	“HDD TOSHIBA 2.5”” 5400rpm 500GB MK5055GSX Libra SATA LF F/W:FG001J”
HGST	N500GB5.4 KS	NV42_UMACcwM	“HDD HGST 2.5”” 5400rpm 500GB HTS545050B9A300 Panther B SATA LF F/W:C60F”
WD	N500GB5.4 KS	NV42_UMACcwM	“HDD WD 2.5”” 5400rpm 500GB WD5000BEVT-22ZAT0 ML250 SATA LF F/W:01.01A01”
SEAGATE	N160GB5.4 KS	NV42_UMACkkM	“HDD SEAGATE 2.5”” 5400rpm 160GB ST9160314AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N160GB5.4 KS	NV42_UMACkkM	“HDD TOSHIBA 2.5”” 5400rpm 160GB MK1655GSX Libra SATA LF F/W: FG011J”
HGST	N160GB5.4 KS	NV42_UMACkkM	“HDD HGST 2.5”” 5400rpm 160GB HTS545016B9A300 Panther B SATA LF F/W:C60F”
WD	N160GB5.4 KS	NV42_UMACkkM	“HDD WD 2.5”” 5400rpm 160GB WD1600BEVT-22ZCTO ML160 SATA LF F/W:11.01A11”
SEAGATE	N250GB5.4 KS	NV42_UMACkkM	“HDD SEAGATE 2.5”” 5400rpm 250GB ST9250315AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N250GB5.4 KS	NV42_UMACkkM	“HDD TOSHIBA 2.5”” 5400rpm 250GB MK2555GSX Libra SATA LF F/W:FG001J”
HGST	N250GB5.4 KS	NV42_UMACkkM	“HDD HGST 2.5”” 5400rpm 250GB HTS545025B9A300 Panther B SATA LF F/W:C60F”
WD	N250GB5.4 KS	NV42_UMACkkM	“HDD WD 2.5”” 5400rpm 250GB WD2500BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11”
SEAGATE	N320GB5.4 KS	NV42_UMACkkM	“HDD SEAGATE 2.5”” 5400rpm 320GB ST9320325AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N320GB5.4 KS	NV42_UMACkkM	“HDD TOSHIBA 2.5”” 5400rpm 320GB MK3255GSX Libra SATA LF F/W:FG011J”
HGST	N320GB5.4 KS	NV42_UMACkkM	“HDD HGST 2.5”” 5400rpm 320GB HTS545032B9A300 Panther B SATA LF F/W: C60F”
WD	N320GB5.4 KS	NV42_UMACkkM	“HDD WD 2.5”” 5400rpm 320GB WD3200BEVT-22ZCT0 ML160 SATA LF F/W:11.01A11”
SEAGATE	N500GB5.4 KS	NV42_UMACkkM	“HDD SEAGATE 2.5”” 5400rpm 500GB ST9500325AS Wyatt SATA LF F/W:0001SDM1”
TOSHIBA	N500GB5.4 KS	NV42_UMACkkM	“HDD TOSHIBA 2.5”” 5400rpm 500GB MK5055GSX Libra SATA LF F/W:FG001J”

Brand	Type	BOM_Name	Description
HGST	N500GB5.4 KS	NV42_UMACkkM	“HDD HGST 2.5”” 5400rpm 500GB HTS545050B9A300 Panther B SATA LF F/ W:C60F”
WD	N500GB5.4 KS	NV42_UMACkkM	“HDD WD 2.5”” 5400rpm 500GB WD5000BEVT-22ZAT0 ML250 SATA LF F/W:01.01A01”

