

Aspire 1430/1551/1830T Series Aspire One 721/753 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 Aspire 1430/1551/1830T Series and Aspire One 721/753 Series 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 Introduction

Your Acer Notebook Tour

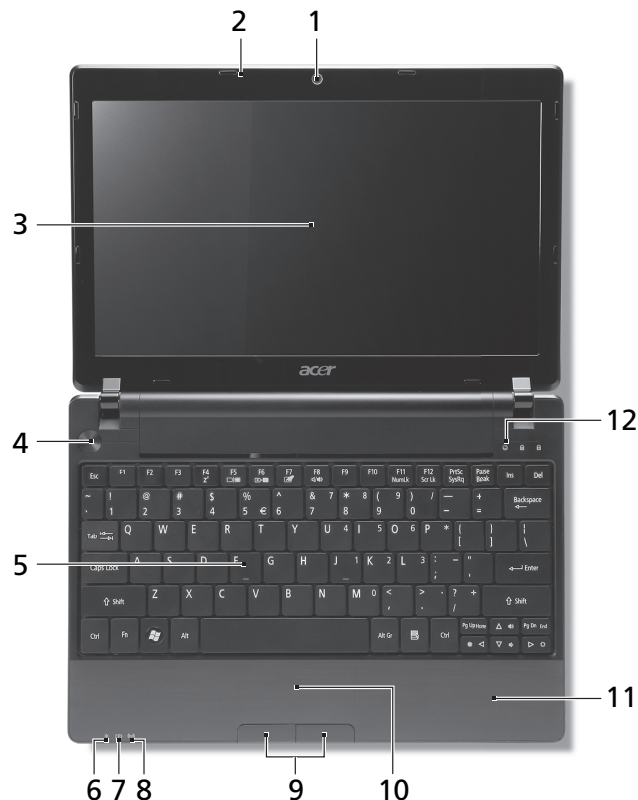
NOTES: Case color may vary from that shown in the pictures.




Top view








Important

Case color may vary from that shown in the pictures.



#	Icon	Item	Description
1		Acer Crystal Eye webcam	Web camera for video communication (configuration may vary by model).
2		Microphone	Internal microphone for sound recording.
3		Display screen	Also called Liquid-Crystal Display (LCD), displays computer output (configuration may vary by model).
4		Power button	Turns the computer on and off.
5		Keyboard	For entering data into your computer.
6		Power indicator ¹	Indicates the computer's power status.







#	Icon	Item	Description						
7		Battery indicator ¹	Indicates the computer's battery status. 1.Charging: The light shows amber when the battery is charging. 2.Fully charged: The light shows blue when in AC mode.						
8		3G/Wireless LAN indicator ¹	Indicates the status of 3G/Wireless LAN communication <table border="1" data-bbox="525 298 888 425"> <tr> <td>Blue light on</td> <td>3G on/Wi-Fi on 3G on/Wi-Fi off</td> </tr> <tr> <td>Orange light on</td> <td>3G off/Wi-Fi on</td> </tr> <tr> <td>Not lit</td> <td>3G off/Wi-Fi off</td> </tr> </table>	Blue light on	3G on/Wi-Fi on 3G on/Wi-Fi off	Orange light on	3G off/Wi-Fi on	Not lit	3G off/Wi-Fi off
Blue light on	3G on/Wi-Fi on 3G on/Wi-Fi off								
Orange light on	3G off/Wi-Fi on								
Not lit	3G off/Wi-Fi off								
9		Click buttons (left and right)	The left and right buttons function like the left and right mouse buttons.						
10		Touchpad	Touch-sensitive pointing device which functions like a computer mouse.						
11		Palmrest	Comfortable support area for your hands when you use the computer.						
12		HDD indicator	Indicates when the hard disk drive is active.						
		Num Lock	Lights up when Num Lock is activated.						
		Caps Lock	Lights up when Caps Lock is activated.						





1. The front panel indicators are visible even when the computer cover is closed.

Hotkeys

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

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

Hotkey	Icon	Function	Description
<Fn> + <F3>		Communication key	Enables/disables the computer's communication devices. (Communication devices may vary by configuration.)
<Fn> + <F4>		Sleep	Puts the computer in Sleep mode.
<Fn> + <F5>		Display toggle	Switches display output between the display screen, external monitor (if connected) and both.
<Fn> + <F6>		Screen blank	Turns the display screen backlight off to save power. Press any key to return.
<Fn> + <F7>		Touchpad toggle	Turns the internal touchpad on and off.
<Fn> + <F8>		Speaker toggle	Turns the speakers on and off.
<Fn> + <F11>		Num Lock	When Num Lock is on, the embedded keypad is in numeric mode. The keys function as a calculator (complete with the arithmetic operators +, -, *, and /). Use this mode when you need to do a lot of numeric data entry. A better solution would be to connect an external keypad. <Fn> + <F11> only for certain models.
<Fn> + <F12>		Scroll Lock	When Scroll Lock is on, the screen moves one line up or down when you press the up or down arrow keys respectively. Scroll Lock does not work with some applications.

Hotkey	Icon	Function	Description
<Fn> + <▷>		Brightness up	Increases the screen brightness.
<Fn> + <◁>		Brightness down	Decreases the screen brightness.
<Fn> + <△>		Volume up	Increases the sound volume.
<Fn> + <▽>		Volume down	Decreases the sound volume.

Using the communication key*

Here you can enable and disable the various wireless connectivity devices on your computer.

Press <Fn> + <F3> to bring up the Launch Manager window panel.

A red toggle indicates the device is off.

- Click the red toggle to turn the device on.

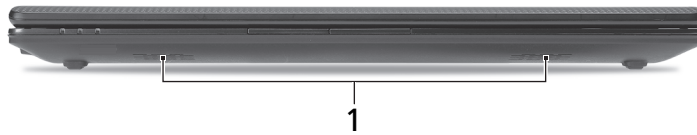
A green toggle indicates the device is on.

- Click the green toggle to turn the device off.

*Communication devices may vary by model.

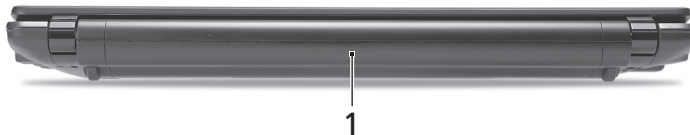


Closed front view



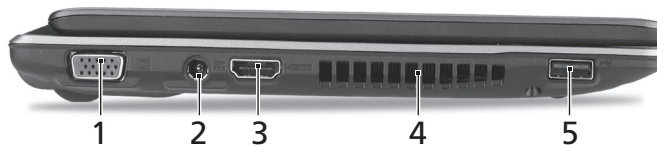
#	Item	Description
1	Speakers	Left and right speakers deliver stereo audio output.




Rear view



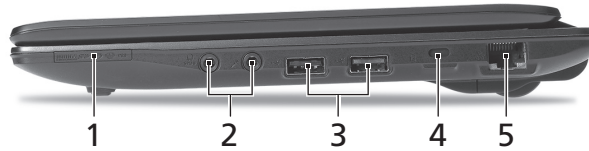
#	Item	Description
1	Battery bay	Houses the computer's battery pack.

Left view



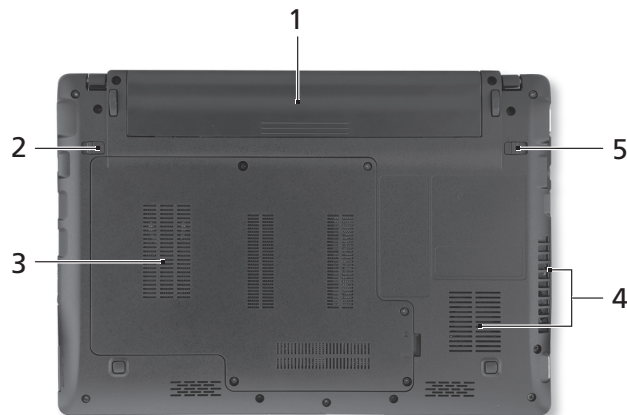
#	Icon	Item	Description
1		External display (VGA) port	Connects to a display device (e.g., external monitor, LCD projector).
2		DC-in jack	Connects to an AC adapter.
3	HDMI	HDMI port	Supports high definition digital video connections.
4		Ventilation slots	Enable the computer to stay cool, even after prolonged use.
5		USB 2.0 port	Connects to USB 2.0 devices (e.g., USB mouse, USB camera).

Right view




#	Icon	Item	Description
1		Multi-in-1 card reader	Accepts Secure Digital (SD), MultiMediaCard (MMC), Memory Stick (MS), Memory Stick PRO (MS PRO), xD-Picture Card (xD). Note: Push to remove/install the card. Only one card can operate at any given time.
2		Microphone-in jack	Accepts inputs from external microphones.
		Headphone/speaker/line-out jack with S/PDIF support	Connects to audio line-out devices (e.g., speakers, headphones).
3		USB 2.0 ports	Connect to USB 2.0 devices (e.g., USB mouse, USB camera).
4		Kensington lock slot	Connects to a Kensington-compatible computer security lock.
5		Ethernet (RJ-45) port	Connects to an Ethernet 10/100 based network.

Base view



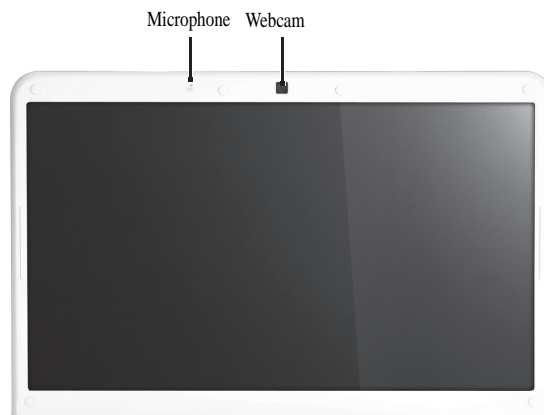
#	Icon	Item	Description
1		Battery bay	Houses the computer's battery pack.
2		Battery release latch	Releases the battery for removal.
3		Hard disk bay	Houses the computer's hard disk (secured with screws).
		Memory compartment	Houses the computer's main memory.

#	Icon	Item	Description
4		Ventilation slots and cooling fan	Enable the computer to stay cool, even after prolonged use. Note: Do not cover or obstruct the opening of the fan.
5		Battery lock	Locks the battery in position.

Environment

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

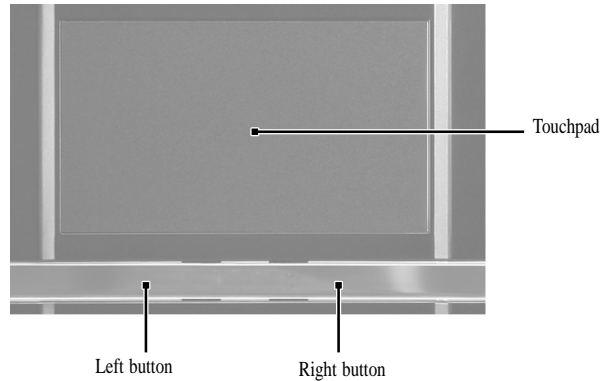
LCD panel



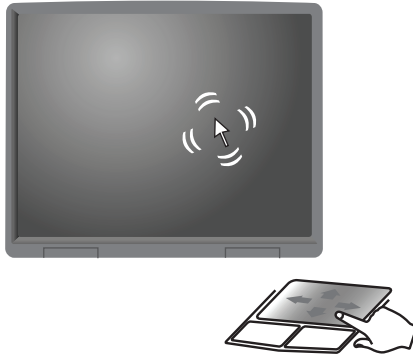
Component	Icon	Description
Webcam		Use to let others see who they are communicating with when making VoIP calls. For more information, see Using the webcam 8 .
Microphone		Use to talk through when making Voice over Internet Protocol (VoIP) calls.

Using the EZ Pad touchpad

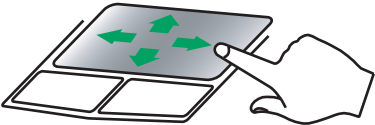
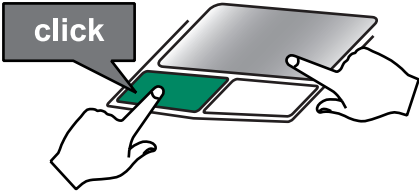
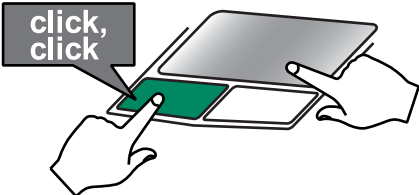
The EZ Pad™ consists of a touchpad, two buttons, and a scroll zone.

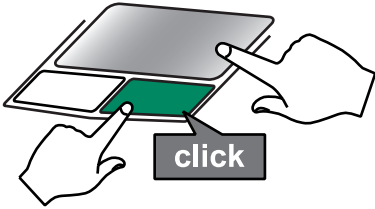
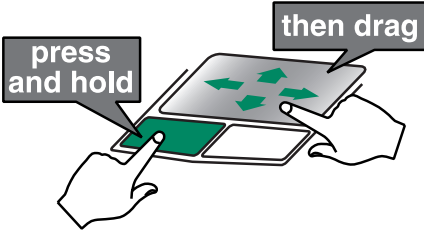


When you move your finger on the touchpad, the *pointer* (arrow) on the screen moves in the same direction. You can use the scroll zone to scroll through documents. Use of the scroll zone may vary from program to program.



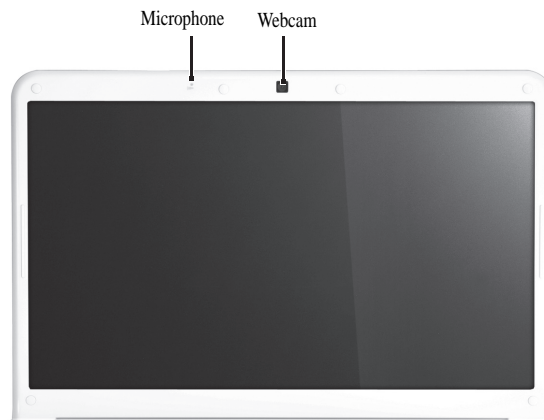
You can use the EZ Pad *left* and *right* buttons below the touchpad to select objects.

To...	Do this...	
Move the pointer on the screen.		Move your finger around on the touchpad. If you run out of space and need to move the pointer farther, lift your finger, move it to the middle of the touchpad, then continue moving your finger.
Select an object on the screen.		Position the pointer over the object. Quickly press and release the left button once. This action is called <i>clicking</i> .
Start a program or open a file or folder.		Position the pointer over the object. Press the left button twice in rapid succession. This action is called <i>double-clicking</i> .

To...	Do this...	
Access a shortcut menu or find more information about an object on the screen.		Position the pointer over the object. Quickly press and release the right button once. This action is called <i>right-clicking</i> .
Move an object on the screen.		Position the pointer over the object. Press the left button and hold it down, then use the touchpad to move (drag) the object to the appropriate part of the screen. Release the button to drop the object where you want it.

Using the webcam

You can use the optional webcam with many of the available Internet chat programs to add video and audio to your chat session. In addition, by using the software included with the webcam, you can take pictures or create video clips.



Hardware Specifications and Configurations

Processor

Item	Specification
CPU type	<ul style="list-style-type: none"> Intel Core i5-540M (2.53 GHz) Intel Core i5-430M (2.26 GHz) Intel Core i3-330M (2.13 GHz) AMD Turion II K625 (1.5 GHz) AMD Athlon II K325 (1.3 GHz) AMD Athlon II K125 (1.7 GHz)
Core logic	Mobile Intel HM55 Express Chipset/ AMD RS880M w/ HDCP EEPROM/AMD SB820M
CPU package	PGA 988

System Chipsets

Item	Specification
North bridge	<ul style="list-style-type: none"> Discrete model: ATI Mobility Radeon HD 5650 with DDR3-800 1GB VRAM ATI Mobility Radeon HD 5450 with DDR3-800 1GB VRAM UMA model: Integrated in the Mobile Intel HM55 Express Chipset AMD RS880M w/ HDCP EEPROM
South bridge	Mobile Intel HM55 Express Chipset/AMD SB820M

System Controllers

Item	Controller
VGA	<ul style="list-style-type: none"> UMA
LAN	Foxconn Atheros AR8151L
3G	Ericsson F3307 mobile broadband module
Bluetooth	Foxconn Bluetooth BRM2046/BRM2070
Wireless 802.11 b/g/n	<ul style="list-style-type: none"> Foxconn WLAN Atheros HB93 2x2 BGN Foxconn WLAN LAN Atheros HB95 1x1 BG (HM) Foxconn WLAN Atheros HB95 1x1 BGN (HM) T77H121.01 Foxconn WLAN Broadcomm 43225 2x2 BGN (HM) T77H103.00 Intel WLAN 112BN.HMWG MM#903341 Intel WLAN INT1000HBG Intel WLAN 622AN.HMWG
Memory card reader	Alcor AU6433
Audio codec	Realtek ALC271X
Keyboard	NPCE781B

BIOS

Item	Specification
BIOS vendor	Insyde
BIOS version	1.02

BIOS

Item	Specification
Supported protocols	ACPI 1.0b/2.0/3.0 compliance, PCI 2.2, System/HDD Password Security Control, INT 13H Extensions, PnP BIOS 1.0a SMBIOS 2.4, BIOS Boot Specification, Simple Boot Flag 1.0, Boot Block, PCI Bus Power Management Interface Specification, USB Specification 1.1/2.0, IEEE 1394 1.0, USB/1394 CD-ROM Boot Up support, PC Card Standard 1995 (PCMCIA 3.0 Compliant Device), IrDA 1.0, Intel AC97 CNR Specification, WfM 2.0, PXE 2.1, Boot Integrity Service Application Program Interface (BIS) 1.0, PC99a and Mobile PC2001 Compliant

Video

Item	Specification
Chipset	<ul style="list-style-type: none">UMA

Ethernet

Item	Specification
LAN Chipset	Foxconn Atheros AR8151L
Supports LAN protocol	10/100/1000 Mbps
LAN connector type	RJ45
LAN connector location	Right side
Features	Integrated 10/100 BASE-T transceiver Wake on LAN support compliant with ACPI 2.0 PCIE

Wireless LAN

Item	Specification
Chipset	<ul style="list-style-type: none">Foxconn WLAN Atheros HB93 2x2 BGNFoxconn WLAN LAN Atheros HB95 1x1 BG (HM)Foxconn WLAN Atheros HB95 1x1 BGN (HM) T77H121.01Foxconn WLAN Broadcom 43225 2x2 BGN (HM) T77H103.00Intel WLAN 112BN.HMWG MM#903341Intel WLAN INT1000HBGIntel WLAN 622AN.HMWG
Protocol	802.11 b/g/n
Interface	PCI Express mini-card

3G Module

Item	Specification
Chipset	<ul style="list-style-type: none">QUALCOMM Gobi 2000 3G moduleHuawei EM770W Rev1Ericsson F3307-900MHz
Data Speeds	<ul style="list-style-type: none">HSDPA/HSUPA DL/UL – 7.2 Mbps/5.76 MbpsWCDMA DL/UL – 384 kbps/384 kbpsGSM DL/UL – 14.4 kbps/14.4 kbpsGPRS DL/UL – 85.6 kbps/42.8 kbpsEDGE DL/UL – 236.8 kbps/118.4 kbpsEV-DO FL/RL – 3.1 Mbps/1.8 MbpsCDMA 1xRTT FL/RL – 153 kbps/153 kbps
Interface	PCI Express mini-card

Bluetooth

Item	Specification
Chipset	Foxconn Bluetooth BRM2046/BRM2070
Data throughput	Up to 24 Mbps
Protocol	Bluetooth 2.1
Interface	USB 2.0
Connector type	USB

System Memory

Item	Specification
Memory controller	Built-in
Vendor & model name	Elpida <ul style="list-style-type: none">SO-DIMM DDRIII 1066 1GB EBJ10UE8BDS0-AE-F LFSO-DIMM DDRIII 1333 1GB EBJ10UE8BDS0-DJ-F LFSO-DIMM DDRIII 1066 2GB EBJ21UE8BDS0-AE-F LFSO-DIMM DDRIII 1333 2GB EBJ21UE8BDS0-DJ-F LFSO-DIMM DDRIII 1333 4GB EBJ41UF8BAS0-DJ-F LF Hynix <ul style="list-style-type: none">SO-DIMM DDRIII 1066 1GB HMT112S6BFR6C-G7 N0 LFSO-DIMM DDRIII 1333 1GB HMT112S6TFR8C-H9 LFSO-DIMM DDRIII 1066 2GB HMT125S6BFR8C-G7 N0 LFSO-DIMM DDRIII 1333 2GB HMT125S6TFR8C-H9 LFSO-DIMM DDRIII 1333 2GB NT2GC64B8HC0NS-CG LF Samsung <ul style="list-style-type: none">SO-DIMM DDRIII 1066 1GB M471B2873EH1-CF8 LFSO-DIMM DDRIII 1333 1GB M471B2873FHS-CH9 LFSO-DIMM DDRIII 1066 2GB M471B5673EH1-CF8 LFSO-DIMM DDRIII 1333 2GB M471B5673FH0-CH9 LFSO-DIMM DDRIII 1066 4GB M471B5273BH1-CF8 LFSO-DIMM DDRIII 1333 4GB M471B5273CH0-CH9 LF
Memory size	0 MB (no on-board memory)
SO-DIMM socket number	2 sockets
Supports memory size per socket	4 GB
Supports maximum memory size	8 GB
Supports SO-DIMM type	DDR3 synchronous DRAM
Supports DIMM Speed	800/1066/1333 MT/s
Supports SO-DIMM package	204-pin SO-DIMM
Memory module combinations	You can install memory modules in any combinations as long as they match the above specifications.

