

ZX4800/ZX4830 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>

PRINTED IN TAIWAN

Revision History

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

Date	Chapter	Updates

Copyright

Copyright © 2009 by Acer Incorporated. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of Acer Incorporated.

Disclaimer

The information in this guide is subject to change without notice.

Acer Incorporated makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties of merchantability or fitness for any particular purpose. Any Acer Incorporated software described in this manual is sold or licensed "as is". Should the programs prove defective following their purchase, the buyer (and not Acer Incorporated, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software.

Acer is a registered trademark of Acer Corporation.

Intel is a registered trademark of Intel Corporation.

Pentium and Pentium II/III are trademarks of Intel Corporation.

Other brand and product names are trademarks and/or registered trademarks of their respective holders.

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.

System Specifications	1
Features	1
System Block Diagram	4
Your Computer tour	5
Front View	5
Right View	6
Left View	7
Rear View	8
Using the Keyboard	9
Windows Keys	10
Hardware Specifications and Configurations	11
System Utilities	19
BIOS Setup Utility	19
Navigating the BIOS Utility	19
CMOS Setup Utility	20
Product Information	21
Standard CMOS Features	22
Advanced BIOS Features	23
Advanced Chipset Features	24
Integrated Peripherals	25
Power Management Features	26
PC Health	27
Frequency Voltage Control	28
BIOS Security Features	29
BIOS Flash Utilities	32
DOS Flash Utility	33
WinPhlash Utility	34
Using DMI Tools	35
Machine Disassembly and Replacement	38
Disassembly Requirements	38
General Information	38
Pre-disassembly Instructions	38
Disassembly Process	40
Disassembly Flowchart	40
Removing the ODD Bezel	42
Removing the Stand Assembly	44
Removing the Rear Cover	46
Removing the Audio Board	48
Removing the Hard Disk Drive	50
Removing the ODD	53
Removing the Inverter Board	56
Removing the Touchscreen Control Board	58
Removing the Mainboard Shielding	60
Removing the Wireless LAN Module	65
Removing the TV Module	67
Removing the DIMM Module	69
Removing the VGA Card	70
Removing the Fan	71
Removing the Thermal Module	73
Removing the CPU	74
Removing the Mainboard	75
Removing the USB Board	76
Removing the IR Receiver	78

Removing the Frame	80
Removing the LCD Panel	85
Removing the Power Board	86
Removing the Home Button Board	88
Removing the Webcam	89
Removing the Antennas	91
Removing the Speakers	92
Removing the Bluetooth Module	94
Reassembly Procedure	95
Replacing the Bluetooth Module	95
Replacing the Speakers	96
Replacing the Antennas	98
Replacing the Webcam	100
Replacing the Home Button Board	102
Replacing the Power Board	103
Replacing the LCD Panel in the Frame	104
Replacing the Frame	106
Replacing the IR Receiver	113
Replacing the USB Board	114
Replacing the Mainboard	116
Replacing the CPU	117
Replacing the Thermal Module	118
Replacing the Fan	119
Replacing the VGA Card	120
Replacing the DIMM Module	121
Replacing the TV Tuner Module	122
Replacing the WLAN Module	123
Replacing the Mainboard Shielding	125
Replacing the Touchscreen Board	127
Replacing the Mainboard Connectors	129
Replacing the Inverter Board	132
Replacing the ODD Module	134
Replacing the HDD	137
Replacing the Audio Board	139
Replacing the Rear Cover	140
Replacing the Stand	142
Replacing the ODD Bezel	144

Troubleshooting 146

Common Problems	146
Component Failure	147
Wireless Failure	151
LCD Failure	153
General Troubleshooting Issues	155
Intermittent Problems	158
Undetermined Problems	158

Jumper and Connector Locations 159

Mainboard Top View	159
Mainboard Bottom View	161
BIOS Recovery	162
BIOS Recovery by Crisis Disk	162

FRU (Field Replaceable Unit) List 165

Exploded Diagrams	165
-------------------	-----

Main Assembly	166
FRU List	166
Screw List	173
Model Definition and Configuration	174
Test Compatible Components	178
Online Support Information	184
Index	185

System Specifications

Features

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

Operating system

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

Processor

- Intel® Core™2 Duo processor (1066/800 FSB)
- Intel® Pentium® processor
- Intel® Celeron® processor

Chipset

- Intel® GM40 Express Chipset - for ZX4800
- Intel® GM45 Express Chipset - for ZX4830

Memory

- Up to 4 GB of DDR2 800 MHz SDRAM (dual-channel support on two DIMMs)

Display

- 20" Full HD 1600 x 900 pixel resolution, high brightness (250 nits) TFT LCD1
- 6.7 million colors
- 5 ms response time
- 1000:1 (ACM) contrast ratio

Touchscreen

- Integrated Windows® 7 compliant multi-touch capable optical solution

Hard drive

- SATA 3 Gb/s hard disk up to 750GB

Optical drive

- SuperMulti DVD ROM

Card reader

- Multi-in-1 card reader, supporting:

- MultiMediaCard (MMC)
- Secure Digital™ (SD) Card
- SDHC™ Card
- Memory Stick™
- Memory Stick PRO™
- Memory Stick PRO-HG Duo™

Graphics

- Onboard Intel® GMA X4500HD (Intel® GM45) - for ZX4800
- Discrete ATI Radeon™ HD 4570 with 512 MB DDR2 Memory (Intel® GM45) - for ZX4830

TV-tuner

- Hybrid analog (NTSC/PAL/SECAM) and digital (DVB-T or ATSC format) TV-tuner card, supporting hardware or software MPEG-2 stream encoding

Audio

- Integrated 5 W stereo speaker system
- High-definition audio with 5.1-channel support

Communication

- Built-in web cam and microphone
- Gigabit Ethernet, Wake-on-LAN ready
- WLAN*: 802.11b/g/Draft-N
- WPAN*: Bluetooth® 2.1+EDR (Enhanced Data Rate)

I/O ports

- Side:
 - Two USB 2.0 ports
 - Multi-in-one card reader
 - High-definition headphone and microphone jacks
- Rear:
 - Four USB 2.0 ports
 - DC-in jack
 - Ethernet (RJ-45) port
 - IR blaster*
 - TV-tuner port*

Software

- Gateway TouchSuite
- Adobe® Reader®
- CyberLink® PowerCinema® 7
- CyberLink® YouCam® 2.0 (online upgrade to 3.0)

- Norton Internet Security™ 2009 Trial
- Microsoft® Office 2007 Trial with Microsoft® Works 8.5
- Wild Tangent Games

Security

- Kensington lock slot

Dimensions

- 421 (H) x 515 (W) x 80 (D) mm (with bezel)

BIOS

- AMI PnP BIOS compatible with SMBIOS 2.4

Adapter

- 65 W adapter with cord - for ZX4800
- 120 W adapter with power cord - for ZX4830

Certification

- FCC, CE, BSMI, CCC, C-Tick, ETL, Nemko (CB & Bauart)

System compliance

- PC 2001, ENERGY STAR®

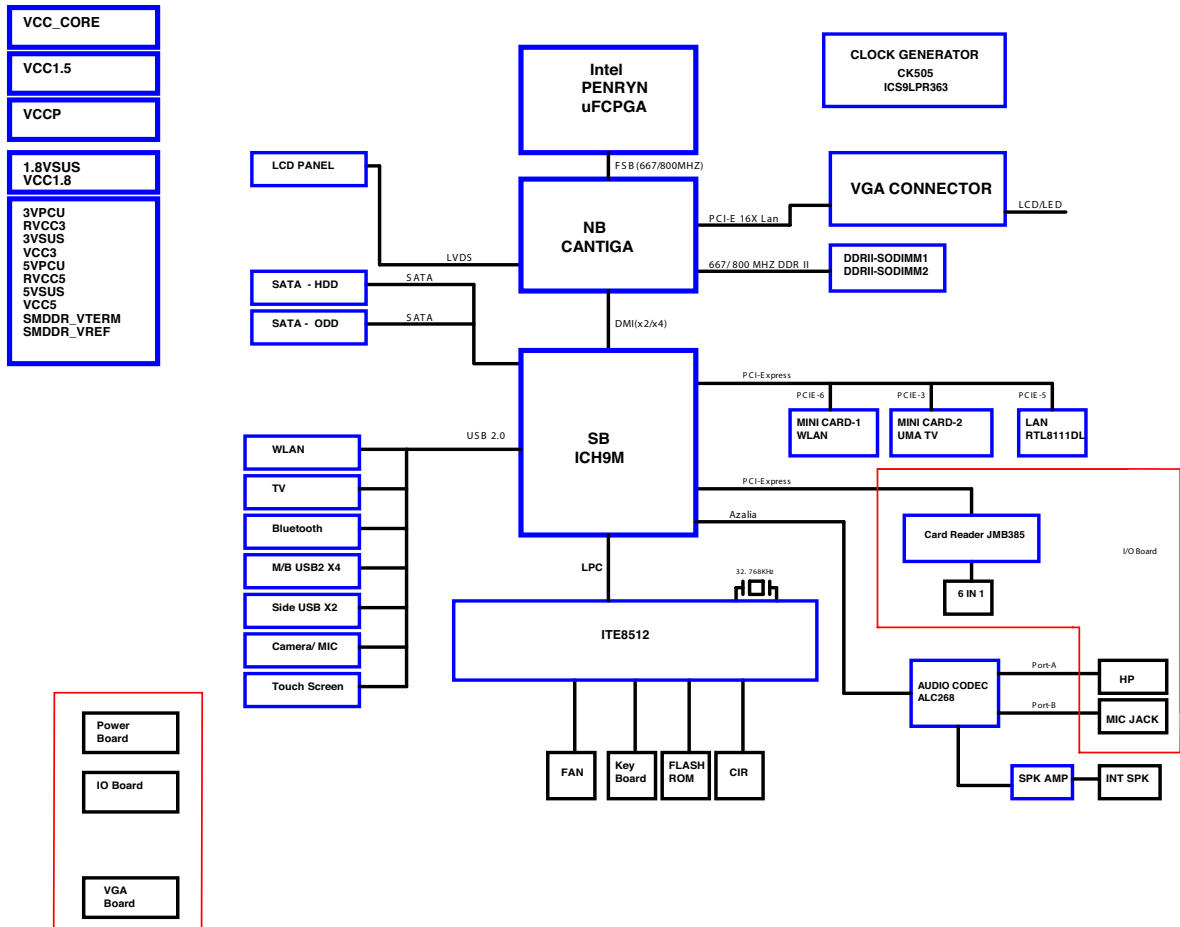
Optional accessories

- Gateway USB keyboard and mouse (wireless optional)

NOTE: Items marked with * denote only selected models.

NOTE: The specifications listed above are for reference only. The exact configuration of your PC depends on the model purchased.

System Block Diagram

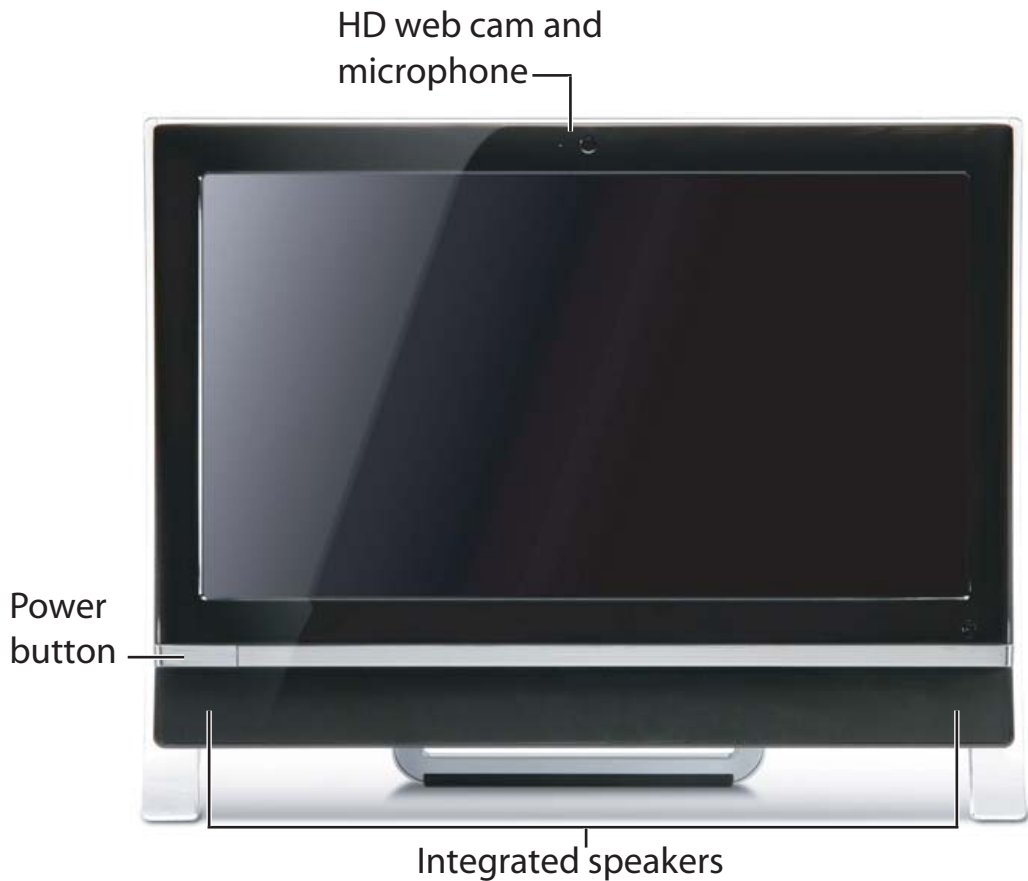


Your Computer tour

This section describes port locations, indicators, and controls for the computer.

IMPORTANT: Your computer's hardware options, port locations, and indicators may vary from this illustration.

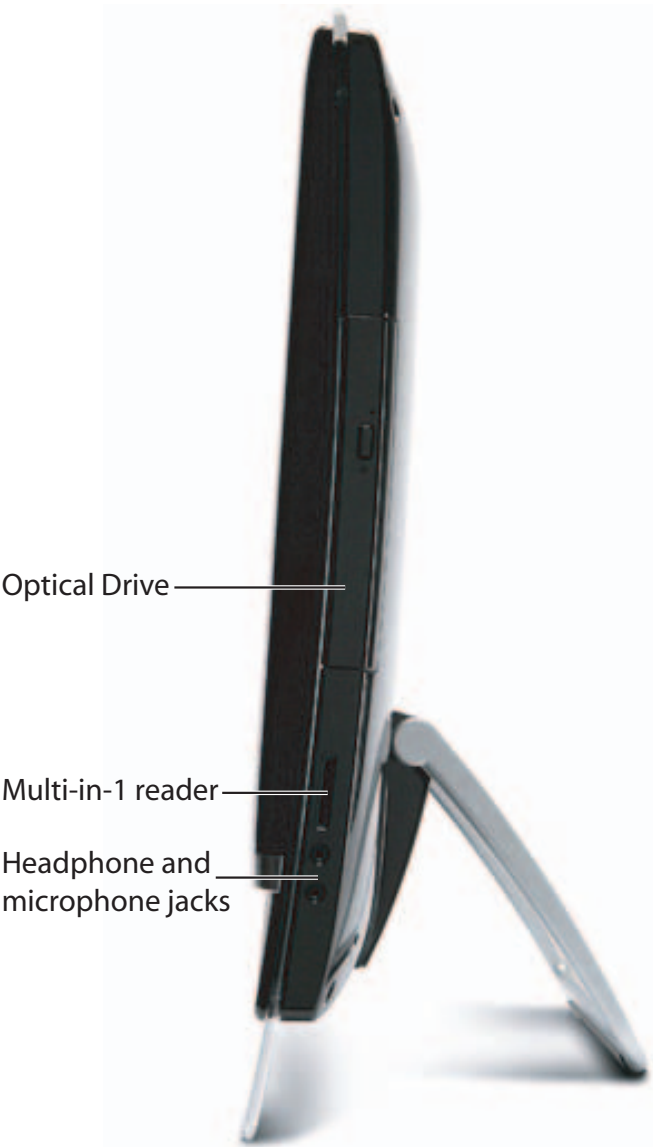
Front View



Component	Description
Power button	Press this button to turn the power on or off. You can also configure the power button to operate in Standby/Resume mode or Hibernate mode.
Integrated speakers	5W/channel stereo speakers built into the computer.
Web cam and microphone	For internet communication.

Right View

IMPORTANT:Your computer's hardware options, port locations, and indicators may vary from this illustration.




Component	Icon	Description
Optical disc drive		Use this drive to listen to audio CDs, install games and programs, watch DVDs, and store large files onto recordable discs (depending on drive type). This drive may be a CD, recordable CD, DVD, or recordable DVD.
Headphone jack		Plug powered, analog front speakers, an external amplifier, or headphones into this jack.
Microphone jack		Plug a microphone into this jack.
Multi-in-1 reader		Insert a memory card from a digital camera, MP3 player, PDA, cellular telephone, or other device into the memory card reader.

Left View

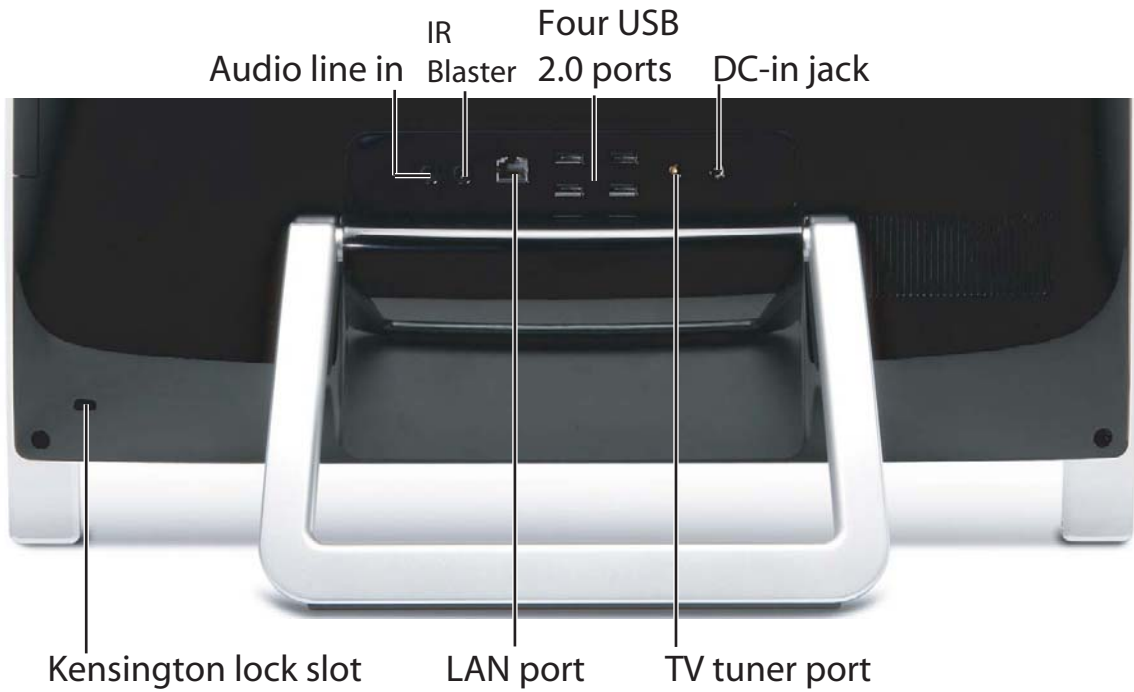
IMPORTANT:Your computer's hardware options, port locations, and indicators may vary from this illustration.







Component	Icon	Description
USB 2.0 port		Plug USB (Universal Serial Bus) devices (such as a USB external drive, printer, scanner, camera, keyboard, or mouse) into this port.
BCAS Card Reader	TBD	Subscription service available for select models only.

Rear View



IMPORTANT:Your computer's hardware options, port locations, and indicators may vary from this illustration.



Component	Icon	Description
Audio line in	Line Out	Connect to an external 5.1 speaker system through these jack.
IR Blaster	IR	Connect an IR blaster extension to this jack.
Kensington™ lock slot		Secure your computer to an object by connecting a Kensington cable lock to this slot.
TV-tuner port	TV Tuner	Connect your TV to this port.
Ethernet (network) jack		Plug an Ethernet network cable or a device (such as a DSL or cable modem for a broadband Internet connection) into this jack.
USB ports		Plug USB (Universal Serial Bus) devices (such as a USB printer, scanner, camera, keyboard, or mouse) into these ports.
DC-in jack		Plug the power cord into this connector.




















Using the Keyboard

The keyboard has several different types of keys and buttons.

Feature	Icon	Description
Function keys		Press these keys to start program actions. Each program uses different function keys for different purposes. See the program documentation to find out more about the function key actions.
Audio playback keys		Press these keys to play your audio files and to adjust the volume.
Windows key		Press this key to open the Windows Start menu. This key can also be used in combination with other keys to open utilities. See “Windows Keys” on page 10.
Fn key		Press this key in combination with keys that have alternate functions defined, such as the F9-F12 keys. Press <Fn> + <Δ> to increase the brightness of the display. Press <Fn> + <▽> to decrease the brightness of the display.
Application key		Press this key to access shortcut menus and help assistants in Windows.
Navigation keys		Press these keys to move the cursor and to copy, cut, and paste objects.

Windows Keys

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

Key	Description
 Windows key	<p>Pressed alone, this key has the same effect as clicking on the Windows Start button; it launches the Start menu. It can also be used with other keys to provide a variety of functions:</p> <ul style="list-style-type: none"> <  >: Open or close the Start menu <  > + <D>: Display the desktop <  > + <E>: Open Windows Explore <  > + <F>: Search for a file or folder <  > + <G>: Cycle through Sidebar gadgets <  > + <L>: Lock your computer (if you are connected to a network domain), or switch users (if you're not connected to a network domain) <  > + <M>: Minimizes all windows <  > + <R>: Open the Run dialog box <  > + <T>: Cycle through programs on the taskbar <  > + <U>: Open Ease of Access Center <  > + <X>: Open Windows Mobility Center <  > + <BREAK>: Display the System Properties dialog box <  > + <SHIFT+M>: Restore minimized windows to the desktop <  > + <TAB>: Cycle through programs on the taskbar by using Windows Flip 3-D <  > + <SPACEBAR>: Bring all gadgets to the front and select Windows Sidebar <CTRL> + <  > + <F>: Search for computers (if you are on a network) <CTRL> + <  > + <TAB>: Use the arrow keys to cycle through programs on the taskbar by using Windows Flip 3-D <p>Note: Depending on your edition of Windows 7 some shortcuts may not function as described.</p>
 Application key	This key has the same effect as clicking the right mouse button; it opens the application's context menu.

Hardware Specifications and Configurations

Processor

Item	Specification
CPU type*	<ul style="list-style-type: none"> Intel Penryn LGA775 up to 35W TDP Intel Core 2 Duo Mobile Processor E2000/E4000/E5000/E7000/E8000 series Intel Celeron Processor 500 series Intel Celeron Mobile Dual Core T1x00 series <p>*Dependent on model shipped.</p>

System Board Major Chips

Item	Controller
Core logic	<ul style="list-style-type: none"> Intel 82GL40 or 82GM45 Intel ICH9M
LAN	RTL8111DL (10/100/Giga Base)
Audio Codec	Realtek ALC268GR audio code

North Bridge Chipset

Item	Specification
Chipset	Intel 82GL40 or 82GM45
Features	<ul style="list-style-type: none"> CPU Interface <ul style="list-style-type: none"> 667/800/1677 MT/s FSB (1066 FSB is only supported by 82GM45) System Memory Interface <ul style="list-style-type: none"> One or Two channels (each channel consisting of 64 data line) Single or Dual channel memory organization DDR2 667/800 frequencies Unbuffered, non ECC DIMMs only Supports 2Gb,1Gb,512Mb,256Mb DDR2 technologies for x8 and x16 device 8GB maximum memory (Max 4GB with GL40) Direct Management Interface (DMI) <ul style="list-style-type: none"> Chip to chip connection interface to Intel ICH 2GBs/ point to point DMI to ICH9M (1GB/s each direction) 32 bit downstream addressing Messaging and Error Handling PCI Express Interface (82GM45 GMCH Only) <ul style="list-style-type: none"> One x16 PCI Express port Compatible with PCI Express Base Specification, Revision 2.0c. Raw bit rate on data pins of 2.5Gb/s resulting in a real bandwidth per pair of 250Mb/s Integrated Graphics Device (82GL40 GMCH Only) <ul style="list-style-type: none"> Core frequency of 400 MHz Packing <ul style="list-style-type: none"> 27mm x 27mm 1362 ball FC-BGA 12W TDP Tcasema100 degree C

South Bridge Chipset

Item	Specification
Chipset	ICH9M
Features	<ul style="list-style-type: none"> • Direct Media Interface PCI Express <ul style="list-style-type: none"> • 6 PCI Express root ports • Support PCI Express 1.1 • Ports 1-4 can be statically configured as 4x1, or 1x4 • Support for full 2.5Gb/s bandwidth in each direction per x1 lane • Module based Hot-plug supported • PCI Bus Interface <ul style="list-style-type: none"> • Support PCI Rev2.3 Specification at 33 MHz • Four available PCI REQ/GNT pairs • Supported for 64 bit addressing on PCI using DAC protocol • Two Integrated Serial ATA Host Controller <ul style="list-style-type: none"> • Up to four SATA ports • Data transfer rate up to 3.0 Gb/s (300MB/s) • Integrated AHCI controller • External SATA support • Port Disable Capability • Intel High Definition Audio Interface <ul style="list-style-type: none"> • PCI Express endpoint • Independent Bus Master logic for eight general purpose streams, four input and four output • Support four external Codes • Supports variable length stream slots • Support multi-channel, 32 bit sample depth, 192 kHz sample rate output • Provides mic array support • Allow for non-48 kHz sampling output • Support for ACPI Device States • Low Voltage Mode • Intel Quiet System Technology <ul style="list-style-type: none"> • Four TACH signals and three PWM signals • Improved algorithms for better performance • Simple Serial Transport (SST) 1.0 Bus and Platform Environment Control Interface (PEIC) • USB 2.0 <ul style="list-style-type: none"> • 6 OHCI and 2 EHCI Host controllers, support up to 12 external ports. • Two Configuration Operations for EHCI Controller 6+6 and 8+4 • Per port Disable Capability • Includes up to two USB2.0 High speed Debug Ports • Supports wake up from sleeping states S1-S4 • Supports legacy Keyboard/Mouse software <ul style="list-style-type: none"> • Integrated Gigabit LAN Controller • Integrated ASF Management Controller • Network security with System Defense • Supports IEEE 802.3 • LAN Connect Interface (LCI) and Gigabit LAN Connect Interface(GLCI) • 10/100/1000 Mbps Ethernet SupportJumbo Frame Support • Intel Active Management Technology with System Defense (Corporate Only) • Network Outbreak Containment Heuristics

Item	Specification
	<ul style="list-style-type: none"> • Intel I/O Virtualization (VT-d) Support • Intel Trusted Execution Technology (Intel TXT) Support (Corporate Only) • Power Management Logic <ul style="list-style-type: none"> • Support ACPI 3.0b • ACPI- defined power states (C1,C2,C3,C4,S1,S3,S4,S5) • ACPI Power Management Timer • SMI# generation • All registers readable/restorable for proper resume from 0 V suspend states • Support for APM-based legacy power management for non-ACPI implementations • External Glue Integration <ul style="list-style-type: none"> • Integrated Pull-up, Pull-down and Series • Termination registers on processor I/F • Integrated Pull-down and Series resisters on USB • Enhanced DMA Controller <ul style="list-style-type: none"> • Two cascaded 8237 DMA controllers • Support LPC DMA • SMBus <ul style="list-style-type: none"> • Faster speed, up to 100 kbps • Flexible SMBus/SMLink architecture to optimize for ASF • Provides independent manageability bus through SMLink interface • Supports SMBus 2.0 Specification • Host interface allow processor to communication via SMBus • Slave interface allows an internal or external Microcontroller to access System resources • Compatible with most two-wire components that are also I2C compatible • High Precision Event Timer <ul style="list-style-type: none"> • a. Advanced operating system interrupts scheduling • Timers Based on 82C54 <ul style="list-style-type: none"> • System timer, Refresh request, Speaker tone output • Real Time Clock <ul style="list-style-type: none"> • 256 Byte battery-backed CMOS RAM • Integrated oscillator components • Lower Power DC/DC Converter implementation • System TCO Reduction Circuits <ul style="list-style-type: none"> • Timers to generate SMI# and Reset upon detection of system hang • Timers to detect improper processor reset • Integrated processor frequency strap logic • Supports ability to disable external devices • Supports Processor System Bus interrupt delivery • Interrupt Controller <ul style="list-style-type: none"> • Support up to eight PCI interrupt pins • Support PCI 2.3 Message Signalled Interrupts • Two cascaded 82C59 with 15 interrupts • Integrated I/O APIC capability with 24 interrupts • 1.1V operation with 1.5V and 3.3V I/O <ul style="list-style-type: none"> • 5V tolerant buffers on PCI, USB and selected Legacy signals • 1.1V Core Voltage

South Bridge Chipset (Continued)

Item	Specification
	<ul style="list-style-type: none"> Five Integrated Voltage Regulators for different power rails Firmware Hub I/F supports BIOS Memory size up to 8 MbytesSerial Peripheral Interface (SPI) <ul style="list-style-type: none"> Supports up to two SPI devices Supports 20MHz and 33MHz SPI devices NEW: Dual erase support Low Pin Count(LPC) I/F <ul style="list-style-type: none"> Supports two Master/DMA devices Supports for Security Device(Trusted Platform Module) connected to LPC GPIO <ul style="list-style-type: none"> TTL, Open Drain Inversion GPIO lock down NEW: JTAG (Corporate Only) <ul style="list-style-type: none"> Boundary Scan for testing during board manufacturing Package 23mm x 23mm, 676 mBGA 2.5W TDP Tcasemax 110 degree C

BIOS

Item	Specification
BIOS vendor	AMI PnP BIOS compatible with SMBIOS 2.4
BIOS Version	v02.67

System Memory

Item	Specification
Memory controller	Built in
Memory size	Non onboard
DIMM socket number	2
Supports memory size per socket	512/1024/2048MB (1 bank or 2 bank)
Supports maximum memory size	4096MB (2048MB+2048MB SO-DIMMs)
Supports DIMM type	2 DDR2 SO-DIMM
Supports DIMM Speed	667/800MHz
Supports DIMM voltage	1.8V

Memory Combinations

Slot 1
0MB
512MB
1024MB
2048MB

NOTE: Above table lists system memory configurations.

Wireless Module

Item		Specification
Model and Type		Lite-On WN6605LH-AA, Quanta EM307 WLAN EM307
Conformity		802.11 b/g/n WiMax
Modulation Technique		OFDM with BPSK QPSK, 16QAM, 64QAM (g/n), DQPSK, DBPSK and CCK (b)
Frequency Range		2412 ~ 2484MHz ISM band
Channels		1---14 channels for active channels
Data Rate (Mbps)		802.11b data rate: 11,5.5,2,1 Mbps with DBPSK and DQPSK modulation 802.11 g data rate: 54, 48, 36, 24, 18, 12, 9, 6Mbps
Security (WEP)		WPA, WPA2
Operating Temperature	Operating	-10°C to +75°C
	Storage	-40°C to +80°C

Touchscreen

Item	Specifications
Touchscreen	Windows 7 multitouch and gestures

Hard Disk Drive Interface

Item	Specifications		
Vendor & Model Name	Hitachi HDT721032SLA380 Saturn	Hitachi HDT721064SLA360 Saturn	Hitachi HDT721010SLA360 Saturn
Capacity (GB)	320	640	1000
Bytes per sector	512	512	512
Data heads	2	4	6
Drive Format			
Disks	1	2	3
Spindle speed (RPM)	7200		
Performance Specifications			
Buffer size	16MB		
Interface	SATA		
Internal transfer rate (MB/ sec, max)	300MB/s maximum		
I/O data transfer rate (Mbytes/sec max)	1406 Mbits/s maximum	1406 Mbits/s maximum	1406 Mbits/s maximum
DC Power Requirements			
Voltage	+5.0V ± 5%.		

Item	Specifications			
Vendor & Model Name	Seagate ST3320418AS (Pharaoh)	Seagate ST3640623AS (Brinks)	Seagate ST3750528AS (Pharaoh)	Seagate ST31000528AS (Pharaoh)
Capacity (GB)	320	640	750	1000
Bytes per sector	512	512	512	512
Data heads	2	4	6	
Drive Format				
Disks	TBD	TBD	TND	TBD

Item	Specifications			
Spindle speed (RPM)	7200			
Performance Specifications				
Buffer size	16MB	16Mb	32MB	32MB
Interface	SATA			
Internal transfer rate (MB/sec, max)	300MB/s maximum			
I/O data transfer rate (Mbytes/sec max)	1500 Mbits/s maximum	1500 Mbits/s maximum	1500 Mbits/s maximum	1500 Mbits/s maximum
DC Power Requirements				
Voltage	+5.0V ± 5%.			

Item	Specifications		
Vendor & Model Name	Western Digital WD3200AAJS-22L7A0 XL320S-31	Western Digital WD6400AAKS-22A7B2 XL320M	Western Digital WD7502AALS-22E3A0 (XL500)
Capacity (GB)	320	640	750
Bytes per sector	512	512	512
Data heads			
Drive Format			
Disks			
Spindle speed (RPM)	7200		
Performance Specifications			
Buffer size	8MB	16MB	32MB
Interface	SATA		
Internal transfer rate (MB/sec)	70MB/s sustained		
I/O data transfer rate (Mbytes/sec max)	1000 Mbits/s maximum	1000 Mbits/s maximum	1000 Mbits/s maximum
DC Power Requirements			
Voltage	+5.0V ± 5%.		