BRAND	Type	BOM_Name	Description
Keyboard			
GATEWAY	GP-4T Black	ENNJ31_UMACkk 2	Keyboard GATEWAY GP-4T Black SJV40 Internal 14 Standard Black NONE texture
GATEWAY	GP-4T Black	ENNJ31_UMACkk M	Keyboard GATEWAY GP-4T Black SJV40 Internal 14 Standard Black NONE texture
GATEWAY	GP-4T Black	ENNJ31_UMACkk M2	Keyboard GATEWAY GP-4T Black SJV40 Internal 14 Standard Black NONE texture
GATEWAY	GP-4T Black	NV42_UMACckM	Keyboard GATEWAY GP-4T Black SJV40 Internal 14 Standard Black NONE texture
GATEWAY	GP-4T white	NV42_UMACcwM	Keyboard GATEWAY GP-4T white SJV 40 Internal 14 Standard White texture
GATEWAY	GP-4T Black	NV42_UMACkkM	Keyboard GATEWAY GP-4T Black SJV40 Internal 14 Standard Black NONE texture
LAN			
Broadcom	BCM5784	ENNJ31_UMACkk 2	Broadcom BCM5784
Broadcom	BCM5784	ENNJ31_UMACkk M	Broadcom BCM5784
Broadcom	BCM5784	ENNJ31_UMACkk M2	Broadcom BCM5784
Broadcom	BCM5784	NV42_UMACckM	Broadcom BCM5784
Broadcom	BCM5784	NV42_UMACcwM	Broadcom BCM5784
Broadcom	BCM5784	NV42_UMACkkM	Broadcom BCM5784
LCD			
AUO	NLED14WXGAG	ENNJ31_UMACkk 2	“LED LCD AUO 14”” WXGA Glare B140XW01 V0 1A LF 200nit 8ms 500:1”
SAMSUNG	NLED14WXGAG	ENNJ31_UMACkk 2	“LED LCD SAMSUNG 14”” WXGA Glare LTN140AT01-G01 LF 220nit 8ms 500:1”
LPL	NLED14WXGAG	ENNJ31_UMACkk 2	“LED LCD LPL 14”” WXGA Glare LP140WH1-TLA2 LF 220nit 8ms 500:1”
CMO	NLED14WXGAG	ENNJ31_UMACkk 2	“LED LCD CMO 14”” WXGA Glare N140B6-L02 LF 220nit 8ms 400:1”
CMO	NLED14WXGAG	ENNJ31_UMACkk 2	“LED LCD CMO 14”” WXGA Glare N140B6-L02 C2 LF 220nit 8ms 400:1”
AUO	NLED14WXGAG	ENNJ31_UMACkk M	“LED LCD AUO 14”” WXGA Glare B140XW01 V0 1A LF 200nit 8ms 500:1”
SAMSUNG	NLED14WXGAG	ENNJ31_UMACkk M	“LED LCD SAMSUNG 14”” WXGA Glare LTN140AT01-G01 LF 220nit 8ms 500:1”
SAMSUNG	NLED14WXGAG	ENNJ31_UMACkk M	“LED LCD SAMSUNG 14”” WXGA Glare LTN140AT01-G03 LF 220nit 8ms 500:1”