Memory Combinations

Slot 1	Slot 2	Total Memory
0 GB	1 GB	1 GB
0 GB	2 GB	2 GB
0 GB	4 GB	4 GB
1 GB	0 GB	1 GB
1 GB	1 GB	2 GB
1 GB	2 GB	3 GB
1 GB	4 GB	5 GB
2 GB	0 GB	2 GB
2 GB	1 GB	3 GB
2 GB	2 GB	4 GB
2 GB	4 GB	5 GB
4 GB	0 GB	4 GB
4 GB	1 GB	5 GB
4 GB	2 GB	6 GB
4 GB	4 GB	8 GB

NOTE: Above table lists some system memory configurations. You may combine DIMMs with various capacities to form other combinations. On above table, the configuration of slot 1 and slot 2 could be reversed.

Hard Disk Drive

Item	Specification				
Vendor & Model Name	<u>Seagate</u> ST9160314AS <u>Toshiba</u> MK1665GSX <u>HGST</u> HTS545016B9A30 0 <u>WD</u> WD1600BEVT-22A23T0	<u>Seagate</u> ST9250315AS <u>Toshiba</u> MK2565GSX <u>HGST</u> HTS545025B9A30 0 <u>WD</u> WD2500BEVT-22A23T0	<u>Seagate</u> ST9320325AS <u>Toshiba</u> MK3265GSX <u>HGST</u> HTS545032B9A30 0 <u>WD</u> WD3200BEVT-22A23T0	<u>Seagate</u> ST9500325AS <u>Toshiba</u> MK5065GSX <u>HGST</u> HTS545050B9A3 00 <u>WD</u> WD5000BEVT-22A0RT0	<u>Toshiba</u> MK6465GSX <u>WD</u> WD6400BEVT-22A0RT0
Capacity (GB)	160	250	320	500	640
Bytes per sector	512	512	512	512	512
Data heads	3/4	4	4	4	4
Drive Format					
Disks	2	1	2	2	2
Spindle speed (RPM)	5400	5400	5400	5400	5400
Performance Specifications					
Buffer size (MB)	8	8	8	8	8
Interface	SATA	SATA	SATA	SATA	SATA
Max. media transfer rate (disk-buffer, Mbytes/s)	540	540	850	3.0 GB/s Max. Buffer to Host	3.0 GB/s
DC Power Requirements					

Hard Disk Drive

Item	Specification				
Voltage tolerance	5V (DC) +/- 5%	5V (DC) +/- 5%	5V (DC) +/- 5%	5V (DC) +/- 5%	5V (DC) +/- 5%

LCD Panel

Item	Specification
Vendor & model name	CMO <ul style="list-style-type: none"> 11.6" WXGA Glare N116B6-L02 C2 LF 200nit 10ms 500:1 11.6" WXGA Glare B116XW02 V0 1A (3G) LF 200nit 8ms 500:1 LPL <ul style="list-style-type: none"> 11.6" WXGA Glare LP116WH1-TLA1 LF 200nit 8ms 500:113.3" WXGA Glare LP133WH2-TLL1 Samsung <ul style="list-style-type: none"> 11.6" WXGA Glare LTN116AT01-A01 LF 200nit 8ms
Screen Diagonal	13.3 inches
Resolution support	For UMA <ul style="list-style-type: none"> 1366 x 768 1360 x 768 1280 x 768 1280 x 720 1024 x 768 800 x 600
Pixel Pitch (mm)	0.216
Pixel Arrangement	R.G.B. Vertical Stripe
Display Mode	Normally White
Typical White Luminance (NIT) also called Brightness	220
Luminance Uniformity	1.25 max.
Contrast Ratio	500:1
Response Time msec	8
Nominal Input Voltage VDD	+3.3V
Viewing Angle (H/V)	90/50
Temperature Range(° C) Operating Storage (shipping)	0 to +50 -40 to +60

Webcam

Item	Specification
Vendor & model name	Chicony <ul style="list-style-type: none"> CH9665SN (CNF9157) Suyin <ul style="list-style-type: none"> SY9665SN Liteon <ul style="list-style-type: none"> LT9665AL (09P2SF119) LT6AASP(09P2BF127)
Resolution	1.3 M
DV capability	Yes

AC Adapter

Item	Specification
Vendor	Delta <ul style="list-style-type: none">65W 19V 1.7x5.5x11 Yellow ADP-65JH DB A, LV5 LED LF Liteon <ul style="list-style-type: none">65W 19V 1.7x5.5x11 Yellow PA-1650-22AC LV5 LED LF Hipro <ul style="list-style-type: none">HIPRO 65W 19V 1.7x5.5x11 Yellow HP-A0652R3B 1LF, LV5 LED LFBBlack ADP-30JH BA LF
Input	90 - 264 Vac
Output	19 V / 3.42 - 4.74 A

Battery Pack

Item	Specification
Vendor	Panasonic /Sanyo
Battery Type	Li-ion
Pack capacity	6-cell 5800/4400 mAh
Number of battery cell	6
Package configuration	3 cells in series, 2 series in parallel

System Power Management

ACPI mode	Power Management
Mech. Off (G3)	All devices in the system are turned off completely.
Soft Off (G2/S5)	OS initiated shutdown. All devices in the system are turned off completely.
Working (G0/S0)	Individual devices such as the CPU and hard disc may be power managed in this state.
Suspend to RAM (S3)	<ul style="list-style-type: none">CPU set power downVGA SuspendPCMCIA SuspendAudio Power DownHard Disk Power DownCD-ROM Power DownSuper I/O Low Power mode
Save to Disk (S4)	Also called Hibernation Mode. System saves all system states and data onto the disc prior to power off the whole system.

Physical Specifications

Item	Specification
Dimension (WxDxH)	285 x 201!204 x 21~25 mm
Weight	1.308 kg (2.88 lb)

Environmental Requirements

Item	Specification
Operating temperature	5 to 35 °C (41 to 95 °F)
Operating humidity	20% to 80% RH non-condensing

System Utilities

BIOS setup utility

The BIOS setup utility is a hardware configuration program built into the notebook's BIOS (Basic Input/Output System). The notebook was shipped already properly configured and optimized. However, if the user encounters configuration problems, you may need to run Setup.

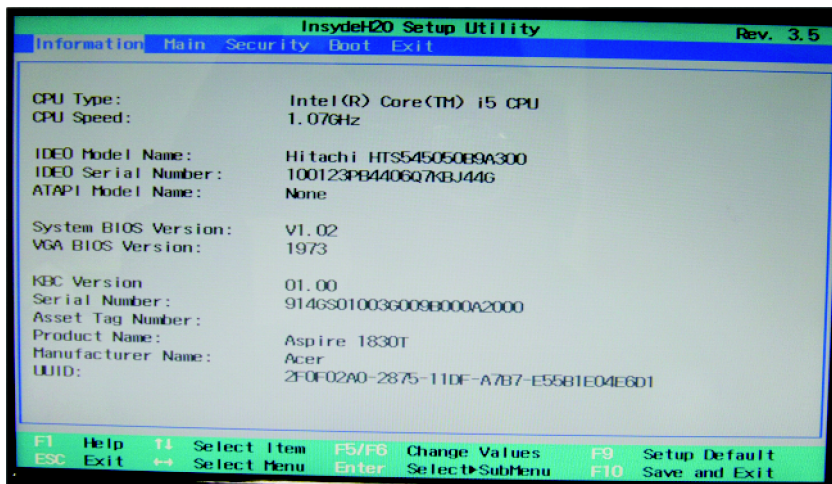
To run the BIOS Setup Utility:

1. Turn on the notebook.

If the computer is already turned on, save your data and close all open applications, then restart the computer.

2. Press F2 when the **Press <F2> to enter Setup** prompt appears on the bottom of the screen.

Use the left and right arrow keys to move between selections on the menu bar.



Navigating the BIOS setup utility

Use the keys listed in the legend bar on the bottom of the Setup screen to work your way through the various menu and submenu screens.

To use the BIOS setup utility:

- 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.
- To load default settings, press F9.
- To save changes made and close the utility, press F10.
- Press Esc while you are in any of the menu screen to display the Exit menu.

IMPORTANT: 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 information carefully when making changes to parameter values.

-The screenshots used in this section are for illustration only. The values displayed may not be the same

as those in your computer.

BIOS setup utility menus

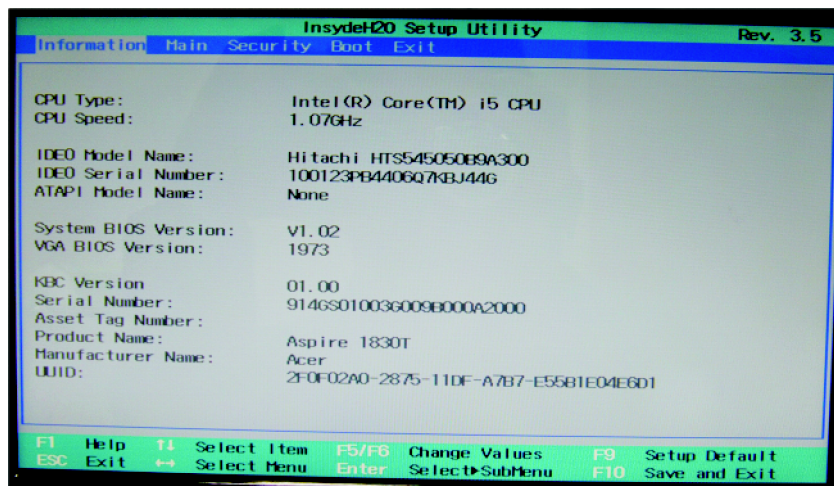
The Setup utility has five menus for configuring the various system functions. These include: Information, Main, Security, Boot, and Exit.

IMPORTANT:The screenshots used in this section are for illustration only. The values displayed may not be the same as those in your computer. Actual screen information varies by model, installed features, and location.

-In the descriptive table following each of the screenshot, settings in boldface are the default settings.

Information

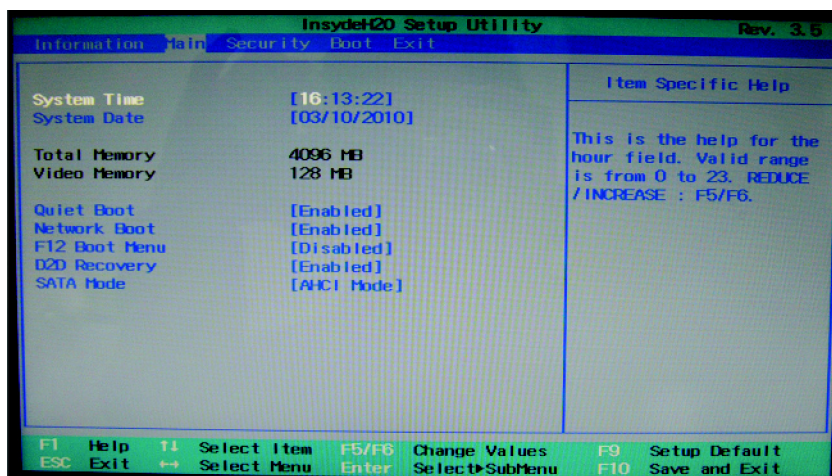
The Information menu displays a summary of your computer hardware information. These information are necessary for troubleshooting and may be required when asking for technical support.



Parameter	Description
CPU Type	Displays the processor model and speed.
CPU Speed	Displays the processor speed.
IDE0 Model Name	Displays the model name of the hard drive installed on the primary IDE master.
IDE0 Serial Number	Displays the serial number of the hard drive installed on the primary IDE master.
ATAPI Model Name	Displays the model name of the installed optical drive.
System BIOS Version	Displays system BIOS version.
VGA BIOS Version	Displays the VGA firmware version.
KBC Version	Displays the keyboard controller version.
Serial Number	Displays the system serial number.
Asset Tag Number	Displays the system asset tag number
Product Name	Displays the official model name of the computer.
Manufacturer Name	Displays the name of the computer manufacturer.
UUID Number	Displays the computer's UUID (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

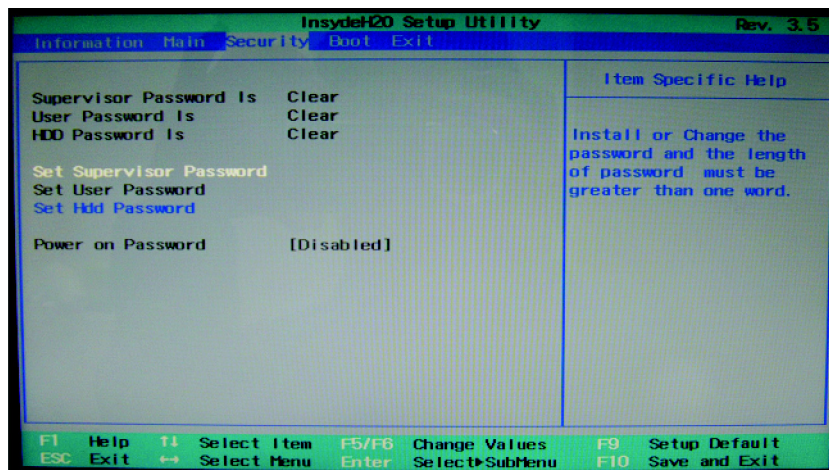
Use the Main menu to set the system time and date, and other basic options.



Parameter	Description	Format/Options
System Time	Displays the system time. The time is expressed in a 24-hour format.	HH:MM:SS (hour:minute:second)
System Date	Displays the system date.	MM/DD/YYYY (month/day/year)
Total Memory	Displays the size of system memory detected during boot-up.	
Video Memory	Displays the size of video memory detected during boot-up.	
Quiet Boot	Enables or disables the Quiet Boot function. When enabled, BIOS setup is in graphical mode and displays only the computer brand logo during POST and while booting. When disabled, BIOS setup is in conventional text mode and displays the system Summary Screen.	Disabled Enabled
Network Boot	When enabled, a remote host with appropriate boot image can boot this computer. (only works with an Ethernet device.)	Disabled Enabled
F12 Boot Menu	Enables or disables the Boot menu during POST.	Disabled Enabled
D2D Recovery	Enables or disables the D2D Recovery function. This function allows the user to create a hidden partition on the hard drive to store the operation system. User can then use this partition to restore the system to factory defaults by pressing the Alt+F10 keys during system boot-up.	Disabled Enabled
SATA Mode	Select the SATA controller operating mode. When set to AHCI (Advanced Host Controller Interface), the SATA controller enables its AHCI and RAID features when the computer boots up. When set to IDE, the SATA controller disables its AHCI and RAID functions when the computer boots up. Note: If you do not intend to use the AHCI or RAID features set this parameter to IDE to speed up the boot-up time.	AHCI IDE

Security

Use the Security menu option to set system passwords to protect your computer from unauthorized use.



Parameter	Description	Option
Supervisor Password Is	Displays the supervisor password status.	Clear Set
User Password Is	Displays the user password status.	Clear Set
HDD Password Is	Displays the hard drive password status.	Clear Set
Set Supervisor Password	Press Enter to set a supervisor password. When set, this password will allow the user to access and change all settings in the Setup Utility.	
Set User Password	Press Enter to set a user password. When set, this password will restrict a user's access to the Setup menus. Only the following menus will be accessible: System Time and System Date All Exit menu options excluding Load Setup Defaults Note: A supervisor password must first be set before creating a user password. If Password on Boot is enabled, the user must enter the user password each time the notebook is turned on or wakes from Sleep.	
Set HDD Password	Press Enter to set password for accessing the hard disk drive (HDD) password. It will be required during boot-up or when waking from hibernation mode.	
Password on Boot	Referred to as the power-on password. When enabled, the user or supervisor password will be required to boot up the system. Note: A supervisor password must first be set before creating a user password.	Disabled Enabled

CAUTION: When you are prompted to enter a password, you have three tries before the system halts. Don't forget your password.

Setting a password

Note the following reminders before you define a system password:

- The maximum length of password contains 8 alphanumeric characters.
- System passwords are case-insensitive.

- When typing the password, only shaded blocks representing each typed character are visible.

To set a supervisor password:

1. Press \uparrow or \downarrow to highlight Set Supervisor Password, then press Enter.
The *Set Supervisor Password* box opens.



2. Type a password, then press Enter.
3. Retype the password to verify the first entry, then press Enter.
4. You will be prompted to save the new password.
5. Press Enter.
6. Press F10 to save the password and close the Setup Utility or you can proceed to setting a user password.

To set a user password:

1. Press \uparrow or \downarrow to highlight Set User Password, then press Enter.

The *Set User Password* box opens.

2. Type a password, then press Enter.
3. Retype the password to verify the first entry, then press Enter.
4. You will be prompted to save the new password.
5. Press Enter.
6. Press F10 to save the password and close the Setup Utility.

Changing a password

To change a password:

1. Press \uparrow or \downarrow to highlight the Set Supervisor Password or Set User Password field, then press Enter.

The *Set Supervisor Password* or *Set User Password* box opens.



2. Type the current password, then press Enter.
3. Type a new password, then press Enter.
4. Retype the new password to verify the first entry, then press Enter.
5. You will be prompted to save the new password.
6. Press Enter.
7. Press F10 to save the password and close the Setup Utility or you can proceed to setting a user password.

Removing a password

To remove a password:

1. Press \uparrow or \downarrow to highlight the Set Supervisor Password or Set User Password field, then press Enter.

The *Set Supervisor Password* or *Set User Password* box opens.



2. Type the current password, then press **Enter**.
3. Press **Enter** twice without entering anything in the new and confirm password fields.
4. You will be prompted to confirm the password removal.
5. Press **Enter**.
6. Press **F10** to save the password and close the Setup Utility or you can proceed to setting a user password.

Resetting a password

If you have forgotten the user password, the computer will continue to function normally but you will have limited access to the Setup utility.

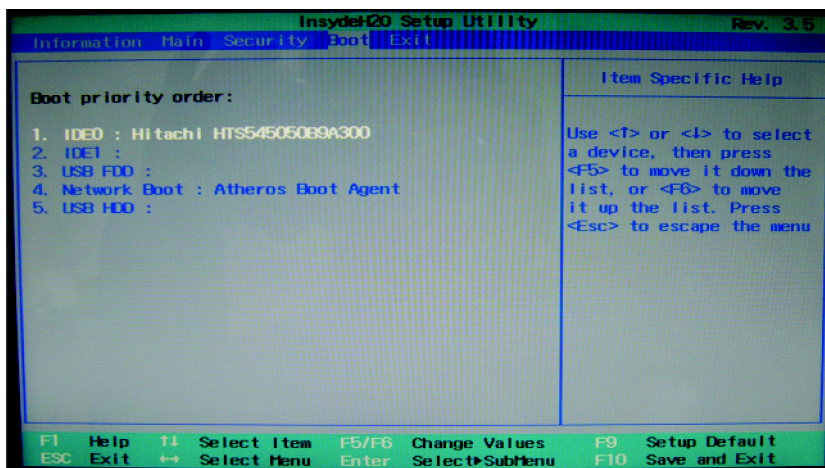
If you have enabled the Password on Boot field and you forget the supervisor password, you will not be able to boot up the computer. The same thing applies if you forget the HDD password.

To clear a lost BIOS password (user or supervisor password) you need to short the clear password hardware gap located on the system board. Go to [page 21](#) for instructions.

To regain access to your computer if you lose the HDD password, you need to generate a master password and unlock your hard drive. Go to [page 22](#) for instructions.

Boot

Use the Boot menu to set the preferred drive sequence in which the Setup utility attempts to boot the operating system.