Audio Interface

Item	Specification
Audio Controller	Alc268 supporting Azalia function
Audio onboard or optional	Onboard
Mono or Stereo	Stereo
Internal Microphone	Headphone /Mic /line out support
Internal Speaker	5W Speakers 300Hz to 20kHz +/- 3dB

Bluetooth

Item	Specification
Chipset	Broadcom BCM2046, Bluetooth2.1 + EDR, USB interface module
Data throughput	3Mbps
Protocol	Bluetooth 2.1 + EDR
Internal Microphone	USB 2.0
Connector type	USB

TV Tuner

Item	Specification
TV Tuner	<ul style="list-style-type: none"> • ATSC/QAM/HRC/IRC/Standard Cable • DVB-T • ISDB-T • DMB-T/H • Meets Microsoft Media Center TV Tuner requirements

VGA Controller

Item	Specifications
VGA Controller	<ul style="list-style-type: none"> • INTEL GL40/GM45 Internal Graphics • Direct 3D, Integrated LVDS • Dual view and Dual video • TV-out • ATI M92-M

LCD 20"

Item	Specification			
Vendor/model name	Chi Mei / M200O1-L01	LG / LM200WD1-TLC1	LG / LM200WD1-TLA1	Samsung / LTM200KT03
Screen Diagonal (mm)	508.05	508.05	508.05	508.05
Active Area (mm)	442.8 (H) x 249.075(V)	442.8 x 249.1	442.8 x 249.1	442.8 x 249.075
Display resolution (pixels)	1600 x 900	1600 x 900	1600 x 900	16 x 900
Pixel Pitch	0.2768(H) x 0.2768 (V)	0.922(H) 0.2766(V)	0.922(H) 0.2766(V)	0.2768 (H) x 0.2768 (W)
Display Mode	Transmissive, normally whtie	Transmissive, normally white	Transmissive, normally white	Twisted Nematic, normally white
Typical White Luminance (cd/ m ²) also called Brightness	300	250	300	250
Supported Colors	16.7M	16.7M	16.7M	16.7M
Contrast Ratio	1000:1	1000:1	1000:1	1000:1
Response Time (Optical Rise Time/Fall Time) msec	1/4	1.1/3.9	1.1/3.9	5
Nominal Input Voltage VDD	5	5V	5V	5
Interface	2ch LVDS	LVDS 2Port	LVDS 2Port	LVDS 2Port
Viewing Angle (degree) Horizontal: Vertical:	160 (typical) 160 (typical)	170 (typical) 160 (typical)	170 (typical) 160 (typical)	160 (typical) 160 (typical)
Temperature Range (°C) Operating Storage (shipping)	0 to +50 -20 to +60	0 to +50 -20 to +60	0 to +50 -20 to +60	0 to +50 -25 to +60

Power Supply

Item	Specifications
AC Input	<ul style="list-style-type: none"> • Auto ranging from 90V to 240V and 50Hz to 60Hz

Item	Specifications
DC Output	<ul style="list-style-type: none">• 19V 6.32A(120W) or 19V 3.42A(65W)• Uses 3 prong ICE-320-C13 or IEC-320-C5 connector for AC power• Hold up time of 16ms under maximum load• Meet <1W Standby Energy Star requirement for Desktop Category B• Meet EU Lot 6 requirement

RTC Battery

Item	Specifications
Lithium Rechargeable Battery	<ul style="list-style-type: none">• Model:ML1220• Voltage:2.5-3.0V• Capacity: 17mAh• Vendor:Panasonic

System Utilities

BIOS Setup Utility

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

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

To activate the BIOS Utility, press **F2** during POST (when "Press <F2> to enter Setup" message is prompted on the bottom of screen).

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

Navigating the BIOS Utility

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

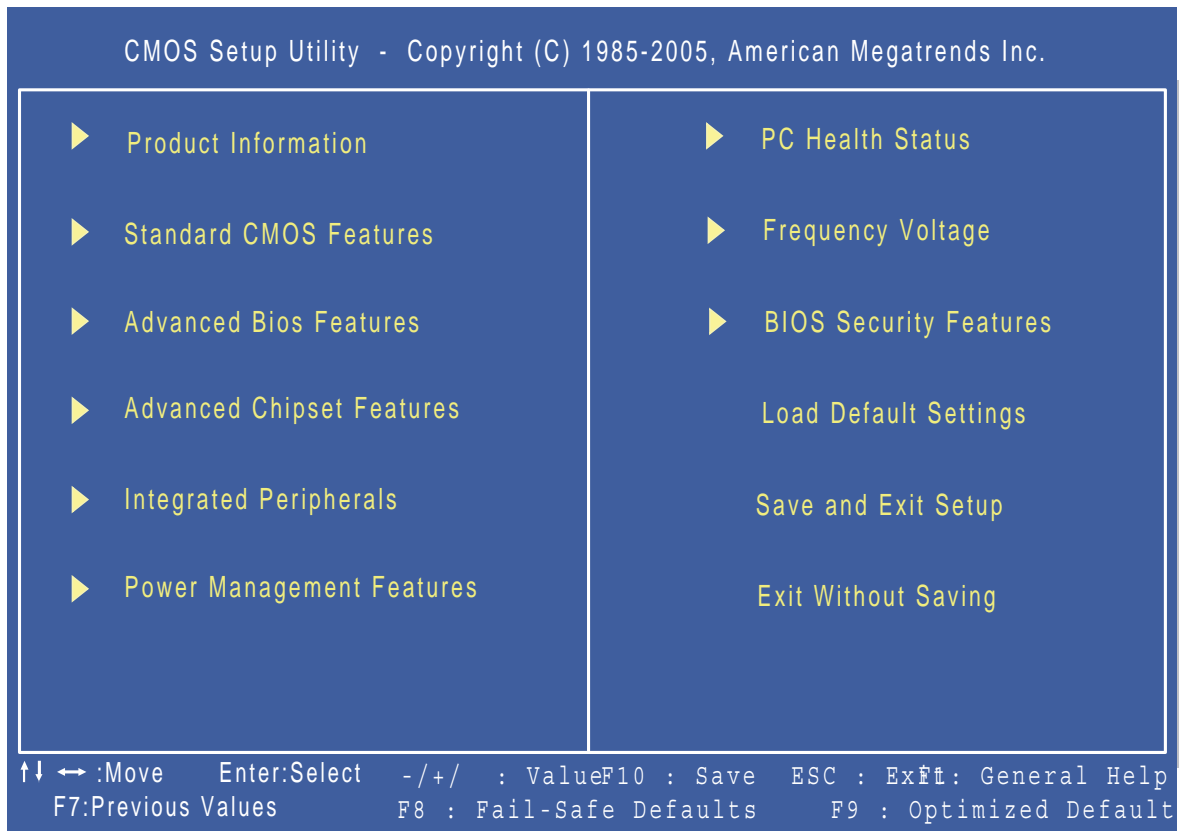
Follow these instructions:

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

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

CMOS Setup Utility

The CMOS Setup Utility screen displays a list of the functions and features available in the BIOS.



Use the arrow keys to scroll to the required menu and press Enter.

Product Information

The Product Information screen displays a summary of the computer hardware information.

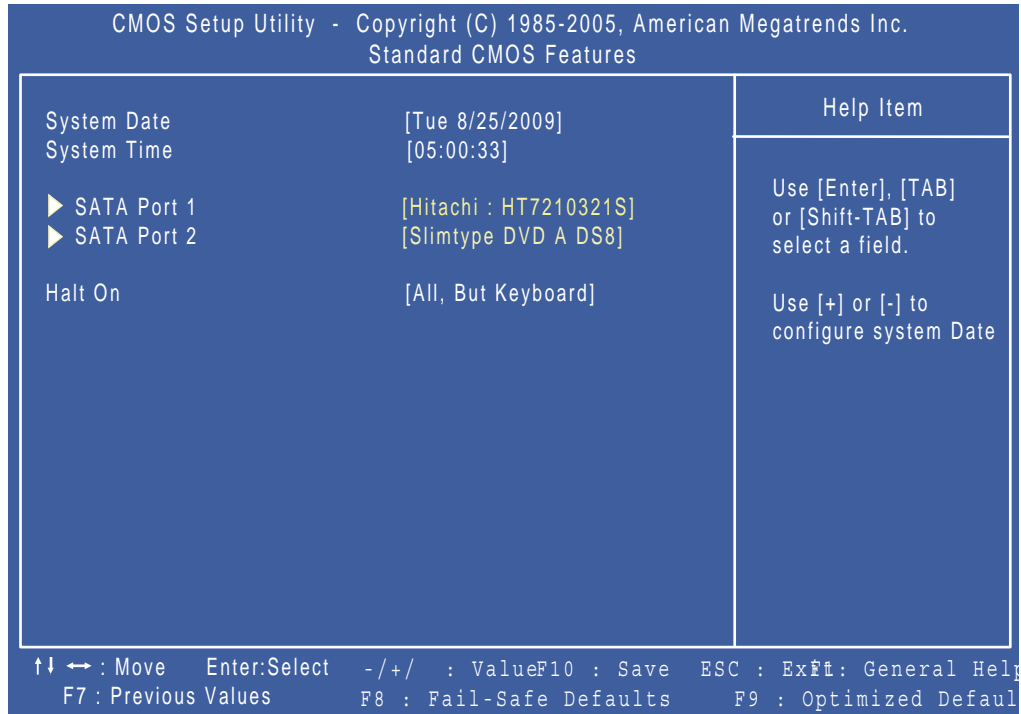
CMOS Setup Utility - Copyright (C) 1985-2005, American Megatrends Inc. Product Information	
Product Information Overview	Help Item
Processor Type Intel (R) Celeron (R) CPU 900 @ 2.20GHz Processor Speed 2.20GHz System Memory 2013MB Product Name ZX4800 System Serial Number System BIOS Version D11 BIOS Release Date 08/24/2009 Asset Tag Number	
↑↓ ↔ :Move Enter:Select -/+/: ValueF10 : Save ESC : Exit F1: General Help F7:Previous Values F8 : Fail-Safe Defaults F9 : Optimized Defaults	

NOTE: The system information is subject to different models.

Parameter	Description
Processor Type	This field shows the system processor type.
Processor Speed	This field shows the speed of the processor.
System Memory	This field reports the memory size of the system.
Product Name	This field shows product name of the system.
System Serial Number	This field displays the serial number of this unit.
System BIOS Version	Displays system BIOS version.
BIOS Release Date	This field displays the release date of the system BIOS.
Asset Tag Number	This field displays the asset tag number.

Standard CMOS Features

The Standard CMOS Features screen allows the user to set the system time and date as well as set HDD and ODD options.



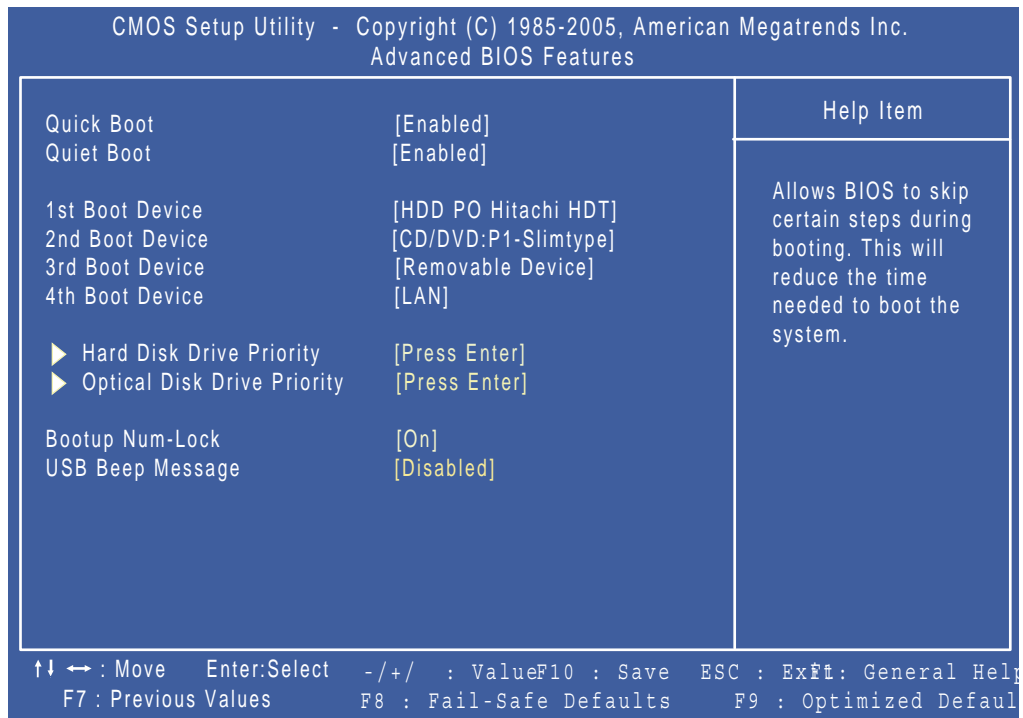
NOTE: The screen above is for your reference only. Actual values may differ.

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

Parameter	Description	Format/Option
System Date	Sets the system date.	Format MM/DD/YYYY (month/day/year)
System Time	Sets the system time. The hours are displayed with 24-hour format.	Format: HH:MM:SS (hour:minute:second)
SATA Port 1	Sets the disk type for SATA Port 1	Enter the Port 1 screen to Enable or Disable S.M.A.R.T. for the HDD
SATA Port 2	Sets the disk type for SATA Port 2	Enter the Port 2 screen
Halt On	Instructs the BIOS to halt during boot up for the selected error parameter.	Options: <ul style="list-style-type: none"> All Errors No Errors All, But keyboard

Advanced BIOS Features

The Advanced BIOS Features screen allows configuration of the various advanced BIOS options.

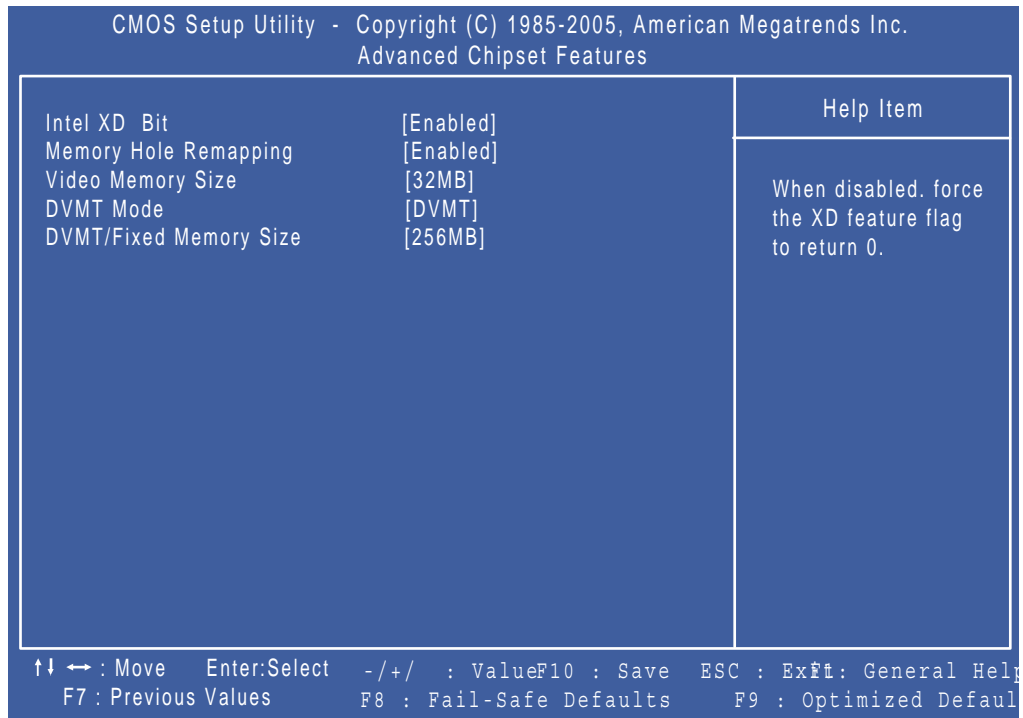


The table below describes the items, menus, and submenus in this screen.

Parameter	Description	Format/Option
Quick Boot	Allows BIOS to skip certain steps while booting.	Enabled or Disabled
Quiet Boot	Allows BIOS to change display parameters while booting changing boot speed.	Enabled or Disabled
Hard Disk Drive Priority	Enter to set the boot drive priority.	Scroll to set the order priority
Optical Disk Driver Priority	Enter to set the boot driver priority.	Scroll to set the order priority
Boot Num-Lock	Turns Num-Lock on or off on boot up.	On or Off
USB Beep Message	Allows a beep during USB enumeration.	Enabled or Disabled

Advanced Chipset Features

The Advanced Chipset Features screens.

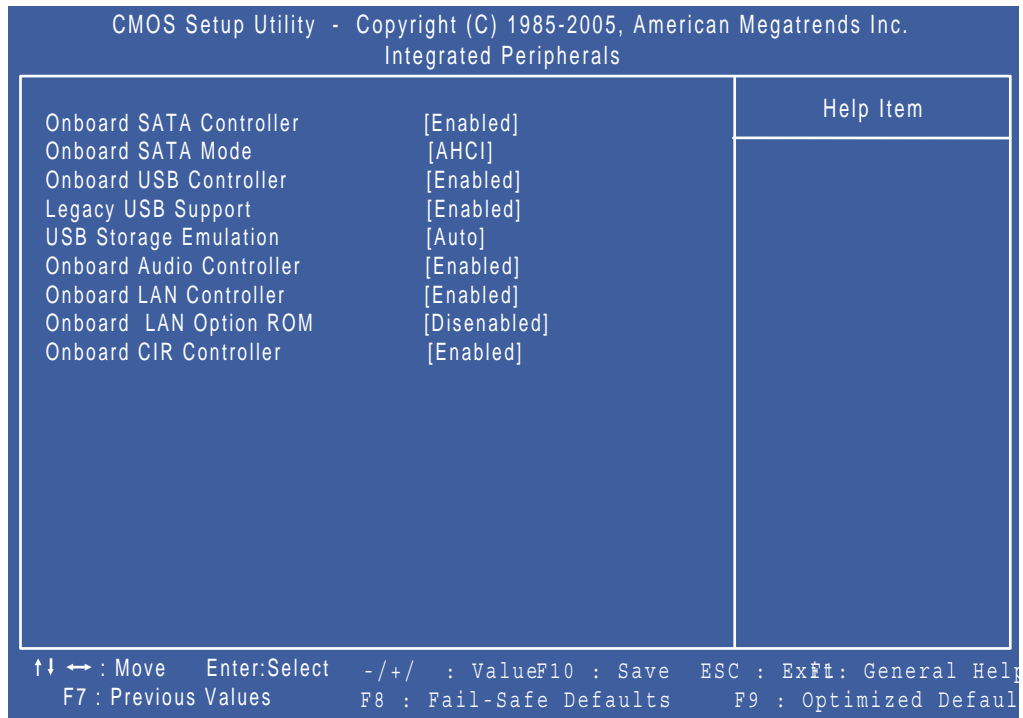


The table below describes the items, menus, and submenus in this screen.

Parameter	Description	Format/Option
Intel XD Bit	When disabled this forces the XD feature flag to always return to 0.	Enabled or Disabled
Memory Hole Remappingt	When enabled allows remapping of overlapped PCI memory above the total physical memory.	Enabled or Disabled
Video Memory Size	Sets the amount of system memory used by the internal graphics device.	Enter to set
DVMT mode	Turns on DVMT mode for use with internal graphics.	Select DVMT
DVMT/Fixed Memory Size	Set the memory allocated for DVMT. (XP only)	Options: <ul style="list-style-type: none"> 128MB 256MB Maximum

Integrated Peripherals

The Integrated Peripherals screen contains parameters for device peripherals.

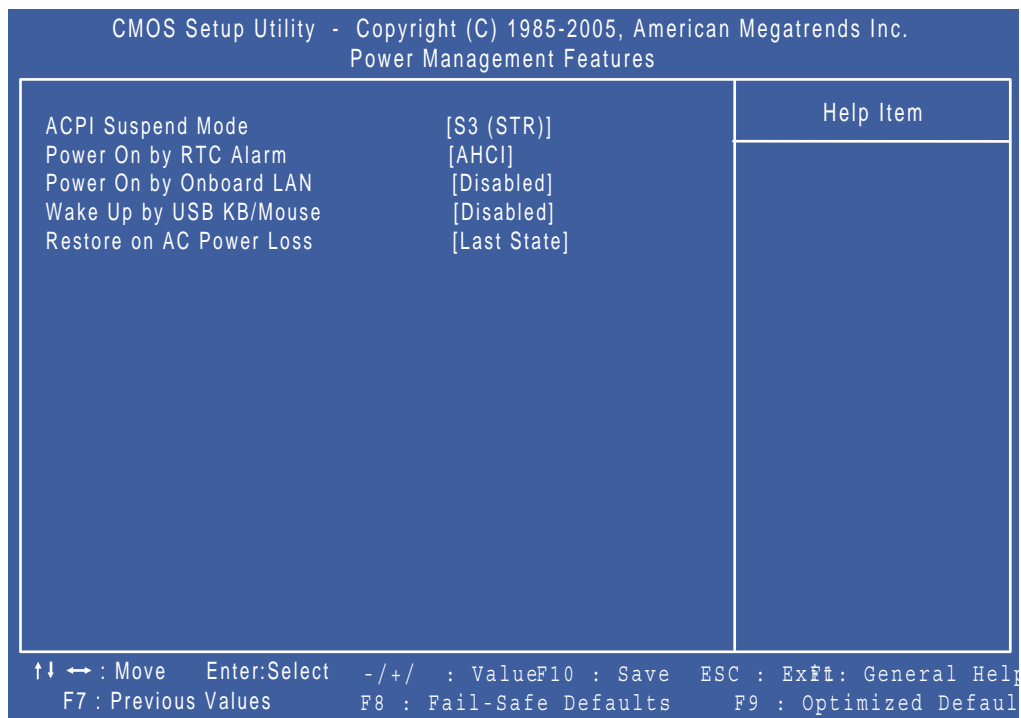


The table below describes the items, menus, and submenus in this screen.

Parameter	Description	Format/Option
Onboard SATA Controller	Enable the SATA controller	Enabled or Disabled
Onboard SATA Mode	Set the SATA mode	Options: <ul style="list-style-type: none"> • IDE • AHCI
Onboard USB Controller	Enable the USB controller.	Enabled or Disabled
Legacy USB Support	Enable legacy USB support	Enabled or Disabled or Auto
USB Storage Emulation	Set the USB storage emulation	Options: <ul style="list-style-type: none"> • Auto • Floppy • Hard Disk
Onboard Audio Controller	Enable or disable the audio controller	Enabled or Disabled
Onboard LAN Controller	Enable or disable the LAN controller	Enabled or Disabled
Onboard LAN Option ROM	Disable or enable LAN optional ROM	Disabled or Enabled
Onboard CIR Controller	Enable or disable the CIR Controller	Enabled or Disable

Power Management Features

The Power Management Features screen contains parameters used for device power management.

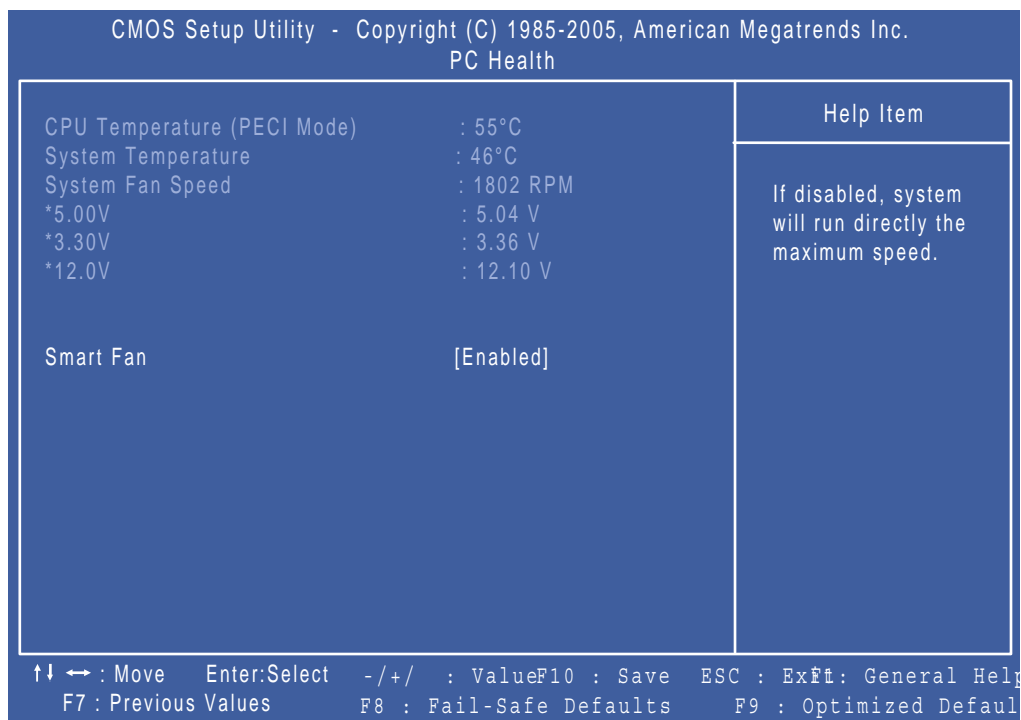


The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Option
ACPI Suspend Mode	Choose between STR (Suspend to Ram) and POS (Power on Standby). POS uses more power during suspend.	S1(POS)/ S3(STR)
Power On by RTC Alarm	Disable or Enable auto wake up at a fixed time everyday.	Disabled or Enabled
Power On by onboard LAN	Disable or Enable wake up when the system power is off and a LAN device is activated.	Disabled or Enabled
Wake Up by PS/2 KB/Mouse	Disable or Enable wake up when the system is in standby and a PS/2 device is activated.	Enabled or Disabled
Wake Up by USB KB/Mouse	Disable or Enable wake up when the system is in standby and a USB device is activated.	Enabled or Disabled
Restore On AC Power Loss	Set the state the device returns to in the event of AC power loss. Off causes the device to remain off in the event of power loss, On restarts the device when AC power resumes, and Last State returns the device to the state it was at when power loss occurred.	Off or On or Last State

PC Health

The PC Health screen displays CPU/Chipset temperature information and contains customizable safety monitors for the CPU.

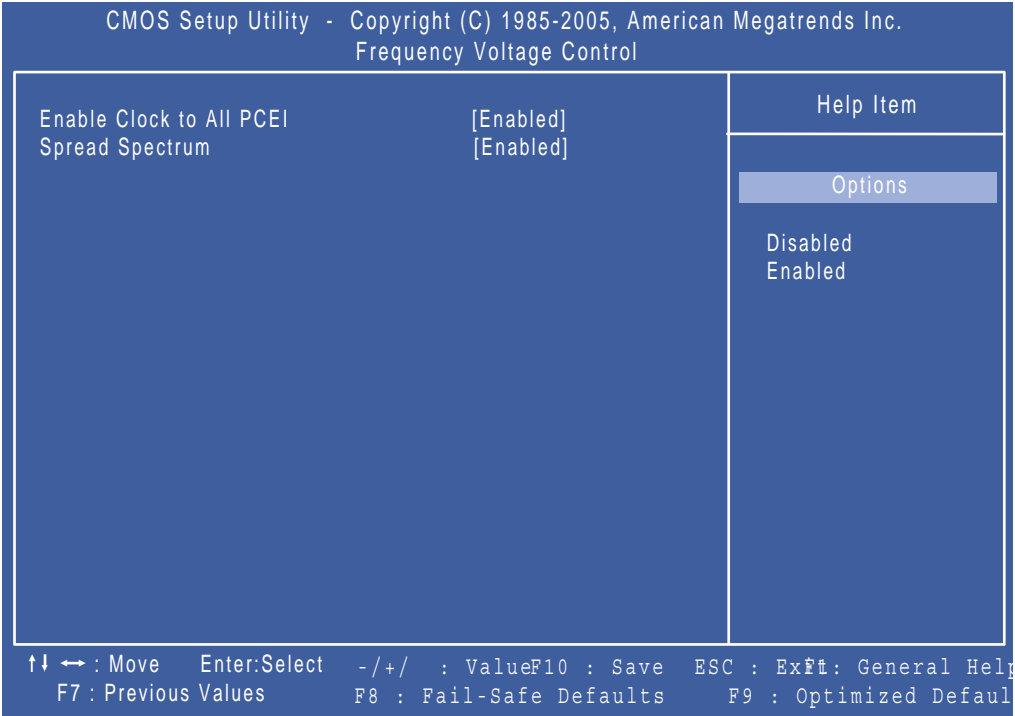


The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Option
CPU Temperature	Displays the current CPU temperature (°C). This field is read only.	N/A
System Temperature	Displays the current System temperate (°C). This field is read only.	N/A
System Fan Speed	Displays the current system fan speed. This field is read only.	N/A
+5.00V	Displays the power supply voltage for the nominal 5V bus. This field is read only.	N/A
+3.30V	Displays the power supply voltage for the nominal 3.3V bus. This field is read only.	N/A
+1.1V	Displays the nominal 1.1 V bus. This field is read only.	N/A
+12.0V	Displays the power supply voltage for the nominal 12.0V bus. This field is read only.	N/A
Smart Fan	Enabled allows auto fan control. If disabled the fan runs continuously at maximum speed.	Enabled or Disabled.

Frequency Voltage Control

The Frequency Voltage Control Screen to set memory and processor parameters.

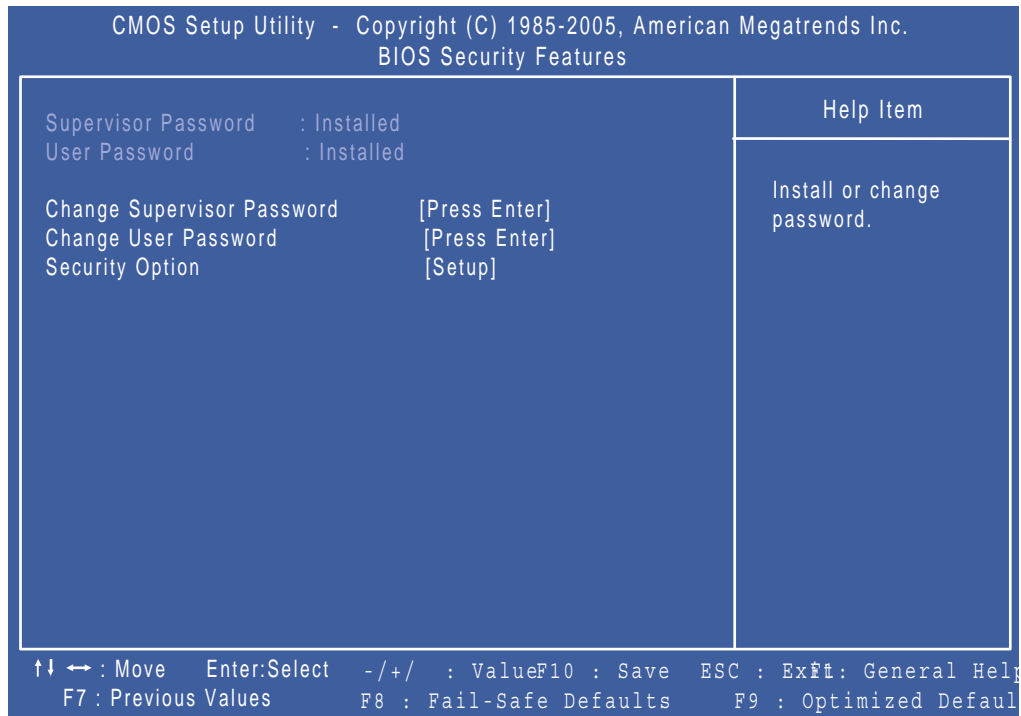


The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

Parameter	Description	Option
Enable Clock to All PCIE	Enabled or disabled for reducing clock consumption.	Enabled or Disabled
Spread Spectrum	Enabled to assist with EMI emissions, Disabled to assist with stability.	Enabled or Disabled

BIOS Security Features

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



The table below describes the parameters in this screen.

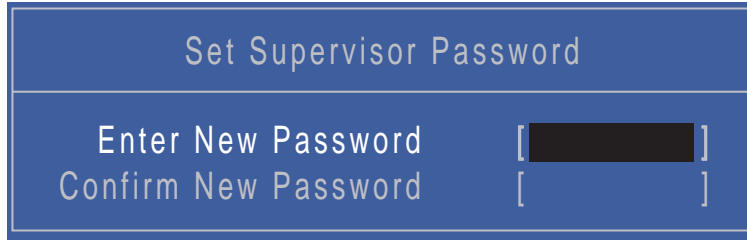
Parameter	Description	Option
Supervisor Password	Shows the setting of the Supervisor password	Not Installed or Installed
User Password	Shows the setting of the user password	Not Installed or Installed
Change Supervisor Password	Press Enter to set the supervisor password. When set, this password protects the BIOS Setup Utility from unauthorized access. The user can not either enter the Setup menu nor change the value of parameters.	N/A
Change User Password	Press Enter to set the user password. When set, this password prompts the user to enter a password during the boot sequence. The user must enter the correct password to be able to continue booting the system. This option is only available if a supervisor password has been specified	N/A
Security Option	Press Enter to set the security option. This option is only available if a supervisor password has been specified.	

NOTE: When prompted to enter a password, only three tries are allowed before the system halts. Do not lose the password.

Setting a Password

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

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



Set Supervisor Password

Enter New Password []

Confirm New Password []

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

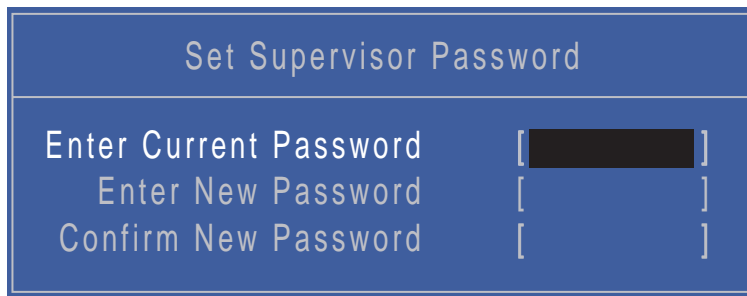
IMPORTANT: Be very careful when typing your password because the characters do not appear on the screen.