BRAND	Type	BOM_Name	Description
LPL	NLED14WXGAG	ENNJ31_UMACkkM	“LED LCD LPL 14”” WXGA Glare LP140WH1-TLA2 LF 220nit 8ms 500:1”
CMO	NLED14WXGAG	ENNJ31_UMACkkM	“LED LCD CMO 14”” WXGA Glare N140B6-L02 LF 220nit 8ms 400:1”
CMO	NLED14WXGAG	ENNJ31_UMACkkM	“LED LCD CMO 14”” WXGA Glare N140B6-L02 C2 LF 220nit 8ms 400:1”
AUO	NLED14WXGAG	ENNJ31_UMACkkM2	“LED LCD AUO 14”” WXGA Glare B140XW01 V0 1A LF 200nit 8ms 500:1”
SAMSUNG	NLED14WXGAG	ENNJ31_UMACkkM2	“LED LCD SAMSUNG 14”” WXGA Glare LTN140AT01-G01 LF 220nit 8ms 500:1”
LPL	NLED14WXGAG	ENNJ31_UMACkkM2	“LED LCD LPL 14”” WXGA Glare LP140WH1-TLA2 LF 220nit 8ms 500:1”
CMO	NLED14WXGAG	ENNJ31_UMACkkM2	“LED LCD CMO 14”” WXGA Glare N140B6-L02 LF 220nit 8ms 400:1”
CMO	NLED14WXGAG	ENNJ31_UMACkkM2	“LED LCD CMO 14”” WXGA Glare N140B6-L02 C2 LF 220nit 8ms 400:1”
AUO	NLED14WXGAG	NV42_UMACckM	“LED LCD AUO 14”” WXGA Glare B140XW01 V0 1A LF 200nit 8ms 500:1”
SAMSUNG	NLED14WXGAG	NV42_UMACckM	“LED LCD SAMSUNG 14”” WXGA Glare LTN140AT01-G01 LF 220nit 8ms 500:1”
LPL	NLED14WXGAG	NV42_UMACckM	“LED LCD LPL 14”” WXGA Glare LP140WH1-TLA2 LF 220nit 8ms 500:1”
CMO	NLED14WXGAG	NV42_UMACckM	“LED LCD CMO 14”” WXGA Glare N140B6-L02 LF 220nit 8ms 400:1”
CMO	NLED14WXGAG	NV42_UMACckM	“LED LCD CMO 14”” WXGA Glare N140B6-L02 C2 LF 220nit 8ms 400:1”
AUO	NLED14WXGAG	NV42_UMACcwM	“LED LCD AUO 14”” WXGA Glare B140XW01 V0 1A LF 200nit 8ms 500:1”
SAMSUNG	NLED14WXGAG	NV42_UMACcwM	“LED LCD SAMSUNG 14”” WXGA Glare LTN140AT01-G01 LF 220nit 8ms 500:1”
LPL	NLED14WXGAG	NV42_UMACcwM	“LED LCD LPL 14”” WXGA Glare LP140WH1-TLA2 LF 220nit 8ms 500:1”
CMO	NLED14WXGAG	NV42_UMACcwM	“LED LCD CMO 14”” WXGA Glare N140B6-L02 LF 220nit 8ms 400:1”
CMO	NLED14WXGAG	NV42_UMACcwM	“LED LCD CMO 14”” WXGA Glare N140B6-L02 C2 LF 220nit 8ms 400:1”
AUO	NLED14WXGAG	NV42_UMACkkM	“LED LCD AUO 14”” WXGA Glare B140XW01 V0 1A LF 200nit 8ms 500:1”
SAMSUNG	NLED14WXGAG	NV42_UMACkkM	“LED LCD SAMSUNG 14”” WXGA Glare LTN140AT01-G01 LF 220nit 8ms 500:1”
LPL	NLED14WXGAG	NV42_UMACkkM	“LED LCD LPL 14”” WXGA Glare LP140WH1-TLA2 LF 220nit 8ms 500:1”
CMO	NLED14WXGAG	NV42_UMACkkM	“LED LCD CMO 14”” WXGA Glare N140B6-L02 LF 220nit 8ms 400:1”
CMO	NLED14WXGAG	NV42_UMACkkM	“LED LCD CMO 14”” WXGA Glare N140B6-L02 C2 LF 220nit 8ms 400:1”
Memory			
SAMSUNG	SO1GBII6	ENNJ31_UMACkk2	Memory SAMSUNG SO-DIMM DDRII 667 1GB M470T2864QZ3-CE6 LF