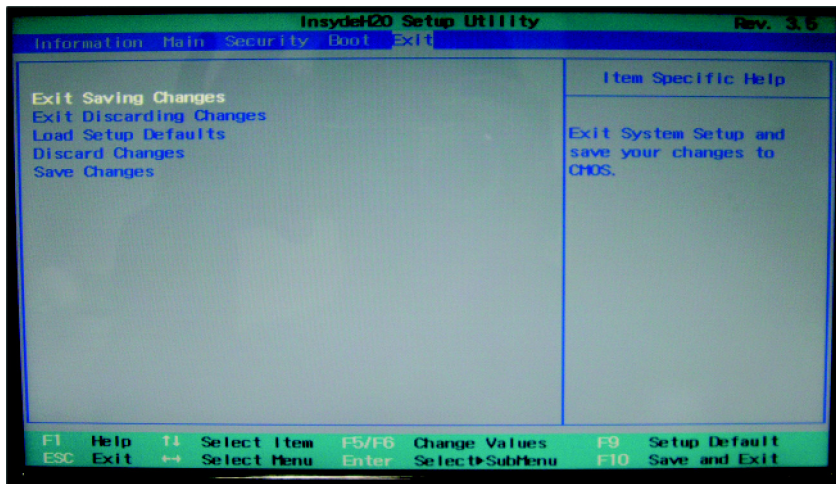


To set boot drive sequence:

1. Press **↑** or **↓** to highlight a bootable device.
2. Press **F5** or **F6** to move the selected device up or down the boot sequence.
3. Press **F10** to save the changes you made and close the Setup utility.

Exit

The Exit menu screen lists options for quitting from the Setup Utility.



Option	Description
Exit Saving Changes	Saves changes made and closes the Setup utility. Keyboard shortcut: F10
Exit Discarding Changes	Discards changes made and closes the Setup utility.
Load Setup Default	Loads the factory-default settings for all Setup parameters. Keyboard shortcut: F9
Discard Changes	Discards all changes made to the Setup utility and loads previous configuration settings.
Save Changes	Saves all changes made to the Setup utility.

Updating the BIOS

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.

NOTE: Observe the following when using the Flash utility to update the system BIOS flash ROM.

- If you do not have a Crisis Recovery disk at hand, then you should create a Crisis Disk (See “Creating the BIOS Crisis Disk in Windows” on page 78) before you use the Flash utility.
- Do not install memory-related drivers (XMS, EMS, DPMI) when you use the Flash.
- Make sure the battery pack is installed to the system and that the system is connected to a UPS unit when you run the Flash utility. If the battery pack does not contain enough power to finish BIOS flash, the system may not boot because the BIOS is not completely loaded.

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 notebook computer, you need the following tools:

- Wrist grounding strap and conductive mat for preventing electrostatic discharge
- Flat screwdriver
- Philips screwdriver
- Hex 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.

General Information

Pre-disassembly Instructions

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

1. Turn off 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 any dummy card inside the card reader.



5. Remove the battery pack.

Disassembly Process

The disassembly process is divided into the following stages:

- External module 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 main board, you must first remove the keyboard, then disassemble the inside assembly frame in that order.

Main Screw List

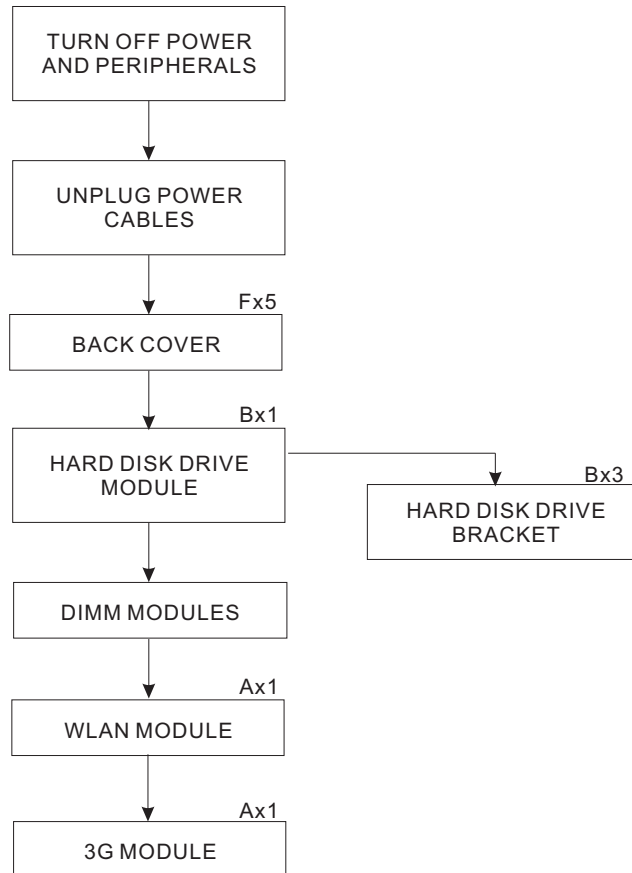
Code	Type	Color	Part No.
A	M2 x L4	Black/Silver	86.00E50.724
B	M3 x L4	Silver	86.9A554.4R0
C	M2 x L10	Black	86.9AR62.100
D	M2 x L2.5	Silver	86.00D72.620
E	IMS M2 x L4	Black	86.00E13.524
F	M2 x L4.7	Black	86.00M90.525

External Module Disassembly Process

External Modules Disassembly Flowchart

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

EXTERNAL MODULE DISASSEMBLY

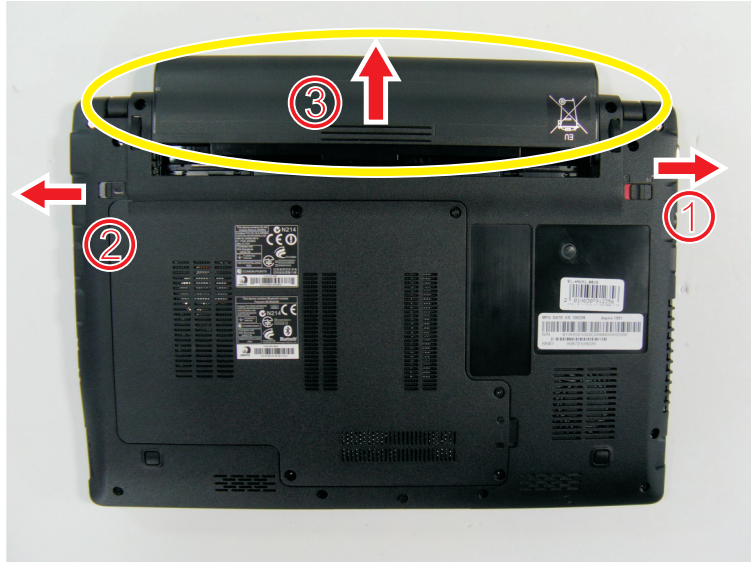


Screw List

Code	Type	Color	Part Number
A	M2 x L4	Black/Silver	86.00E50.724
B	M3 x L4	Silver	86.9A554.4R0
F	M2 x L4.7	Black	86.00M90.525

Removing the Battery Pack

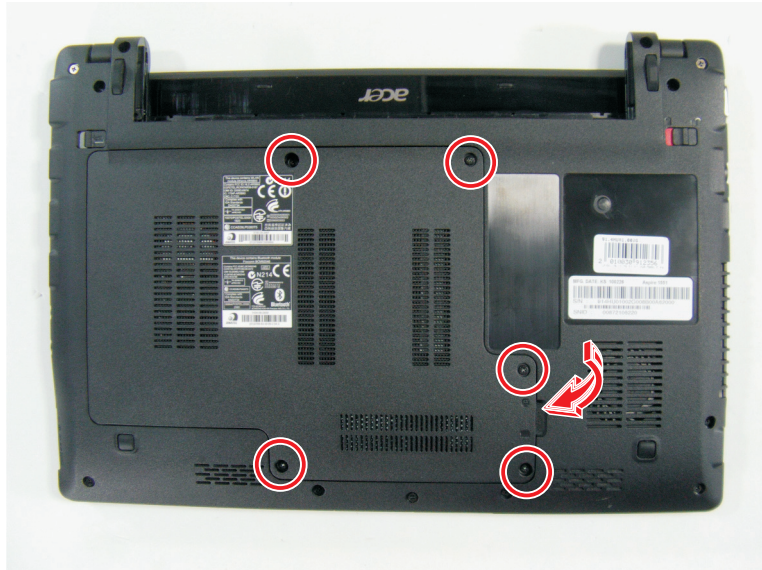
1. Turn base unit over.
2. Slide the battery lock to the unlock position (1); slide and hold the battery release latch to the release position (2), then remove the battery pack from the system (3).



IMPORTANT: Battery has been highlighted with the yellow circle as above image shows. Please detach the battery and follow the local regulations for disposal.

Removing the Back Cover

1. See "Removing the Battery Pack" on page 27.
2. Loosen the five captive screws (F) securing the back cover.



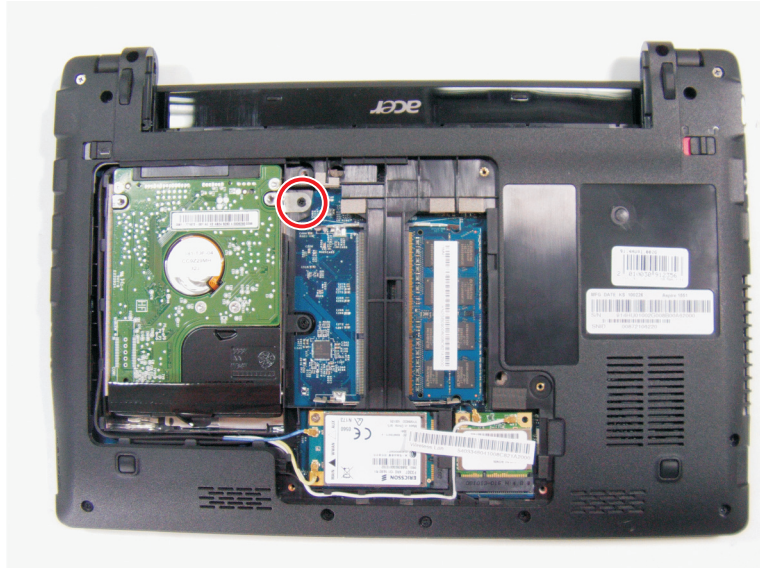
Type	Quantity	Color	Torque	Part No.
M2 x L4.7	5	Black	1.6 kgf-cm	86.00M90.525

3. Use a plastic screw driver to carefully pry open the back cover.
4. Remove the back cover from the lower case.

Removing the Hard Disk Drive Module

1. See "Removing the Battery Pack" on page 27.
2. See "Removing the Back Cover" on page 28.

3. Remove the screw (B) securing the hard disk drive module.



Type	Quantity	Color	Torque	Part Number
M3 x L4	1	Silver	1.6 kgf-cm	86.9A554.4R0

4. Slide the hard disk drive module away from its connector and remove it from its compartment.



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

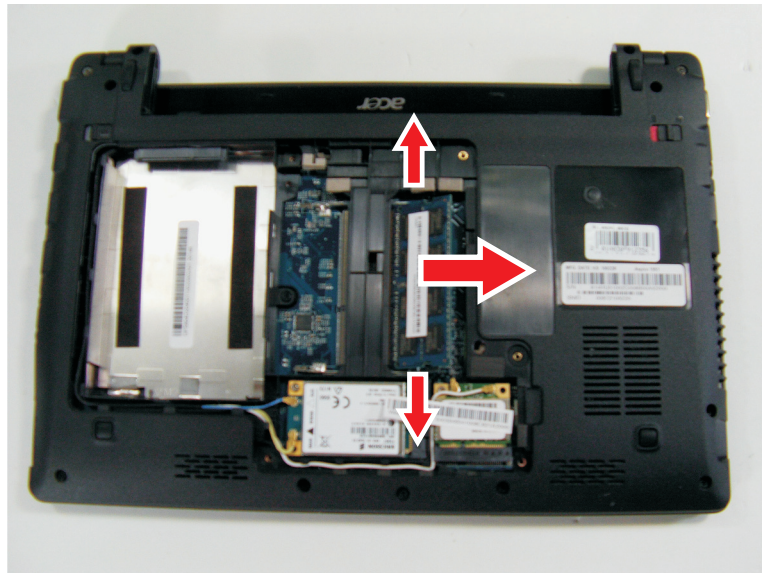
- Remove the three screws (B) securing the hard disk to the bracket and remove the bracket from the hard disk.



Type	Quantity	Color	Torque	Part Number
M3 x L4	3	Silver	1.6 kgf-cm	86.9A554.4R0

Removing the DIMM Modules

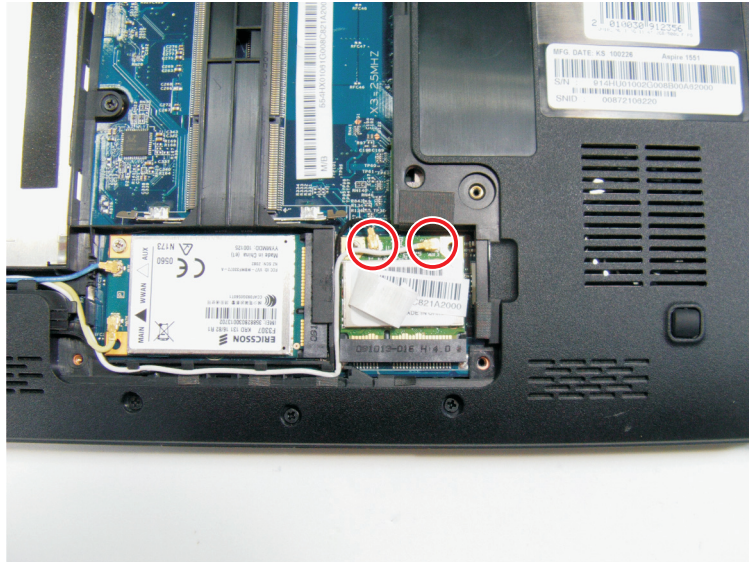
- See “Removing the Battery Pack” on page 27.
- See “Removing the Back Cover” on page 28.
- Push out the latches on both sides of the DIMM socket to release the DIMM and remove the DIMM modules.



Removing the WLAN Module

- See “Removing the Battery Pack” on page 27.
- See “Removing the Back Cover” on page 28.

3. Disconnect the black antenna from MAIN connector and the white antenna from AUX connector on the WLAN module.



4. Remove the screw (A) securing the WLAN module.



Type	Quantity	Color	Torque	Part Number
M2 x L4 (1)	1	Silver	1.6 kgf-cm	86.00E50.724

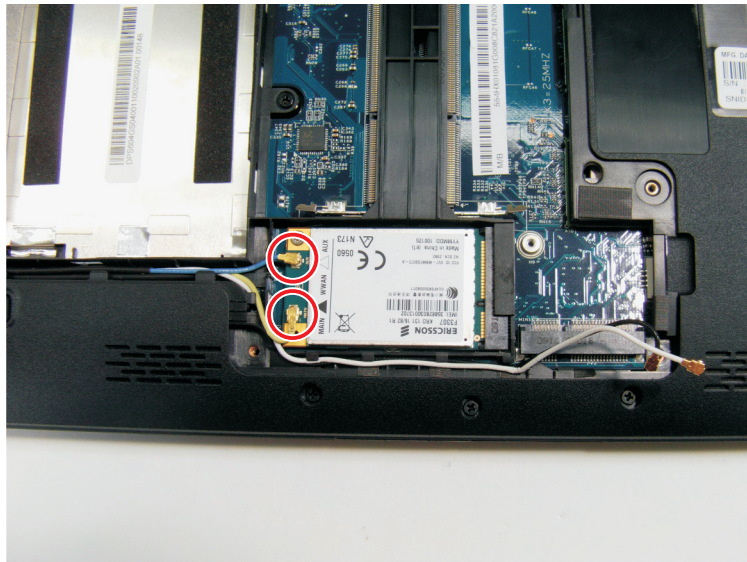
5. Detach the module from its mainboard connector.



NOTE: When attaching the antennas back to the WLAN module, make sure the cables are arranged properly.

Removing the 3G Module

1. See “Removing the Battery Pack” on page 27.
2. See “Removing the Back Cover” on page 28.
3. Disconnect the yellow antenna from MAIN connector and the blue antenna from AUX connector on the 3G module.

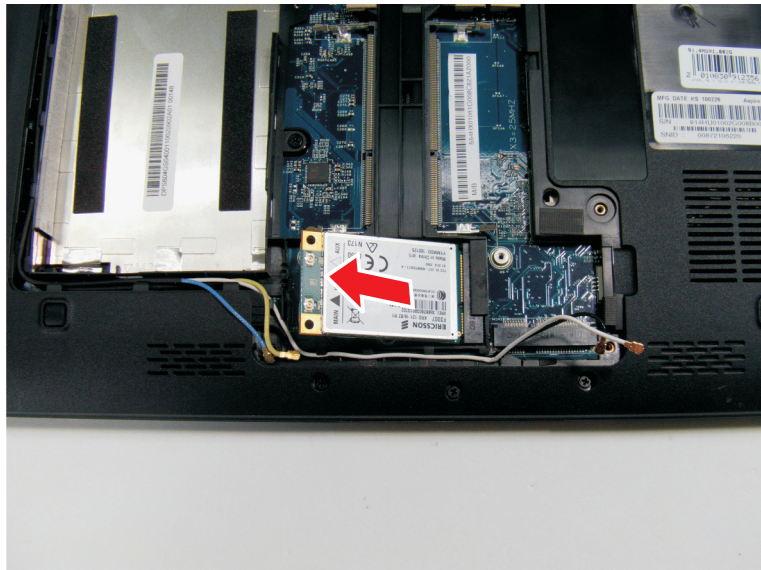


- Remove the screw (A) securing the 3G module.



Type	Quantity	Color	Torque	Part Number
M2 x L4 (1)	1	Silver	1.6 kgf-cm	86.00E50.724

- Detach the 3G module from its mainboard connector.

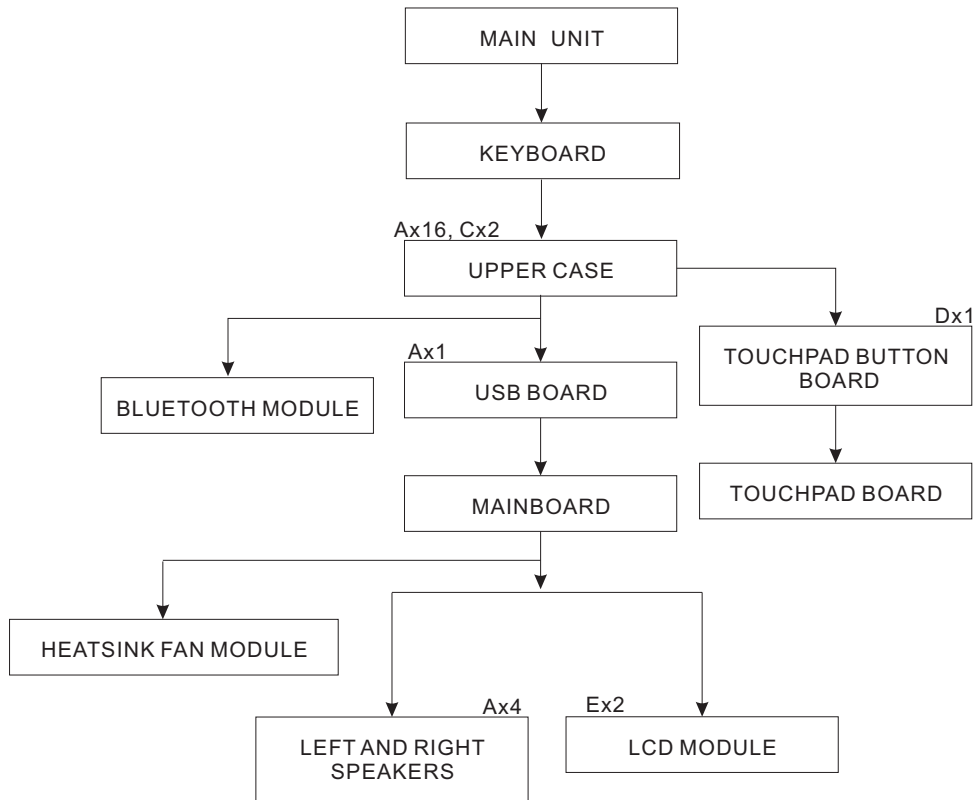


NOTE: When attaching the antennas back to the 3G module, make sure the cables are arranged properly.