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

Removing a Password

Follow these steps:

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



Set Supervisor Password

Enter Current Password []

Enter New Password []

Confirm New Password []

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

Changing a Password

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

Set Supervisor Password	
Enter Current Password	[<input type="password"/>]
Enter New Password	[<input type="password"/>]
Confirm New Password	[<input type="password"/>]

2. Type the current password in the Enter Current Password field and press **Enter**.
3. Type a password in the Enter New Password field. Retype the password in the Confirm New Password field.
4. Press **Enter**. After setting the password, the computer sets the User Password parameter to “Set”.
5. If desired, you can enable the Password on boot parameter.
6. When you are done, press F10 to save the changes and exit the BIOS Setup Utility.

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

Setup Notice
Changes have been saved.
Continue

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

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

Setup Warning
Invalid Password.
Continue

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

Setup Warning
Passwords do not match. Re-enter password.
Continue

BIOS Flash Utilities

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.

This section contains instructions for the following BIOS utilities:

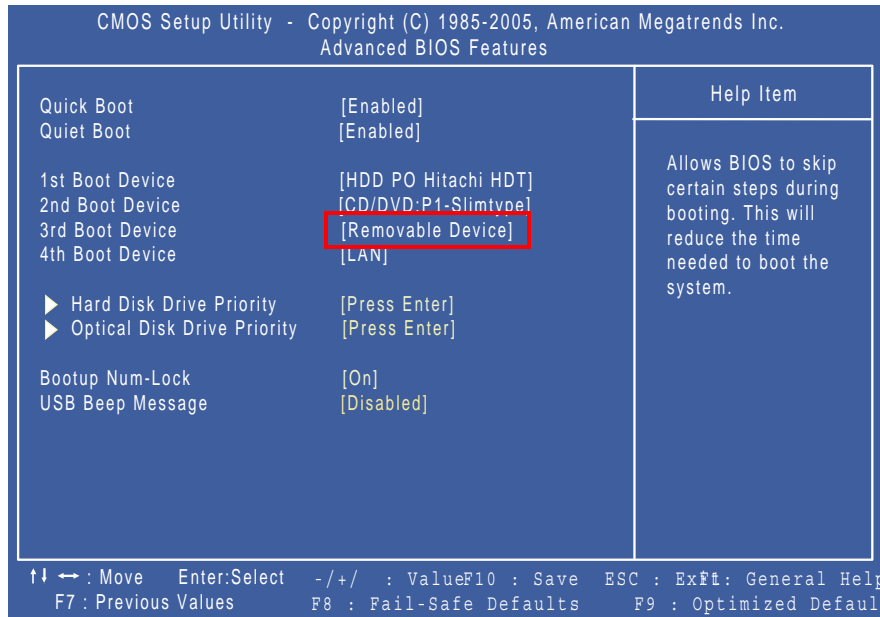
- DOS flashit utility
- WinPhlash utility
- DMI Tools

DOS Flash Utility

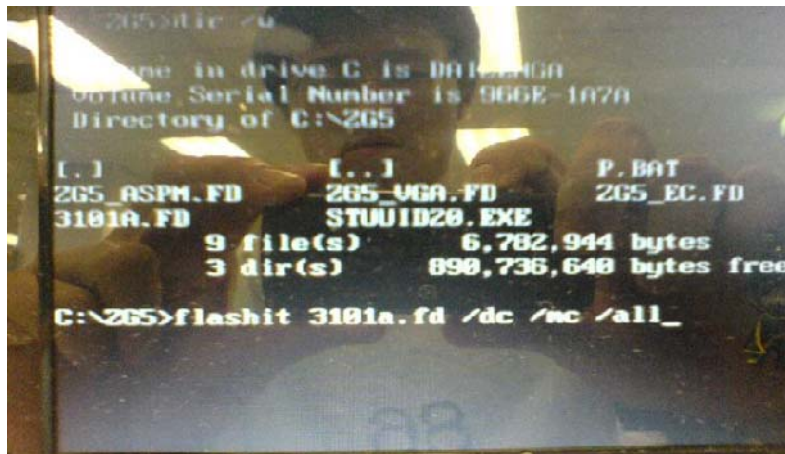
Perform the following steps to use the DOS Flash Utility:

1. Copy the flash utilities to the bootable diskette.
2. Press F2 during boot to enter the Setup Menu.
3. Select **Boot Menu** to modify the boot priority order, for example, if using USB HDD to Update BIOS, move USB HDD to position 1.

IMPORTANT: Please use a device that can be booted in DOS mode (FAT 16 or FAT 32 partitions only)



4. Type **flashit 3101a.fd /dc /mc /all** at the DOS prompt to update the BIOS.



The flash process begins

Flash is complete when the message **Flash programming complete** displays.

WinPhlash Utility

The Winflash utility consists of two files:

- ZU1_3601.WPH (BIOS ROM file)
- WinPhlash (BIOS windows flash tool)

Perform the following steps to use the WinFlash Utility:

1. Double click the WinPhlash executable to run the program.

NOTE: You must run the program with administrator privileges for it to function properly.

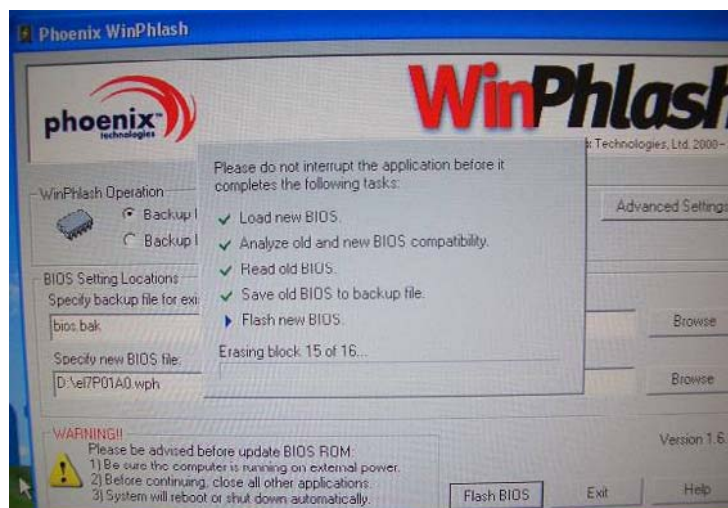
2. In the Specify New BIOS file field, enter the BIOS ROM file name and path.



IMPORTANT: Be sure the AC power is plugged in. If not, the following error message displays:



3. Click **OK** to begin the update. A progress screen displays.



4. When the process is complete the system will reboot automatically.

Using DMI Tools

Use QDMI30A to change the asset tag, product name, or serial number of the machine.

1. Copy the file qdmi30a.exe to USB flash disk with bootable diskette or USB drive.
2. Press F2 during boot to enter the Setup Menu.
3. Select **Boot Menu** to modify the boot priority order, for example, if using a USB HDD to run DMI Tools, move USB HDD to position 1.
4. Boot into DOS.
5. Key in "qdmi30a" then click "Enter". The following screen appears.

```

Bad command or file name

C:\>QDMI30A

=====
          !!!      WARNING      !!!
This utility can be used by service people only!
The incorrect value may cause service problem!

Copyright 2004 Quanta Computer Inc.,
Version: 3.00a
=====

If you want to use SPACE character in your string,
please use '^' to replace it.
=====

Please select function:
1: AssetTag
2: Product Name
3: Serial Number
4: 1394 GUID Number
0: Exit
-->
  
```

Select one of the functions to modify. To modify the asset tag, key in "1" and then key in a string for the new asset tag as shown below.

```

=====
If you want to use SPACE character in your string,
please use '^' to replace it.
=====

Please select function:
1: AssetTag
2: Product Name
3: Serial Number
4: 1394 GUID Number
0: Exit
==>1
!!! The Max length is 32 characters !!!
      1      2      3
----5----0----5----0----5----0--
AssetTag is :12345678901234567890123456789012
  
```

To modify the product number, key in "2" then key in a new string for the product number as shown below.

```
=====
If you want to use SPACE character in your string,
please use '^' to replace it.
=====

Please select function:
1: AssetTag
2: Product Name
3: Serial Number
4: 1394 GUID Number
0: Exit
==>2
!!! The Max length is 15 characters !!!
      1
    ---5---0---5
Product Name is :Aspire^7730
```

To modify the serial number, key in “3” then key in a new string for the serial number as shown below.

```
=====
If you want to use SPACE character in your string,
please use '^' to replace it.
=====

Please select function:
1: AssetTag
2: Product Name
3: Serial Number
4: 1394 GUID Number
0: Exit
==>3
!!! The Max length is 22 characters !!!
      1      2
    ---5---0---5---0---
Serial Number is :1234567890123456789012_
```

To modify the 1394 GUID number, key in “4” then key in a new string for the 1394 GUID number as shown below

```
Please select function:
1: AssetTag
2: Product Name
3: Serial Number
4: 1394 GUID Number
0: Exit
==>4
!!! The Max length is 8 characters !!!
      ---5--8
1394 GUID Number is :12345678_
```


Machine Disassembly and Replacement

WARNING: This computer has two highly sensitive touchscreen sensors on the top left and right corners of the LCD. The sensors are an integral part of the LCD and cannot be separately replaced. The sensors are exposed as soon as the rear cover is removed.

During disassembly:

- **DO NOT** make contact with the sensors.
- **Raise the LCD** off any surface it is placed face down on so that the sensors do not rest on the surface.
- **ALWAYS** employ an antistatic mat.

IMPORTANT: The outside housing and color may vary from the images that appear in this section.

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

Disassembly Requirements

To disassemble the computer, you need the following tools:

- Wrist grounding strap and conductive mat for preventing electrostatic discharge
- Flat screwdriver
- Three (3) sizes of Philips screwdrivers: 7mm, 4mm and 2mm
- Pin or unbent paperclip or similar.
- Block of sponge or similar soft material smaller in surface area than the LCD and at least 1" (2.5cm) high.

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 power to the system and all peripherals.
2. Unplug the AC adapter and all power and signal cables from the system.
3. Place the system on an antistatic mat.

The flowchart provided in the succeeding disassembly section illustrates the entire disassembly sequence. Observe the order of the sequence to avoid damage to any of the hardware components.

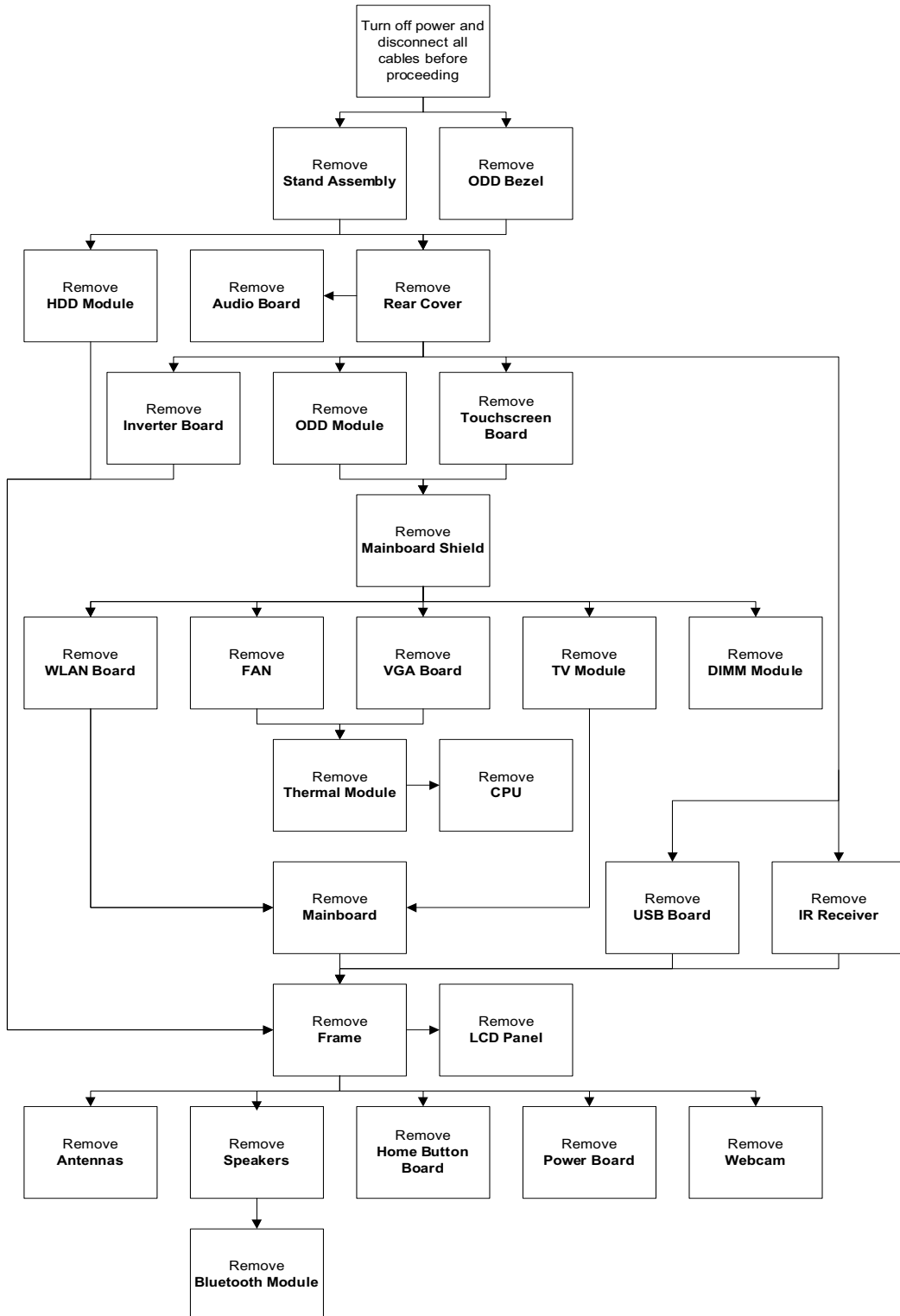
Main Screw List

Screw	Quantity	Part Number
M2.5*4.0-I(NYLOK)IRON	6	86.G8507.001
M2.5*4.0-I(NI)(NYLOK)IRON	26	86.G8507.002
M2.5*7.0-I(B) (NYLOK)IRON	4	86.G8507.003
M4.0*6-I(NI,NYLOK)	4	86.G8507.004

Screw	Quantity	Part Number
M2.5*5.0-I(BNI)(NYLOK)IRON	3	86.G8507.005
M3*4-I(NI)(NYLOK)IRON	4	86.G8507.006
6-32UNC*5-B(NYLOK)IRON	4	86.G8507.007
M2.0*2.5-I (BNI,NYLOK)IRON	4	86.G8507.008
M2.0*3.0-I-NI-NYLOK IRON	7	86.G8507.009

Disassembly Process

Disassembly Flowchart



Screw List

Step	Screw	Quantity
Stand Cover	M2.5*4	2
Stand Hinge	M4*6 Ni	4
Rear Cover	M2.5*7	4
Audio Board	M2.5*4 Ni	2
HDD	M2.5*4 Ni	2
HDD Bracket	M3*4 Ni	4
ODD	M2.5*4 Ni	2
ODD Brackets	M2*2.5 Ni	4
Inverter Board	M2.5*4 Ni	2
Touchscreen Control Board	M2.5*4 Ni	2
Mainboard Shielding	M2.5*4 Ni	7
WLAN	M2*3	1
TV Tuner Module	M2.5*4 Ni	1
VGA Card	M2.5*4 Ni	4
Fan	M2.5*5 Ni	3
Mainboard	M2.5*4 Ni	1
USB Board	M2.5*4 Ni	2
IR Receiver	M2*3	1
Frame	M2.5*4 Ni	15
LCD Panel	M3*4	4
Power Board	M2.5*4 Ni	2
Camera	M2*3	2
Antennas	M1.7*4	2
Speakers	M2.5*4.0-I(NYLOK)IRON	6

Removing the ODD Bezel

1. See "Pre-disassembly Instructions" on page 38.
2. Press the manual release of the ODD drive.



3. Grasp the ODD assembly with one hand and hold firmly. With the other hand grasp the rear edge of the ODD bezel and pull the bezel off the ODD assembly.



4. Lift the ODD bezel away.




5. Close the ODD assembly.



Removing the Stand Assembly

1. See "Pre-disassembly Instructions" on page 38.
2. Remove the two (2) screws securing the stand cap to the back cover.




Step	Size	Quantity	Screw Type
Stand Cover	M2.5*4	2	

3. Pull away the stand cover.



4. Remove the four (4) screws of the stand hinges.



Step	Size	Quantity	Screw Type
Stand Hinges	M4*6	4	


5. Pull away the stand.



Removing the Rear Cover

1. See "Pre-disassembly Instructions" on page 38.
2. See "Removing the ODD Bezel" on page 42.
3. Remove the four (4) screws on the rear of the computer.



Step	Size	Quantity	Screw Type
Rear Cover	M2.5*7	4	

4. Disconnect the audio cable.



5. Forcefully pry the rear cover from the assembly.

i)



ii)



iii)




iv)



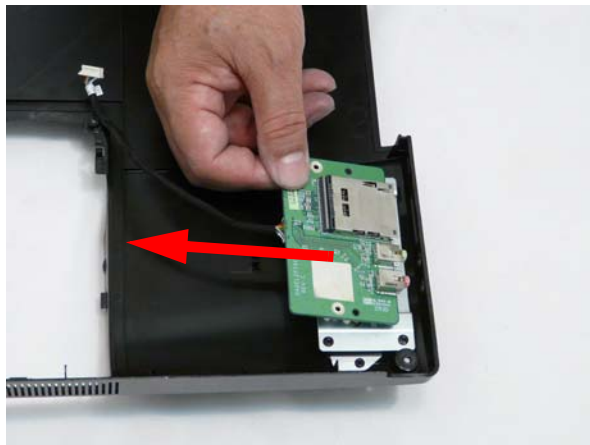
Removing the Audio Board

1. See "Removing the Rear Cover" on page 46.
2. Remove the two (2) screws in the audio board.

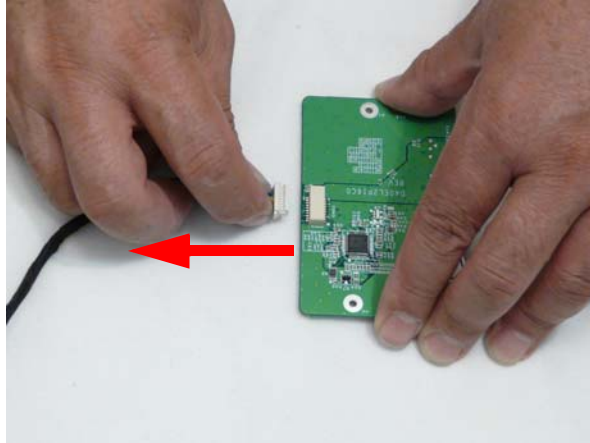


Step	Size	Quantity	Screw Type
Audio Board	M2.5*4	2	

3. Lift the audio board and cable away from the rear cover.



4. Disconnect the audio cable from the audio board.




Removing the Hard Disk Drive

1. See "Removing the Rear Cover" on page 46.
2. Remove the HDD cable.



3. Remove the two (2) screws.

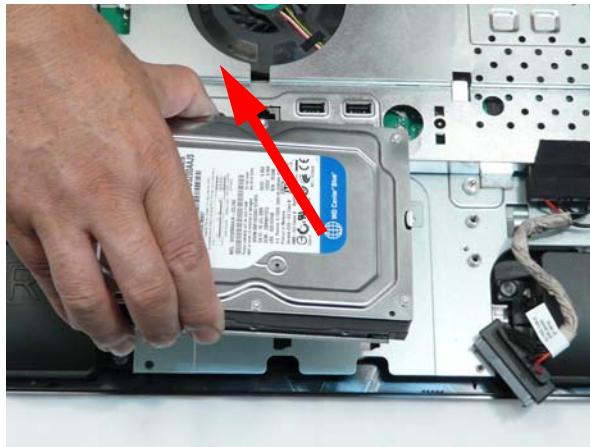


Step	Size	Quantity	Screw Type
HDD	M2.5*4	2	

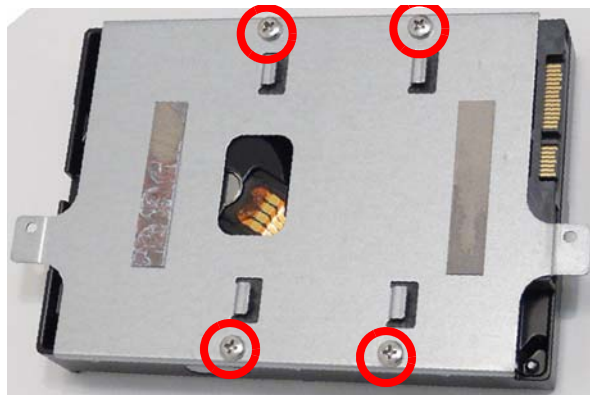
4. Slide the HDD along as far as possible.




5. Lift the HDD out of the chassis.

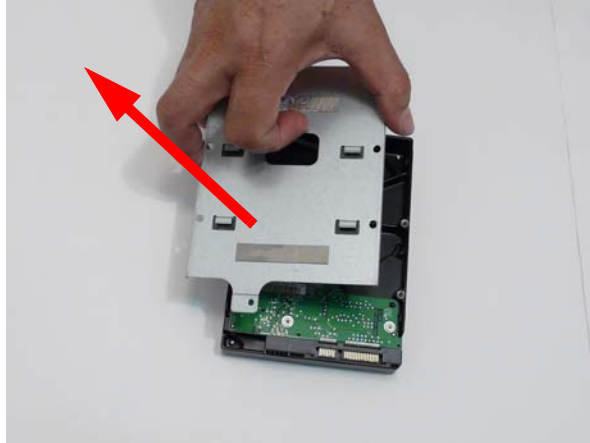


6. Remove the four (4) screws of the HDD bracket.



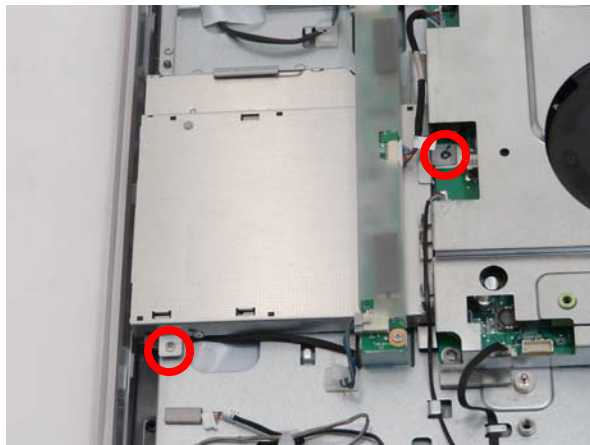
Step	Size	Quantity	Screw Type
HD Bracket	M3*4	4	


7. Remove the HDD module from the bracket.



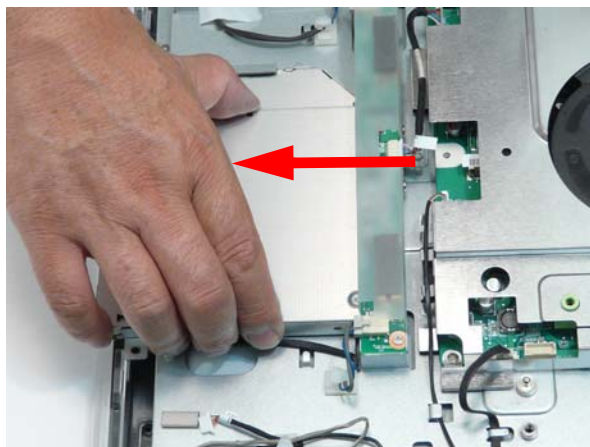
Removing the ODD

1. See "Removing the Rear Cover" on page 46.
2. Remove the two (2) screws.

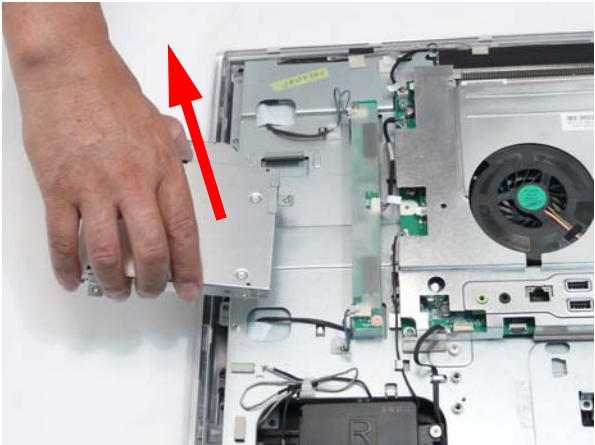


Step	Size	Quantity	Screw Type
ODD	M2.5*4	2	

3. Slide the ODD assembly out.




4. Lift the ODD away from the chassis.

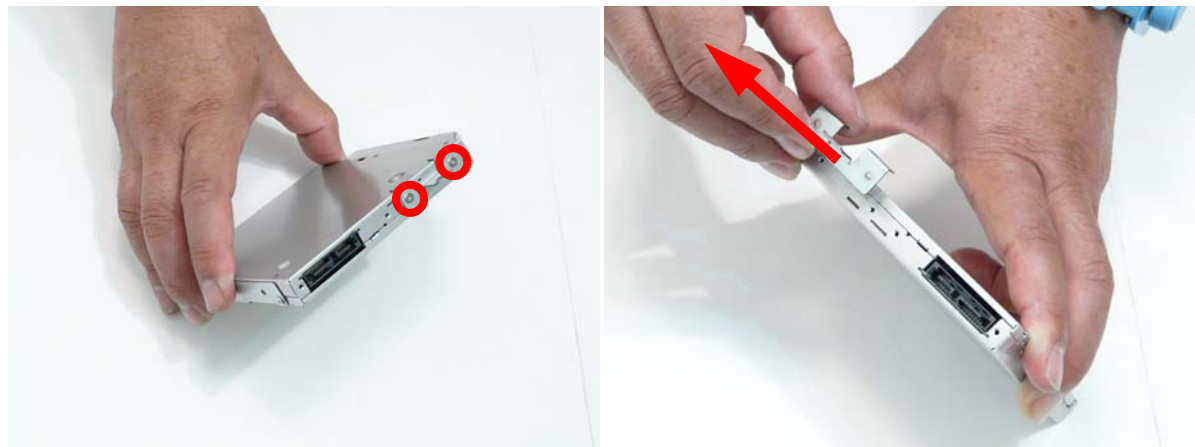



5. Remove the two (2) screws of the side bracket and remove the bracket.



Step	Size	Quantity	Screw Type
ODD Side Bracket	M2*2.5	2	

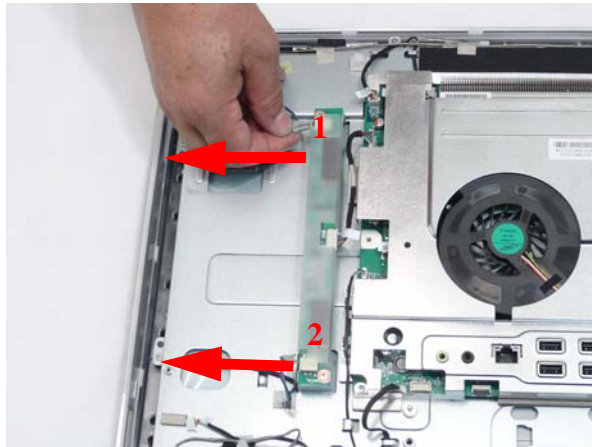
6. Remove the two (2) screws of the ODD rear bracket and remove the bracket.



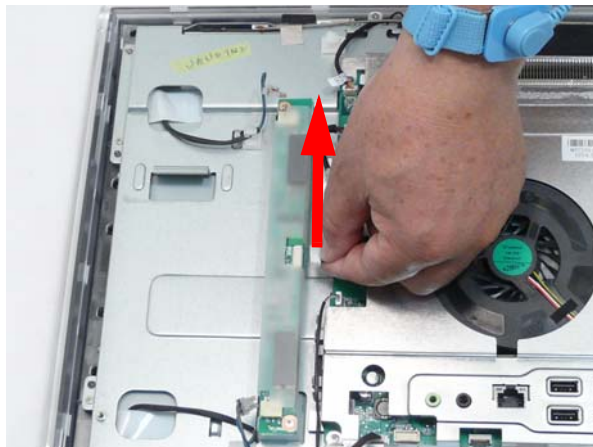
Step	Size	Quantity	Screw Type
ODD Rear Bracket	M2*2.5	2	

Removing the Inverter Board

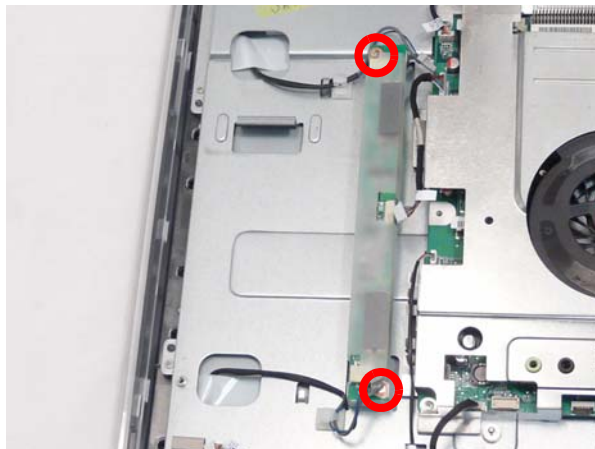
1. See "Removing the Rear Cover" on page 46.
2. Disconnect the LCD to inverter board cables 1 and 2.




3. Disconnect the mainboard to inverter cable.

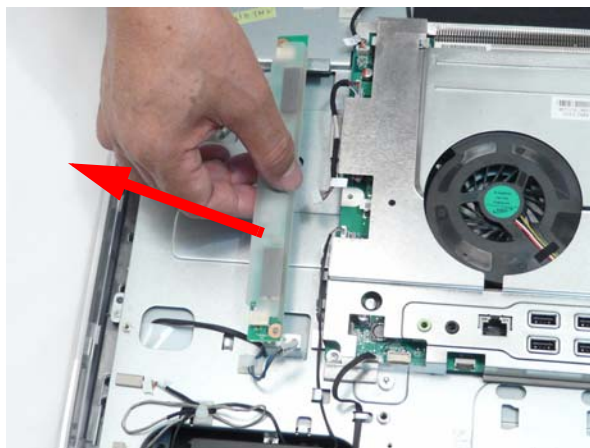


4. Remove the two (2) screws in the inverter board.



Step	Size	Quantity	Screw Type
Inverter Board	M2.5*4	2	

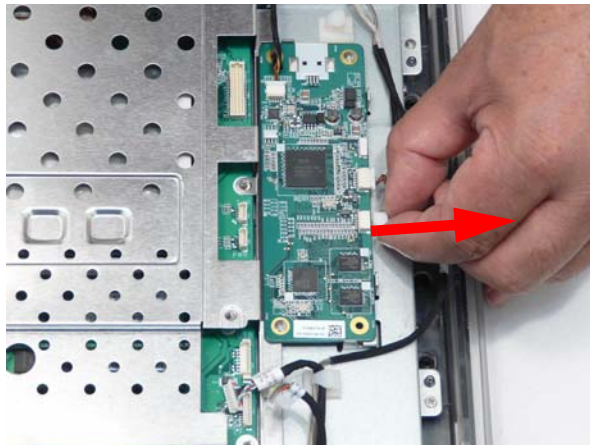
5. Lift away the inverter board.



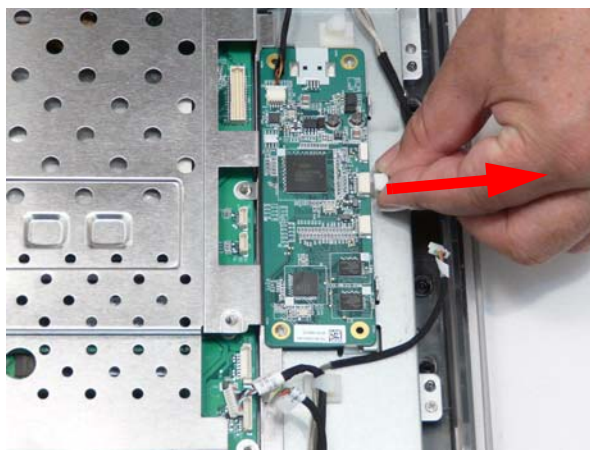
Removing the Touchscreen Control Board

1. See "Removing the Rear Cover" on page 46
2. Disconnect the right touch sensor cable.

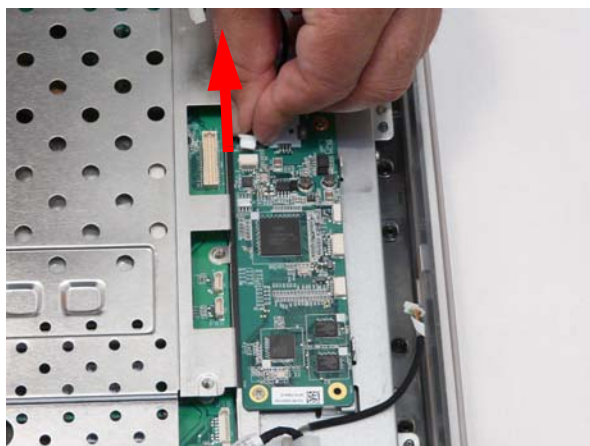
NOTE: Right is defined by how the touch sensors are designated looking at the computer front on.