BRAND	Type	BOM_Name	Description
HYNIX	SO1GBII6	ENNJ31_UMACkk2	Memory HYNIX SO-DIMM DDRII 667 1GB HYMP112S64CP6-Y5 LF
SAMSUNG	SO2GBII6	ENNJ31_UMACkk2	Memory SAMSUNG SO-DIMM DDRII 667 2GB M470T5663QZ3-CE6 LF
HYNIX	SO2GBII6	ENNJ31_UMACkk2	Memory HYNIX SO-DIMM DDRII 667 2GB HMP125S6EFR8C-Y5 LF 128*8 0.055um
SAMSUNG	SO1GBII6	ENNJ31_UMACkkM	Memory SAMSUNG SO-DIMM DDRII 667 1GB M470T2864QZ3-CE6 LF
HYNIX	SO1GBII6	ENNJ31_UMACkkM	Memory HYNIX SO-DIMM DDRII 667 1GB HYMP112S64CP6-Y5 LF
SAMSUNG	SO2GBII6	ENNJ31_UMACkkM	Memory SAMSUNG SO-DIMM DDRII 667 2GB M470T5663QZ3-CE6 LF
HYNIX	SO2GBII6	ENNJ31_UMACkkM	Memory HYNIX SO-DIMM DDRII 667 2GB HMP125S6EFR8C-Y5 LF 128*8 0.055um
SAMSUNG	SO1GBII6	ENNJ31_UMACkkM2	Memory SAMSUNG SO-DIMM DDRII 667 1GB M470T2864QZ3-CE6 LF
HYNIX	SO1GBII6	ENNJ31_UMACkkM2	Memory HYNIX SO-DIMM DDRII 667 1GB HYMP112S64CP6-Y5 LF
SAMSUNG	SO2GBII6	ENNJ31_UMACkkM2	Memory SAMSUNG SO-DIMM DDRII 667 2GB M470T5663QZ3-CE6 LF
HYNIX	SO2GBII6	ENNJ31_UMACkkM2	Memory HYNIX SO-DIMM DDRII 667 2GB HMP125S6EFR8C-Y5 LF 128*8 0.055um
SAMSUNG	SO1GBII6	NV42_UMACckM	Memory SAMSUNG SO-DIMM DDRII 667 1GB M470T2864QZ3-CE6 LF
HYNIX	SO1GBII6	NV42_UMACckM	Memory HYNIX SO-DIMM DDRII 667 1GB HYMP112S64CP6-Y5 LF
SAMSUNG	SO2GBII6	NV42_UMACckM	Memory SAMSUNG SO-DIMM DDRII 667 2GB M470T5663QZ3-CE6 LF
HYNIX	SO2GBII6	NV42_UMACckM	Memory HYNIX SO-DIMM DDRII 667 2GB HMP125S6EFR8C-Y5 LF 128*8 0.055um
SAMSUNG	SO1GBII6	NV42_UMACcwM	Memory SAMSUNG SO-DIMM DDRII 667 1GB M470T2864QZ3-CE6 LF
HYNIX	SO1GBII6	NV42_UMACcwM	Memory HYNIX SO-DIMM DDRII 667 1GB HYMP112S64CP6-Y5 LF
SAMSUNG	SO2GBII6	NV42_UMACcwM	Memory SAMSUNG SO-DIMM DDRII 667 2GB M470T5663QZ3-CE6 LF
HYNIX	SO2GBII6	NV42_UMACcwM	Memory HYNIX SO-DIMM DDRII 667 2GB HMP125S6EFR8C-Y5 LF 128*8 0.055um
SAMSUNG	SO1GBII6	NV42_UMACkkM	Memory SAMSUNG SO-DIMM DDRII 667 1GB M470T2864QZ3-CE6 LF
HYNIX	SO1GBII6	NV42_UMACkkM	Memory HYNIX SO-DIMM DDRII 667 1GB HYMP112S64CP6-Y5 LF
SAMSUNG	SO2GBII6	NV42_UMACkkM	Memory SAMSUNG SO-DIMM DDRII 667 2GB M470T5663QZ3-CE6 LF
HYNIX	SO2GBII6	NV42_UMACkkM	Memory HYNIX SO-DIMM DDRII 667 2GB HMP125S6EFR8C-Y5 LF 128*8 0.055um
Modem			
Foxconn	Fox+Con MC4Z 1.5_3.3V Aus	ENNJ31_UMACkkM	Foxconn Conexant -Unizion 1.5_3.3v AUS T60M955.0x

BRAND	Type	BOM_Name	Description
Foxconn	Fox+Con MC4Z 1.5_3.3V Aus	ENNJ31_UMACkkM2	Foxconn Conexant -Unizion 1.5_3.3v AUS T60M955.0x
Foxconn	Fox+Con MC4Z 1.5_3.3V Aus	NV42_UMACckM	Foxconn Conexant -Unizion 1.5_3.3v AUS T60M955.0x
Foxconn	Fox+Con MC4Z 1.5_3.3V Aus	NV42_UMACcwM	Foxconn Conexant -Unizion 1.5_3.3v AUS T60M955.0x
Foxconn	Fox+Con MC4Z 1.5_3.3V Aus	NV42_UMACkkM	Foxconn Conexant -Unizion 1.5_3.3v AUS T60M955.0x
NB Chipset			
AMD	AMDRS780MN	ENNJ31_UMACkk2	AMD RS780MN w/ HDCP EEPROM
AMD	AMDRS780MN	ENNJ31_UMACkkM	AMD RS780MN w/ HDCP EEPROM
AMD	AMDRS780MN	ENNJ31_UMACkkM2	AMD RS780MN w/ HDCP EEPROM
AMD	AMDRS780MN	NV42_UMACckM	AMD RS780MN w/ HDCP EEPROM
AMD	AMDRS780MN	NV42_UMACcwM	AMD RS780MN w/ HDCP EEPROM
AMD	AMDRS780MN	NV42_UMACkkM	AMD RS780MN w/ HDCP EEPROM
ODD			
TOSHIBA	NSM8XS	ENNJ31_UMACkk2	ODD TOSHIBA Super-Multi DRIVE 12.7mm Tray DL 8X TS-L633B LF W/O bezel SATA
HLDS	NSM8XS	ENNJ31_UMACkk2	ODD HLDS Super-Multi DRIVE 12.7mm Tray DL 8X GT20N LF W/O bezel SATA
SONY	NSM8XS	ENNJ31_UMACkk2	ODD SONY Super-Multi DRIVE 12.7mm Tray DL 8X AD-7580S LF W/O bezel SATA
PLDS	NSM8XS	ENNJ31_UMACkk2	ODD PLDS Super-Multi DRIVE 12.7mm Tray DL 8X DS-8A3S LF W/O bezel SATA
TOSHIBA	NSM8XS	ENNJ31_UMACkkM	ODD TOSHIBA Super-Multi DRIVE 12.7mm Tray DL 8X TS-L633B LF W/O bezel SATA
TOSHIBA	NSM8XS	ENNJ31_UMACkkM	ODD TOSHIBA Super-Multi DRIVE 12.7mm Tray DL 8X TS-L633C LF W/O bezel SATA (HF + Windows 7)
HLDS	NSM8XS	ENNJ31_UMACkkM	ODD HLDS Super-Multi DRIVE 12.7mm Tray DL 8X GT20N LF W/O bezel SATA
HLDS	NSM8XS	ENNJ31_UMACkkM	ODD HLDS Super-Multi DRIVE 12.7mm Tray DL 8X GT30N LF W/O bezel SATA (HF + Windows 7)
SONY	NSM8XS	ENNJ31_UMACkkM	ODD SONY Super-Multi DRIVE 12.7mm Tray DL 8X AD-7580S LF W/O bezel SATA
SONY	NSM8XS	ENNJ31_UMACkkM	ODD SONY Super-Multi DRIVE 12.7mm Tray DL 8X AD-7585H LF W/O bezel SATA (HF + Windows 7)
PLDS	NSM8XS	ENNJ31_UMACkkM	ODD PLDS Super-Multi DRIVE 12.7mm Tray DL 8X DS-8A3S LF W/O bezel SATA
PLDS	NSM8XS	ENNJ31_UMACkkM	ODD PLDS Super-Multi DRIVE 12.7mm Tray DL 8X DS-8A4SH LF W/O bezel SATA (HF + Windows 7)