Main Unit Disassembly Process

Main Unit Disassembly Flowchart

MAIN UNIT DISASSEMBLY



Screw List

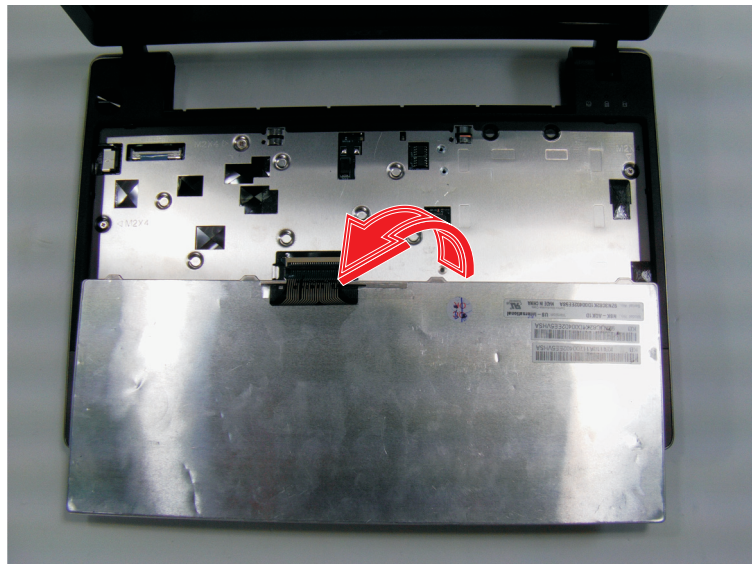
Code	Type	Color	Part Number
A	M2 x L4	Black/Silver	86.00E50.724
C	M2 x L10	Black	86.9AR62.100
D	M2 x L2.5	Silver	86.00D72.620
E	IMS M2 x L4	Black	86.00E13.524

Removing the Keyboard

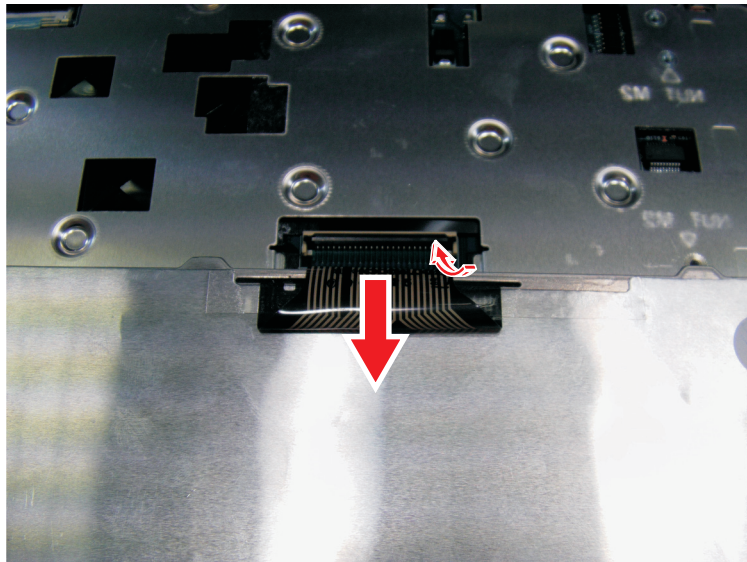
1. See "Removing the Battery Pack" on page 27.
2. Use a plastic flat-blade screwdriver to push the latches on the top side of the keyboard.



3. Turn the keyboard over on the palm rest to gain access to the keyboard cable.

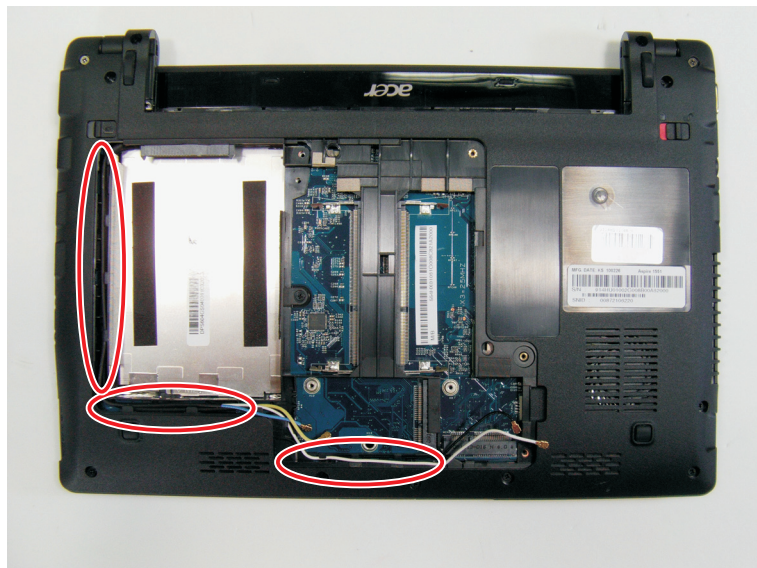


4. Disconnect the keyboard cable from its mainboard connector.

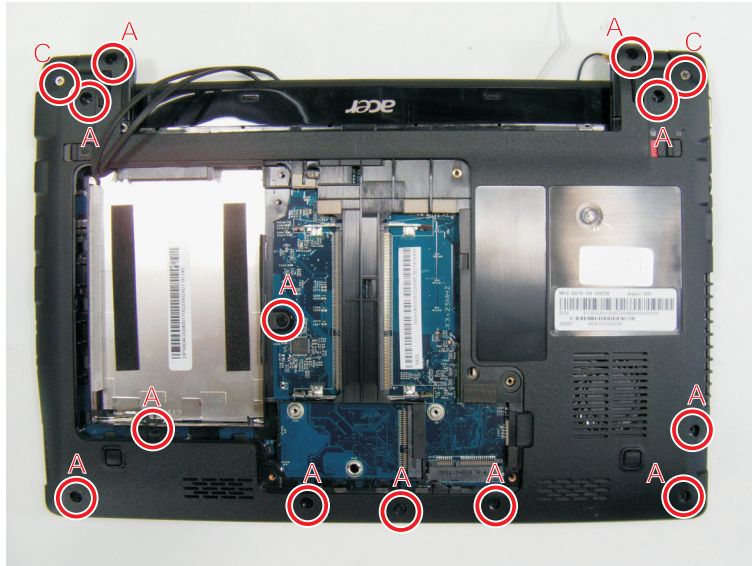


Removing the Upper Case

1. See “Removing the Battery Pack” on page 27.
2. See “Removing the Back Cover” on page 28.
3. See “Removing the Hard Disk Drive Module” on page 28.
4. See “Removing the DIMM Modules” on page 30.
5. See “Removing the WLAN Module” on page 30.
6. See “Removing the 3G Module” on page 32.
7. See “Removing the Keyboard” on page 35.
8. Release the antenna cables from the latches.

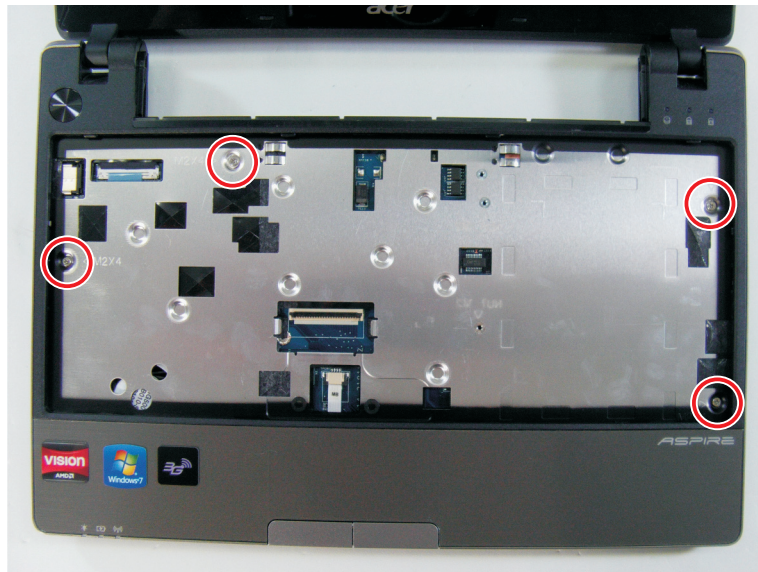


9. Remove the fourteen screws (A x 12, C x 2) securing the upper case to the lower case.



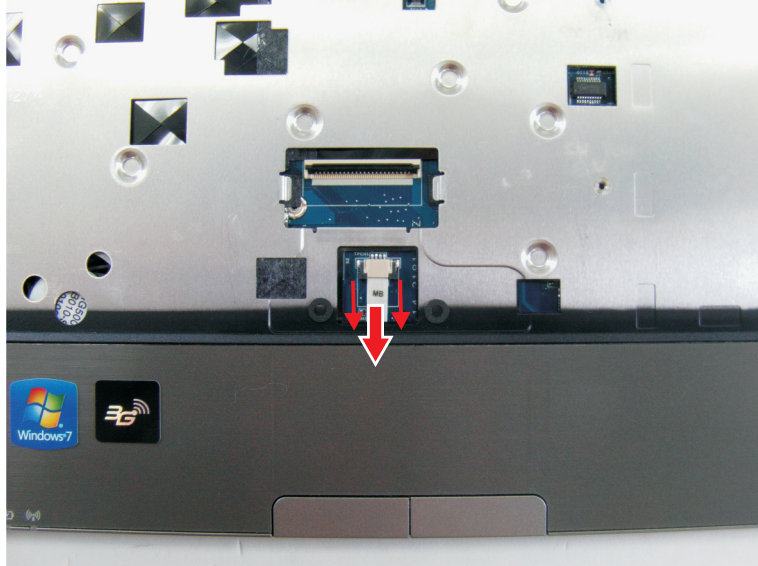
Type	Quantity	Color	Torque	Part Number
M2 x L4	12	Black	1.6 kgf-cm	86.00E50.724
M2 x L10	2	Black	1.6 kgf-cm	86.9AR62.100

10. Turn the unit over and remove the four screws (A) from the upper case.

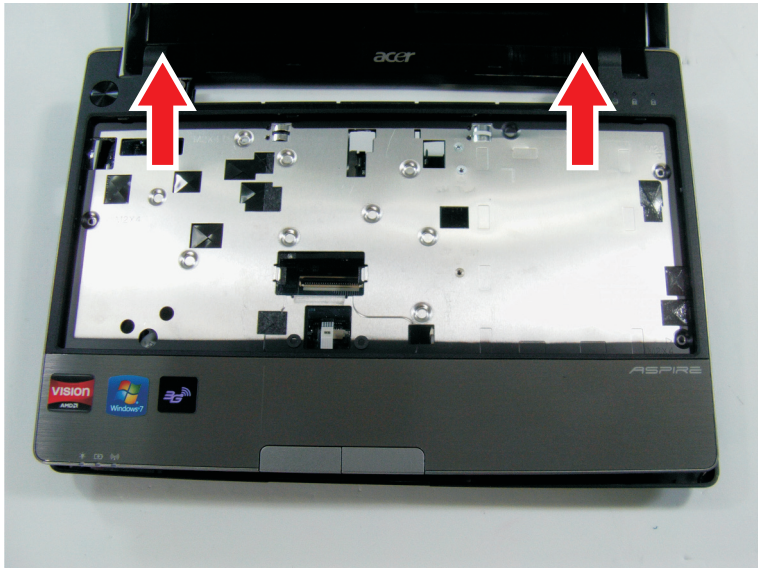


Type	Quantity	Color	Torque	Part Number
M2 x L4	4	Silver	1.6 kgf-cm	86.00E50.724

11. Disconnect the touch pad cable from the mainboard connector.

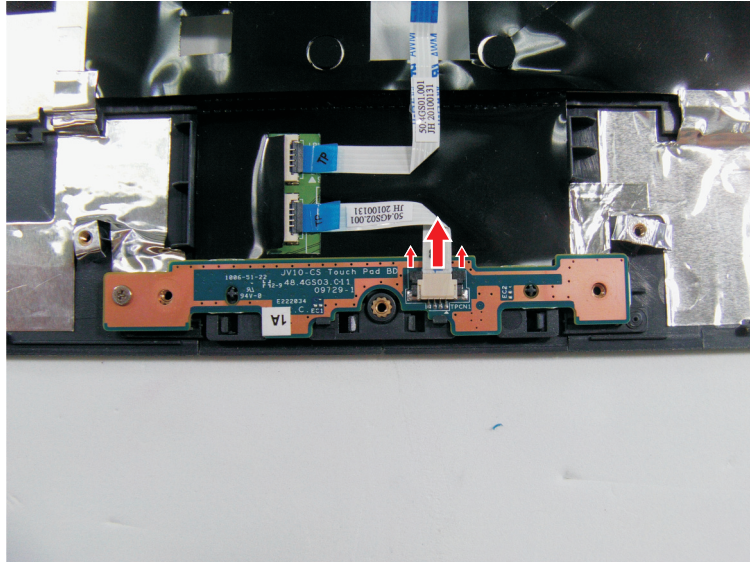


12. Pry loose the upper case from the lower case and remove the upper case.

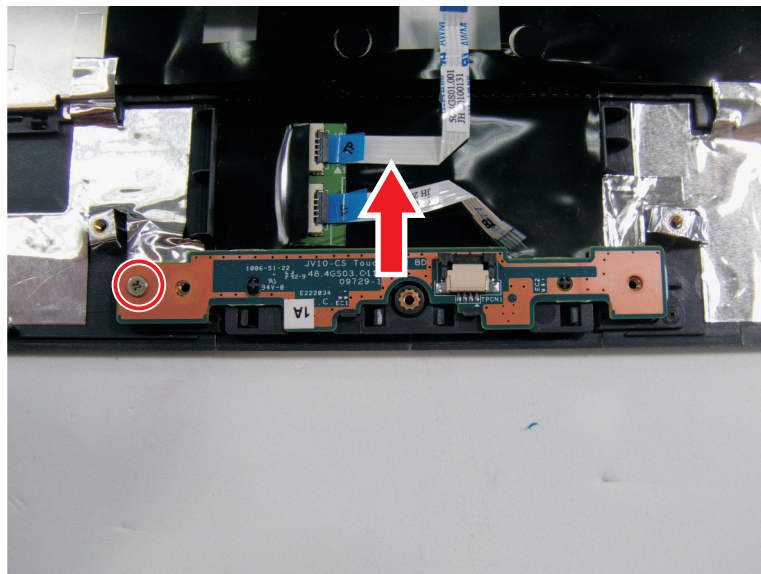


Removing the Touchpad Button Board

1. Perform the “Removing the Upper Case” procedure on page 36.
2. Disconnect the cable from the touch pad button board.



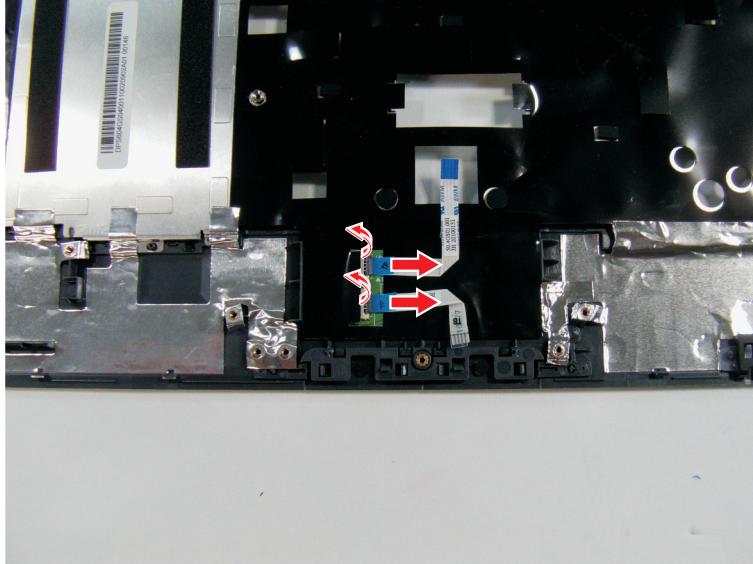
3. Remove the one screw (D) securing the touch pad button board to the upper case.



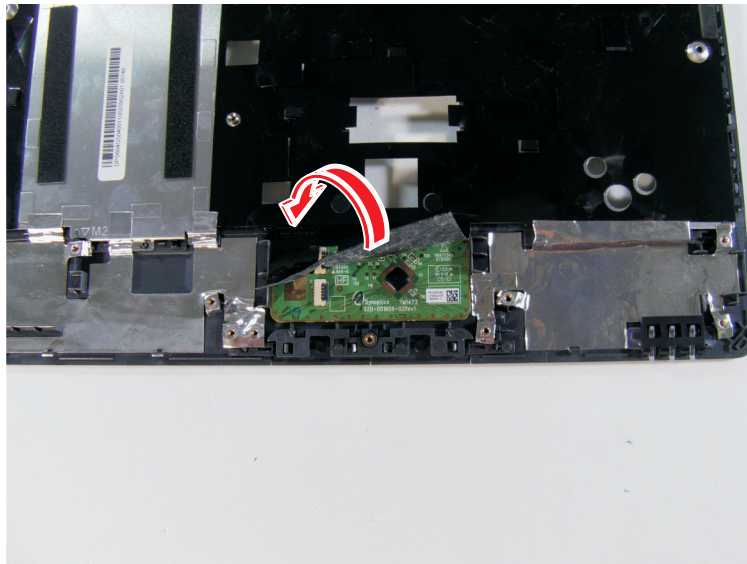
Type	Quantity	Color	Torque	Part Number
M2 x L2.5	1	Silver	1.6 kgf-cm	86.00E50.724

Removing the Touchpad Board

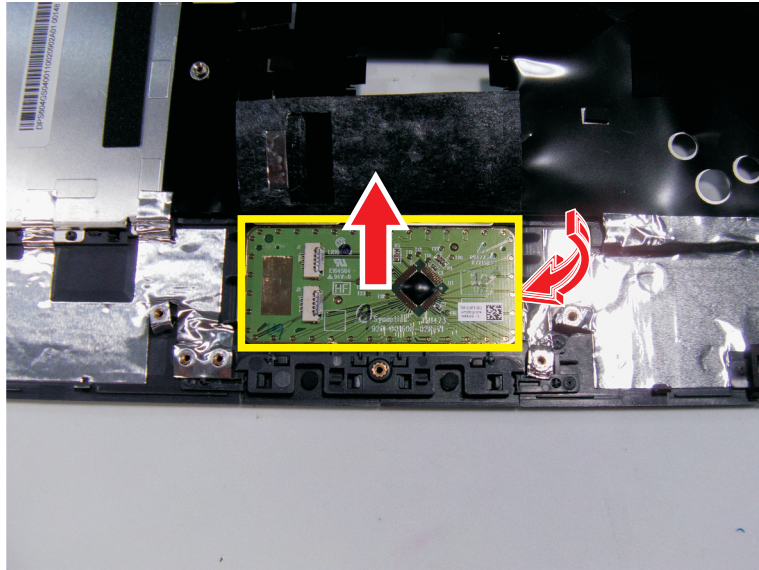
1. Perform the "Removing the Upper Case" procedure on page 36.
2. Release the latches and disconnect the cables from the touchpad board.



3. Remove the adhesive tape from the touchpad board.



- Carefully pry loose the touchpad board from the upper case to detach it.



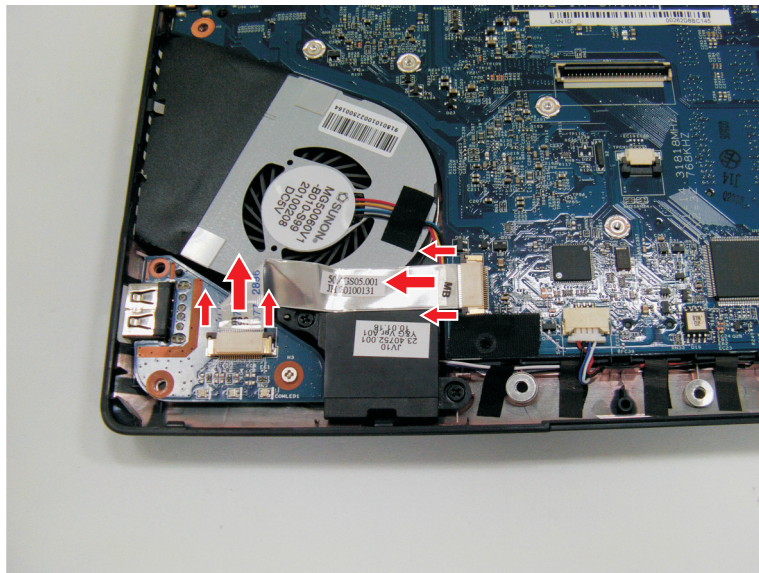
CAUTION: The touchpad board is glued to the upper case. Remove the touchpad board only if it is defective.