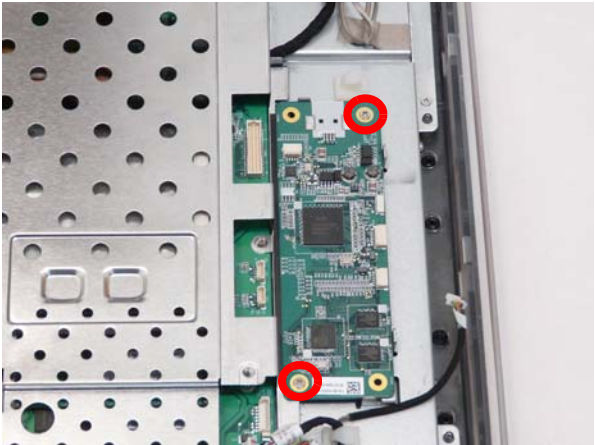
3. Disconnect the left touch sensor cable.




4. Disconnect the touchscreen board to mainboard cable.

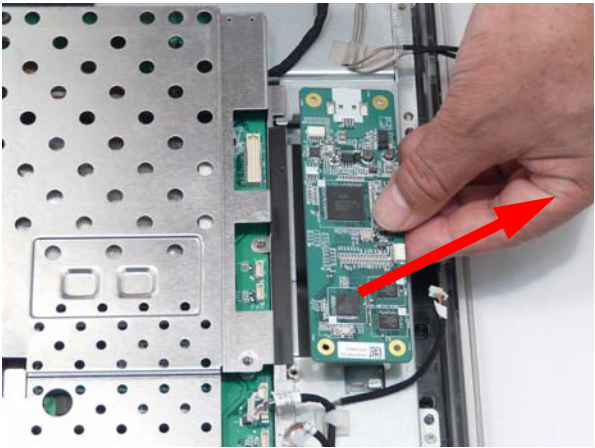


5. Remove the two (2) screws.



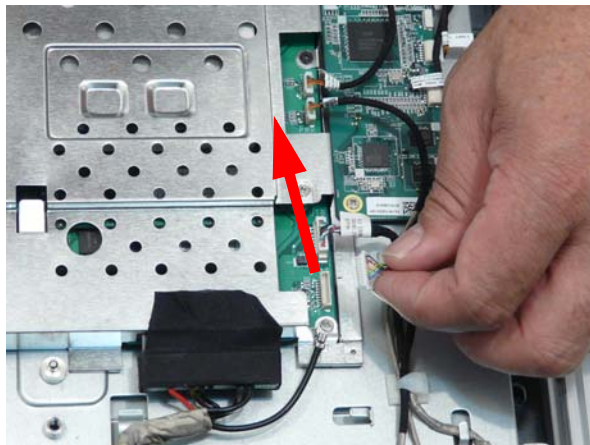
Step	Size	Quantity	Screw Type
Touchscreen Board	M2.5*4	2	

6. Lift away the touchscreen board.

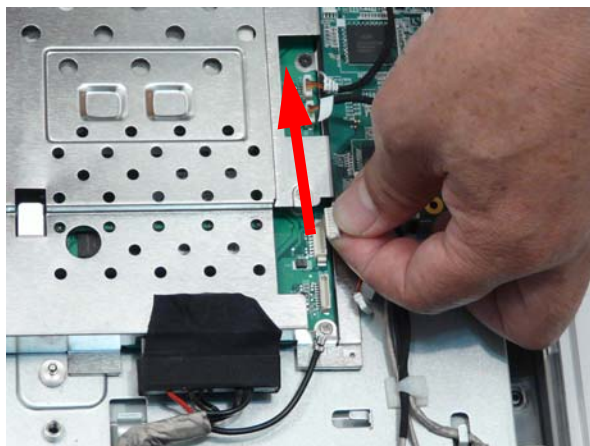


Removing the Mainboard Shielding

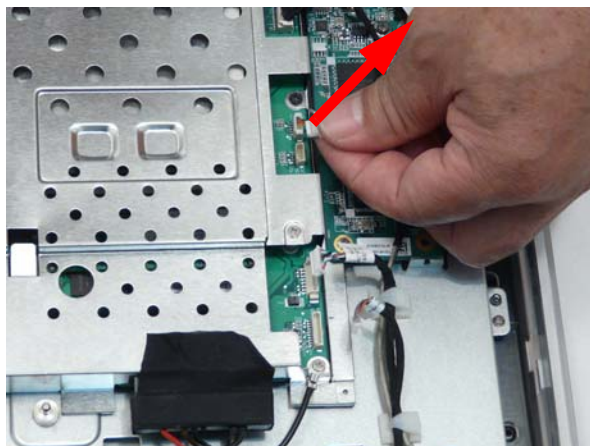
1. See "Removing the Audio Board" on page 48.
2. See "Removing the ODD" on page 53.
3. Disconnect the Bluetooth cable from the mainboard.



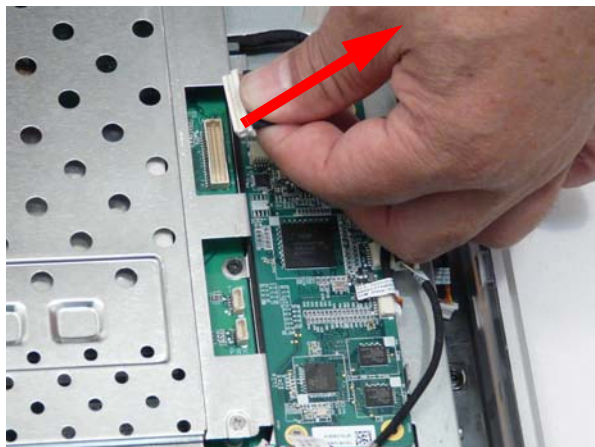
4. Disconnect the USB cable from the mainboard.



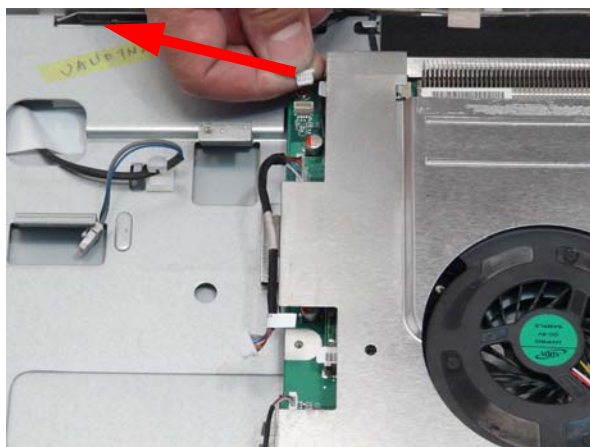
5. Disconnect the touch panel board cable from the mainboard.



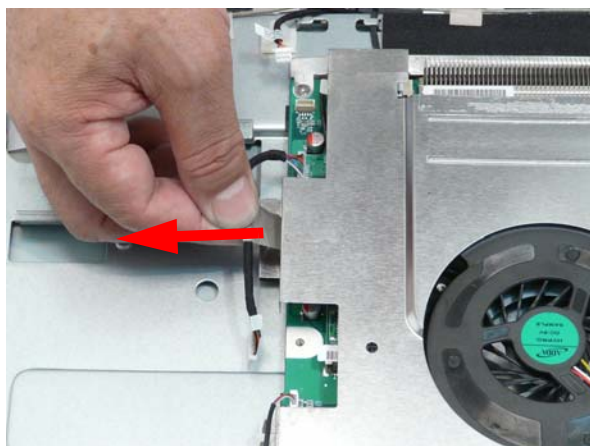
6. Disconnect the LVDS cable from the mainboard.



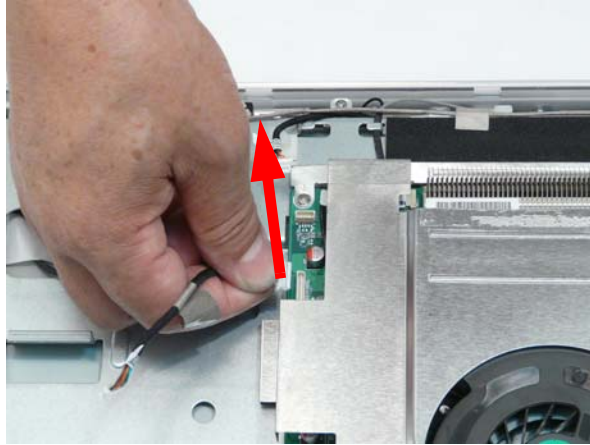
7. Disconnect the webcam cable from the mainboard.



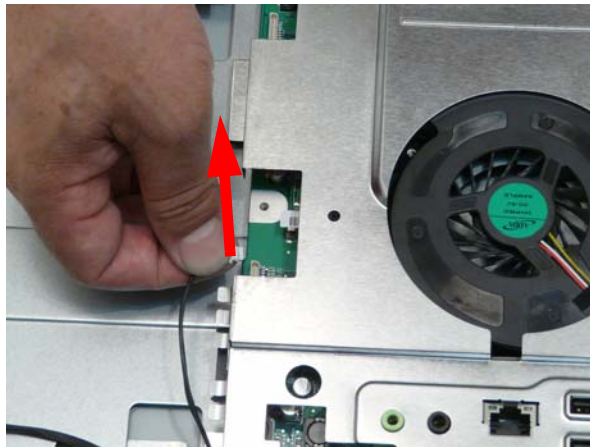
8. Detach the inverter cable adhesive tape.



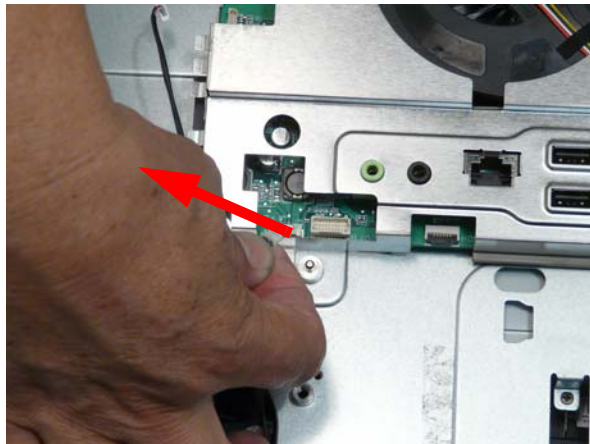
9. Disconnect the inverter cable.



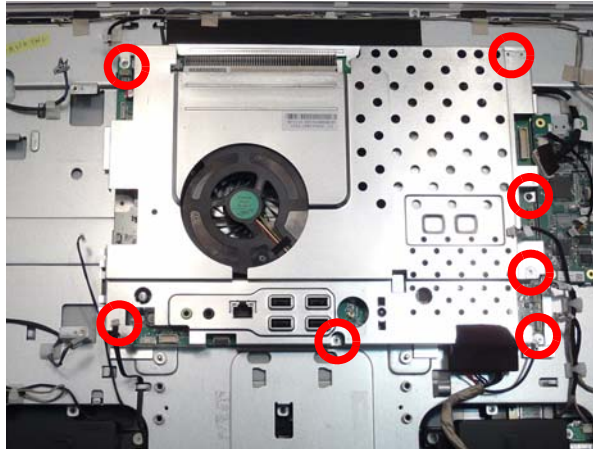
10. Disconnect the IR receiver cable.




11. Disconnect the speaker cable.



12. Remove the seven (7) screws.

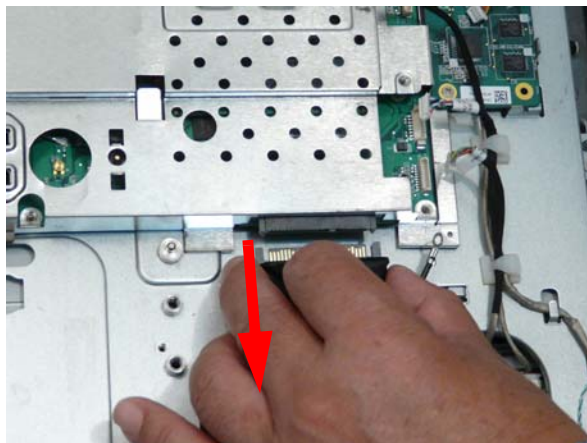


Step	Size	Quantity	Screw Type
Mainboard Shielding	M2.5*4	7	

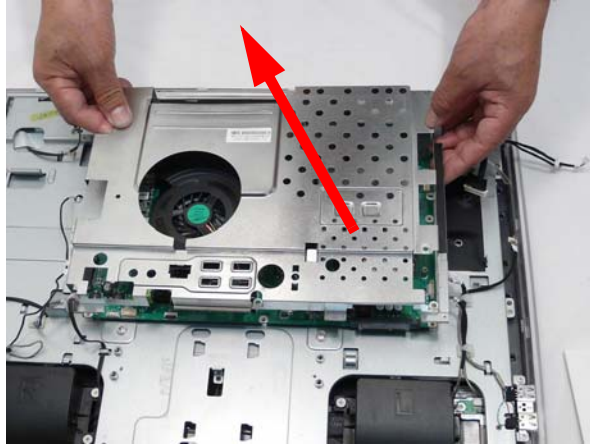
13. Detach the HDD cable protective cover.



14. Disconnect the HDD cable.



15. Lift the mainboard shielding away from the chassis.




Removing the Wireless LAN Module

- 1. See "Removing the Mainboard Shielding" on page 60.
- 2. Disconnect the WLAN cables.



- 3. Remove the one (1) screw from the WLAN module.



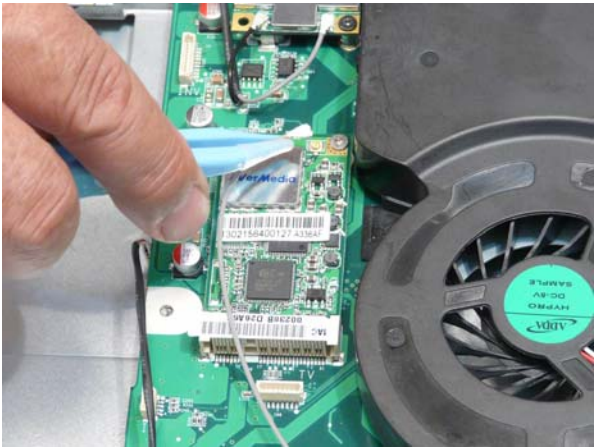
Step	Size	Quantity	Screw Type
WLAN	M2.0*3	1	

4. Lift the WLAN module away.




Removing the TV Module

- 1. See "Removing the Mainboard Shielding" on page 60.
- 2. Disconnect the TV cable.

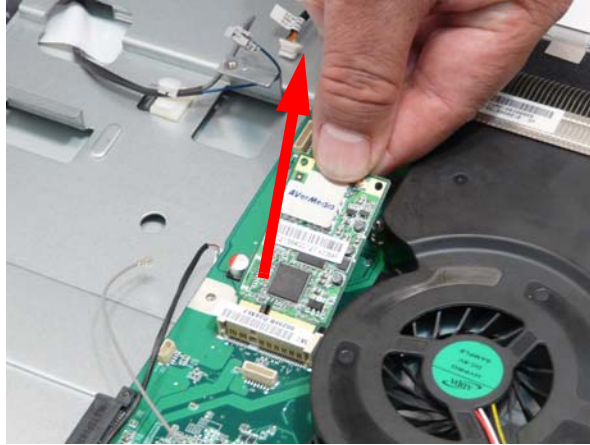


- 3. Remove the one (1) screw.

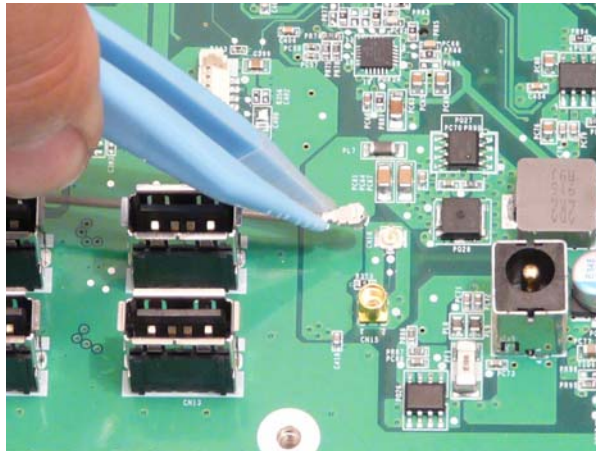


Step	Size	Quantity	Screw Type
TV Card	M2.0*3	1	

4. Lift the TV module away.

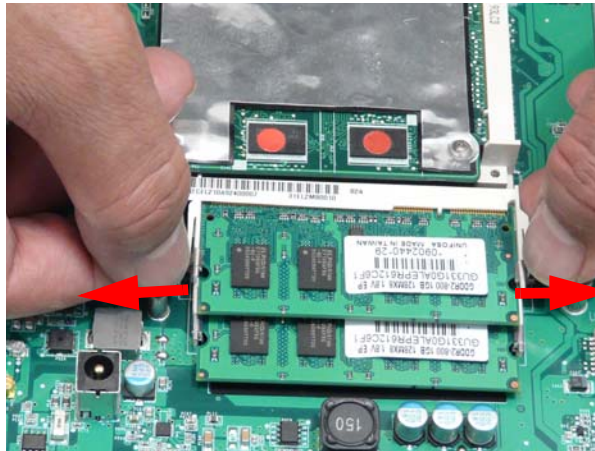


5. Disconnect the other end of the TV cable and remove.

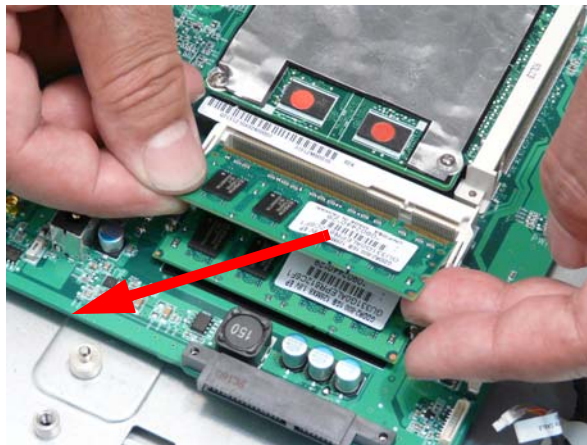


Removing the DIMM Module

1. See “Removing the Mainboard Shielding” on page 60.
2. Pull apart the retaining clips.



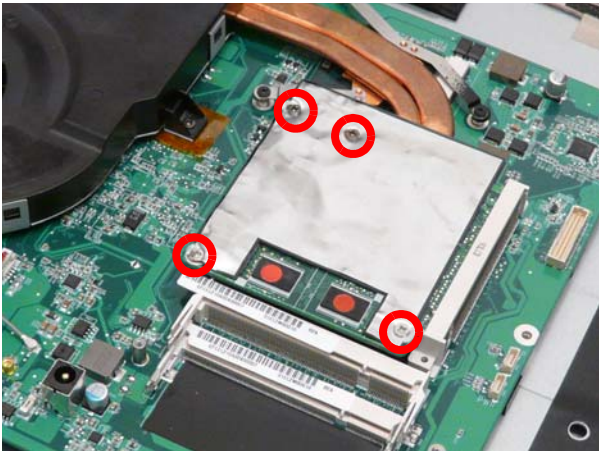
3. Pull away the DIMM module.




4. Repeat steps 2. and 3. for any remaining DIMM modules.

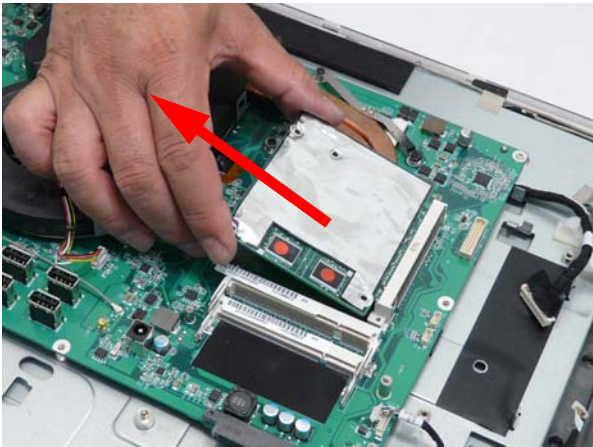
Removing the VGA Card

- 1. See "Removing the Mainboard Shielding" on page 60.
- 2. Remove the four (4) screws.



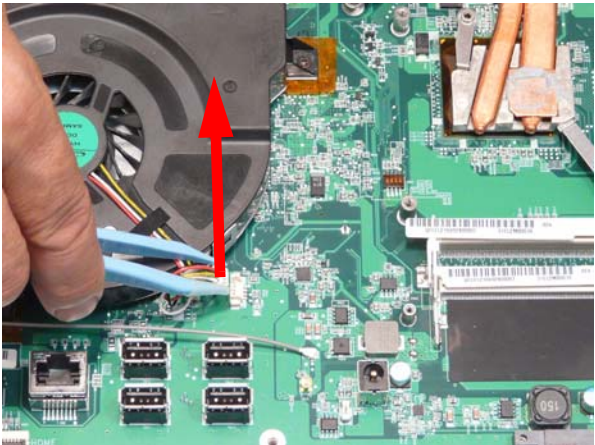
Step	Size	Quantity	Screw Type
VGA Card	M2.5*4	4	

- 3. Lift the VGA card away.

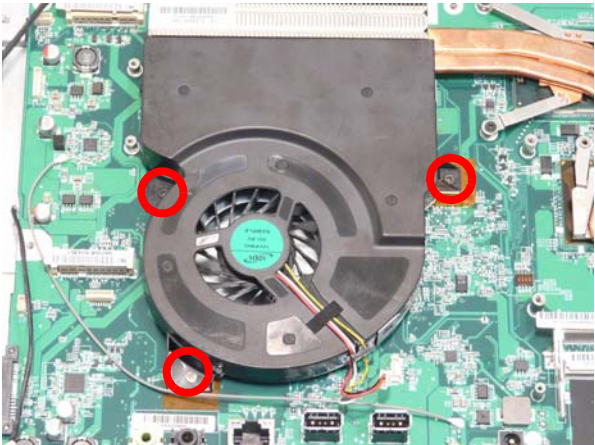



Removing the Fan

- 1. See “Removing the VGA Card” on page 70.
- 2. Disconnect the fan cable.

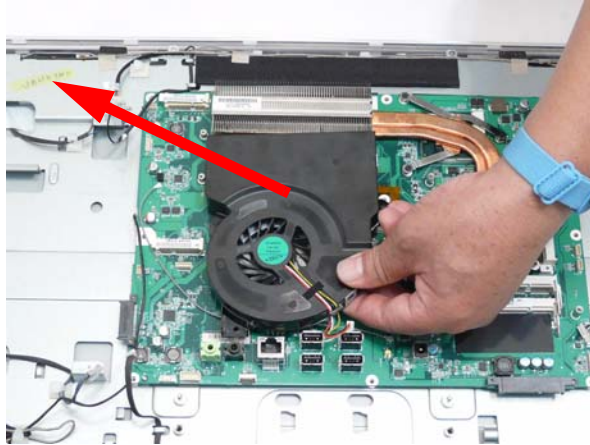


- 3. Remove the three (3) screws.



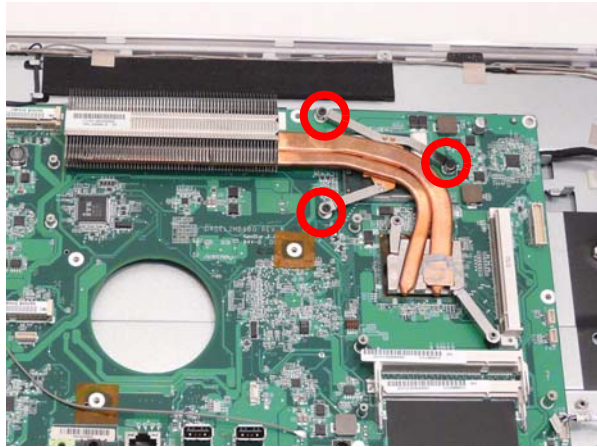
Step	Size	Quantity	Screw Type
Fan	2.5*5	3	

4. Remove the fan.



Removing the Thermal Module

1. See "Removing the Fan" on page 71.
2. Loosen the three (3) captive screws.

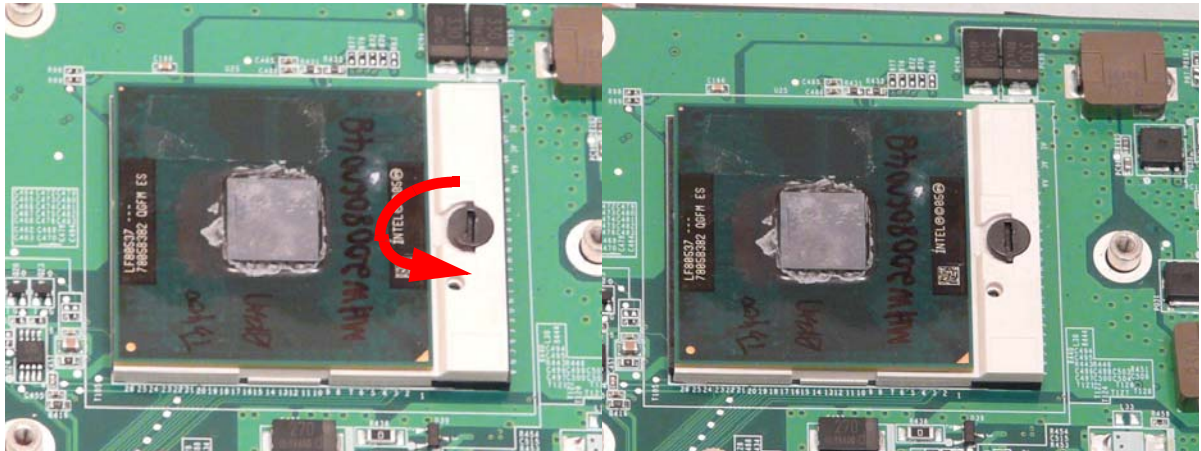


3. Lift the thermal module away.

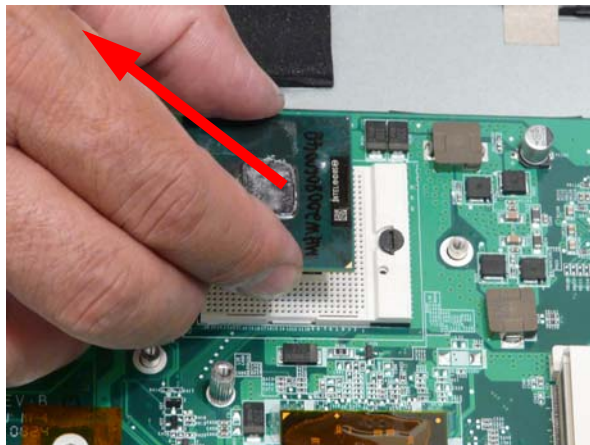


Removing the CPU

1. See “Removing the Thermal Module” on page 73.
2. Unlock the CPU by turning the lock one hundred and eighty degrees (180°).



3. Lift the CPU away by the corners.




CAUTION: Avoid any contact with a thermal pad or thermal grease.

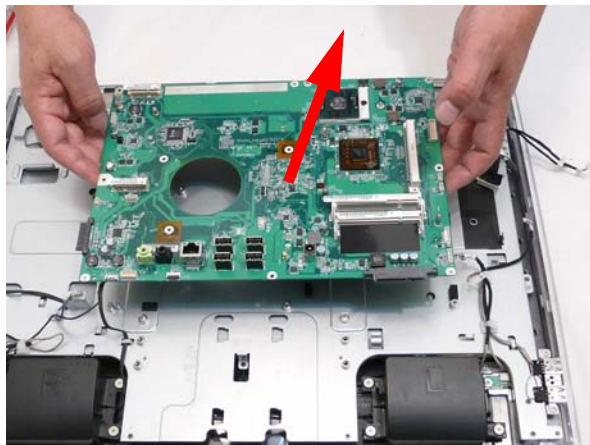
Removing the Mainboard

1. See "Removing the Wireless LAN Module" on page 65.
2. See "Removing the TV Module" on page 67.
3. See "Removing the Thermal Module" on page 73.
4. Remove the one (1) screw.



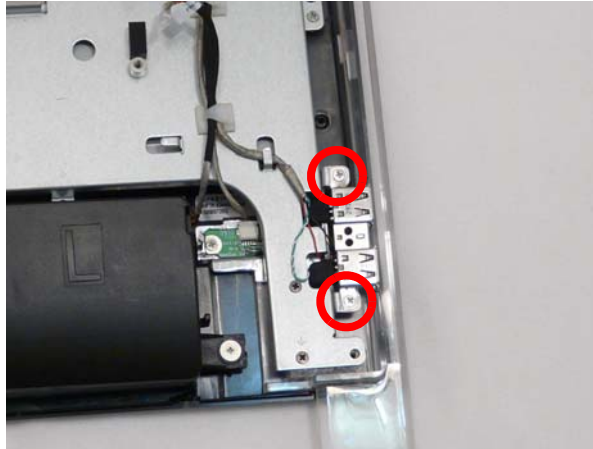
Step	Size	Quantity	Screw Type
Mainboard	M2.5*4	1	


5. Lift the mainboard away.



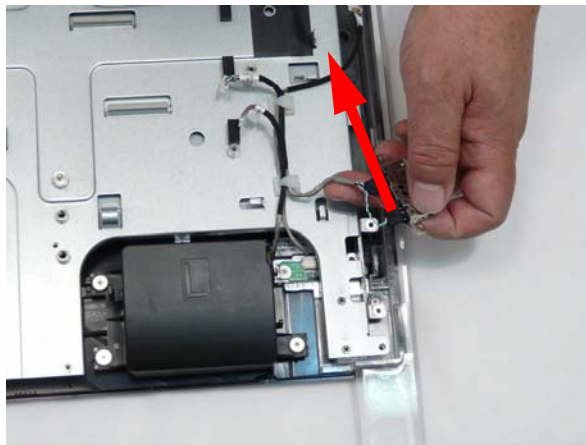
Removing the USB Board

1. See "Removing the Rear Cover" on page 46.
2. Remove the two (2) screws.

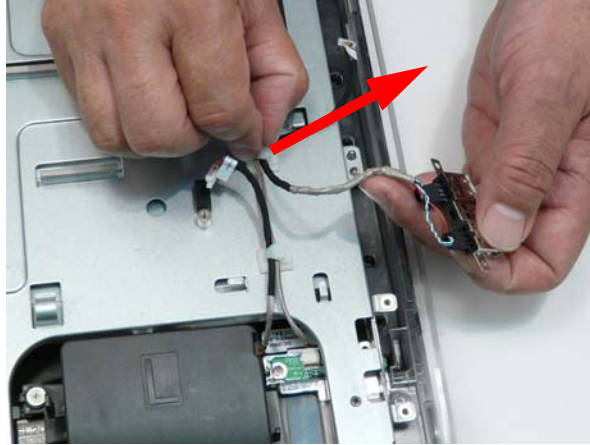


Step	Size	Quantity	Screw Type
USB Board	M2.5*4	2	

3. Remove the USB board from the chassis.

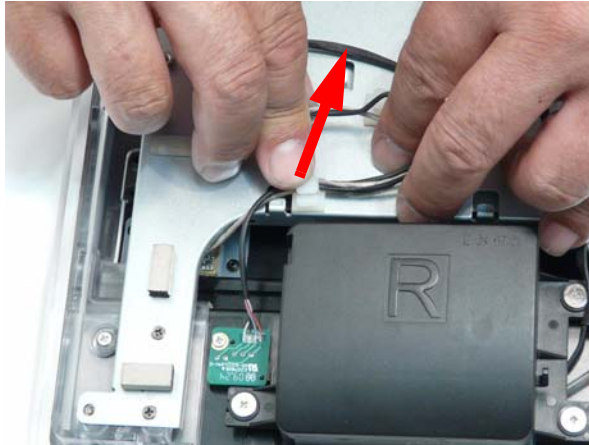


4. Remove the cables from the guide clips.

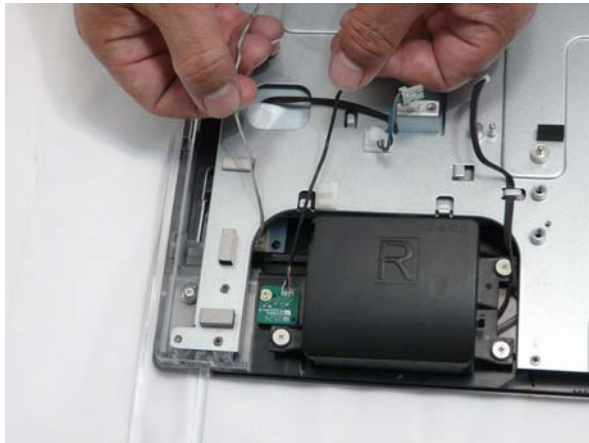


Removing the IR Receiver

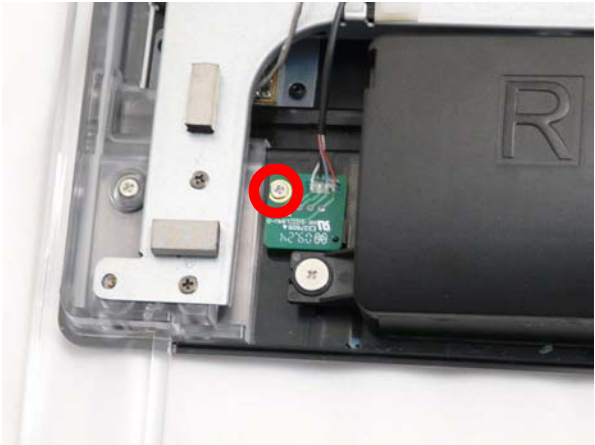
1. See "Removing the Rear Cover" on page 46.
2. Remove the cables from the guide clips.