BRAND	Type	BOM_Name	Description
TOSHIBA	NSM8XS	ENNJ31_UMACkkM2	ODD TOSHIBA Super-Multi DRIVE 12.7mm Tray DL 8X TS-L633B LF W/O bezel SATA
HLDS	NSM8XS	ENNJ31_UMACkkM2	ODD HLDS Super-Multi DRIVE 12.7mm Tray DL 8X GT20N LF W/O bezel SATA
SONY	NSM8XS	ENNJ31_UMACkkM2	ODD SONY Super-Multi DRIVE 12.7mm Tray DL 8X AD-7580S LF W/O bezel SATA
PLDS	NSM8XS	ENNJ31_UMACkkM2	ODD PLDS Super-Multi DRIVE 12.7mm Tray DL 8X DS-8A3S LF W/O bezel SATA
TOSHIBA	NSM8XS	NV42_UMACckM	ODD TOSHIBA Super-Multi DRIVE 12.7mm Tray DL 8X TS-L633B LF W/O bezel SATA
HLDS	NSM8XS	NV42_UMACckM	ODD HLDS Super-Multi DRIVE 12.7mm Tray DL 8X GT20N LF W/O bezel SATA
SONY	NSM8XS	NV42_UMACckM	ODD SONY Super-Multi DRIVE 12.7mm Tray DL 8X AD-7580S LF W/O bezel SATA
PLDS	NSM8XS	NV42_UMACckM	ODD PLDS Super-Multi DRIVE 12.7mm Tray DL 8X DS-8A3S LF W/O bezel SATA
TOSHIBA	NSM8XS	NV42_UMACcwM	ODD TOSHIBA Super-Multi DRIVE 12.7mm Tray DL 8X TS-L633B LF W/O bezel SATA
HLDS	NSM8XS	NV42_UMACcwM	ODD HLDS Super-Multi DRIVE 12.7mm Tray DL 8X GT20N LF W/O bezel SATA
SONY	NSM8XS	NV42_UMACcwM	ODD SONY Super-Multi DRIVE 12.7mm Tray DL 8X AD-7580S LF W/O bezel SATA
PLDS	NSM8XS	NV42_UMACcwM	ODD PLDS Super-Multi DRIVE 12.7mm Tray DL 8X DS-8A3S LF W/O bezel SATA
TOSHIBA	NSM8XS	NV42_UMACkkM	ODD TOSHIBA Super-Multi DRIVE 12.7mm Tray DL 8X TS-L633B LF W/O bezel SATA
HLDS	NSM8XS	NV42_UMACkkM	ODD HLDS Super-Multi DRIVE 12.7mm Tray DL 8X GT20N LF W/O bezel SATA
SONY	NSM8XS	NV42_UMACkkM	ODD SONY Super-Multi DRIVE 12.7mm Tray DL 8X AD-7580S LF W/O bezel SATA
PLDS	NSM8XS	NV42_UMACkkM	ODD PLDS Super-Multi DRIVE 12.7mm Tray DL 8X DS-8A3S LF W/O bezel SATA
SB Chipset			
AMD	AMDSB710	ENNJ31_UMACkk2	AMD SB710
AMD	AMDSB710	ENNJ31_UMACkkM	AMD SB710
AMD	AMDSB710	ENNJ31_UMACkkM2	AMD SB710
AMD	AMDSB710	NV42_UMACckM	AMD SB710
AMD	AMDSB710	NV42_UMACcwM	AMD SB710
AMD	AMDSB710	NV42_UMACkkM	AMD SB710
Software			
	NIS	ENNJ31_UMACkk2	Antivirus application NIS