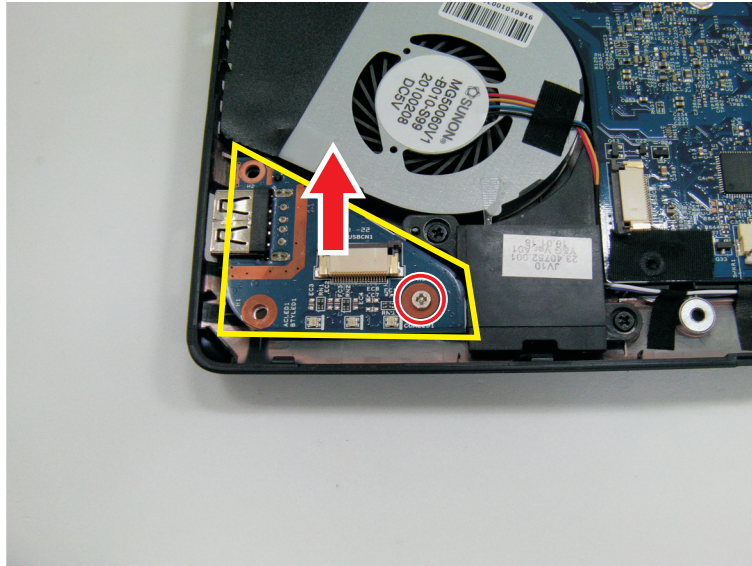
IMPORTANT: A circuit board that is >10 cm² has been highlighted with the yellow rectangle as above image shows. Follow local regulations for disposing this type of circuit board.

Removing the USB Board

- Perform the “Removing the Upper Case” procedure on page 36.
- Disconnect the USB cable from its connectors.



3. Remove the one screw (A), then remove the USB board.



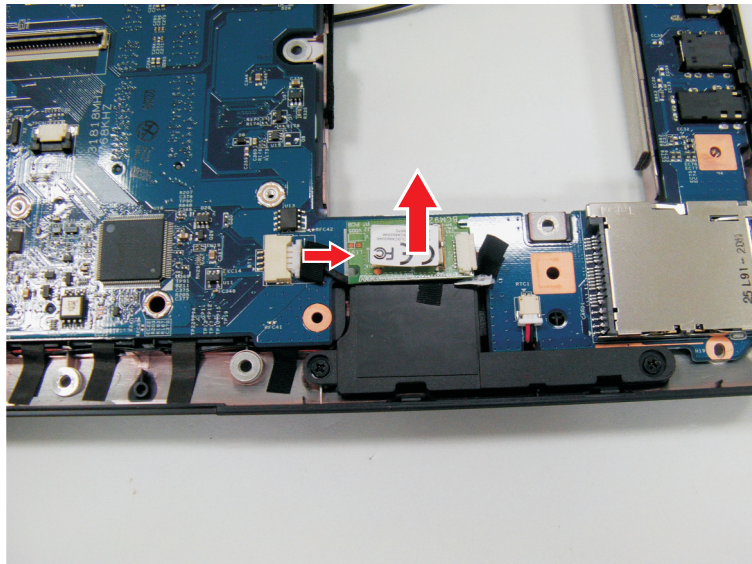
Type	Quantity	Color	Torque	Part Number
M2 x L4	1	Black	1.6 kgf-cm	86.00E50.724



IMPORTANT: A circuit board that is >10 cm² has been highlighted with the yellow rectangle as above image shows. Follow local regulations for disposing this type of circuit board.

Removing the Bluetooth Module

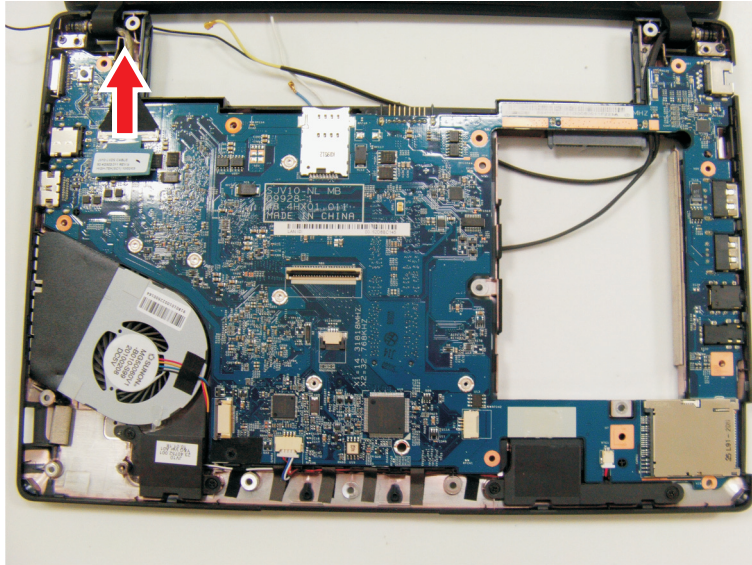
1. Perform the “Removing the Upper Case” procedure on page 36.
2. Disconnect the Bluetooth cable from its mainboard connector and remove the Bluetooth module.



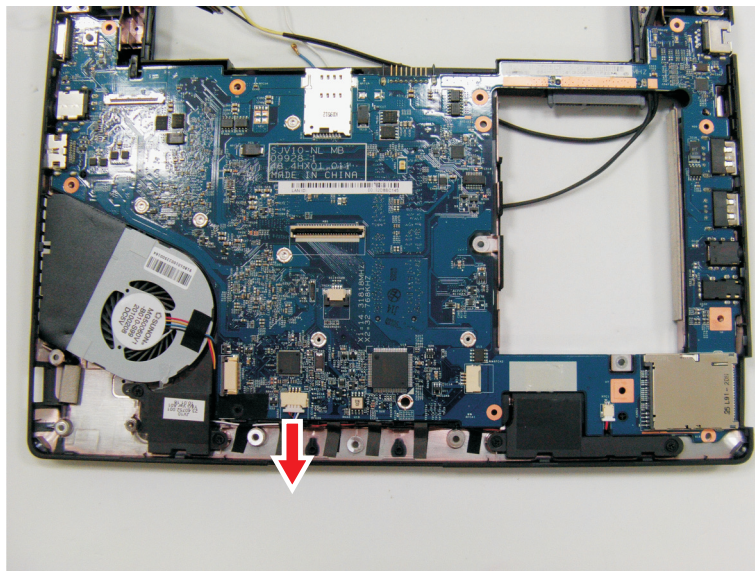
NOTE: Be careful when removing the Bluetooth module as it is glued in place.

Removing the Mainboard

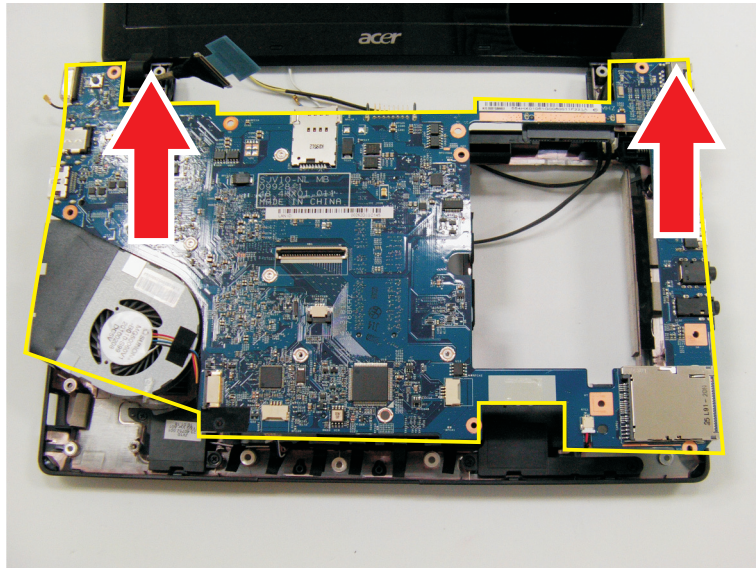
1. Perform the “Removing the Upper Case” procedure on page 36.
2. Perform the “Removing the USB Board” procedure on page 41.
3. Perform the “Removing the Bluetooth Module” procedure on page 42.
4. Disconnect the LVDS cable from the mainboard.



5. Disconnect the speaker cable from the mainboard.



6. Carefully remove the mainboard from the base enclosure.



IMPORTANT: A circuit board that is >10 cm² has been highlighted in yellow as the above image shows. Follow local regulations for disposing this type of circuit board.

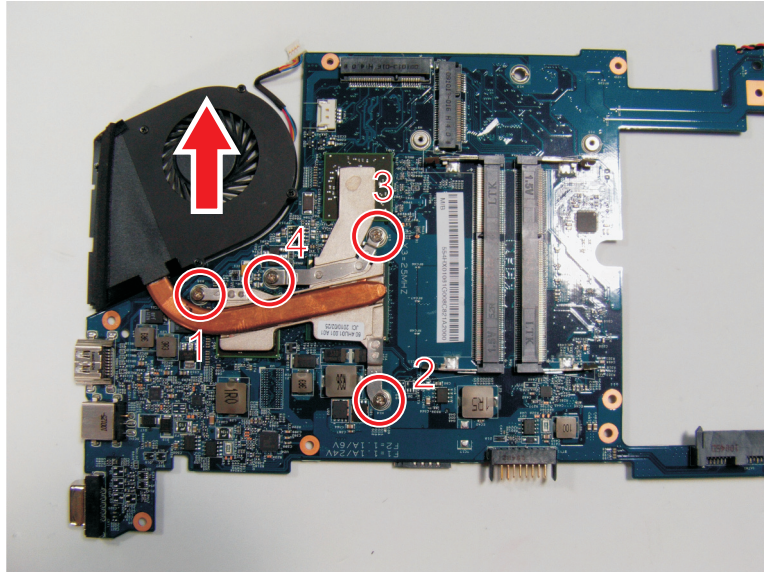
IMPORTANT: The CMOS battery has been highlighted with a yellow circle in the above image. Detach the battery and follow regulations for disposing it.

Removing the Heatsink Fan Module

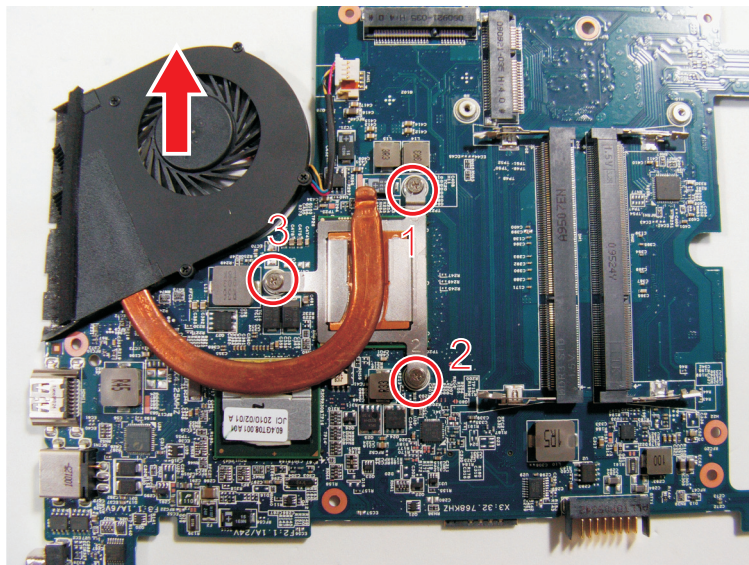
1. Perform the “Removing the Mainboard” procedure on page 43.
2. Turn the mainboard over and disconnect the heatsink fan cable from its mainboard connector.



- Loosen the heatsink screws in the order shown and remove the heatsink fan from the mainboard.



AMD Model

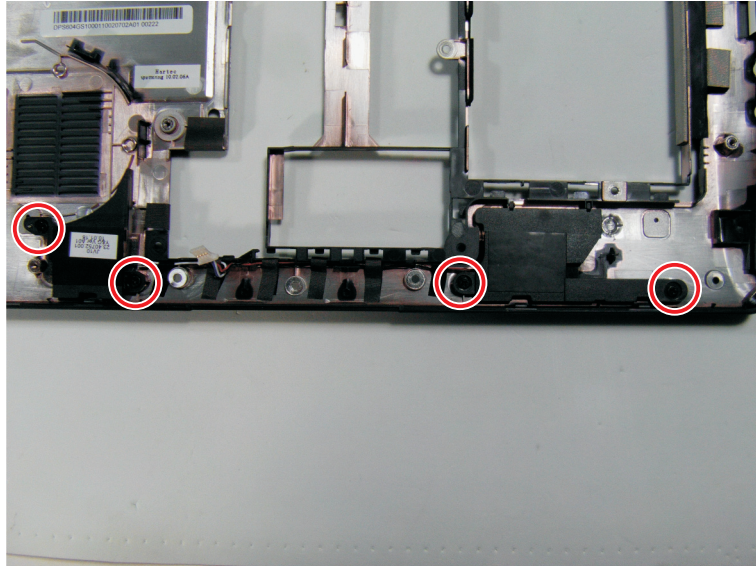


Intel Model

Removing the Speaker Module

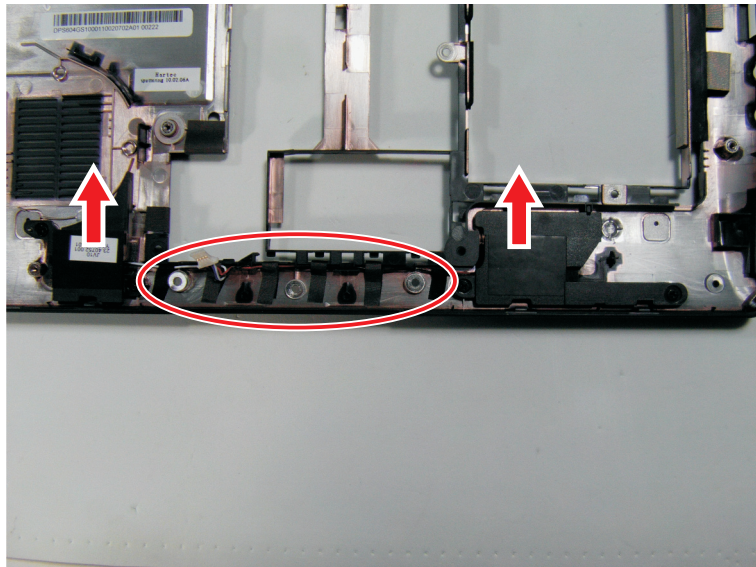
- Perform the "Removing the Mainboard" procedure on page 43.

- Remove the four screws (A) securing the left and right speakers to the bottom panel.



Type	Quantity	Color	Torque	Part Number
M2 x L4	4	Black	1.6 kgf-cm	86.00E50.724

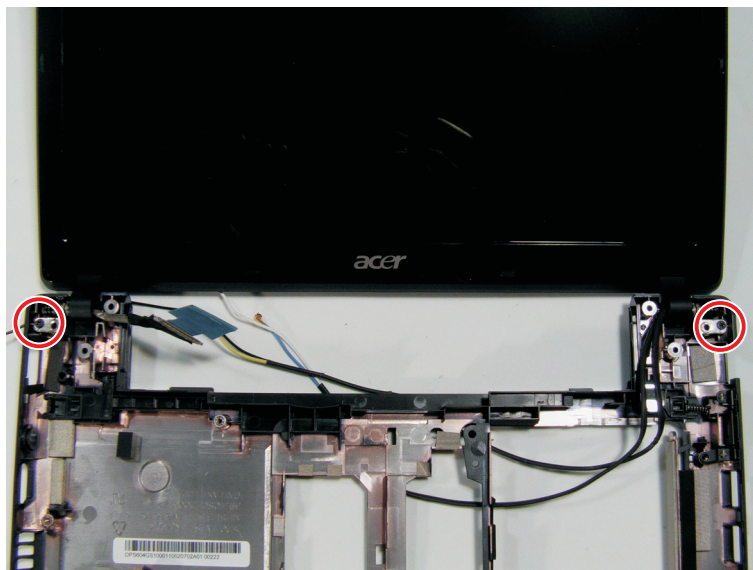
- Remove the tapes securing the speaker cables and remove the speaker module from the bottom panel.



Removing the LCD Module

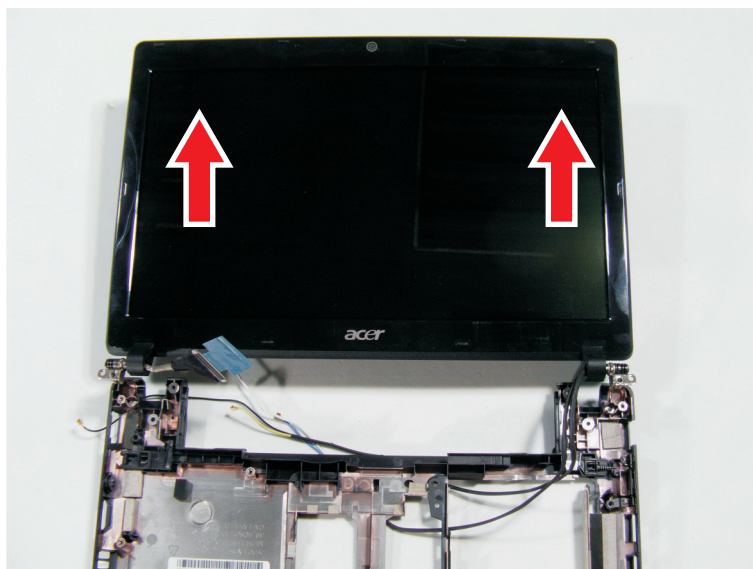
- Perform the "Removing the Mainboard" procedure on page 43.

2. Remove the two screws (E) securing the LCD module.



Type	Quantity	Color	Torque	Part Number
M2 x L4	2	Black	1.6 kgf-cm	86.00E13.524

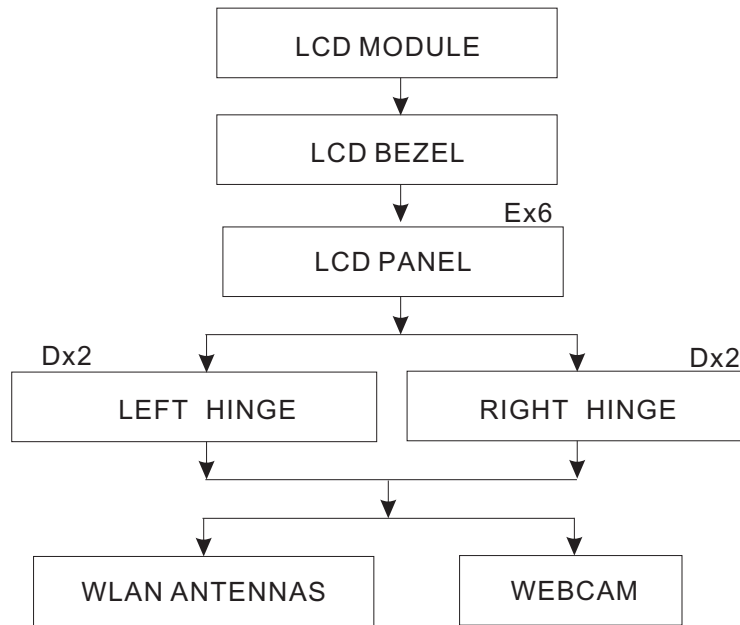
3. Detach the LCD module from the base unit.



LCD Module Disassembly Process

LCD Module Disassembly Flowchart

LCD MODULE DISASSEMBLY

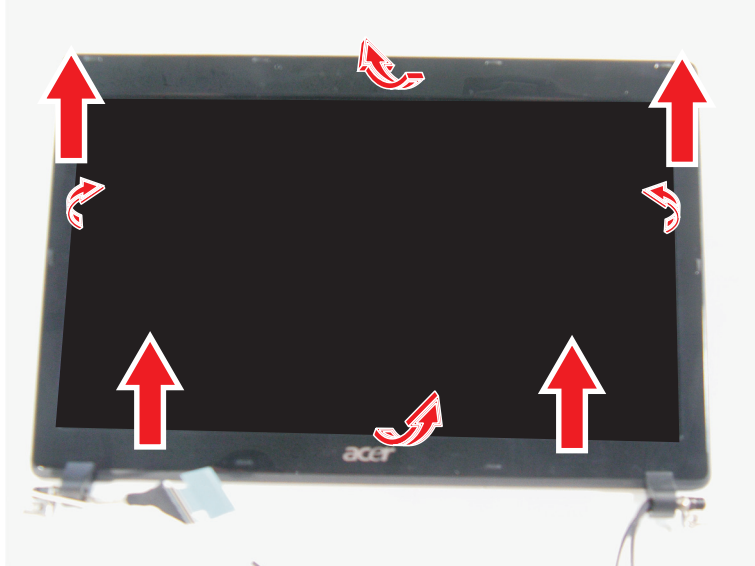


Screw List

Code	Type	Color	Part Number
D	M2 x L2.5	Black/Silver	86.00D72.620
E	IMS M2 x L4	Black	86.00E13.524

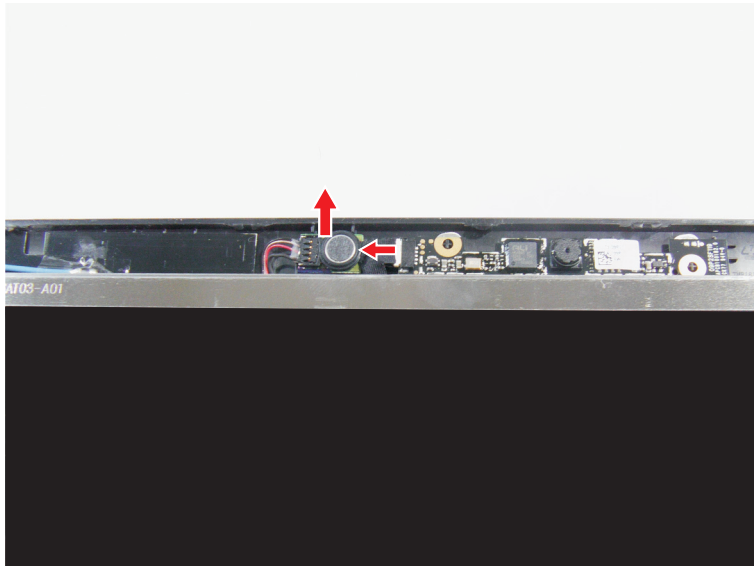
Removing the LCD Bezel

1. Perform the "Removing the LCD Module" procedure on page 47.
2. Carefully pry loose the bezel from the LCD case and detach the bezel.