3. Separate the individual cables.

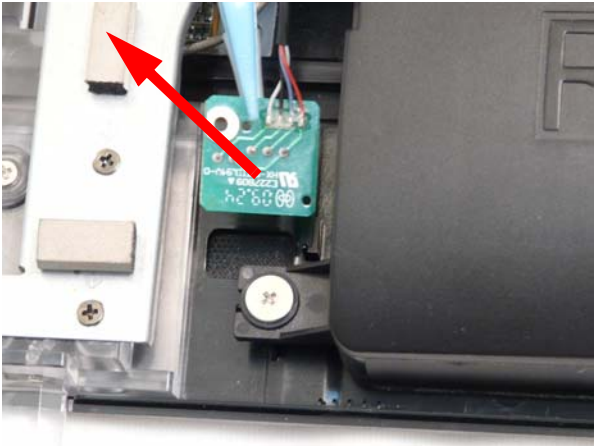


4. Remove the one (1) screw.



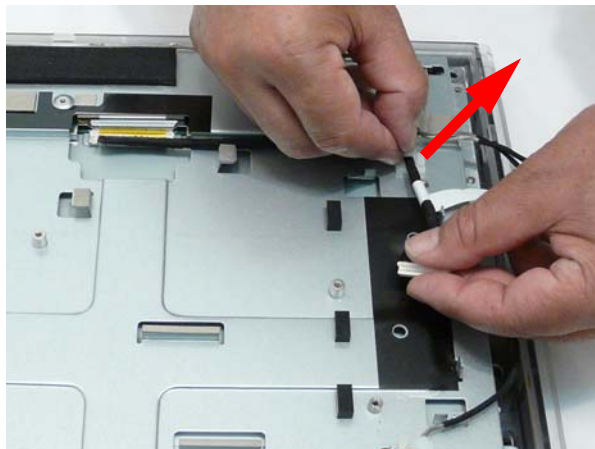
Step	Size	Quantity	Screw Type
IR Receiver	M2.0*3	1	

5. Lift the IR receiver away from the chassis.

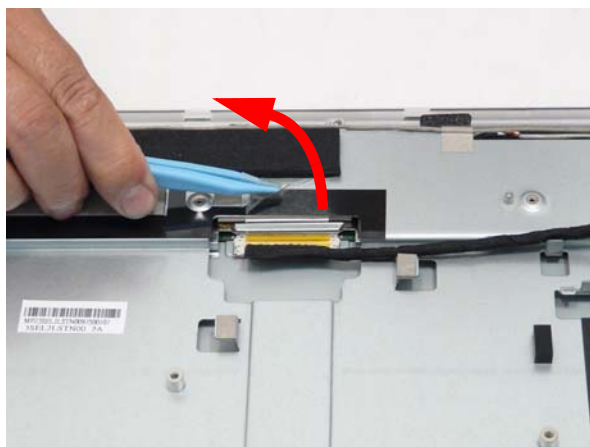


Removing the Frame

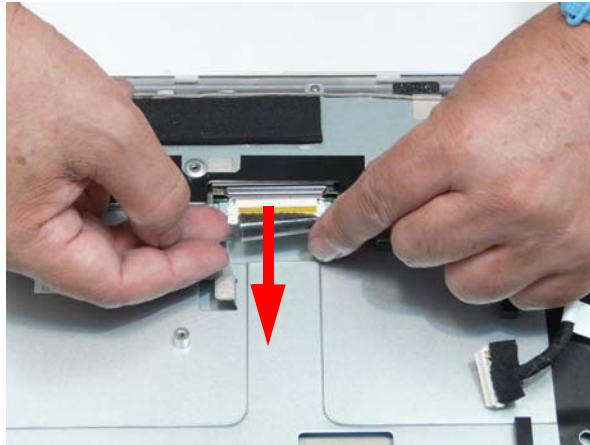
1. See "Removing the Hard Disk Drive" on page 50.
2. See "Removing the Inverter Board" on page 56.
3. See "Removing the Mainboard" on page 75.
4. See "Removing the USB Board" on page 76.
5. See "Removing the IR Receiver" on page 78.
6. Remove the LVDS cable from the guide clips.



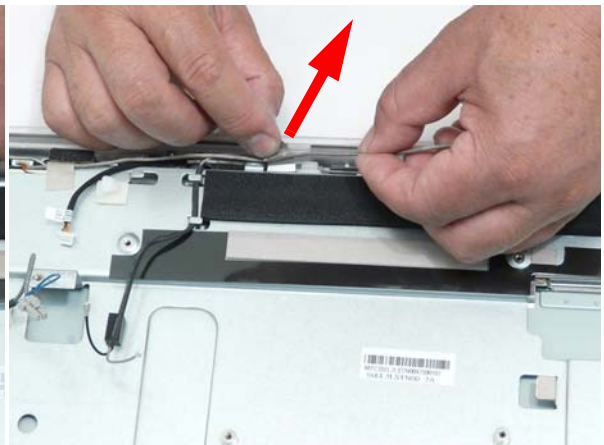
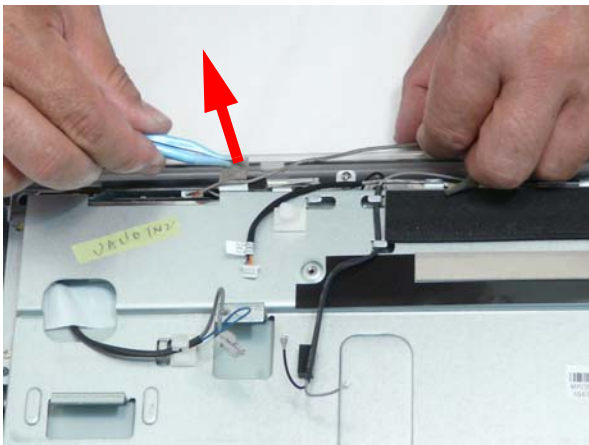
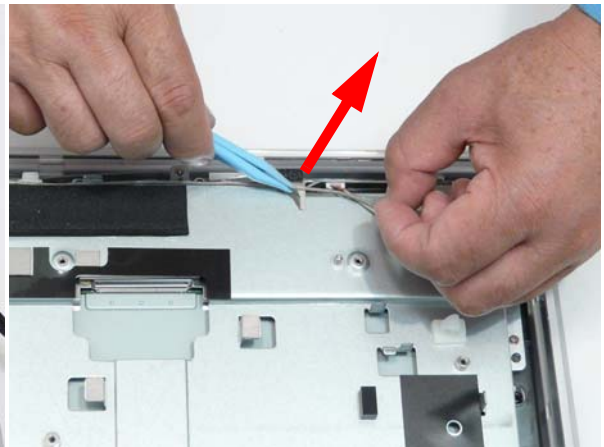
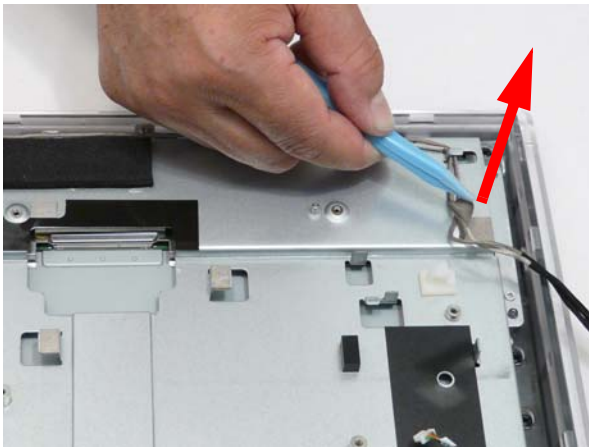
7. Remove the LVDS connector protective cover.



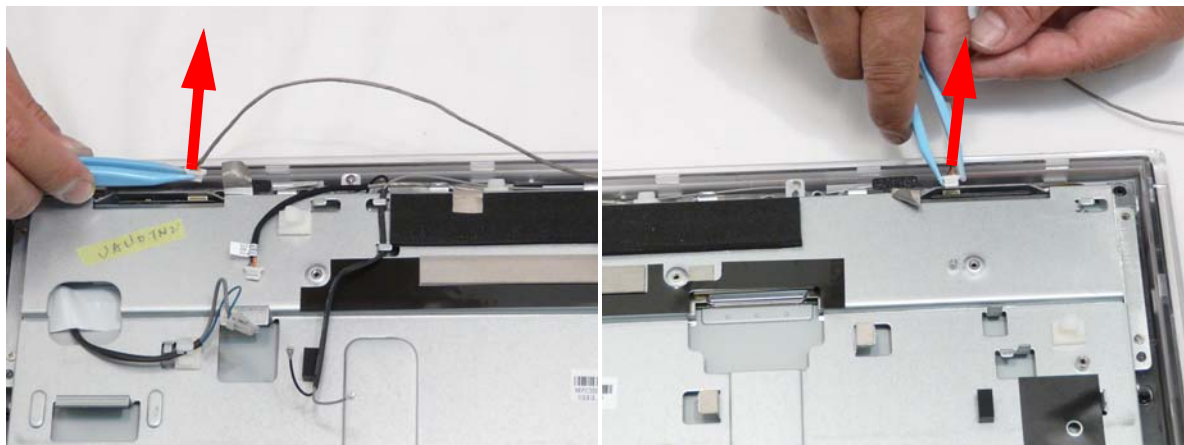
8. Remove the LVDS cable.



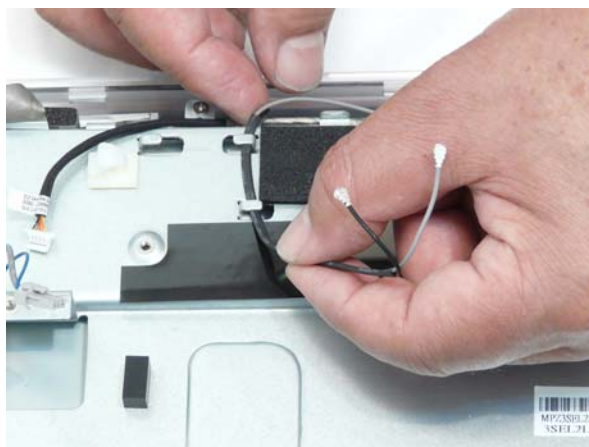
9. Remove the adhesive tape off the sensor cables.



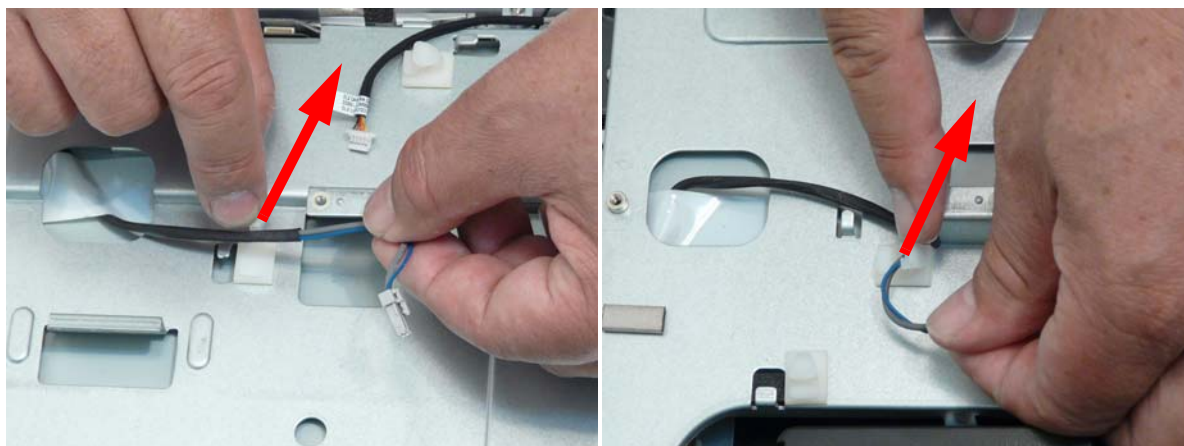
10. Remove the two (2) sensor connectors.



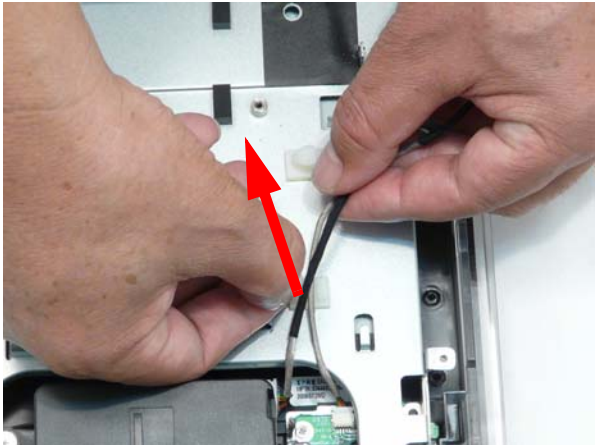
11. Remove the antenna cable from the retention hooks.



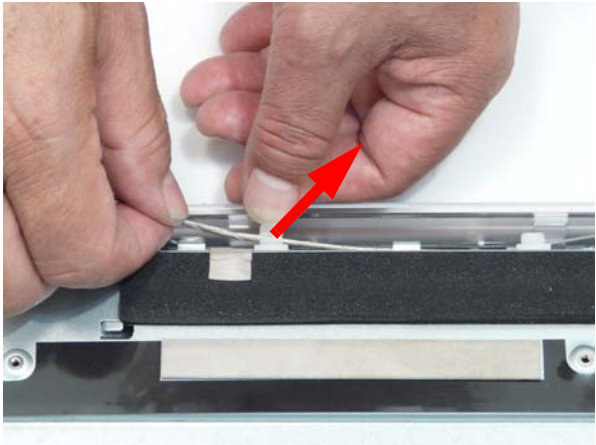
12. Remove the two (2) inverter cables from the guide clips.



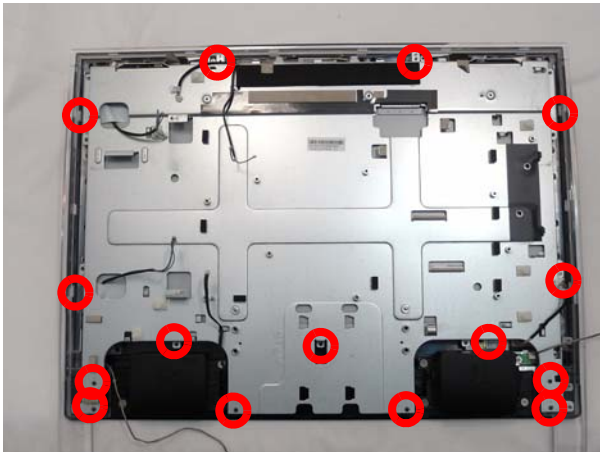
13. Remove the speaker cable from the guide clips.




14. Remove the webcam cable from the guide clips.



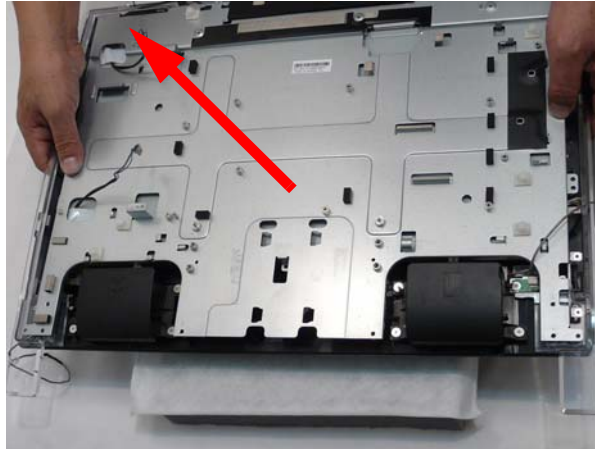
15. Remove the fifteen (15) screws.



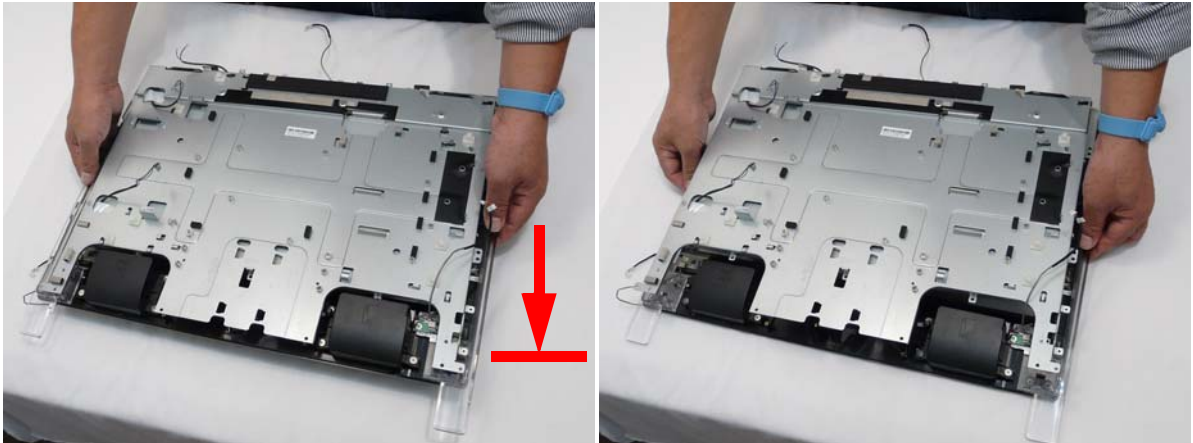
Step	Size	Quantity	Screw Type
Frame	M2.5*4	15	

16. Firmly holding onto the sides of the unit assembly, lift and place the unit assembly on a raised protected soft surface. This raised surface must be smaller in surface area than the LCD while still capable of supporting the assembly.

IMPORTANT: Do not allow the LCD touch panel sensors to contact any surface.



17. Gently lower the bezel down away from the LCD panel assembly.



18. Lift the frame away.




IMPORTANT: Do not place the LCD panel face down.

Removing the LCD Panel

- 1. See "Removing the Frame" on page 80.
- 2. Remove the four (4) screws of the LCD assembly.



Step	Size	Quantity	Screw Type
LCD Panel	M3*4	4	

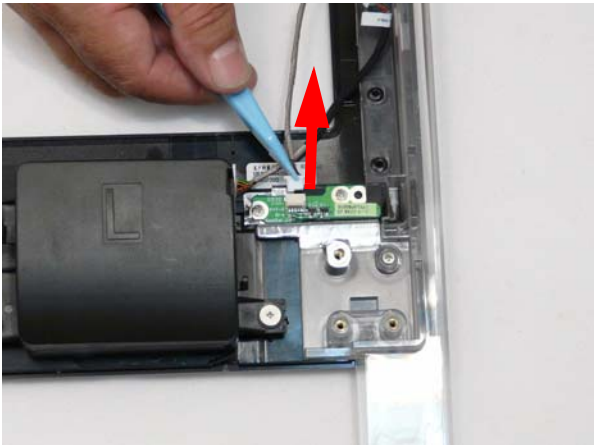
- 3. Lift the LCD panel away from the LCD assembly.



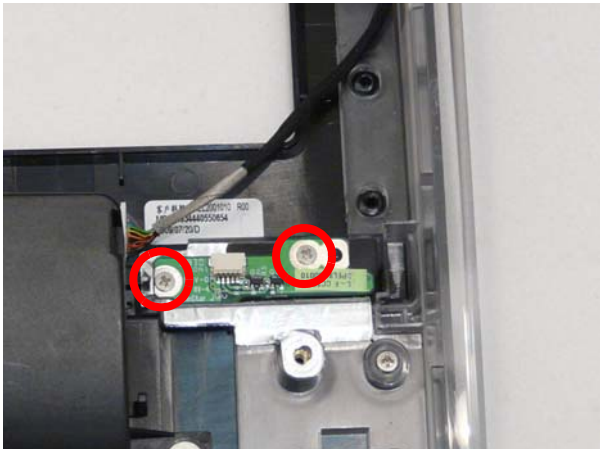
IMPORTANT:The touchscreen control board and LCD panel must be returned together for RMA purposes. See "Removing the Touchscreen Control Board" on page 58. The touchscreen control board records the specific panel's data, do not separate these for RMA.


Removing the Power Board

- 1. See "Removing the Frame" on page 80.
- 2. Disconnect the power board cable.

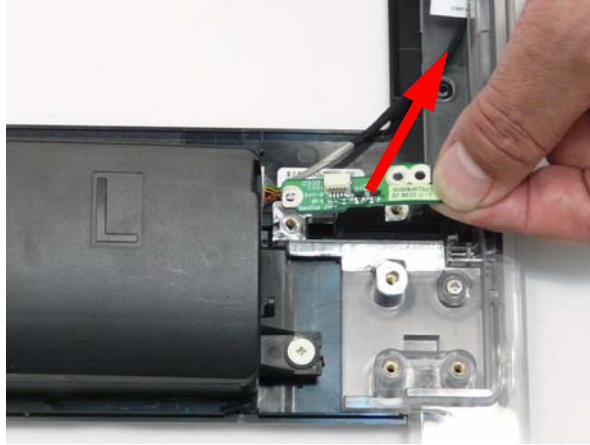


- 3. Remove the two (2) screws.



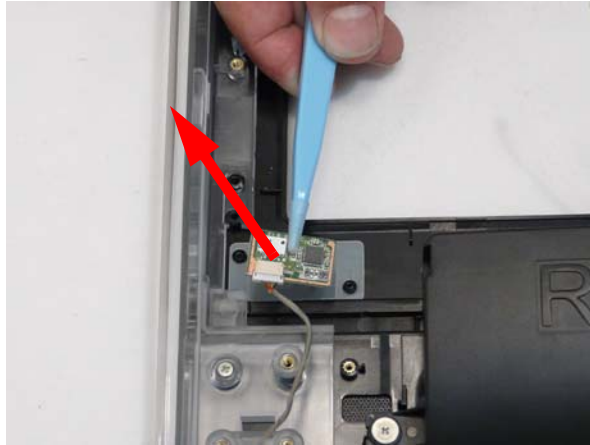
Step	Size	Quantity	Screw Type
Power Board	M2.5*4	2	

4. Lift the power board away from the bezel.

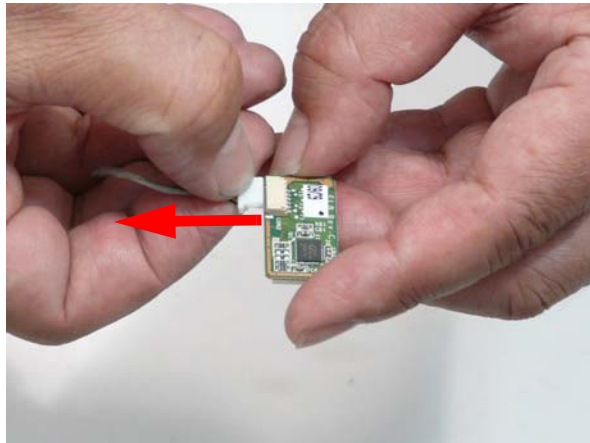


Removing the Home Button Board

1. See "Removing the Frame" on page 80.
2. Pry the home button board off the bezel.

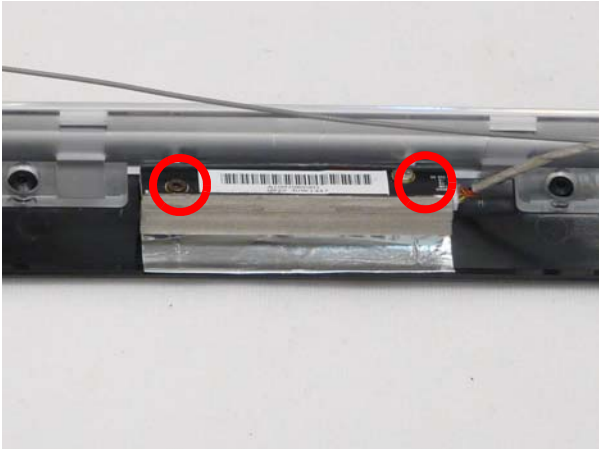



3. Disconnect the home button board cable.



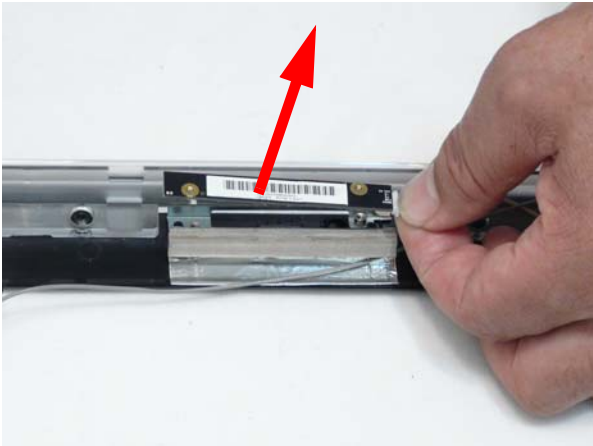
Removing the Webcam

- 1. See "Removing the Frame" on page 80.
- 2. Remove the two (2) screws.

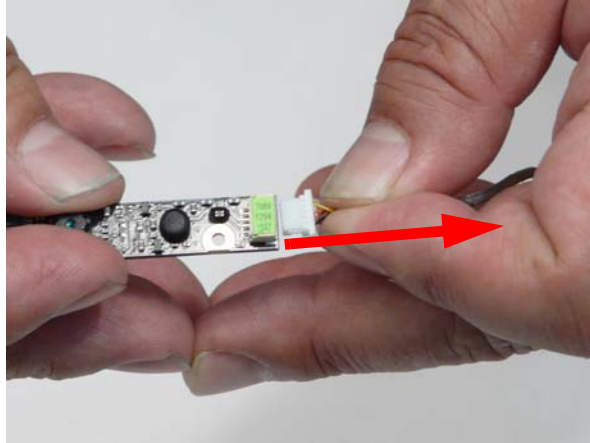


Step	Size	Quantity	Screw Type
Webcamr	M2*3	2	

- 3. Lift the webcam away from the bezel.




4. Disconnect the webcam cable.



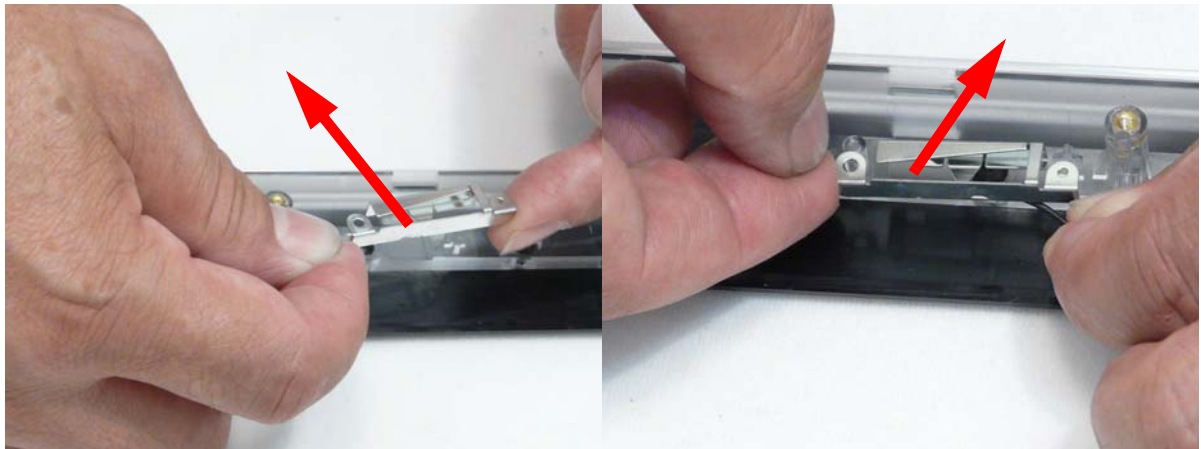
Removing the Antennas

1. See "Removing the Frame" on page 80.
2. Remove the two (2) screws.



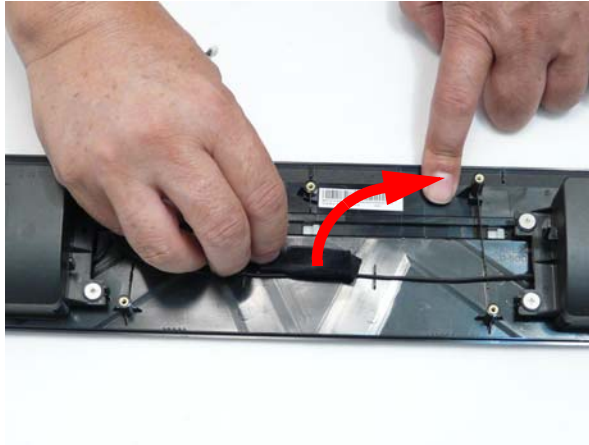
Step	Size	Quantity	Screw Type
Antennas	M1.7*4	2	

3. Remove the left and right antennas from the bezel.

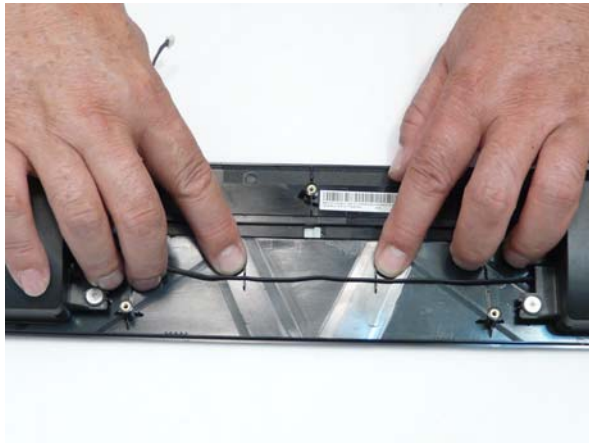


Removing the Speakers

1. See "Removing the Frame" on page 80.
2. Remove the adhesive tape from the speaker cable.




3. Remove the speaker cable from the retention guides.

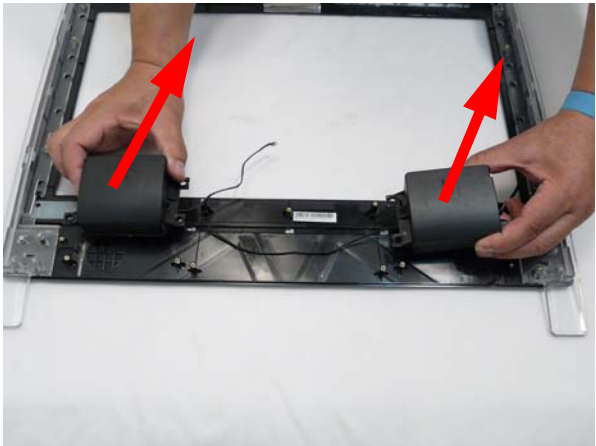


4. Remove the six (6) screws of the speakers.



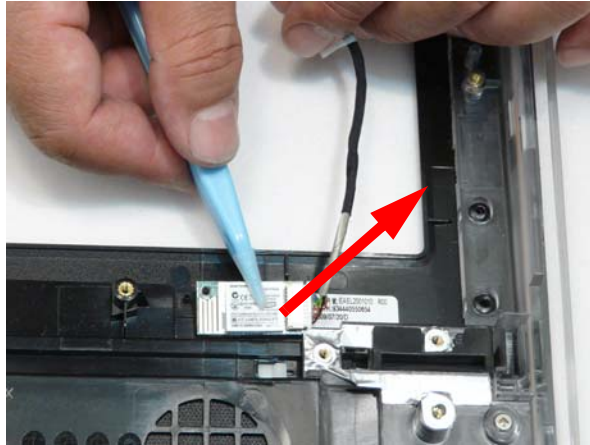
Step	Size	Quantity	Screw Type
Speakers	M2.5*4	6	

5. Lift the speakers away from the bezel.

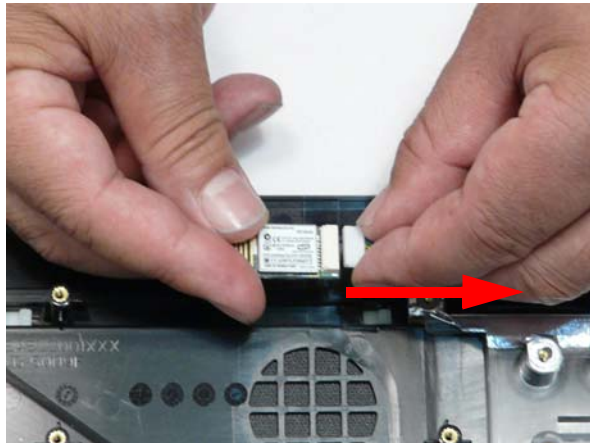


Removing the Bluetooth Module

1. See “Removing the Speakers” on page 92.
2. Pry the Bluetooth module off the adhesive.



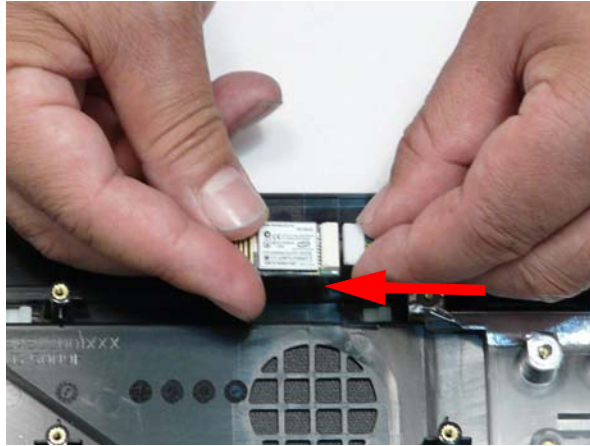
3. Disconnect the Bluetooth cable.



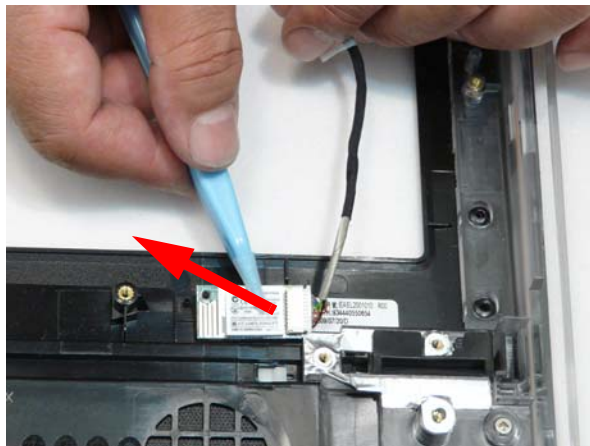
Reassembly Procedure

Replacing the Bluetooth Module

1. Connect the Bluetooth cable to the Bluetooth Module.

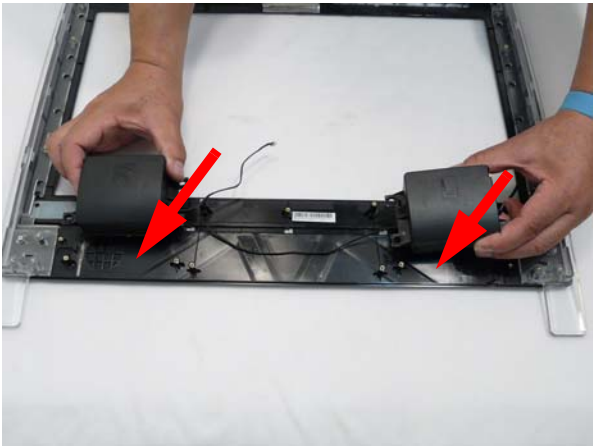


2. Adhere the Bluetooth module to the bezel.




Replacing the Speakers

- 1. Place the speakers on the bezel.