BRAND	Type	BOM_Name	Description
	NIS	ENNJ31_UMACkkM	Antivirus application NIS
	NIS	ENNJ31_UMACkkM2	Antivirus application NIS
	NIS	NV42_UMACckM	Antivirus application NIS
	NIS	NV42_UMACcwM	Antivirus application NIS
	NIS	NV42_UMACkkM	Antivirus application NIS
VGA Chip			
None	UMA	ENNJ31_UMACkk2	UMA (AMD)
None	UMA	ENNJ31_UMACkkM	UMA (AMD)
None	UMA	ENNJ31_UMACkkM2	UMA (AMD)
None	UMA	NV42_UMACckM	UMA (AMD)
None	UMA	NV42_UMACcwM	UMA (AMD)
None	UMA	NV42_UMACkkM	UMA (AMD)
WiFi Antenna			
WNC	PIFA	ENNJ31_UMACkk2	PIFA
WNC	PIFA	ENNJ31_UMACkkM	PIFA
WNC	PIFA	ENNJ31_UMACkkM2	PIFA
WNC	PIFA	NV42_UMACckM	PIFA
WNC	PIFA	NV42_UMACcwM	PIFA
WNC	PIFA	NV42_UMACkkM	PIFA
Wireless LAN			
Foxconn	3rd WiFi 1x2 BGN	ENNJ31_UMACkk2	Foxconn Wireless LAN Atheros HB93 1x2 BGN (HM)
Liteon	3rd WiFi 1x2 BGN	ENNJ31_UMACkk2	Liteon Wireless LAN Atheris HB93 1x2 BGN (HM) WN6602AH
Foxconn	3rd WiFi 1x2 BGN	ENNJ31_UMACkkM	Foxconn Wireless LAN Atheros HB93 1x2 BGN (HM)
Liteon	3rd WiFi 1x2 BGN	ENNJ31_UMACkkM	Liteon Wireless LAN Atheris HB93 1x2 BGN (HM) WN6602AH
Foxconn	3rd WiFi 1x2 BGN	ENNJ31_UMACkkM2	Foxconn Wireless LAN Atheros HB93 1x2 BGN (HM)
Liteon	3rd WiFi 1x2 BGN	ENNJ31_UMACkkM2	Liteon Wireless LAN Atheris HB93 1x2 BGN (HM) WN6602AH
Foxconn	3rd WiFi 1x2 BGN	NV42_UMACckM	Foxconn Wireless LAN Atheros HB93 1x2 BGN (HM)
Liteon	3rd WiFi 1x2 BGN	NV42_UMACckM	Liteon Wireless LAN Atheris HB93 1x2 BGN (HM) WN6602AH
Foxconn	3rd WiFi 1x2 BGN	NV42_UMACcwM	Foxconn Wireless LAN Atheros HB93 1x2 BGN (HM)
Liteon	3rd WiFi 1x2 BGN	NV42_UMACcwM	Liteon Wireless LAN Atheris HB93 1x2 BGN (HM) WN6602AH

BRAND	Type	BOM_Name	Description
Foxconn	3rd WiFi 1x2 BGN	NV42_UMACkkM	Foxconn Wireless LAN Atheros HB93 1x2 BGN (HM)
Liteon	3rd WiFi 1x2 BGN	NV42_UMACkkM	Liteon Wireless LAN Atheris HB93 1x2 BGN (HM) WN6602AH

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
- Bios updates
- Software utilities
- Spare parts lists
- TABs (Technical Announcement Bulletin)

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.

Numerics

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