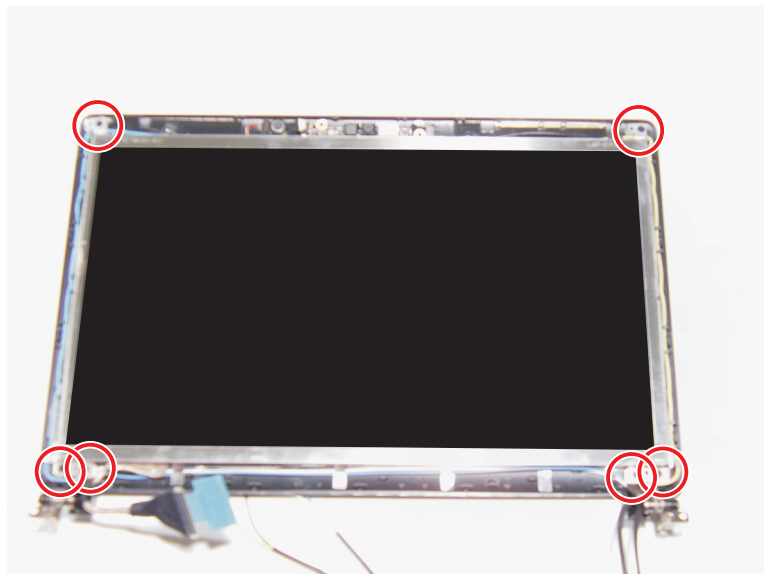


Removing the LCD Panel

1. Perform the "Removing the LCD Bezel" procedure on page 50.
2. Disconnect the cable from the webcam and remove the internal microphone from the base.

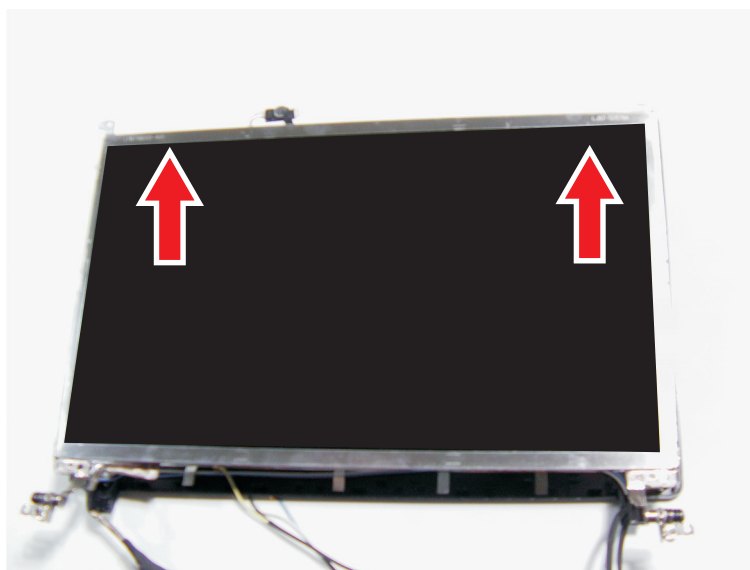


3. Remove the six screws (E) securing the LCD panel.

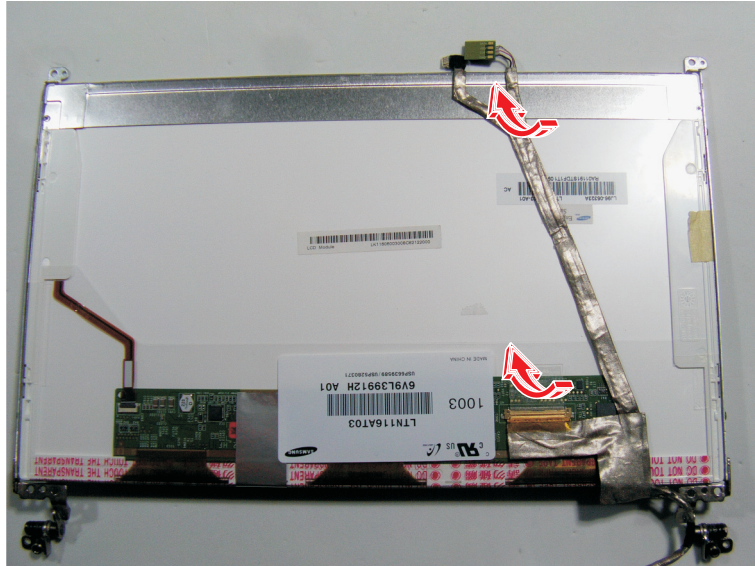


Type	Quantity	Color	Torque	Part Number
IMS M2 x L4	6	Black	1.6 kgf-cm	86.00E13.524

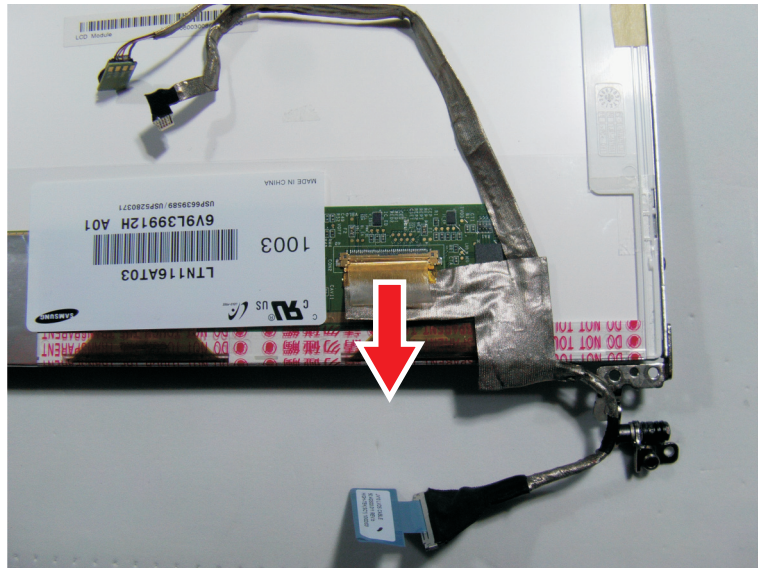
4. Carefully lift up the LCD panel to remove it from the back cover.



5. Detach the silver cable and the transparent adhesive tape that is glued to the panel.



6. Disconnect the LCD cable from the connector.



Removing the LCD Brackets with Hinges

1. Perform the “Removing the LCD Panel” procedure on page 50.

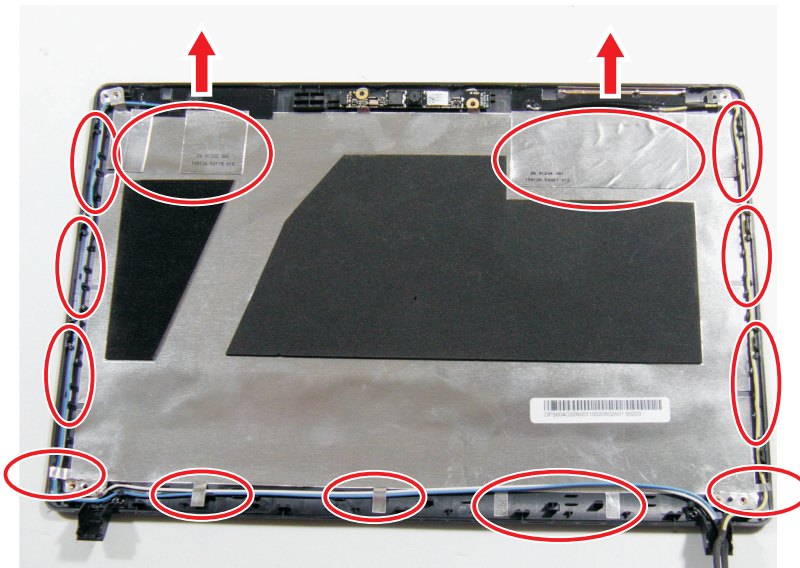
- Remove the four screws (D) securing the left and right LCD brackets with hinges to remove it.



Type	Quantity	Color	Torque	Part Number
M2 x L2.5	4	Silver	1.6 kgf-cm	86.00D72.620

Removing the WLAN Antennas

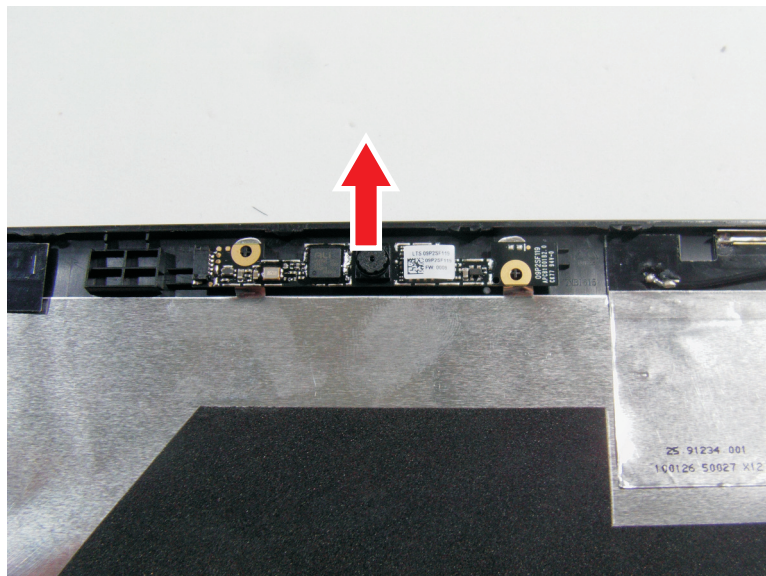
- Perform the “Removing the LCD Panel” procedure on page 50.
- Detach the aluminum foil tabs and the latches securing the WLAN antenna cables; then remove the WLAN antennas.



NOTE: There is no need to remove the antenna unless you really need to replace it.

Removing the Webcam Board

1. Perform the "Removing the LCD Panel" procedure on page 50.
2. Pry loose the CCD board from the LCD case to remove it.



NOTE: The CCD board is glued to the LCD case. Remove the CCD board only if it is defective.

Troubleshooting

Use the following procedure as a guide for system problems.

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

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

Symptoms (Verified)	Go To
Power failure. (The power indicator does not go on or stay on.)	"Power System Check" on page 57.
POST does not complete. No beep or error codes are indicated.	"Power-On Self-Test (POST) Error Message" on page 58 "Undetermined Problems" on page 70
POST detects an error and displayed messages on screen.	"" on page 59
Other symptoms (i.e. LCD display problems or others).	"Power-On Self-Test (POST) Error Message" on page 58
Symptoms cannot be re-created (intermittent problems).	Use the customer-reported symptoms and go to "Power-On Self-Test (POST) Error Message" on page 58 "Intermittent Problems" on page 69 "Undetermined Problems" on page 70

System Check Procedures

External Diskette Drive Check

Use the following procedure to isolate a problem in diskette drive controller, driver, or diskette. A write-enabled, diagnostic diskette is required.

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

1. Boot from the diagnostics diskette and start the diagnostics program.
2. See if FDD Test is passed as the program runs to FDD Test.
3. Follow the onscreen instructions.

If an error occurs with the internal diskette drive, reconnect the diskette connector on the mainboard. If the error persists, do the following:

1. Reconnect the external diskette drive.
2. Replace the external diskette drive.
3. Replace the mainboard.

External Optical Drive Check

Use the following procedure to isolate a possible problem in an optical drive controller, drive, or optical drive.

NOTE: Make sure that the optical drive does not have any label attached to it. The label may damage the drive or cause drive failure.

1. Boot from the diagnostics diskette and start the diagnostics program.
2. Run the CD-ROM Test and see if the test completes successfully.
3. Follow the onscreen instructions.

If an error occurs, reconnect the drive connector on the mainboard.

If the error still remains:

1. Reconnect the external optical drive to a USB jack.
2. Replace the external optical drive.
3. Replace the mainboard.

Keyboard or Auxiliary Input Device Check

If the internal keyboard does not work or an unexpected character appears, make sure that the flexible cable extending from the keyboard is correctly seated in the connector on the mainboard. If the keyboard cable is connected correctly, run the Keyboard Test.

IMPORTANT: Disconnect any external keyboards before testing the built-in or internal keyboard.

If the tests detect a keyboard problem, do the following in sequence:

1. Reconnect the keyboard cable to the mainboard.
2. Replace the keyboard.
3. Replace the mainboard.

IMPORTANT: Do not replace a non-defective FRU.

The following auxiliary input devices are supported by this system:

- Numeric keypad
- External keyboard

If any of these devices do not function, reconnect the cable and repeat above procedures.

Memory Check

Memory errors can stop your programs, show error messages on the screen, or hang the system.

NOTE: Make sure that each memory card is properly installed into the connector. A loose connection can cause an error.

1. Boot from the diagnostics diskette and start the diagnostic program.
2. Run the Memory Test and see if the test completes successfully.
3. Press <F2> in the test items.
4. Follow the onscreen instructions.

Power System Check

Turn on the system using each of the following power sources:

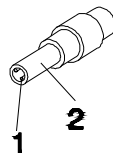
- Remove the battery pack, connect the power adapter, then make sure that the system turns on using AC power.
- Disconnect the power adapter, install a charged battery pack; then make sure that power is supplied by the battery pack.

If you suspect a power problem, complete the appropriate power supply check:

- "Check the Power Adapter" on page 57.
- "Check the Battery Pack" on page 58.

Check the Power Adapter

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



Pin 1: +19 to +20.5V

Pin 2: 0V, Ground

1. If the voltage is not correct, replace the power adapter.
2. If the voltage is within the range, do the following:
 - Replace the mainboard.
 - If the problem is not corrected, see "Undetermined Problems" on page 70.
 - If the power on indicator does not light up, check the power adapter's power cord for correct continuity and installation.
 - If the operational charge does not work, see "Check the Battery Pack" on page 58.

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

Check the Battery Pack

To check the battery pack using software:

1. Open Power Management in the Windows Control Panel.
2. In Power Meter, make sure that the parameters shown for Current Power Source and Total Battery Power Remaining are correct.
3. Repeat the steps 1 and 2 for both battery and adapter. This helps you identify first the problem is on recharging or discharging.

To check the battery pack using hardware:

1. Turn off the system.
2. Remove the battery pack and measure the voltage between battery terminals 1(+) and 6 (ground).
3. If the voltage is still less than 7.5 Vdc after recharging, replace the battery.

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

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

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

Touchpad Check

If the touchpad does not work, do the following actions in sequence to correct the problem.

1. Reconnect the touchpad cables.
2. Replace the touchpad.
3. Replace the mainboard.

IMPORTANT:Do not replace a non-defective FRU.

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

Power-On Self-Test (POST) Error Message

The POST error message index lists the error message and their possible causes.

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

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

If the symptom is not listed, see “Undetermined Problems” on page 70.

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

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

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

Index of Error Messages

Error Codes

Error Codes	Error Messages
006	Equipment Configuration Error Causes: <ul style="list-style-type: none"> • CPU BIOS Update Code Mismatch • IDE Primary Channel Master Drive Error (The causes are shown before "Equipment Configuration Error")
010	Memory Error at xxxx:xxx:xxxh (R:xxxh, W:xxxh)
070	Real Time Clock Error
071	CMOS Battery Bad
072	CMOS Checksum Error
110	System Disabled An incorrect password was entered.
<No error code>	Battery Critical Low In this situation BIOS issues four short beeps, then shuts the system down. No message is displayed.
<No error code>	Thermal Critical High In this situation BIOS shuts the system down. No message is displayed.

Error Messages

Error Messages	FRU/Action in Sequence
Failure Fixed Disk	<ul style="list-style-type: none"> • Reconnect hard disk drive connector. • Run "Load Setup Defaults" using the BIOS Setup Utility, then reboot the system. • Test or replace the hard disk drive. • Test or replace the mainboard.
Stuck Key	See "Keyboard or Auxiliary Input Device Check" on page 56.
Keyboard error	See "Keyboard or Auxiliary Input Device Check" on page 56.
Keyboard Controller Failed	See "Keyboard or Auxiliary Input Device Check" on page 56.
Keyboard locked - Unlock key switch	Unlock the external keyboard
Monitor type does not match CMOS - Run Setup	Run "Load Setup Defaults" using the BIOS Setup Utility, then reboot the system.
Shadow RAM Failed at offset: nnnn	<ul style="list-style-type: none"> • Test or replace the BIOS ROM. • Test or replace the mainboard.
System RAM Failed at offset: nnnn	<ul style="list-style-type: none"> • Test or replace the SO-DIMM. • Test or replace the mainboard.
Extended RAM Failed at offset: nnnn	<ul style="list-style-type: none"> • Test or replace the SO-DIMM. • Test or replace the mainboard.
System battery is dead - Replace and run Setup	Test or replace the RTC battery, run the BIOS Setup Utility to reconfigure system time, then reboot the system.

Error Messages	FRU/Action in Sequence
System CMOS checksum bad - Default configuration used	Test or replace the RTC battery, run the BIOS Setup Utility to reconfigure system time, then reboot the system.
System timer error	<ul style="list-style-type: none"> • Test or replace the RTC battery, run the BIOS Setup Utility to reconfigure system time, then reboot the system. • Test or replace the mainboard.
Real time clock error	<ul style="list-style-type: none"> • Test or replace the RTC battery, run the BIOS Setup Utility to reconfigure system time, then reboot the system. • Test or replace the mainboard.
Previous boot incomplete - Default configuration used	<ul style="list-style-type: none"> • Run "Load Setup Defaults" using the BIOS Setup Utility, then reboot the system. • Test or replace the RTC battery, run the BIOS Setup Utility to reconfigure system time, then reboot the system. • Test or replace the mainboard.
Memory size found by POST differed from CMOS	<ul style="list-style-type: none"> • Run "Load Setup Defaults" using the BIOS Setup Utility, then reboot the system. • Test or replace the SO-DIMM. • Test or replace the mainboard.
Diskette drive A error	Make sure that the drive is defined with the proper diskette type in the BIOS Setup Utility.
Incorrect Drive A type - run SETUP	Make sure that the drive is defined with the proper diskette type in the BIOS Setup Utility.
System cache error - Cache disabled	Test or replace the mainboard.
CPU ID:	Test or replace the mainboard.
DMA Test Failed	<ul style="list-style-type: none"> • Test or replace the SO-DIMM. • Test or replace the mainboard.
Software NMI Failed	<ul style="list-style-type: none"> • Test or replace the SO-DIMM. • Test or replace the mainboard.
Fail-Safe Timer NMI Failed	<ul style="list-style-type: none"> • Test or replace the SO-DIMM. • Test or replace the mainboard.
Device Address Conflict	<ul style="list-style-type: none"> • Run "Load Setup Defaults" using the BIOS Setup Utility, then reboot the system. • Test or replace the RTC battery, run the BIOS Setup Utility to reconfigure system time, then reboot the system. • Test or replace the mainboard.
Allocation Error for device	<ul style="list-style-type: none"> • Run "Load Setup Defaults" using the BIOS Setup Utility, then reboot the system. • Test or replace the RTC battery, run the BIOS Setup Utility to reconfigure system time, then reboot the system. • Test or replace the mainboard.
Failing Bits: nnnn	<ul style="list-style-type: none"> • Test or replace the SO-DIMM. • Test or replace the BIOS ROM. • Test or replace the mainboard.
Fixed Disk n	None

Error Messages	FRU/Action in Sequence
Invalid System Configuration Data	<ul style="list-style-type: none"> • Test or replace the BIOS ROM. • Test or replace the mainboard.
I/O device IRQ conflict	<ul style="list-style-type: none"> • Run "Load Setup Defaults" using the BIOS Setup Utility, then reboot the system. • Test or replace the RTC battery, run the BIOS Setup Utility to reconfigure system time, then reboot the system. • Test or replace the mainboard.
Operating system not found	<ul style="list-style-type: none"> • Run the BIOS Setup Utility and see if fixed disk and drive A: are properly identified. • Test or replace the diskette drive. • Test or replace the hard disk drive. • Test or replace the mainboard.