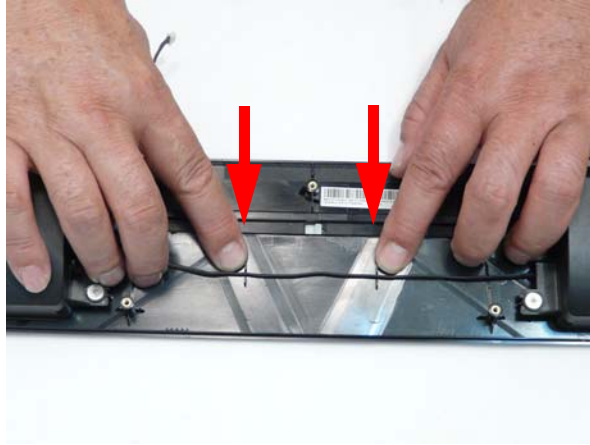


- 2. Replace the six (6) screws.



Step	Size	Quantity	Screw Type
Speakers		6	

3. Replace the speaker cable into the retention guides.

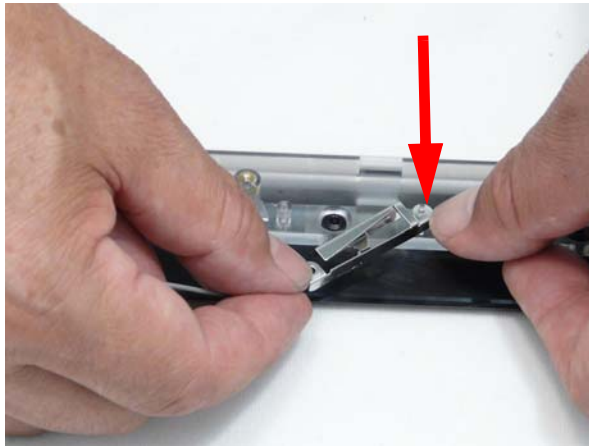


4. Replace the speaker cable adhesive tape.

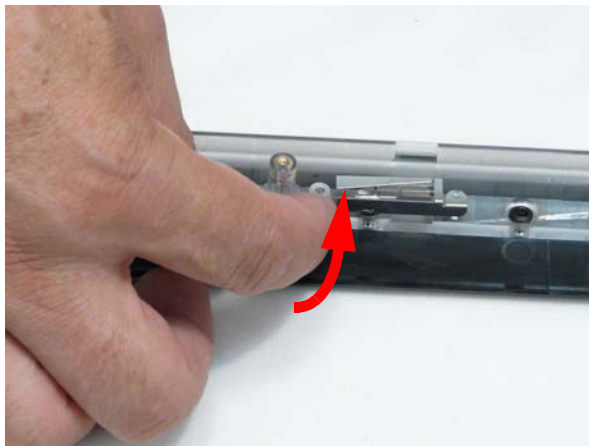


Replacing the Antennas

1. Place the right antenna on the guide pin.



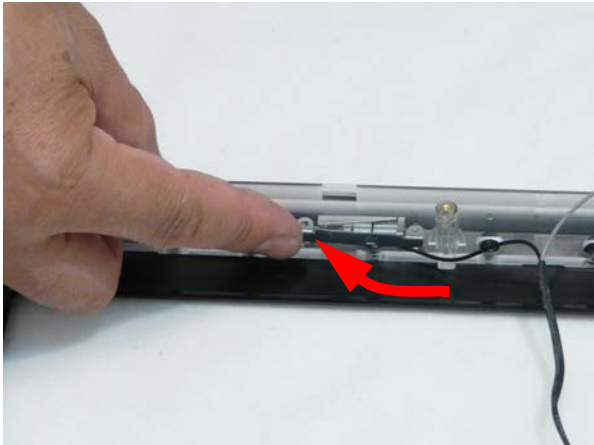
2. Push the right antenna into position.



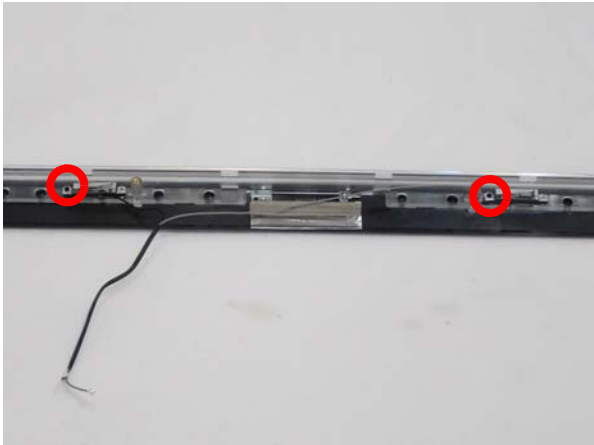
3. Place the left antenna on the guide pin.




4. Push the left antenna into position.



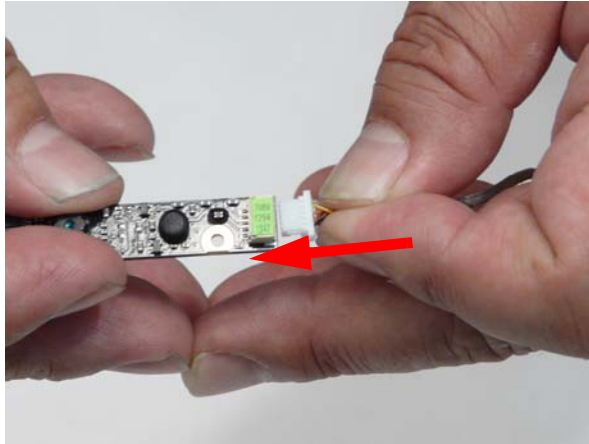
5. Replace the two (2) screws.



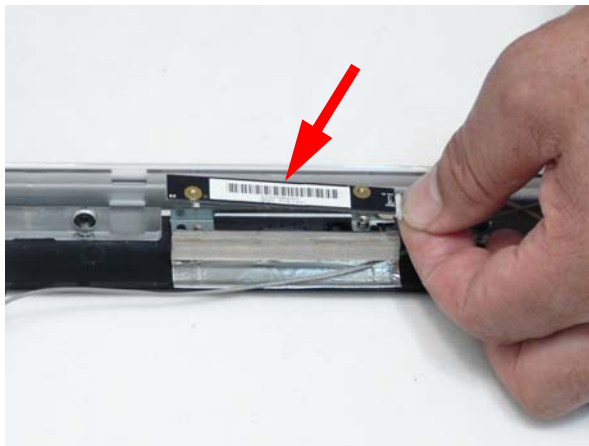
Step	Size	Quantity	Screw Type
Antenna	M1.7*4	2	

Replacing the Webcam

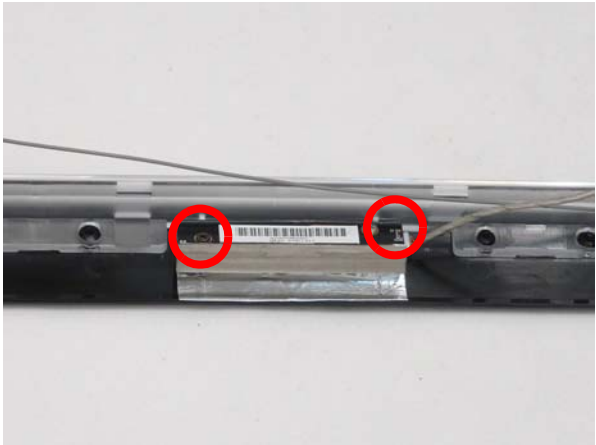
1. Connect the webcam cable to the webcam board.




2. Replace the webcam.



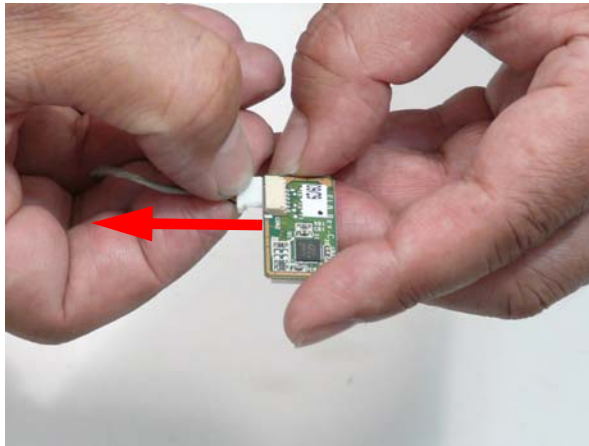
3. Replace the two (2) screws.



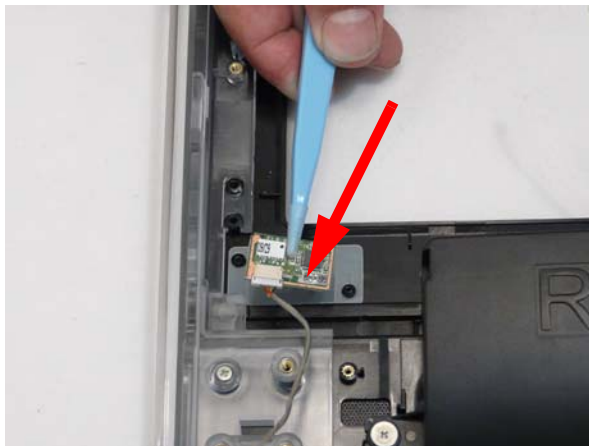
Step	Size	Quantity	Screw Type
Webcam	M2*3	2	

Replacing the Home Button Board

1. Connect the home button board cable to the home button board.

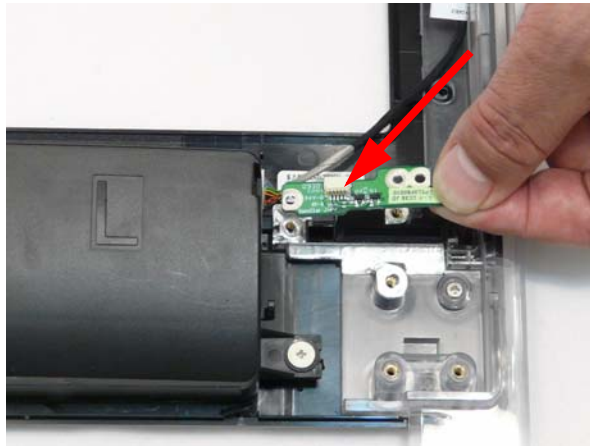


2. Adhere the home button board to the bezel.

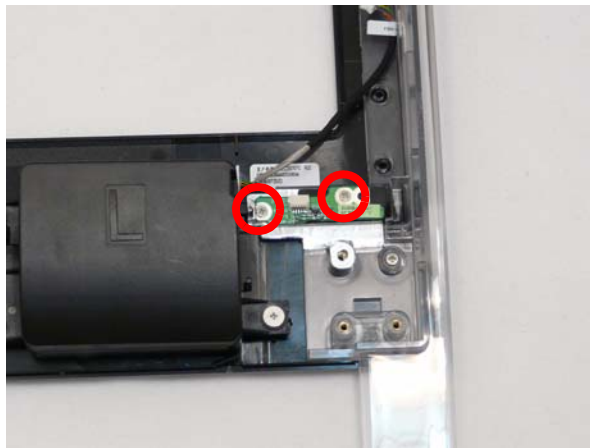



Replacing the Power Board

1. Replace the power board in the bezel.

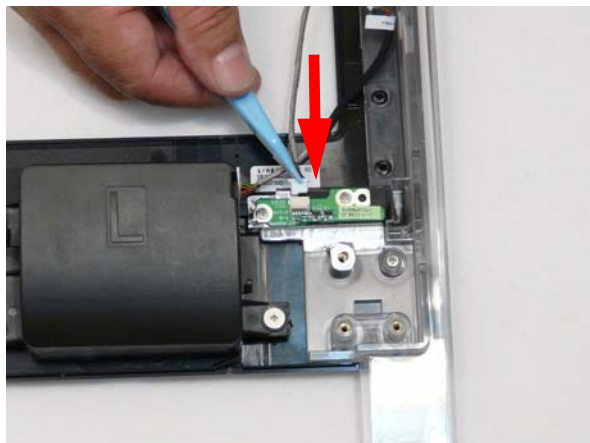


2. Replace the two (2) screws.



Step	Size	Quantity	Screw Type
Power Board	M2.5*4	2	

3. Connect the power board cable.

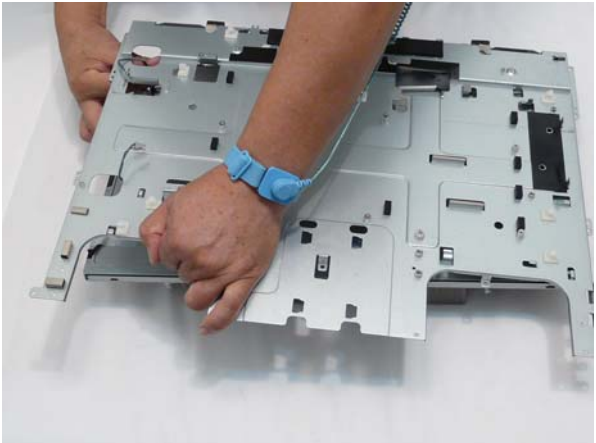
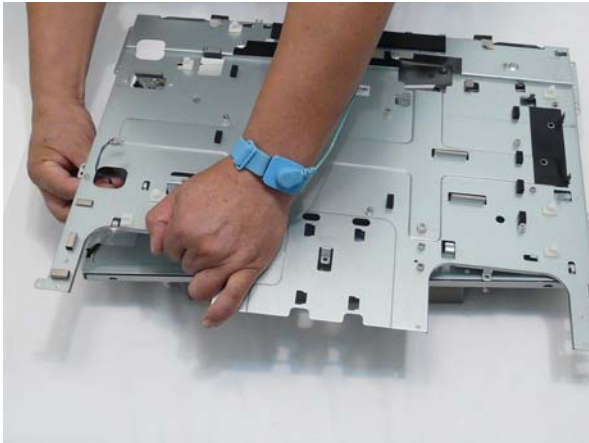


Replacing the LCD Panel in the Frame

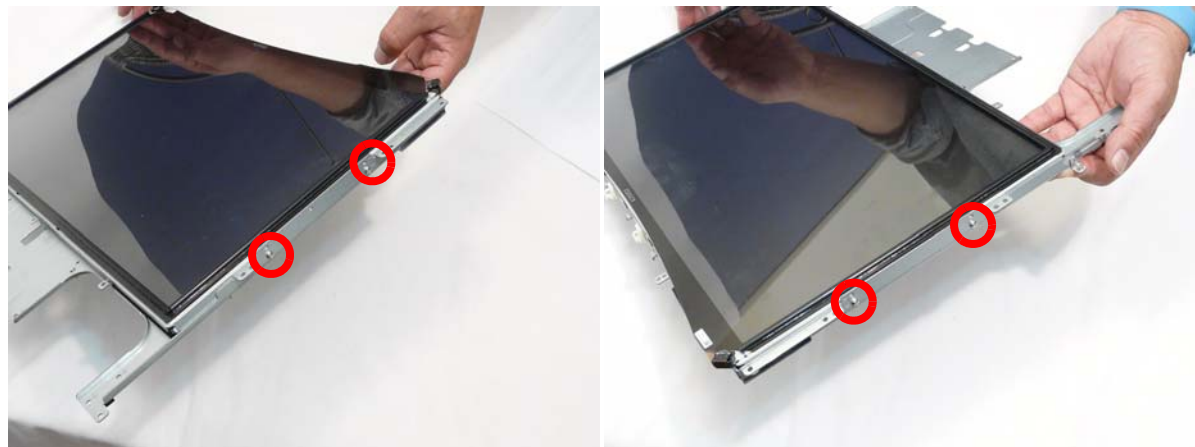
1. Replace the LCD panel into the frame.




2. Flip the panel over and place the assembly on a raised surface. Push the two (2) inverter cables through the frame.



3. Replace the four (4) screws.



Step	Size	Quantity	Screw Type
LCD Panel	M3*4	4	

Replacing the Frame

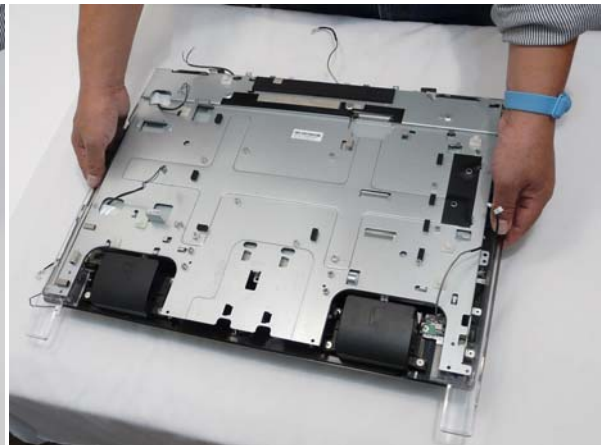
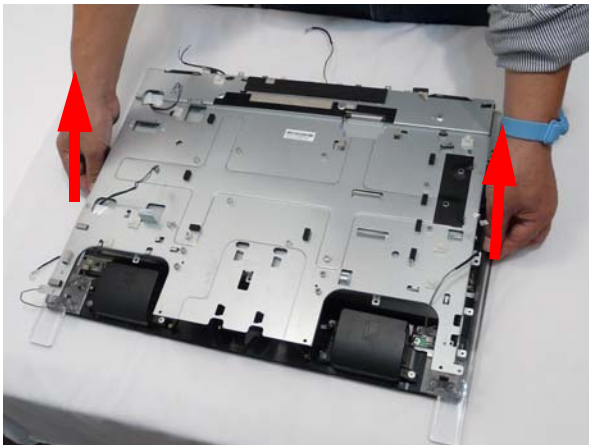
1. Place the bezel around a raised surface so that the bezel is lower than the raised surface



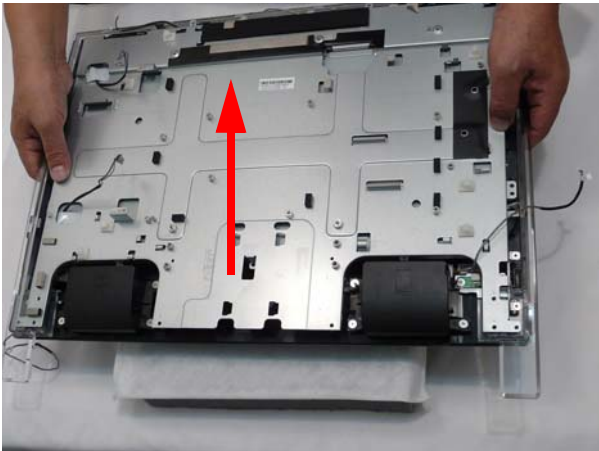
2. Place the LCD panel assembly onto the raised surface.



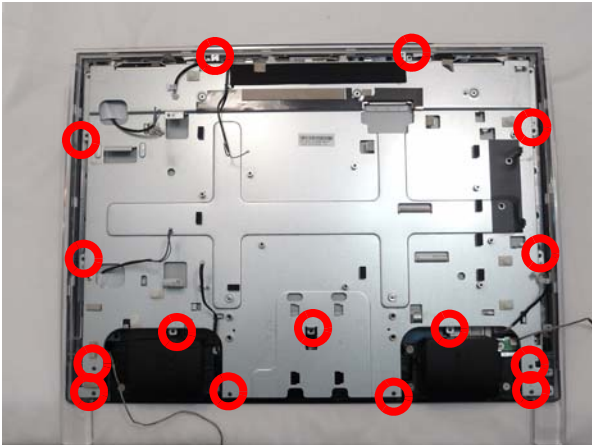
3. Lift the bezel up to meet the LCD panel assembly.




4. Lift the unit off the raised surface and place it on a flat surface.

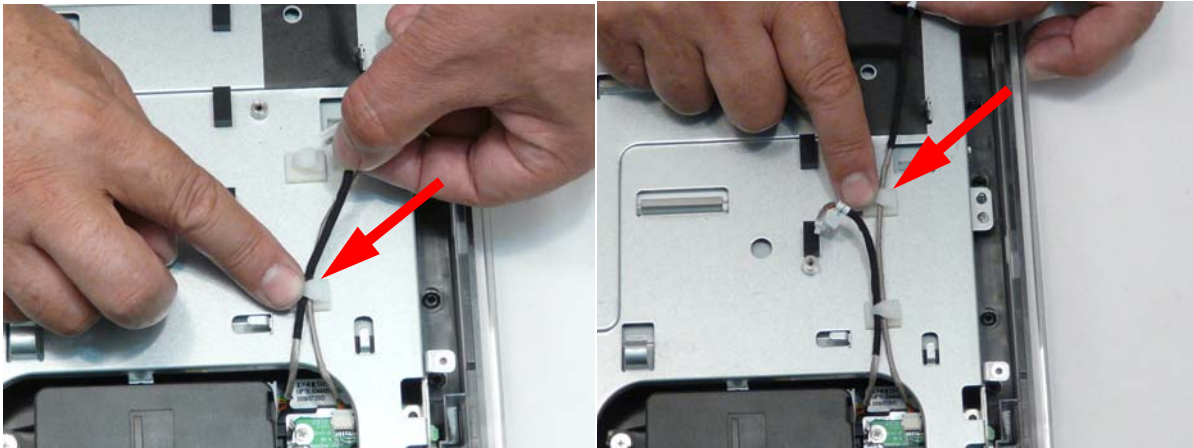


5. Replace the fifteen (15) screws.

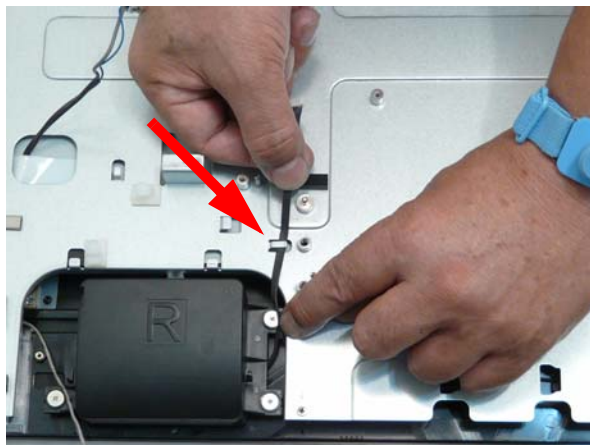


Step	Size	Quantity	Screw Type
Frame	M2.5*4	15	

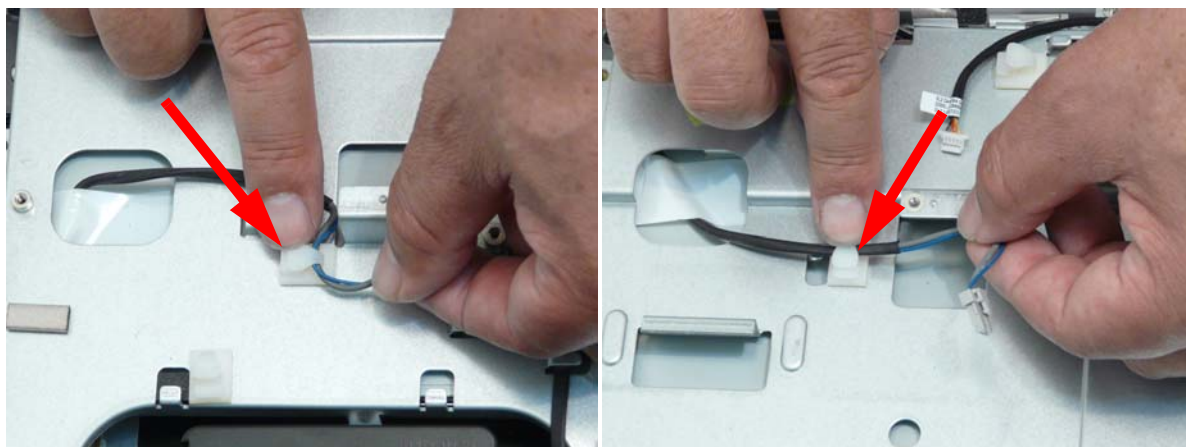
6. Replace the power button cable and the Bluetooth module cable into the guide clips.



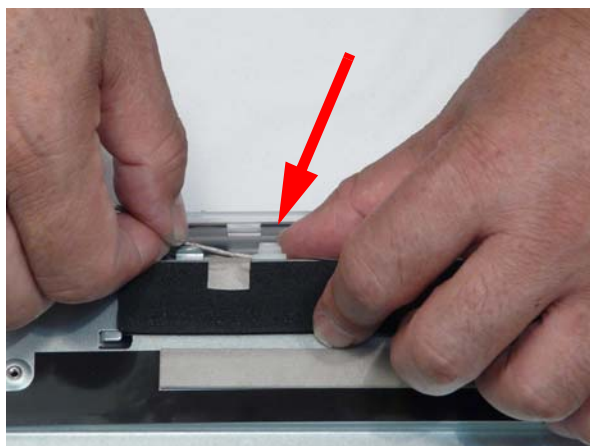
7. Replace the speaker cable under the retention guide.



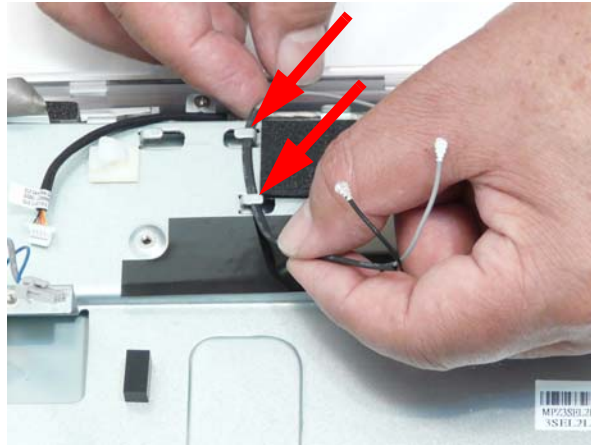
8. Replace the inverter cables in the guide clips.



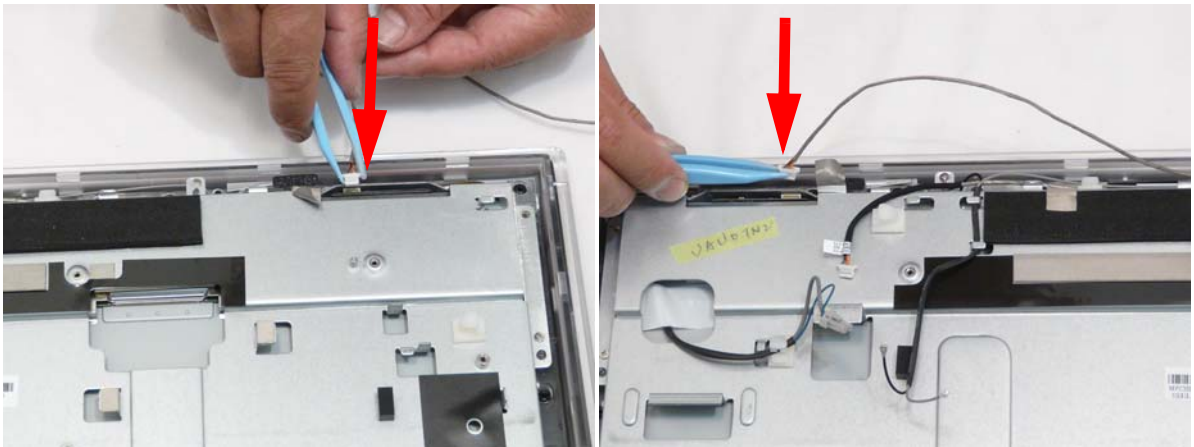
9. Replace the webcam cable into the guide clips.



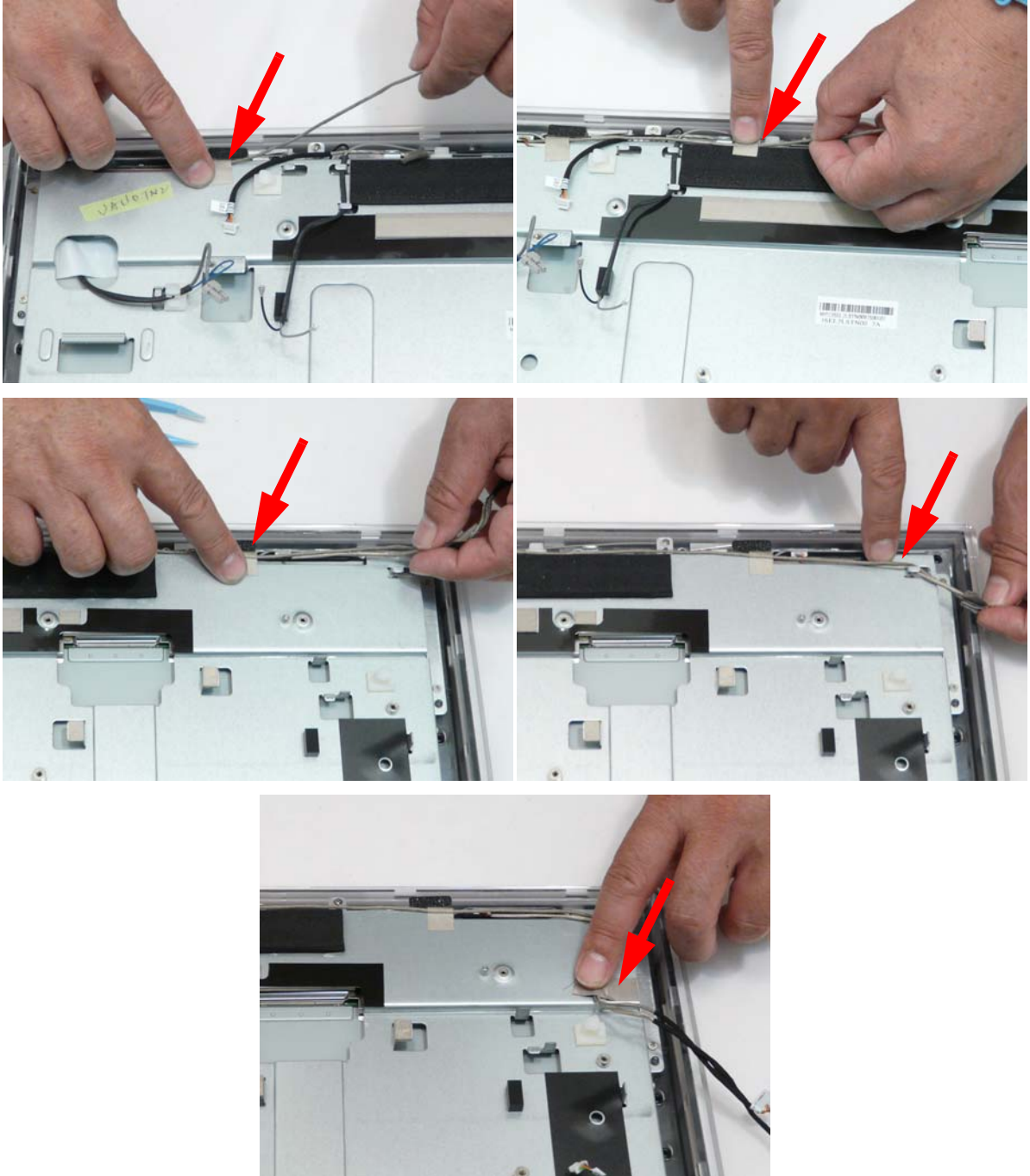
10. Replace the antenna cables under the retention guide.



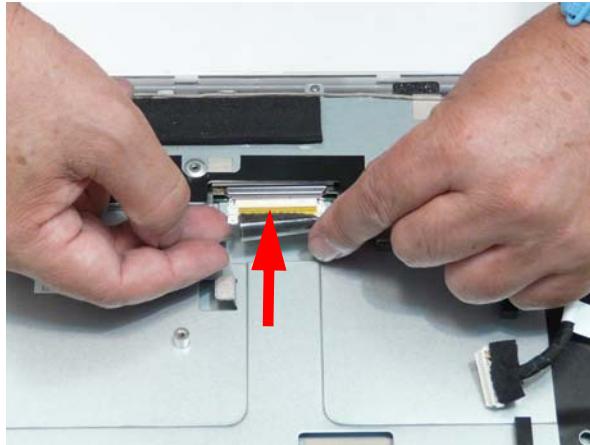
11. Connect the left and right sensor connectors.



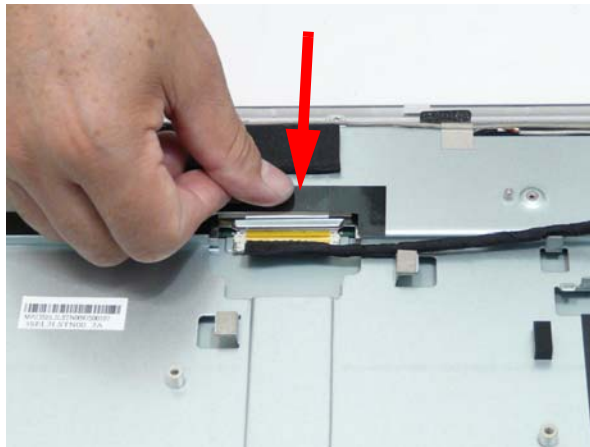
12. Adhere the tape over the sensor cables and lay the cable through the retention hook.