No Beep Error Messages

No Beep Error Messages	FRU/Action in Sequence
No beep, power-on indicator turns off and LCD is blank.	<ul style="list-style-type: none"> • Test the power source (battery pack and power adapter). See "Power System Check" on page 57. • Make sure that every connector is connected tightly and correctly. • Reconnect the SO-DIMM. • Test or replace the LED board. • Test or replace the mainboard.
No beep, power-on indicator turns on and LCD is blank.	<ul style="list-style-type: none"> • Test the power source (battery pack and power adapter). See "Power System Check" on page 57. • Reconnect the LCD connector. • Check the hard disk drive. • Check the LCD cable. • Test or replace the LCD. • Test or replace the mainboard.
No beep, power-on indicator turns on and LCD is blank. But you can see POST on an external CRT.	<ul style="list-style-type: none"> • Reconnect the LCD connector. • Check the LCD cable. • Test or replace the LCD. • Test or replace the mainboard.
No beep, power-on indicator turns on and a blinking cursor shown on LCD during POST.	<ul style="list-style-type: none"> • Make sure that every connector is connected tightly and correctly. • Test or replace the mainboard.
No beep during POST but system runs correctly.	<ul style="list-style-type: none"> • Test or replace the speaker. • Test or replace the mainboard.

BIOS Beep Codes

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 215 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
3Ch		Advanced configuration of chipset registers
3Dh		Load alternate registers with CMOS values
42h		Initialize interrupt vectors
45h		POST device initialization

Code	Beeps	POST Routine Description
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 User Patch1
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
87h		Configure Motherboard Configurable Devices (optional)
88h		Initialize BIOS Area
89h		Enable Non-Maskable Interrupts (NMIs)

Code	Beeps	POST Routine Description
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
A Eh		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
C3h		Initialize error display function

Code	Beeps	POST Routine Description
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
E0h		Initialize the chipset
E1h		Initialize the bridge
E2h		Initialize the CPU
E3h		Initialize the 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

Symptom-to-FRU Error Messages

LCD-Related Symptoms

Symptom / Error	Action in Sequence
<ul style="list-style-type: none"> LCD backlight doesn't work LCD is too dark LCD brightness cannot be adjusted LCD contrast cannot be adjusted 	<ul style="list-style-type: none"> Run "Load Setup Defaults" using the BIOS Setup Utility, then reboot the system. Reconnect the LCD connector. Test or replace the keyboard (if contrast and brightness function key doesn't work). Test or replace the LCD cable. Test or replace the LCD. Test or replace the mainboard.
<ul style="list-style-type: none"> Unreadable LCD screen Missing pels in characters Abnormal screen Wrong color displayed 	<ul style="list-style-type: none"> Reconnect the LCD connector. Test or replace the LCD cable. Test or replace the LCD. Test or replace the mainboard.
LCD has extra horizontal or vertical lines displayed.	<ul style="list-style-type: none"> Test or replace the LCD cable. Test or replace the LCD. Test or replace the mainboard.

Power-Related Symptoms

Symptom / Error	Action in Sequence
System shuts down during operation	<ul style="list-style-type: none"> Test the power source (battery pack and power adapter). See "Power System Check" on page 57. Test or replace the battery pack. Test or replace the power adapter. Test or replace the mainboard.
System doesn't power-on.	<ul style="list-style-type: none"> Test the power source (battery pack and power adapter). See "Power System Check" on page 57. Test or replace the battery pack. Test or replace the power adapter. Test or replace the mainboard.
System doesn't turn off.	<ul style="list-style-type: none"> Test the power source (battery pack and power adapter). See "Power System Check" on page 57. Press and hold the power button for more than 4 secs. Test or replace the mainboard.
The battery can't be charged	<ul style="list-style-type: none"> Test the battery pack. See "Check the Battery Pack" on page 58. Test or replace the battery pack. Test or replace the mainboard.

Memory-Related Symptoms

Symptom / Error	Action in Sequence
Memory count (size) appears different from actual size.	<ul style="list-style-type: none"> Run "Load Setup Defaults" using the BIOS Setup Utility, then reboot the system. Test or replace the SO-DIMM. Test or replace the mainboard.

Speaker-Related Symptoms

Symptom / Error	Action in Sequence
No sound comes from the system when running Windows multimedia programs.	<ul style="list-style-type: none"> Reinstall the audio driver. Test or replace the speakers. Test or replace the mainboard.
Internal speakers make noise or emit no sound.	<ul style="list-style-type: none"> Test or replace the speakers. Test or replace the mainboard.

Power Management-Related Symptoms

Symptom / Error	Action in Sequence
System will not enter hibernation.	<ul style="list-style-type: none"> Test or replace the keyboard (if control is from the keyboard). Test or replace the hard disk drive. Test or replace the mainboard.
System doesn't enter hibernation mode and four short beeps every minute.	<ul style="list-style-type: none"> Press <Fn> + <O> and see if the system enters hibernation mode. Test or replace the touchpad Test or replace the keyboard Check the hard disk connection to the mainboard. Test or replace the hard disk drive. Test or replace the mainboard.
System doesn't enter standby mode after closing the LCD.	Test or replace the mainboard.
System doesn't resume from hibernation mode.	<ul style="list-style-type: none"> Check the hard disk connection to the mainboard. Test or replace the hard disk drive. Test or replace the mainboard.
System doesn't resume from standby mode after opening the LCD.	Test or replace the mainboard.
Battery fuel gauge in Windows doesn't go higher than 90%.	<ul style="list-style-type: none"> Remove battery pack and let it cool for 2 hours. Refresh battery (use only battery until the notebook turns off, then charge the battery). Test or replace the battery pack. Test or replace the mainboard.
System hangs intermittently.	<ul style="list-style-type: none"> Reconnect the hard disk drive and external optical drive. Check the hard disk connection to the mainboard. Test or replace the mainboard.

Peripheral Devices-Related Symptoms

Symptom / Error	Action in Sequence
System configuration does not match the installed devices.	<ul style="list-style-type: none"> Run "Load Setup Defaults" using the BIOS Setup Utility, then reboot the system. Reconnect the hard disk drive and external optical drive.
External display does not work correctly.	<ul style="list-style-type: none"> Press <Fn> + <F5> repeatedly to switch between LCD, external display, and both displays. Test or replace the mainboard.
USB does not work correctly	<ul style="list-style-type: none"> Test or replace the USB board. Test or replace the mainboard.

Peripheral Devices-Related Symptoms

Symptom / Error	Action in Sequence
Print problems.	<ul style="list-style-type: none">• Run the printer self test.• Reinstall the printer driver.• Test or replace the printer cable.• Test or replace the printer.• Test or replace the mainboard.

Keyboard/Touchpad-Related Symptoms

Symptom / Error	Action in Sequence
Keyboard (one or more keys) does not work.	<ul style="list-style-type: none">• Reconnect the keyboard cable.• Test or replace the keyboard.• Test or replace the mainboard.
Touchpad does not work.	<ul style="list-style-type: none">• Reconnect the touchpad cable.• Test or replace the touchpad board.• Test or replace the mainboard.

IMPORTANT: If you cannot find a symptom or an error in this list and the problem remains, see “Undetermined Problems” on page 70.

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 mainboard in loop mode at least 10 times.
 - If no error is detected, do not replace the FRU.
 - If any error is detected, replace the FRU.
2. 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. Use these procedures to isolate the failing FRU (do not isolate non-defective FRU).

IMPORTANT: Verify that all attached devices are supported by the system.

IMPORTANT: Verify that the power supply being used at the time of the failure is operating correctly. (See "Power System Check" on page 57.)

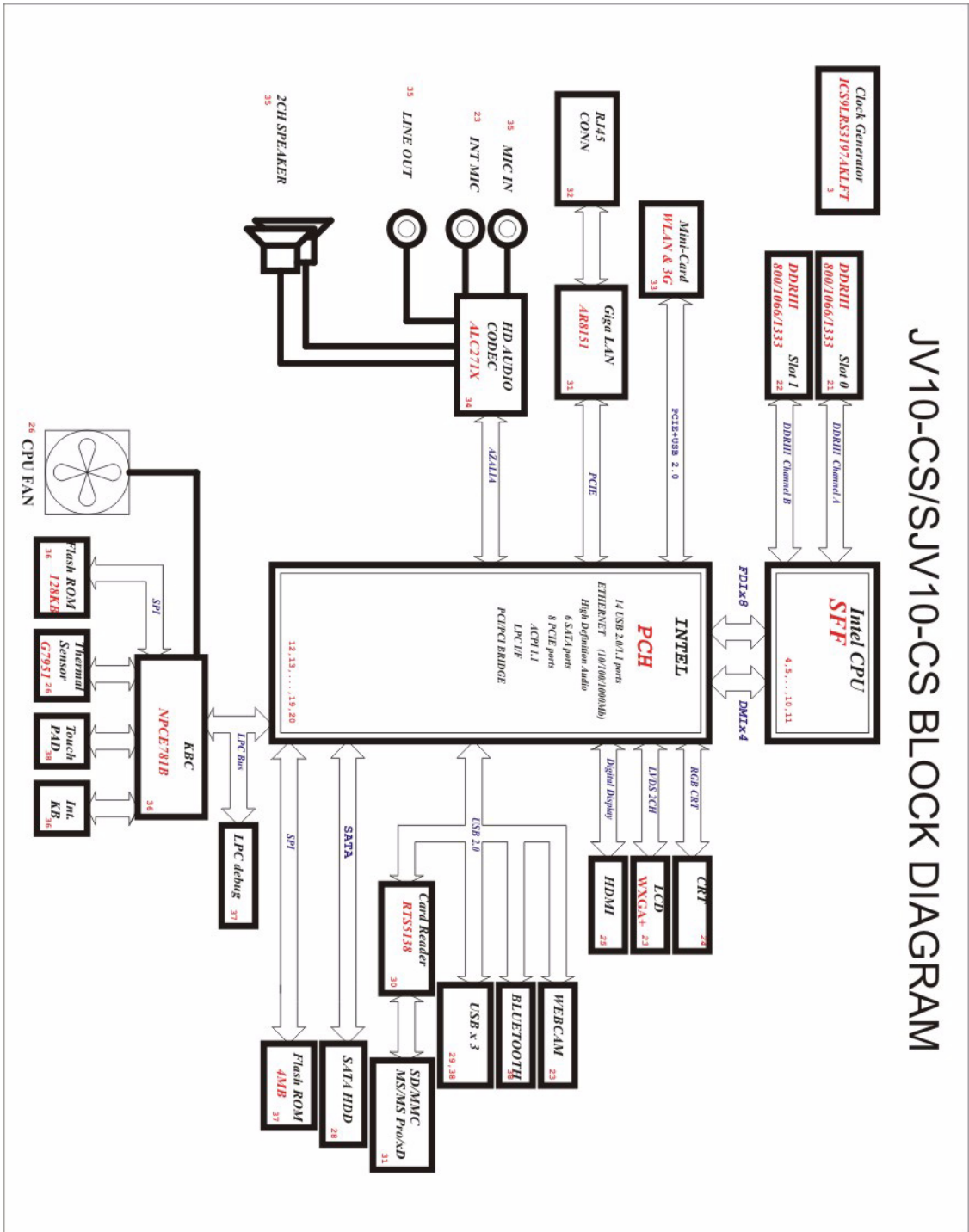
To isolate the failing FRU:

1. Turn off the system.
2. Visually check FRU parts for damage. If you identify any damage, replace the FRU.
3. Remove or disconnect all of the following devices:
 - Non-Acer devices
 - Printer, mouse, and other external devices
 - Battery pack
 - Hard disk drive
 - SO-DIMM
 - External optical drive
4. Turn on the system.
5. Determine if the problem has changed.
 - If the problem does not recur, reconnect the removed devices one at a time until you find the failing FRU.
 - If the problem does recur, replace the following FRUs one at a time.
 - Mainboard
 - LCD assembly

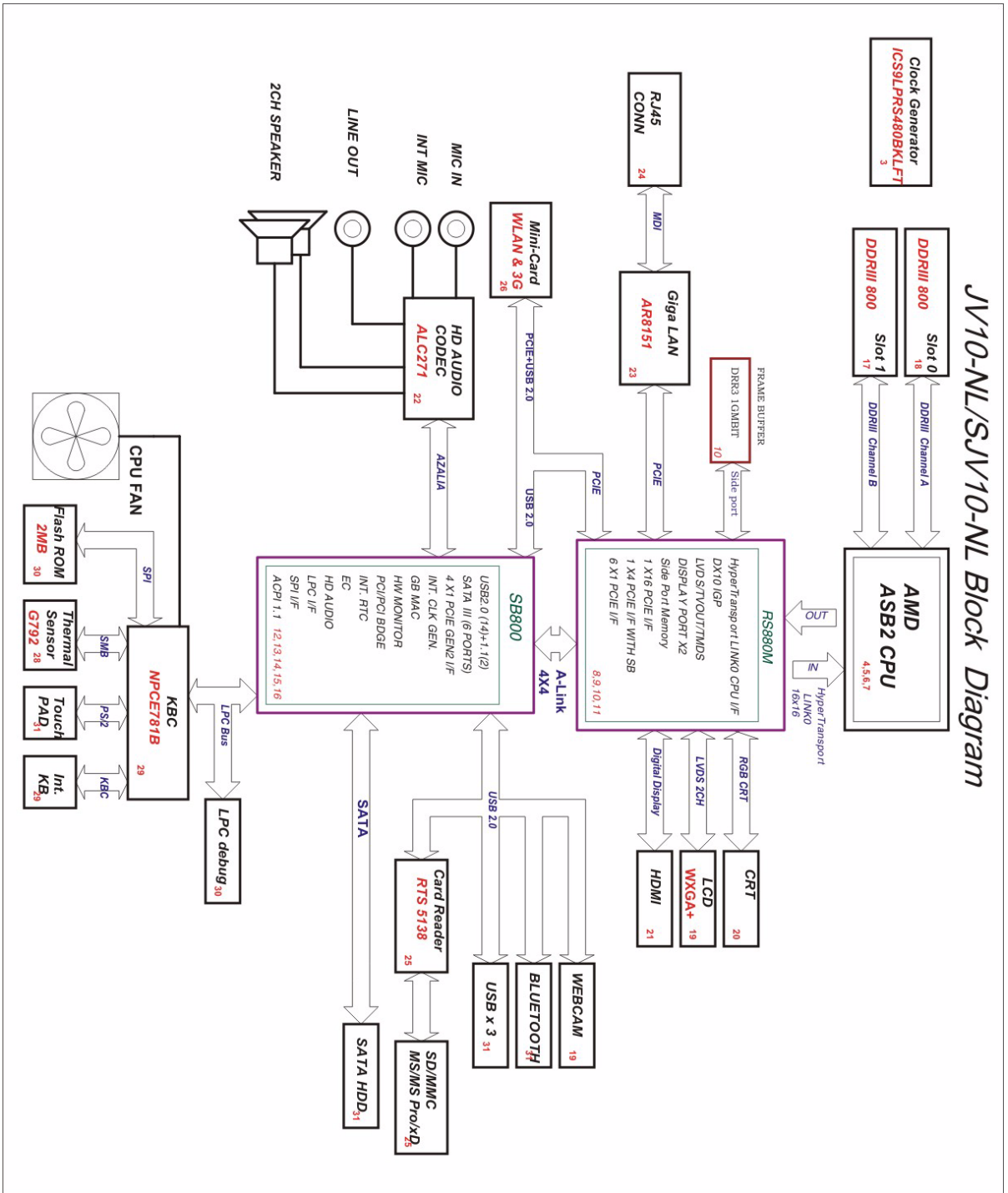
IMPORTANT: Do not replace a non-defective FRU.