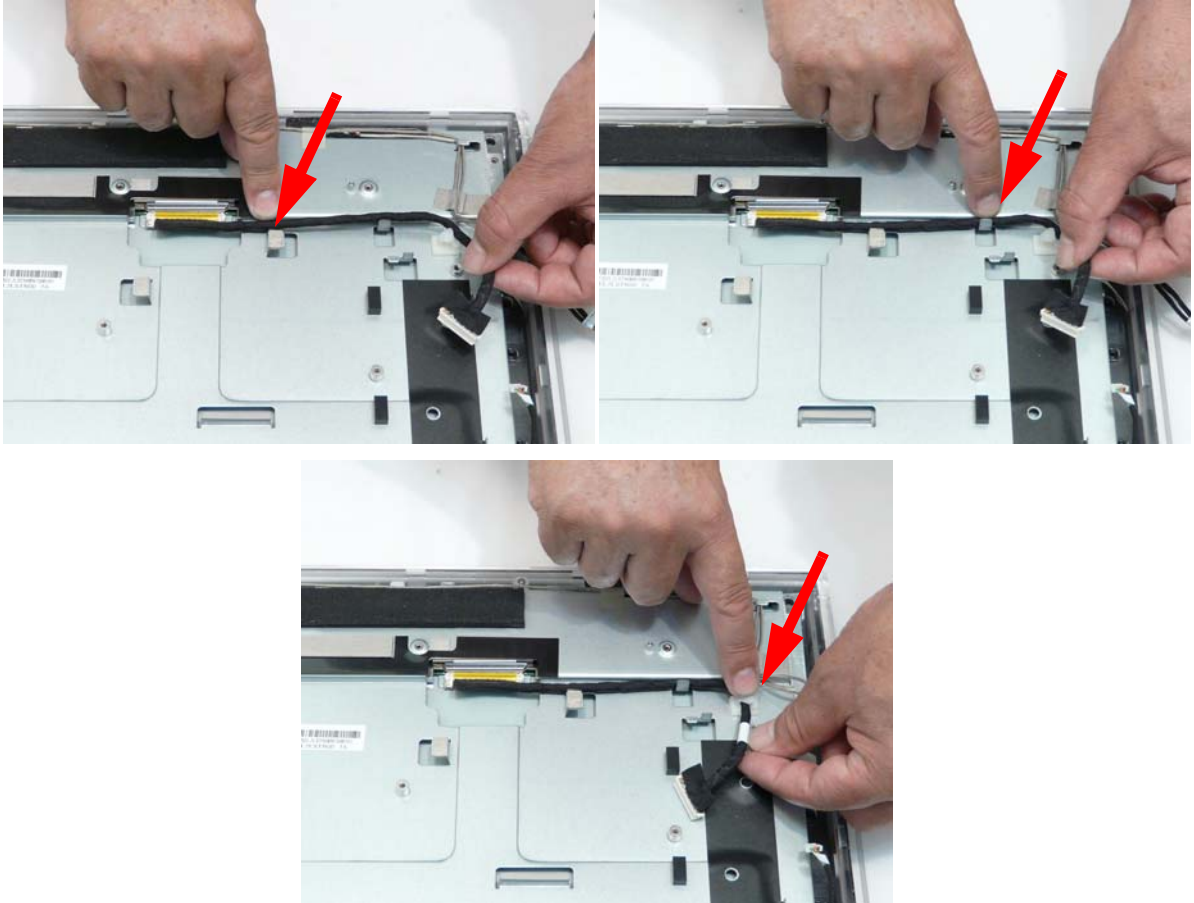
13. Connect the LVDS cable.



14. Adhere the LVDC cable protective cover.

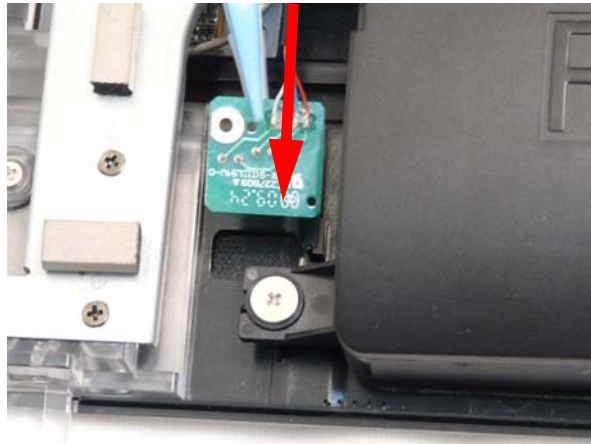


15. Lay the LVDS cable through the retention guides and into the guide clip.




Replacing the IR Receiver

1. Replace the IR receiver board.

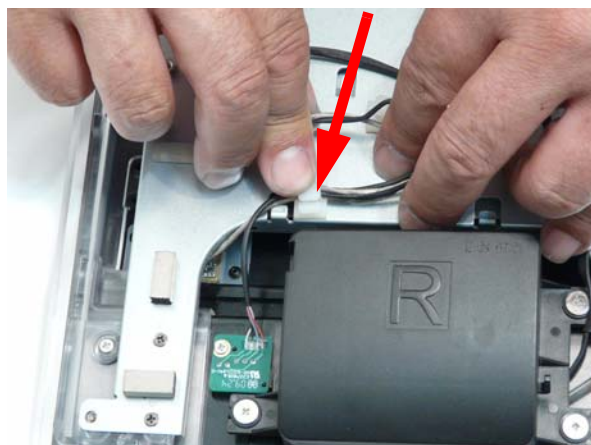


2. Replace the one (1) screw.



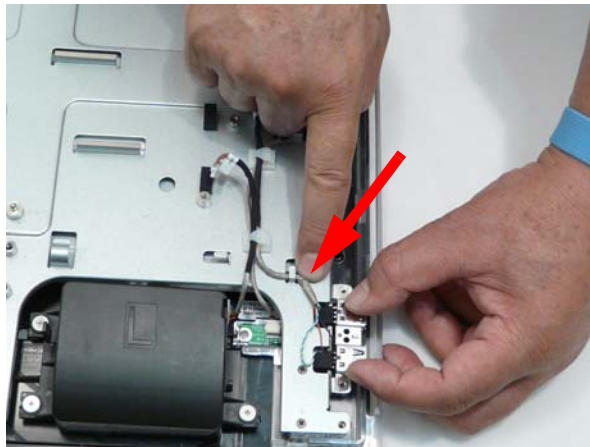
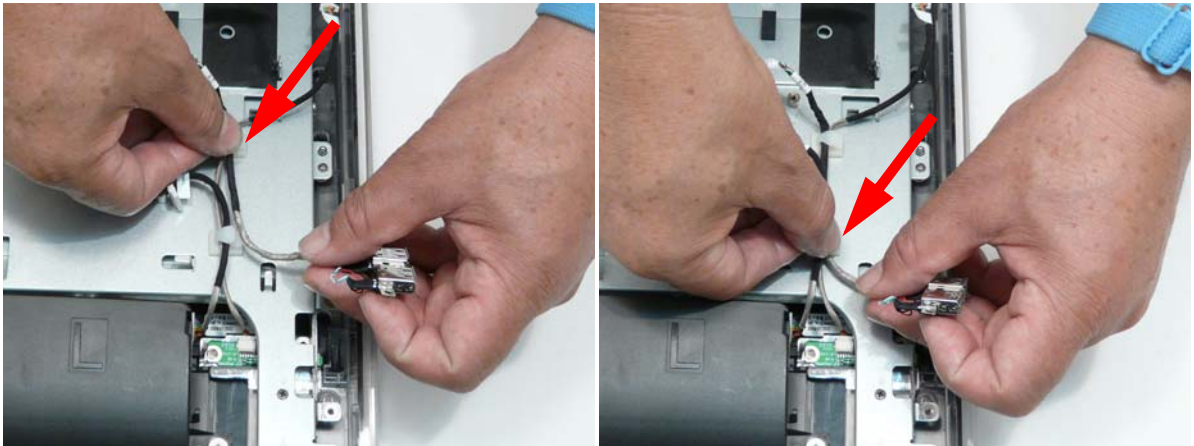
Step	Size	Quantity	Screw Type
IR Receiver	M2.5*4	1	

3. Replace the IR receiver cable and the home button board cable into the guide clip.

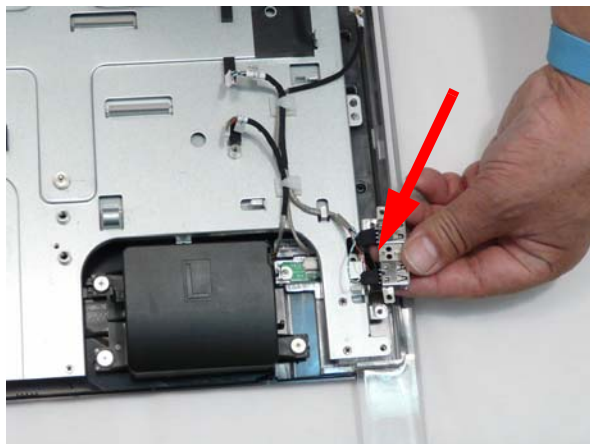


Replacing the USB Board

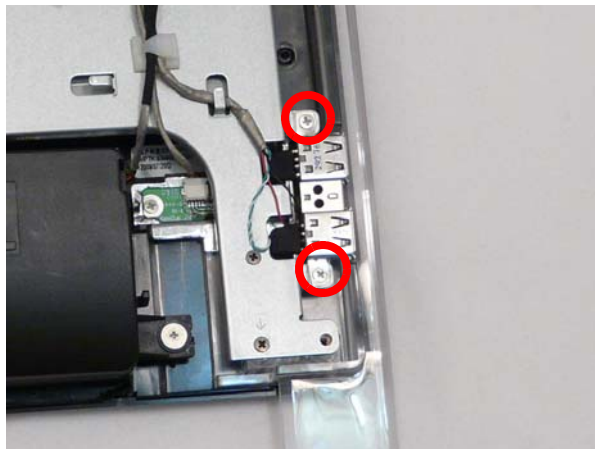
1. Replace the USB board cable into the guide clips and retention hook.




2. Replace the USB board.



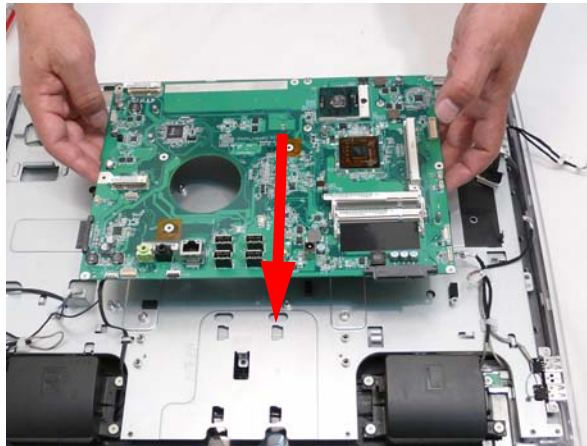
3. Replace the two (2) screws.



Step	Size	Quantity	Screw Type
USB Board	M2.5*4	2	


Replacing the Mainboard

1. Replace the mainboard.



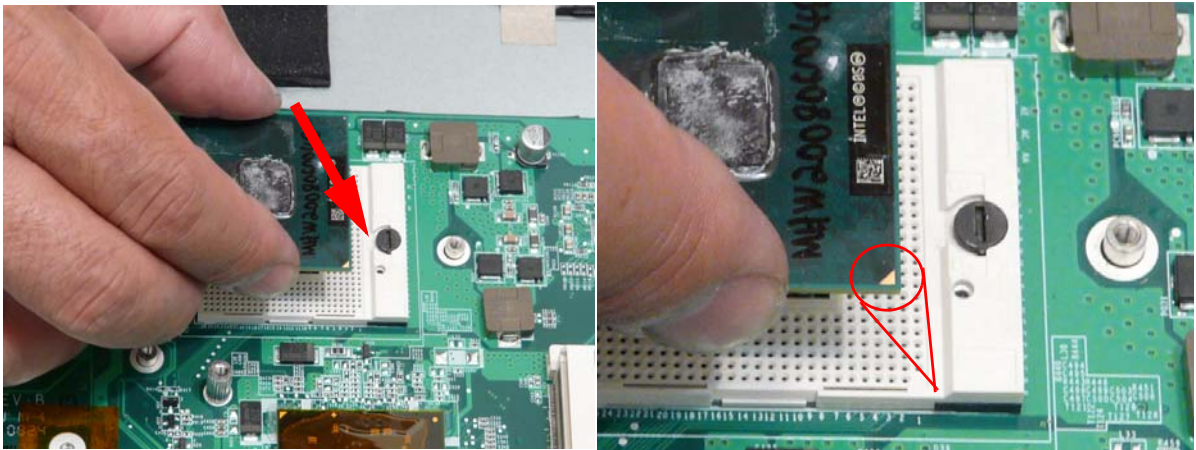
2. Replace the one (1) screw.



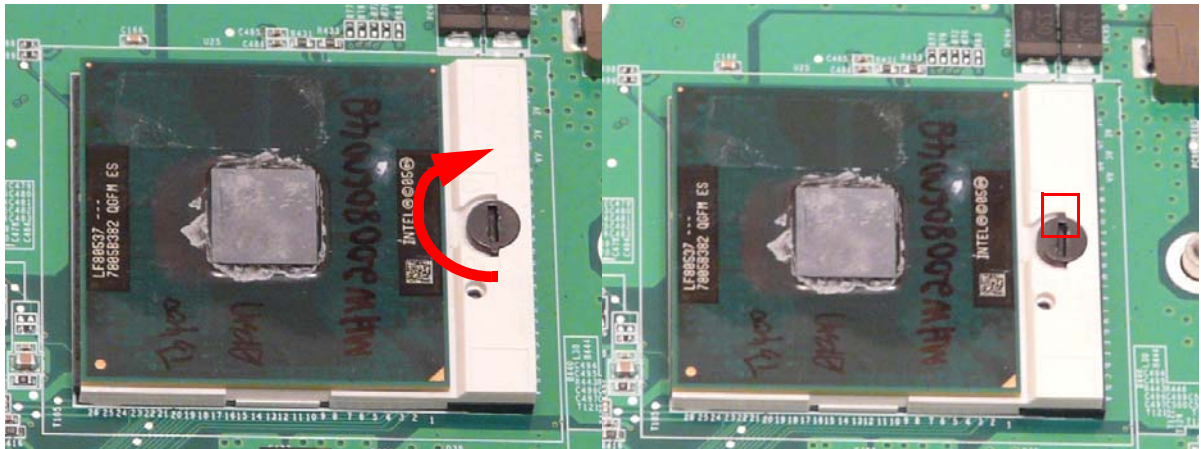
Step	Size	Quantity	Screw Type
Main Board	M2.5*4	1	

Replacing the CPU

1. Replace the CPU paying attention to the locating triangle.

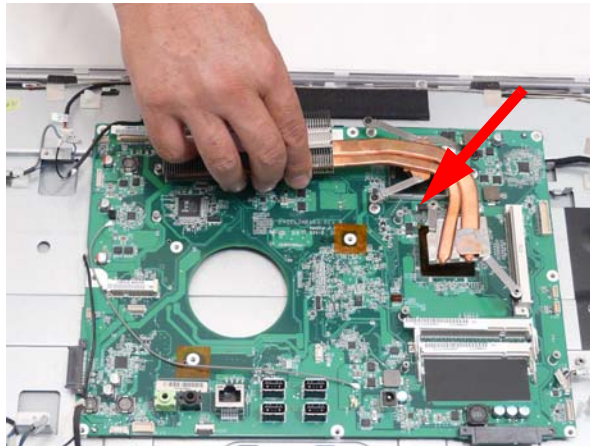


2. Turn the locking screw 180° to the locked position.
NOTE: The position of the locking lug in the call out.

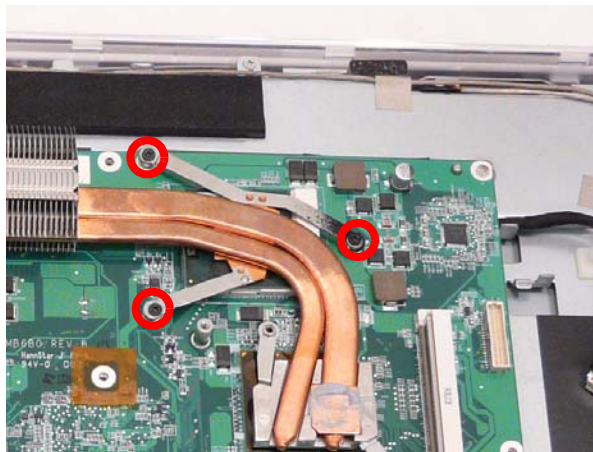


Replacing the Thermal Module

1. Replace the thermal module.



2. Tighten the three (3) captive screws.

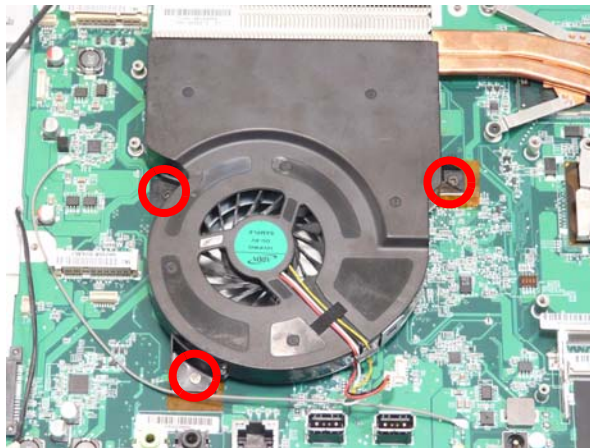



Replacing the Fan

1. Replace the fan.

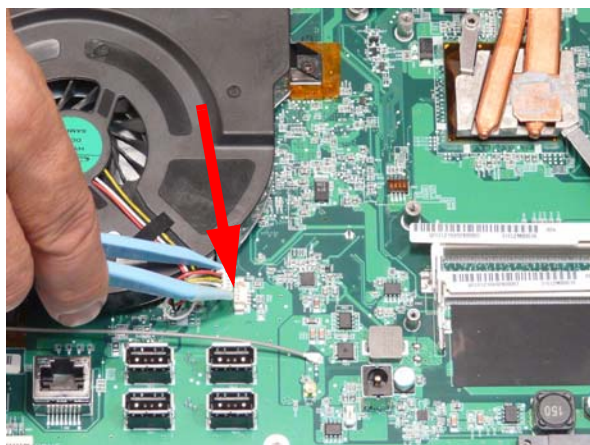


2. Replace the three (3) screws.



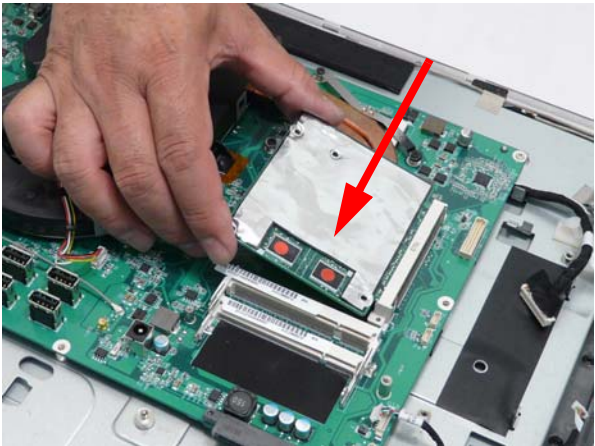
Step	Size	Quantity	Screw Type
Fan	M2.5*5	1	

3. Connect the fan cable.

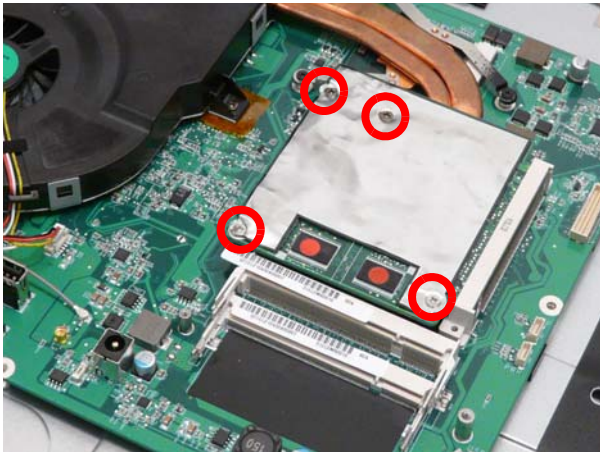



Replacing the VGA Card

1. Replace the VGA card.



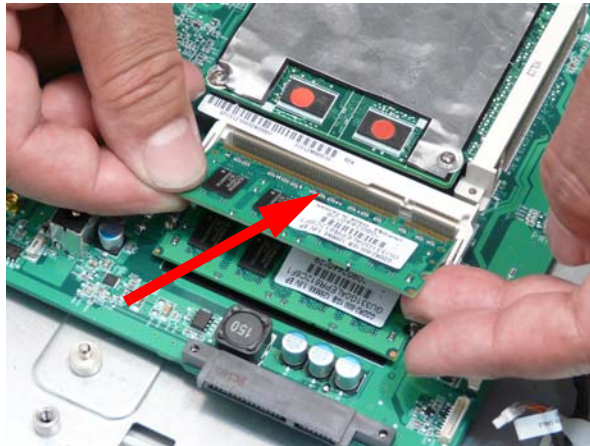
2. Replace the four (4) screws.



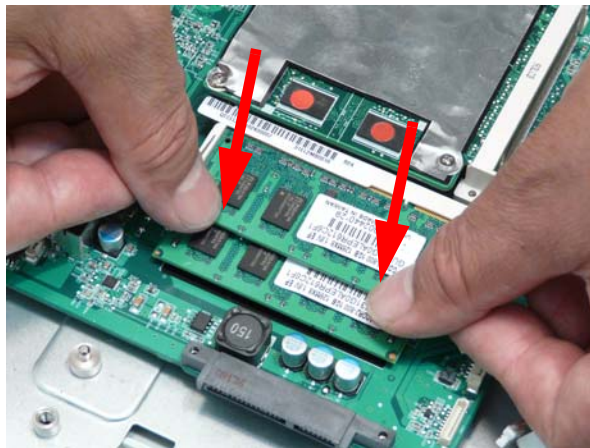
Step	Size	Quantity	Screw Type
VGA Card	M2.5*4	4	

Replacing the DIMM Module

1. Replace the DIMM Module.

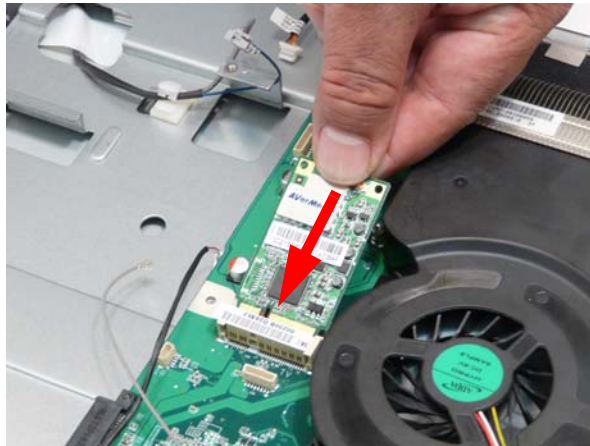


2. Press down to lock into place.




Replacing the TV Tuner Module

1. Replace the TV tuner module.



2. Replace the one (1) screw.



Step	Size	Quantity	Screw Type
TV Tuner	M2.5*4	1	

3. Replace the TV tuner cable, connecting both ends.




Replacing the WLAN Module

1. Replace the WLAN module.



2. Replace the one (1) screw.



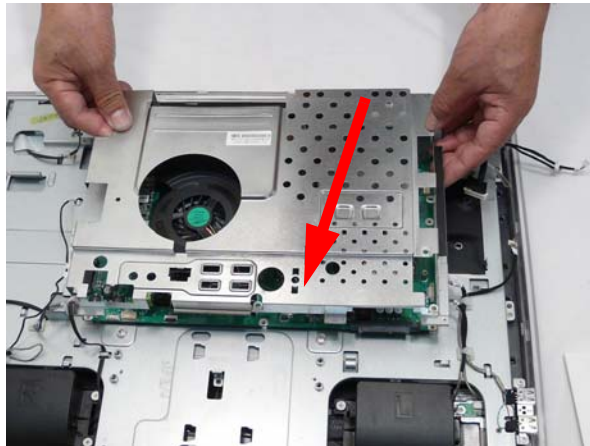
Step	Size	Quantity	Screw Type
WLAN	M2*3	1	

3. Replace the two (2) connectors. The gray cable is placed closest to the fan.

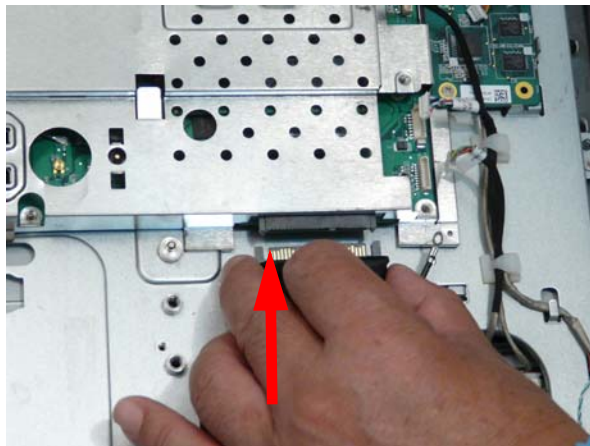


Replacing the Mainboard Shielding

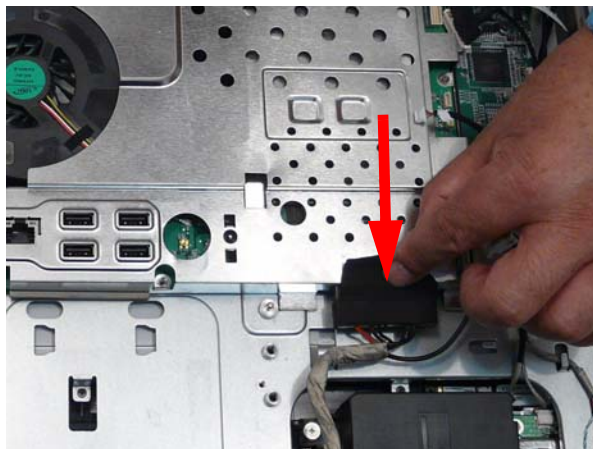
1. Replace the shield onto the assembly.



2. Connect the HDD cable.

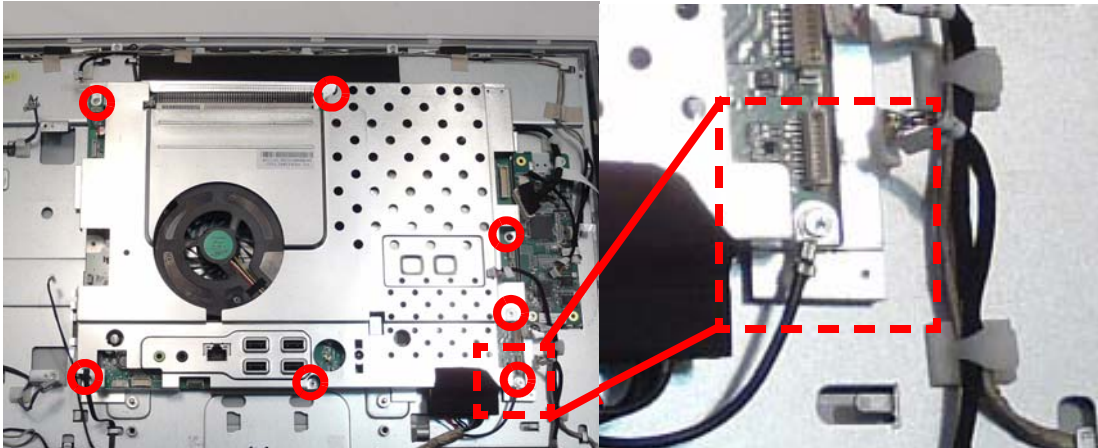



3. Adhere the HDD cable protective cover.



4. Replace the seven screws.

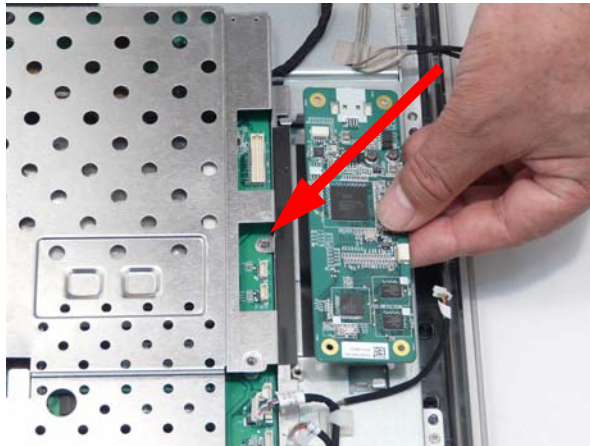
IMPORTANT:Ensure that the HDD cable grounding lug is connected under the corner screw.



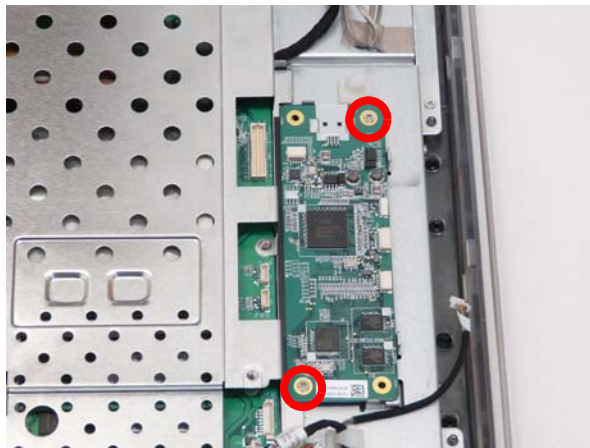
Step	Size	Quantity	Screw Type
Mainboard Shielding	M2.5*4	7	


Replacing the Touchscreen Board

1. Replace the Touchscreen board.

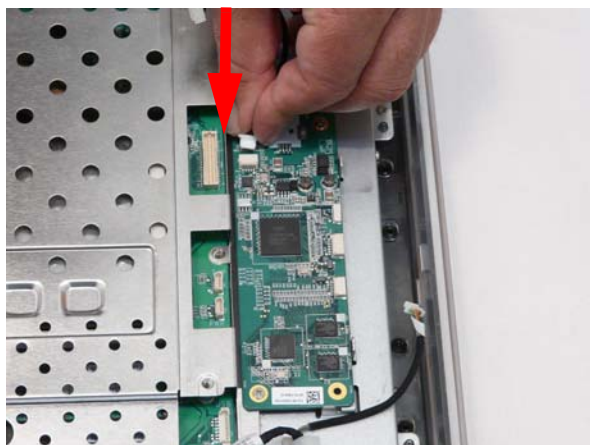


2. Replace the two (2) screws.

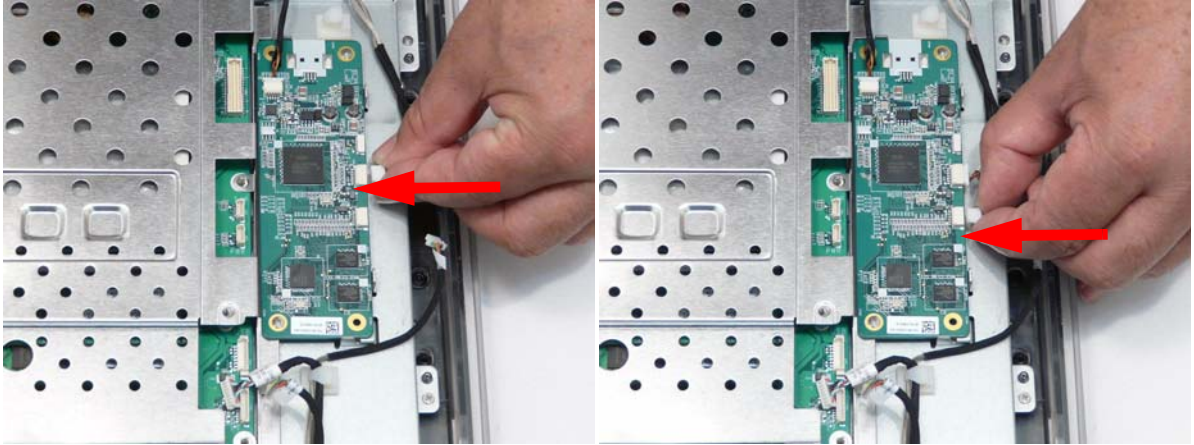


Step	Size	Quantity	Screw Type
Touchscreen Board	M2.5*4	2	

3. Connect the mainboard to touch screen board connector.

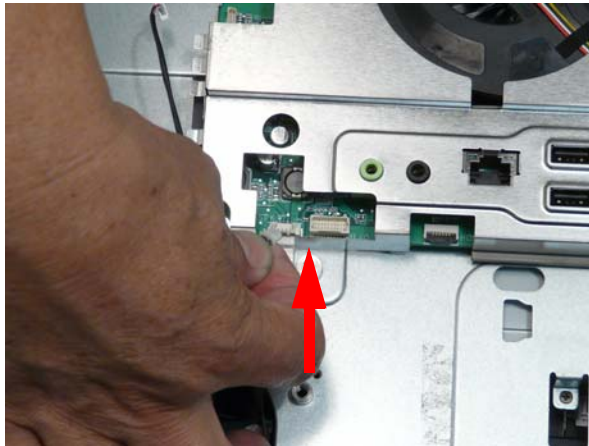


4. Connect the left and right touchscreen sensor cable connectors.

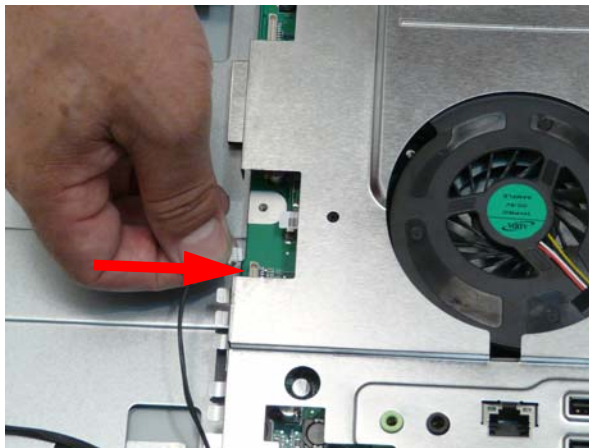


Replacing the Mainboard Connectors

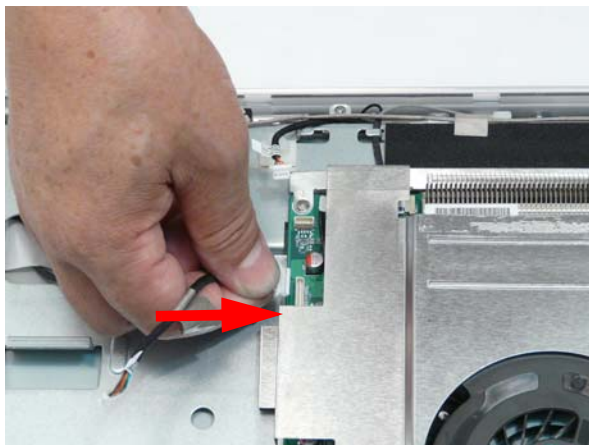
1. Connect the speaker connector.