System Architecture

Aspire 1430/1830T/One 753 Series Block Diagram

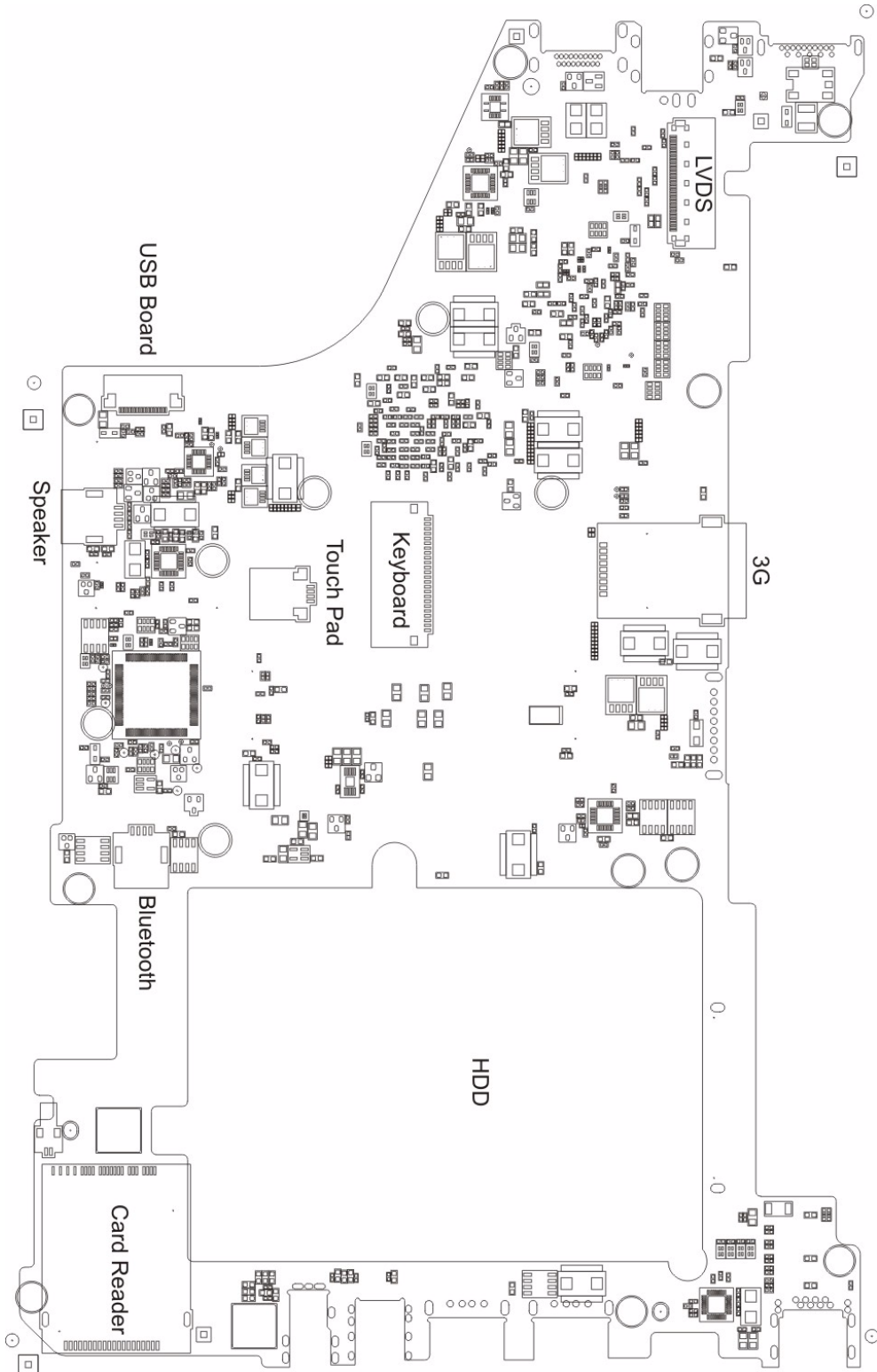


Aspire 1551/One 721 Series Block Diagram

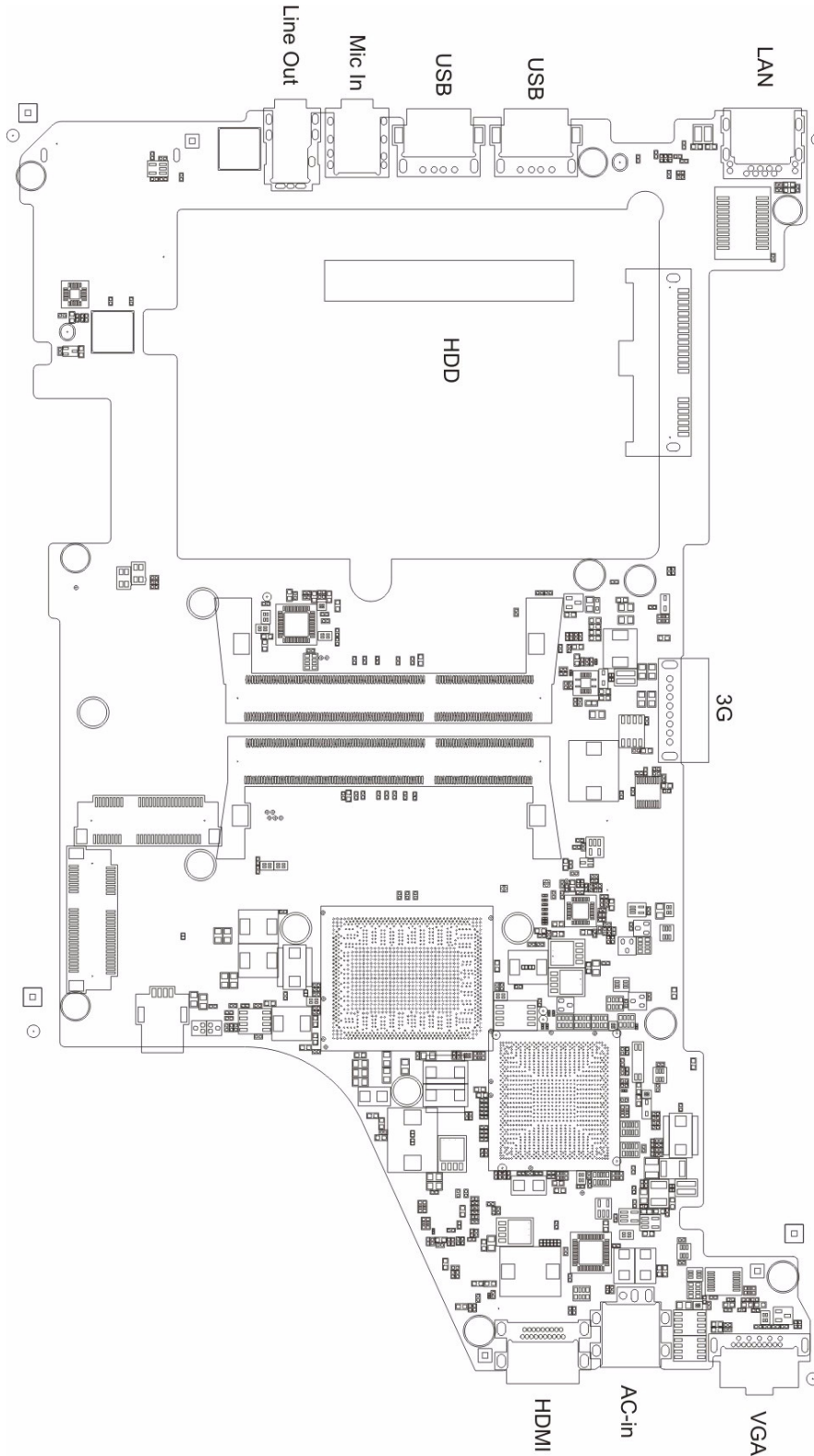


Mainboard Layout

Top View

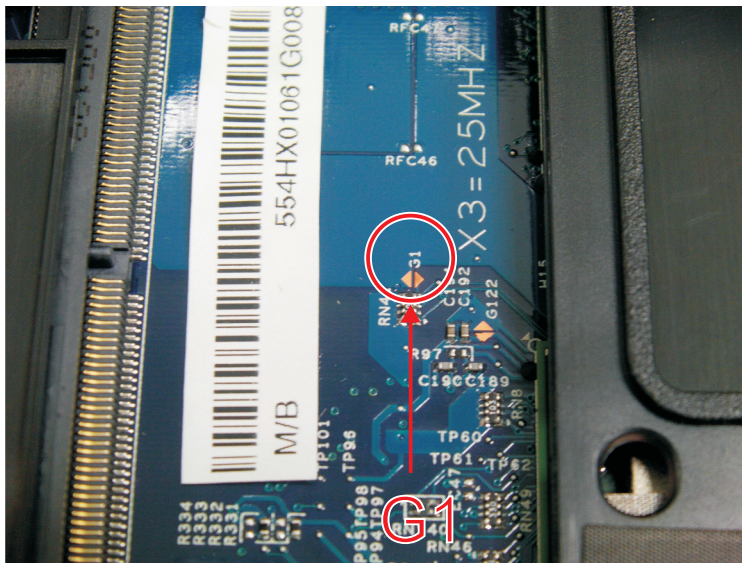
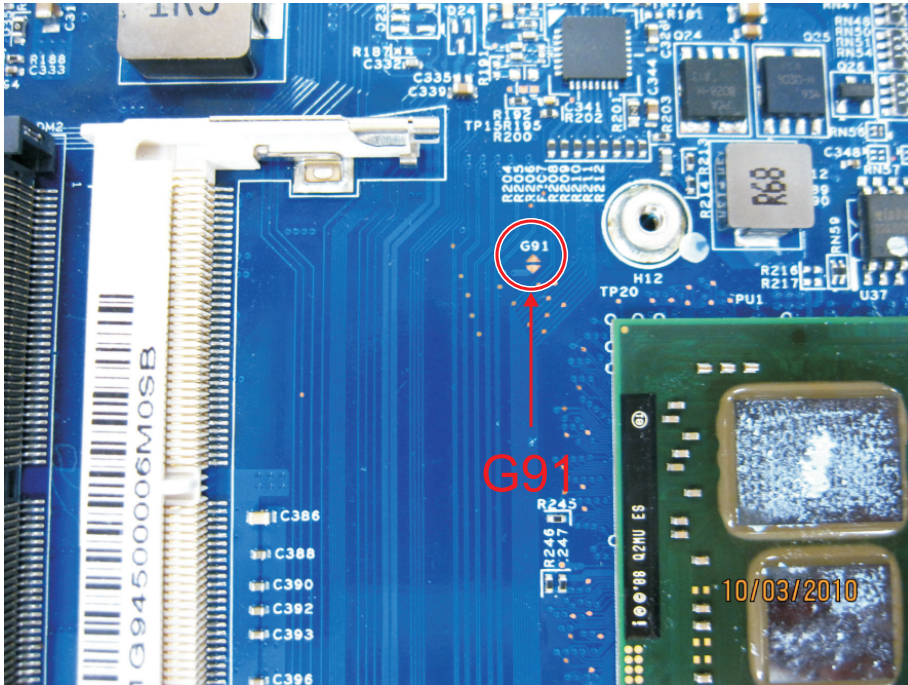


Bottom View



Clearing a BIOS Password

To clear a lost BIOS password (user or supervisor password) you need to short the G91 for Aspire 1430/1830T/One 753 Series, G1 for Aspire 1551/One 721 Series hardware gap located near the DIMM module to clear the password..



Gap	Default Setting	Operation Description
G91/G1	Open (Normal)	Short (Clear the BIOS user and supervisor passwords)

To clear a BIOS password:

1. Turn off the system and unplug all peripherals connected to it.
2. Unplug the AC adapter.

-
3. Remove the battery.
 4. Remove the memory module. Refer to page 30 for detailed instructions.
 5. Locate the **G91/G1** gap.
 6. Use an electrical conductivity tool to short the two contacts on the hardware gap together.
 7. While resting the tool on the two contacts, plug one end of the AC adapter into the DC power jack and plug one end of the electrical outlet.
 8. Press the power button to turn on the system.
 9. After POST, remove the tool from the hardware gap.
 10. Restart the computer. Press <**F2**> during bootup to access the BIOS Setup utility.
 11. Press <**F9**> to load the system defaults.
 12. Press <**F10**> to save the changes you made and close the Setup Utility.

Unlocking the HDD

To regain access to your notebook computer if you lose the HDD password, you need to generate a master password and unlock your hard drive. Use the unlock6.exe utility to unlock the hard drive.

1. Open the system in a DOS environment.
2. Type the following command:
A\>unlock6 XXXXX 00
where XXXXX is the HDD password error code
3. Press **Enter** to display the command options.
4. Select option **2** (upper case ASCII code) then press **Enter**.
5. Write down the generated master password.
6. Restart the computer.
7. In the HDD password prompt, type the master password generated in step 5, then press **Enter**.

BIOS Recovery

An interruption during a BIOS flash procedure (e.g. a power outage) can corrupt the BIOS firmware, which will cause the system to become unbootable. You need to access and execute the the boot block program to reboot the computer and recover the regular BIOS firmware.

Observe the following when performing a BIOS recovery:

- Make sure the battery pack is installed to the system and that the system is connected to a UPS unit during the BIOS recovery and BIOS flash procedures.
- The Crisis Disk should be prepared in a system running the Windows XP or Windows Vista OS.

Creating the BIOS Crisis Disk in Windows

1. Prepare a removable USB storage device with a capacity size greater than 10 MB.
Note that all data on the USB storage device will be cleared during the creation of the Crisis disk.
2. Set up a system running the Windows XP or Windows Vista OS and plug in the USB storage device into an available USB port.
3. Decompress the Crisis Package Source.
4. Select **WINCRIS.EXE** and then select **Run as administrator**.
5. Keep the default settings and then click **Start** button.
6. When the pop-up warning dialog box appears, click **OK** to create the Crisis disk.
7. Click **No** if you do not want to create another Crisis disk.
8. Eject and reconnect the USB removable storage device, and make sure it contains the following three files:
 - BIOS.WPH
 - MINIDOS.SYS
 - PHLASH16.EXE

Performing a BIOS Recovery

1. Shut down the BIOS failed-computer.
2. Connect the USB storage device containing the Crisis Disk files to the failed system.
3. Press and hold the <Fn> + <Esc> keys (this is the BIOS recovery hotkey), then press the power button.
The BIOS recovery process begins. When the process is complete the system will automatically reboot.
4. Disconnect the USB storage device from the system.
5. Perform a BIOS flash procedure to update the BIOS firmware. Refer to Running the Flash Utility section below.

Running the Flash Utility

1. Rename the BIOS file as "XXXXXXX.FD"
2. Copy the "XXXXXXX.FD" file to a bootable USB device containing the Crisis Recovery disk files.
3. Turn off the system.
4. Insert the USB storage device containing the renamed BIOS file and the Crisis Recovery disk files to any USB port.
5. Press and hold the <Fn> + <Esc> keys (this is the BIOS recovery hotkey), then press the **power** button.
6. Release the <Fn> + <Esc> keys after POST.

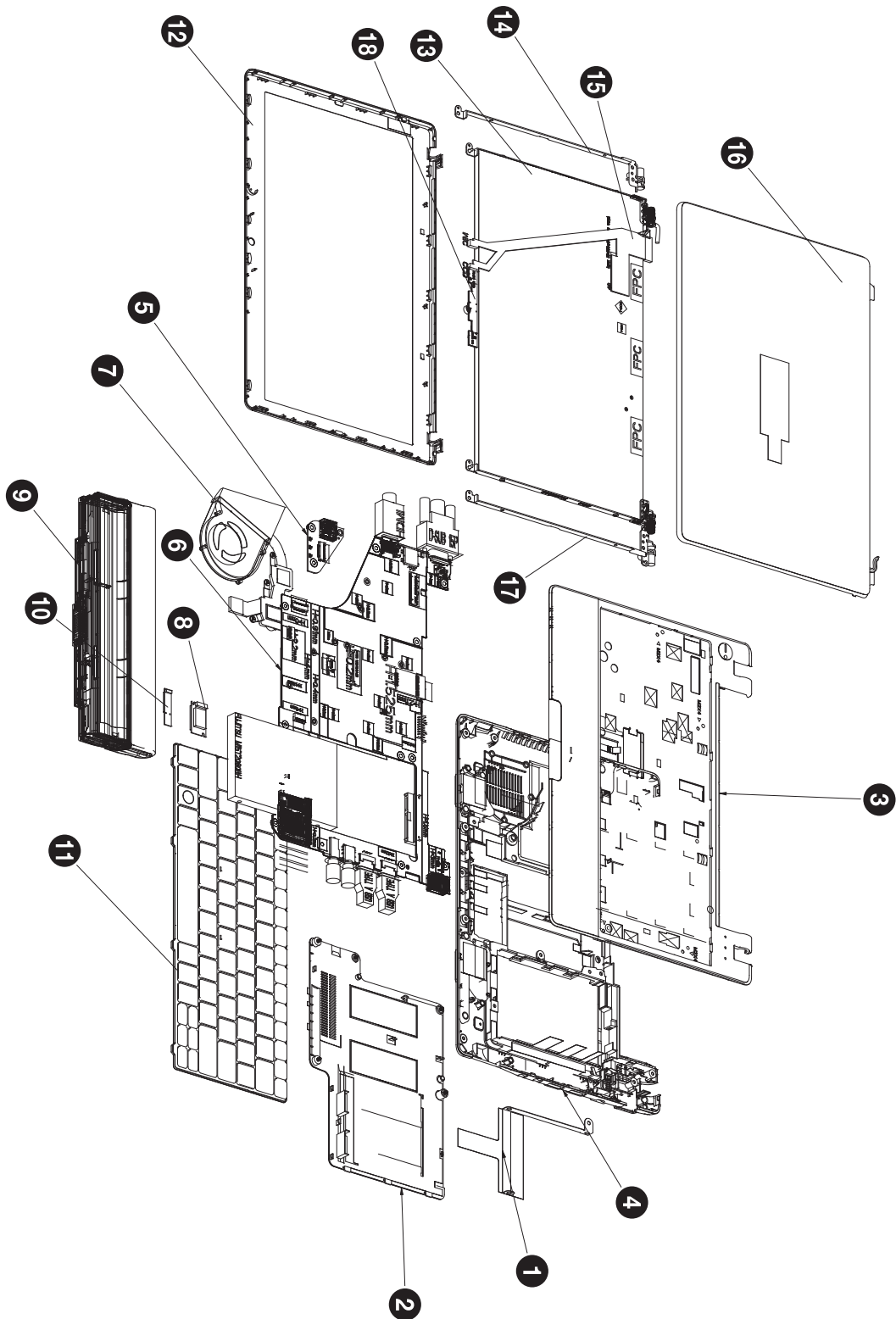
FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing of the Acer Aspire 1430/1551/1830T Series and Aspire One 721/753 computer global configurations. Refer to this list when ordering for repair parts or for RMA (Return Merchandise Authorization).

Part number changes will not be noted in this printed Service Guide. The part numbers listed in this Service Guide may differ from those given to regional AUTHORIZED SERVICE PROVIDERS. You MUST use the local FRU list provided by your regional office to order FRU parts for repair and service of customer machines. Make sure that you are using the most up-to-date information available on your regional web site or channel when ordering FRU parts.

NOTE: Follow the local government regulations, or the rules set by your regional office on how to return or dispose of defective parts.

Exploded Diagram



NO	PART NO	DESCRIPTION	Q'TY
1	60.4GS11.001	JV10_LCASE_HDD_MYLAR_MODULE	1
2	60.4GS03.001	60_JV10_BIG_DOOR_ASM	1
3	60.4GS04.001	U CASE GAP	1
4	60.4GS10.001	60_JV10_LCASE_ASM	1
5	JV.0_DB_.	JV10_USB_BOARD	1
6		JV10_MB_AMD	1
7		TBD	9
7		ASSY THERMAL JCI+SUNON JV10CS	1
8		Foxconn Bluetooth ATH AR3011	1
9		Battery SANYO AL10C Li-Ion 3S2P	1
10	T77H1143D	TBD	1
11		ACER NT1T_A10B (US; Black)	1
12	60.4GS08.001	60 JV10 LCD Bezel	1
13		LED LCD SAMSUNG 11.6" WXGA Glare	1
14	34.4GS05.001	JV10 Hinge L	1
15	50.4GS03.001	JV10 LVDS Cable	1
16	60.4GS06.001	60 JV10 LCD Panel 3G BLACK MATT	1
17	34.4GS06.001	JV10 Hinge R	1
18		CCD	1

FRU List

Aspire 1430/1551/1830T Series and Aspire One 721/753 Series FRU List

1.

Model Definition and Configuration

Keyboard Schematics for Laptop/notebook <http://faqp.ru/>

Keyboard Schematics for Laptop/notebook <http://faqp.ru/>

Keyboard Schematics for Laptop/notebook <http://faqp.ru/>

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Keyboard Schematics for Laptop/notebook <http://faqp.ru/>

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 compatible Windows® operating system for each model.

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 Compatibility Test Report released by the Acer Mobile System Testing Department.

Hardware Device Tests

Item	Device name	Vendor
I/O peripherals		
Access Point	Air Station Wireless NFINITI [ModeNum:WZR-G144N], 802.11n/g/b	Buffalo
	Buffalo Air Station NFINITI [ModeNum:WZR2-G300N], 802.11n/g/b	Buffalo
Bluetooth Access Point	Bluetooth Access Point [ModeNum:BT300]	X Bridge
Bluetooth Devices	Bluetooth Stereo Headset [ModeNum:HT820]	Motorola
	Bluetooth mouse [ModeNum:097855020512]	Logitech
	Motorola Bluetooth Wireless Headset H300	Motorola
	Sony Ericsson Stereo Bluetooth Headset HBH-DS970	Sony
External LCD	P243W 24-inch LCD Monitor	Acer
	P244W 24-inch LCD Monitor	Acer
	SP2208WFP 22-inch LCD Monitor	Dell
	UltraSharp 3008WFP 30-inch LCD Monitor	Dell
	2407FPW 24-inch LCD Monito	Dell
	UltraSharp E2408WFP 24-inch widescreen HDMI	Dell
Earphone / Microphone	Hawk Stereo Headset 933	Hawk
Projector	3300MP Projector	Dell
SIM Card	FarEasTone 3G SIM Card	FarEasTone
	Chunghwa Telecom 3G SIM Card	Chunghwa Telecom
TV	W37G (HDMI)	Westenhouse
	TC-37MPK (VGA/HDMI)	Panasonic
USB 3G Card	Huawei mobile connect E220 USB Modem 3G (E220: HSDPA/UMTS/EDGE/GPRS/GSM)	Huawei
USB Camera	Canon Digital IXUS 860 IS Digital Compact Camera (8.0 Megapixel CCD sensor/DIGIC III with Face Detection AF/AE/FE/ 28mm wide-angle lens with optical Image Stabilizer, Media storage:SD,SDHC,MMC,MMCplus, built-in SD32MB)	Canon
USB Flash Drive	Transcend JetFlash USB2.0 Flash Drive V85 8GB Memory Key	Transcend
	Apacer AH421 8GB	Apacer
	A-Data PD16 Vista 16GB	A-Data
	Transcend JetFlash USB2.0 Flash Drive V10 16GB Memory Key	Transcend
USB HDD	2.5-inch Portable 80GB Hard Disk	Transcend
USB Hub and Others	Huawei mobile connect E220 USB Modem 3G (E220: HSDPA/UMTS/EDGE/GPRS/GSM)	Huawei
	PowerSync USB2.0 4-Port mini HUB(HU151W White)	PowerSync
	Techworks 4-Port USB2.0 Mini HUB(OW4PTUSBHB)	Techworks
USB Keyboard / Mouse	First Wheel Mouse	Logitech
	Internet Navigator Keyboard	Logitech
	Dell L30U 0N242F USB Keybaord	Dell
USB ODD	DVD+R/RW (Usb2.0)	Plextor
USB Printer	HP Deskjet F4280 All-in-One:Printer/ Scanner/Copier, 1200x2400dpi)	HP
USB Speaker / Joystick	iFun USB Speaker(JS1200UA)	JS
	Dell USB Speaker	Dell
USB Storage Drive	6 IN 1 Flash Card Reader/Writer	PQI

Item	Device name	Vendor
Wireless Printer	Photosmart C309 (CC35A) All-in-One Printer (4x6 photos/CD/DVD/Quick Forms)/Scanner/Copier/Fax Port: USB2.0/Ethernet/PictBridge/802.11g/BT	HP
	Photosmart C4580 All-in-One Printer (4x6 photos) /Scanner/Copier Port:USB2.0/802.11g.b/Memory Card	HP
Memory Card		
Memory Stick	High speed 1GB Memory stick Pro Duo	Lexar
	MS PRO Dou 2GB High Speed	SONY
	MS PRO 2GB Memory Card	SONY
	SanDisk Meomry Stick Micro (M2) 8GB Card	SanDisk
Multimedia Card	RS-MMC 128MB Memory Card	Sandisk
	RS-MMC Mobile 256MB Memory Card	PQI
	Transcend MMC plus 4GB Card	Transcend
	Turbo 200X 2GB MMC Card	A-DATA
SD Card	4GB SD PRO Memory Card	RiDATA
	SanDisk multi-use SD Class2 Memory Card 2GB	SanDisk
	SD card 2GB (150x Hi-Speed)	Apacer
	SanDisk microSDHC 4GB Card with Adapter	SanDisk
	Kingston SDHC SD4 32GB Card	Kingston
XD Card	OLYMPUS XD-Picture Card M+ 2GB Speed Card	OLYMPUS
	FUJIFLM XD-Picture Card TypeM 2GB	FUJIFLM

Online Support Information

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

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 can access our website. However some information sources will require a user ID 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 Acer 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 a PDF File to facilitate the problem-free downloading of our technical material.

Also available on this website are:

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

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

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