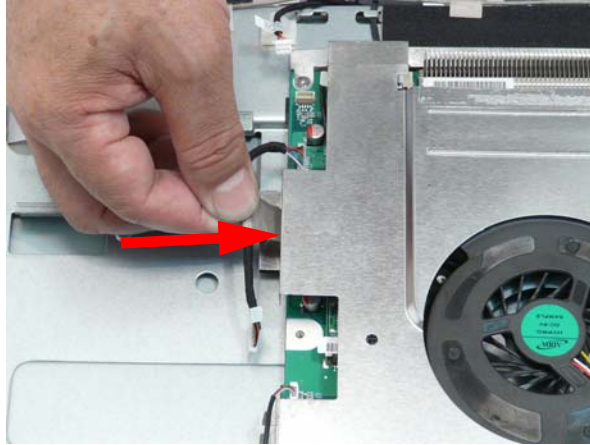
2. Connect the IR receiver cable.



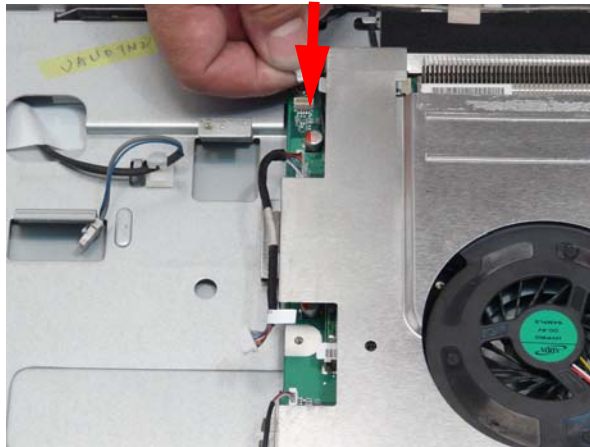
3. Connect the inverter cable.



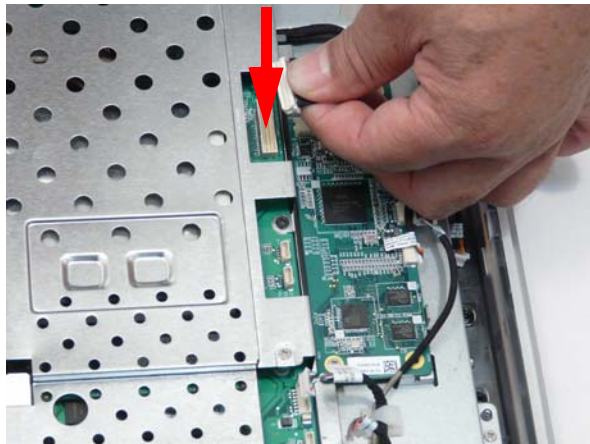
4. Adhere the inverter cable tape.



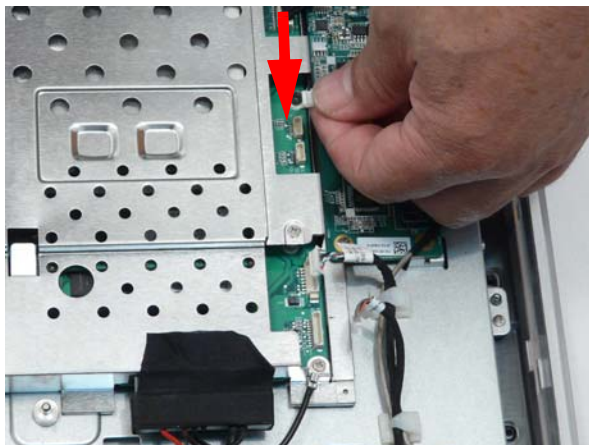
5. Connect the webcam cable.



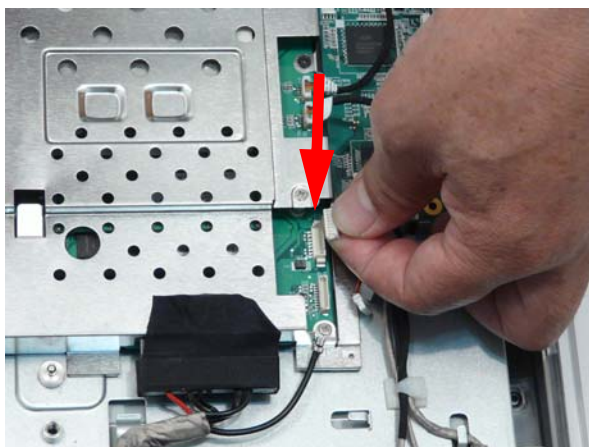
6. Connect the LVDS cable.



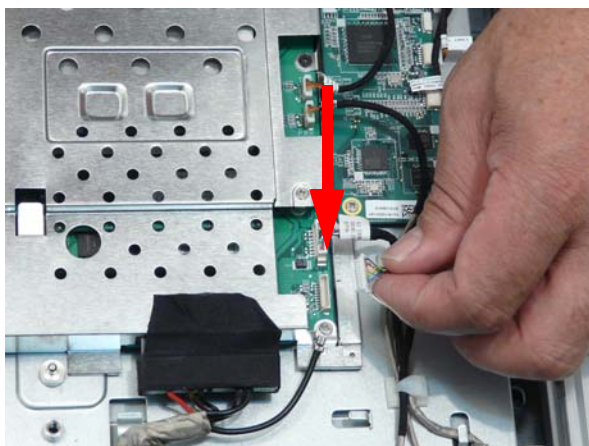
7. Connect the touchscreen board cable.



8. Connect the USB port cable.

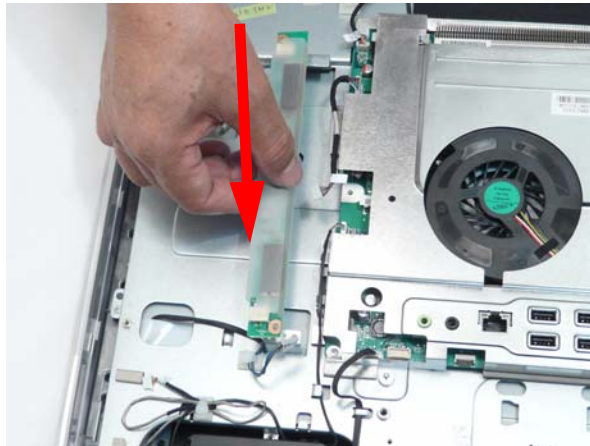


9. Connect the Bluetooth cable.

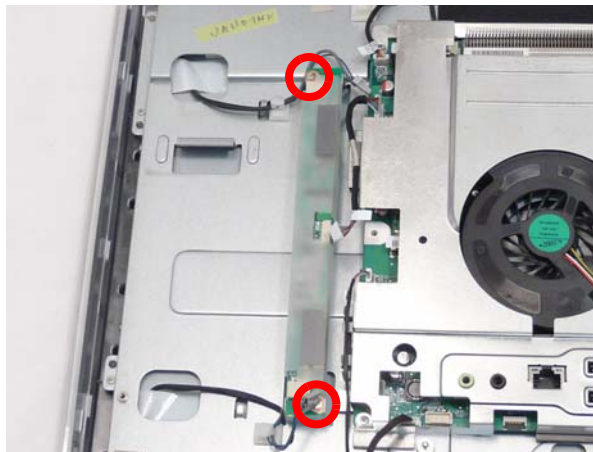



Replacing the Inverter Board

1. Replace the inverter board.

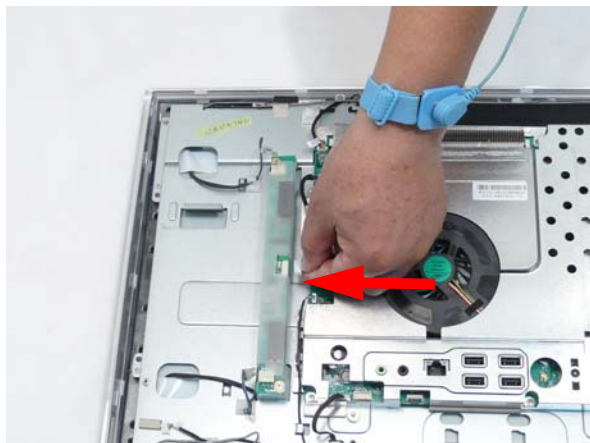


2. Replace the two (2) screws.

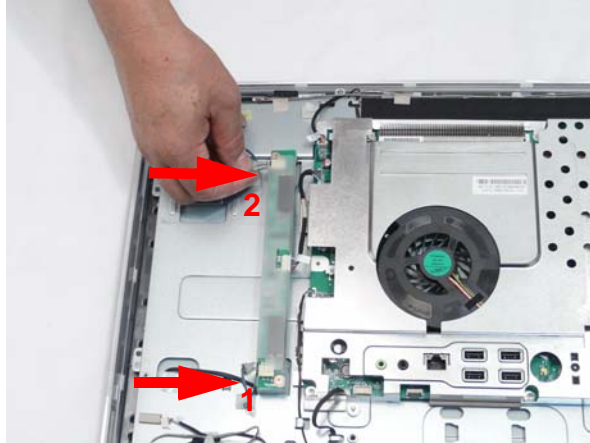


Step	Size	Quantity	Screw Type
Inverter Board	M2.5*4	2	

3. Connect the inverter board to mainboard cable.



4. Connect the two (2) LCD to inverter board cables, 1 and 2.




Replacing the ODD Module

1. Replace the rear bracket.

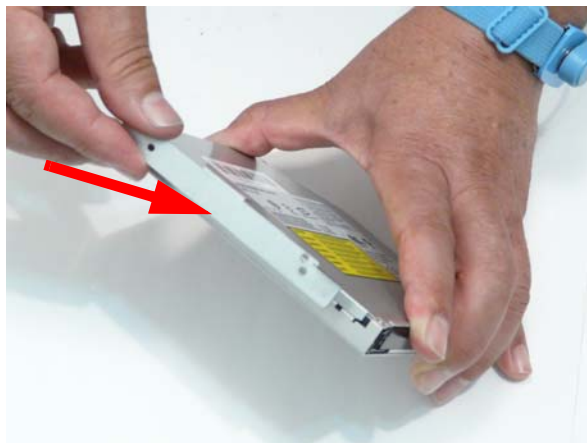


2. Replace the two (2) screws.

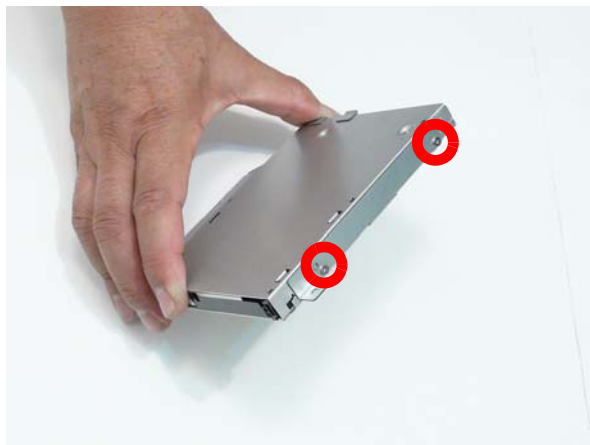



Step	Size	Quantity	Screw Type
ODD Rear Bracket	M2*2.5	2	

3. Replace the side bracket.

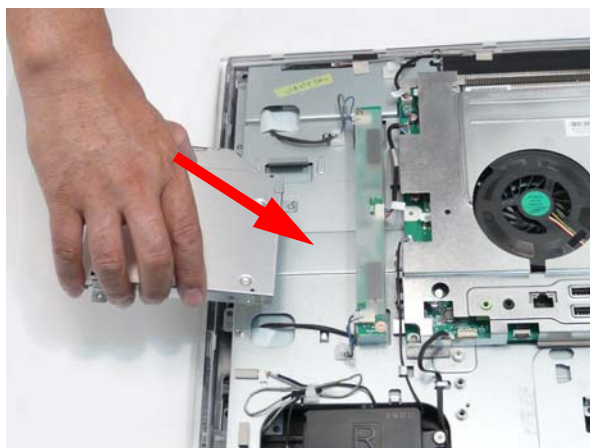


4. Replace the two (2) screws.

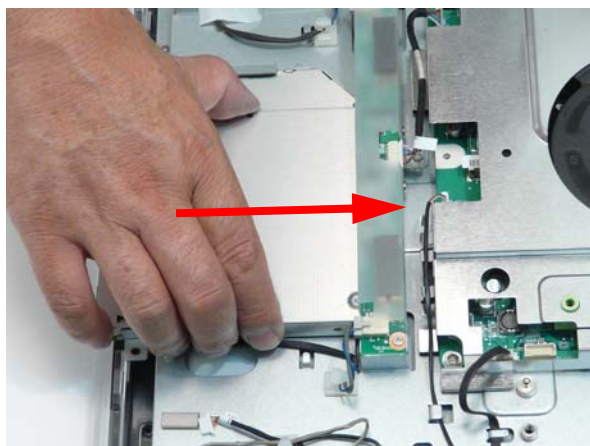


Step	Size	Quantity	Screw Type
ODD Side Bracket	M2*2.5	2	

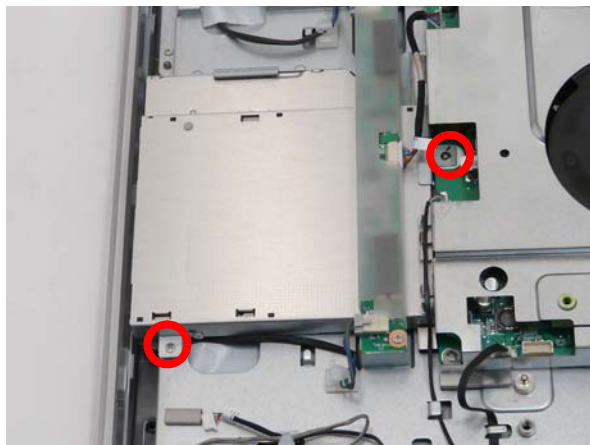
5. Place the ODD module into the bay.




6. Slide into position.



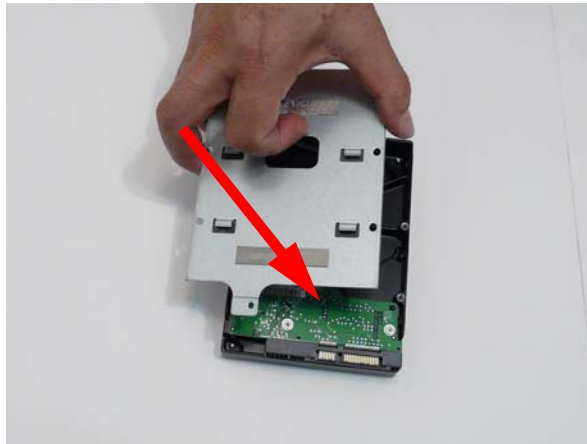
7. Replace the two (2) screws.



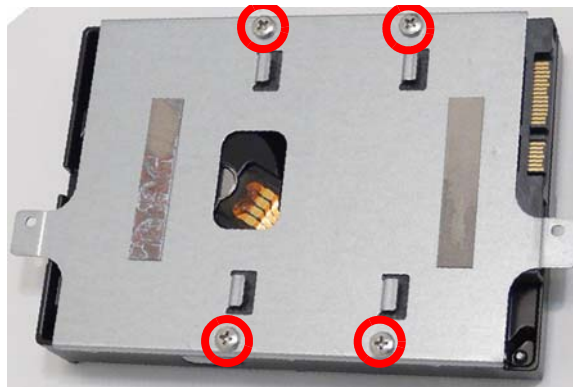
Step	Size	Quantity	Screw Type
ODD Module	M2.5*4	2	


Replacing the HDD

1. Replace the HDD bracket.

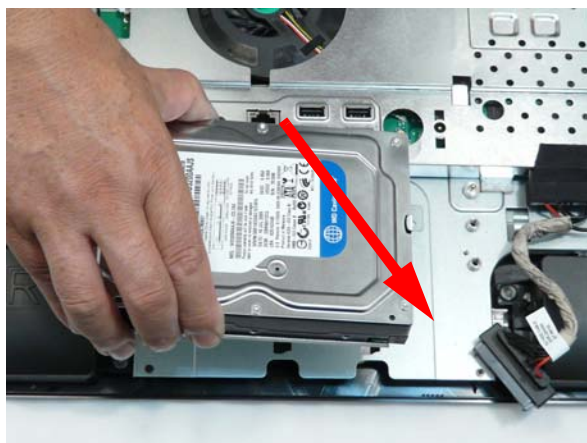


2. Replace the four (4) screws.

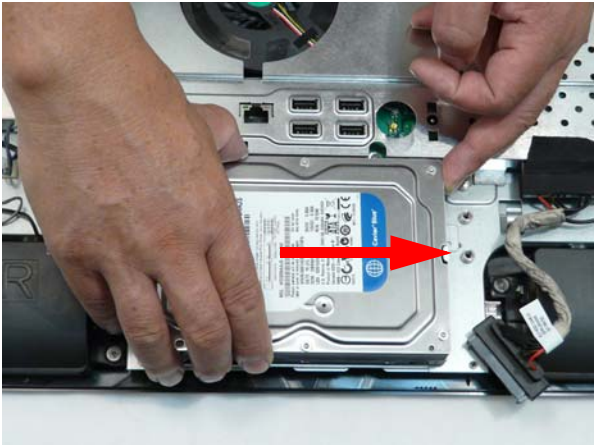


Step	Size	Quantity	Screw Type
HDD Bracket	M3*4	4	

3. Place the HDD into the bay.




4. Slide the HDD into position.

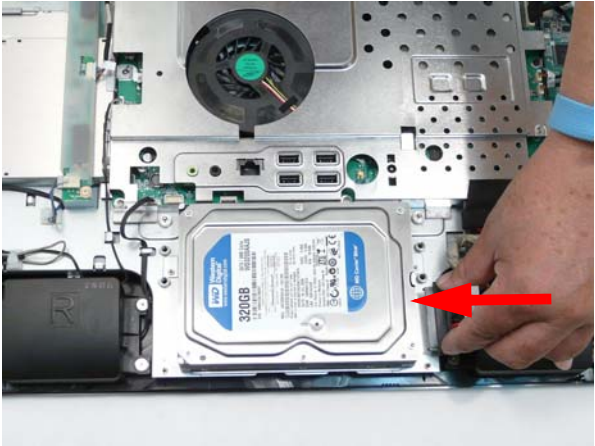


5. Replace the two (2) screws.



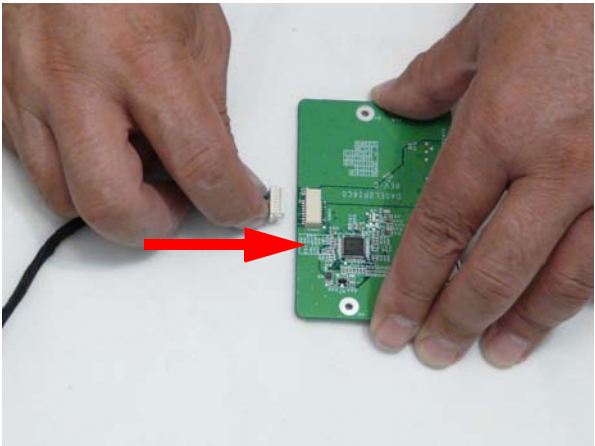
Step	Size	Quantity	Screw Type
HDD Module	M2.5*4	2	

6. Connect the HDD cable.

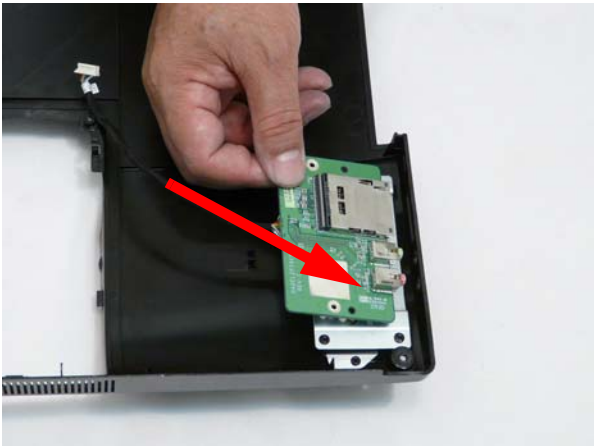


Replacing the Audio Board

1. Connect the audio cable to the audio board.




2. Replace the audio board in the rear cover.



3. Replace the two (2) screws.



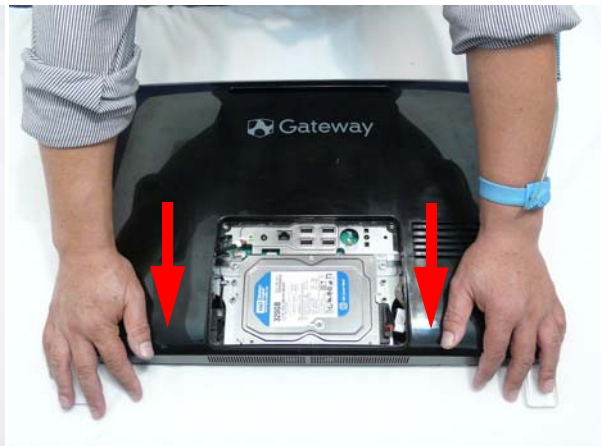
Step	Size	Quantity	Screw Type
Audio Board	M2.5*4	2	

Replacing the Rear Cover

1. Replace the rear cover on the chassis.



2. Press down firmly to engage the locking clips beneath the cover.




3. Connect the audio cable.



4. Replace (4) four screws.



Step	Size	Quantity	Screw Type
Rear Cover	M2.5*7	4	


Replacing the Stand

1. Replace the stand assembly.



2. Replace the four (4) screws.




Step	Size	Quantity	Screw Type
Hinge	M4*6	4	

3. Replace the stand cover.



4. Replace the two (2) screws.



Step	Size	Quantity	Screw Type
Stand Cover	M2.5*4	2	

Replacing the ODD Bezel

1. Open the ODD.



2. Attach the ODD bezel to the top of the ODD assembly.



3. Push the rear edge of the ODD bezel to lock it into place.



4. Close the ODD.

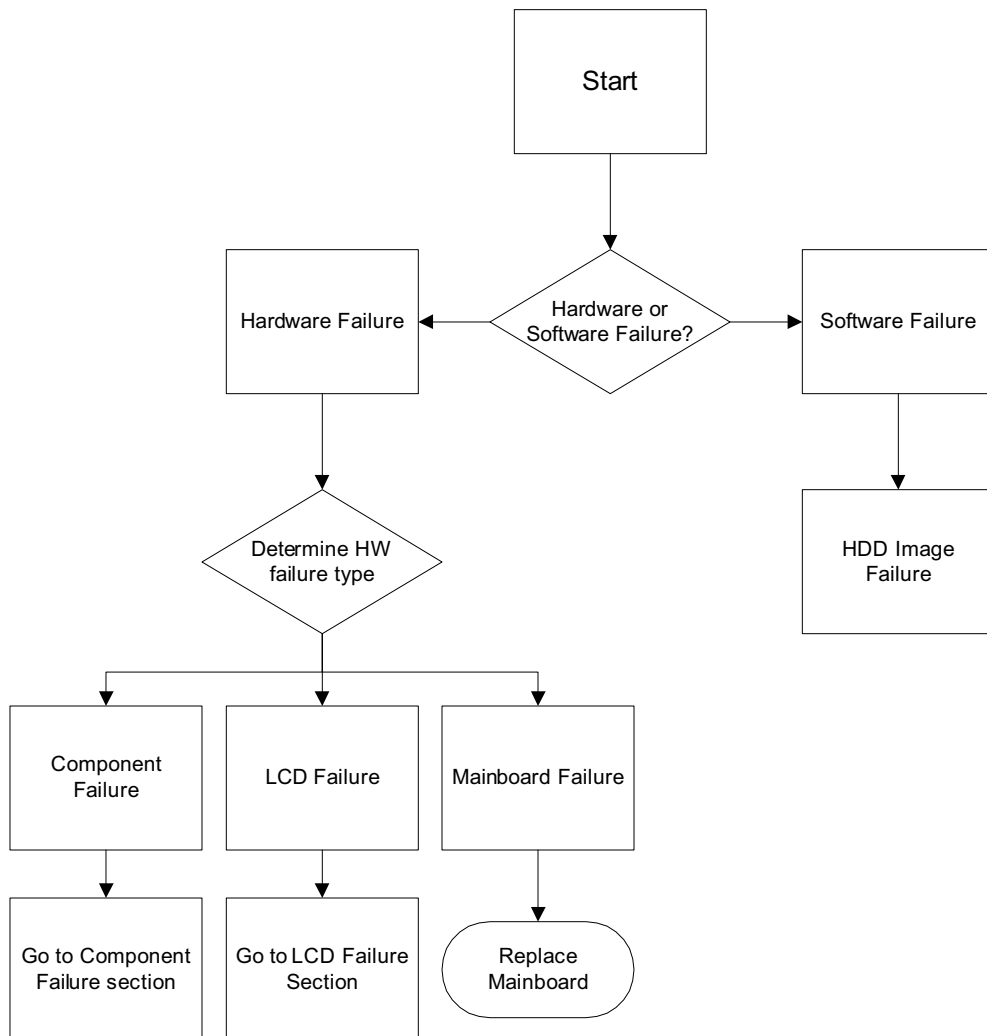
Troubleshooting

Common Problems

Use the following procedure as a guide for computer problems.

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

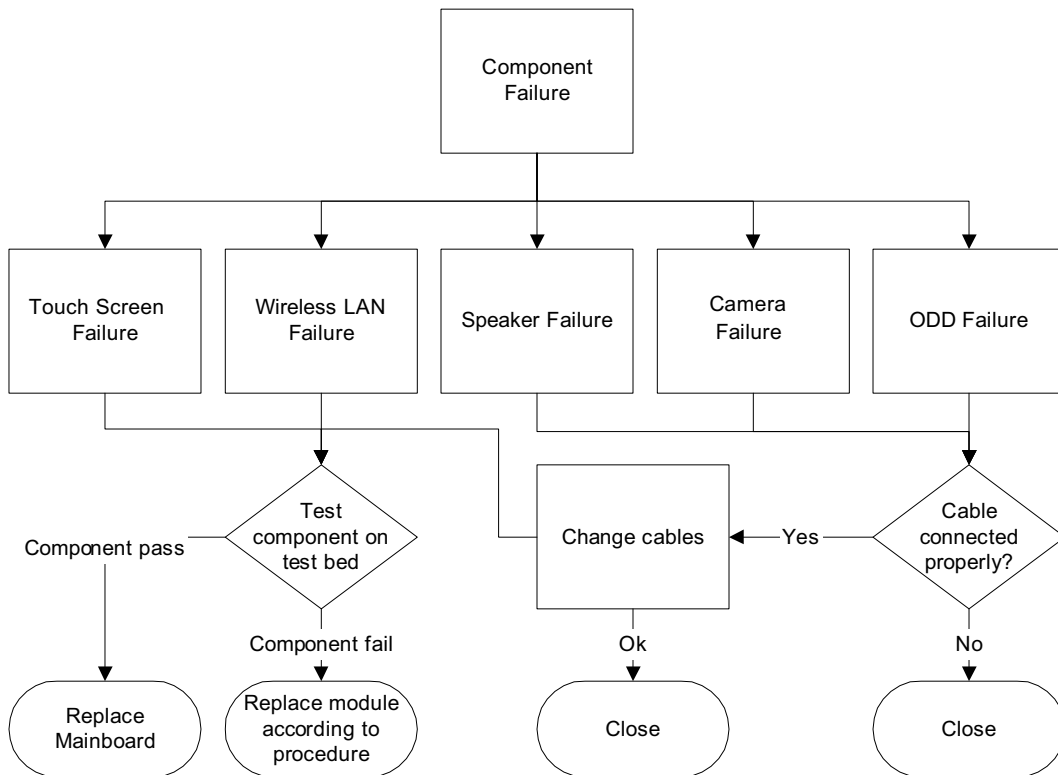
1. Obtain the failing symptoms in as much detail as possible.
2. Verify the symptoms by attempting to re-create the failure by running the diagnostic test or by repeating the same operation.
3. Use the troubleshooting sections to try and resolve the issue.



4. If the Issue is still not resolved, see "Online Support Information" on page 184.

Component Failure

If a component fails, follow the flowchart below to isolate the problem



ODD Failure

If the **ODD** exhibits any of the following symptoms it may be faulty:

- Audio CDs do not play when loaded
- DVDs do not play when loaded
- Blank discs do not burn correctly
- DVD or CD play breaks up or jumps
- Optical drive not found or not active:
 - Not shown in My Computer or the BIOS setup
 - LED does not flash when the computer starts up
 - The tray does not eject
- Access failure screen displays
- The ODD is noisy

Perform the following general solutions one at a time to correct the problem.

1. Reboot the computer and retry the operation.
2. Try an alternate disc.
3. Navigate to **Start** → **Computer**. Check that the ODD device is displayed in the **Devices with Removable Storage** panel.
4. Navigate to **Start** → **Control Panel** → **System and Maintenance** → **System** → **Device Manager**.

- a. Double-click **IDE ATA/ATAPI controllers**. If a device displays a down arrow, right-click on the device and click **Enable**.
- b. Double-click **DVD/CD-ROM drives**. If the device displays a down arrow, right-click on the device and click **Enable**.
- c. Check that there are no yellow exclamation marks against the items in **IDE ATA/ATAPI controllers**. If a device has an exclamation mark, right-click on the device and uninstall and reinstall the driver.
- d. Check that there are no yellow exclamation marks against the items in **DVD/CD-ROM drives**. If a device has an exclamation mark, right-click on the device and uninstall and reinstall the driver.
- e. If the exclamation marker is not removed from the item in the lists, try removing any recently installed software and retrying the operation.

Discs Do Not Play

If discs do not play when inserted in the drive, perform the following actions one at a time to correct the problem.

1. Check that the disc is correctly seated in the drive tray and that the label on the disc is visible.
2. Check that the media is clean and scratch free.
3. Try an alternate disc in the drive.
4. Ensure that **AutoPlay** is enabled:
 - a. Navigate to **Start**→ **Control Panel**→ **Hardware and Sound**→ **AutoPlay**.
 - b. Select **Use AutoPlay for all media and devices**.
 - c. In the Audio CD and DVD Movie fields, select the desired player from the drop down menu.
5. Check that the Regional Code is correct for the selected media:

IMPORTANT:Region can only be changed a limited number of times. After Changes remaining reaches zero, the region cannot be changed even Windows is reinstalled or the drive is moved to another computer.

- a. Navigate to **Start**→ **Control Panel**→ **System and Maintenance**→ **System**→ **Device Manager**.
- b. Double-click **DVD/CD-ROM drives**.
- c. Right-click **DVD drive** and click **Properties**, then click the **DVD Region** tab.
- d. Select the region suitable for the media inserted in the drive.

Discs Do Not Burn Properly

If discs can not be burned, perform the following actions one at a time to correct the problem.

1. Ensure that the default drive is record enabled:
 - a. Navigate to **Start**→ **Computer** and right-click the writable ODD icon. Click **Properties**.
 - b. Select the **Recording** tab. In the **Desktop disc recording** panel, select the writable ODD from the drop down list.
 - c. Click **OK**.
2. Ensure that the software used for burning discs is the factory default. If using different software, refer to the software's user manual.

Playback is Choppy

If playback is choppy or jumps, perform the following actions one at a time to correct the problem.

1. Check that system resources are not running low:
 - a. Try closing some applications.
 - b. Reboot and try the operation again.
2. Check that the ODD controller transfer mode is set to DMA:
 - a. Navigate to **Start**→ **Control Panel**→ **System and Maintenance**→ **System**→ **Device Manager**.

- b. Double-click **IDE ATA/ATAPI controllers**, then right-click ATA Device 0.
- c. Click **Properties** and select the **Advanced Settings** tab. Ensure that the **Enable DMA** box is checked and click **OK**.
- d. Repeat for the other ATA Devices shown if applicable.

Drive Not Detected

If Windows cannot detect the drive, perform the following actions one at a time to correct the problem.

1. Restart the computer and press F2 to enter the BIOS Utility.
2. Check that the drive is detected in the **ATAPI Model Name** field on the Information page.
NOTE: Check that the entry is identical to one of the ODDs specified in “Hardware Specifications and Configurations” on page 11.
3. Turn off the power and remove the cover to inspect the connections to the ODD. See “Disassembly Process” on page 40.
 - a. Check for broken connectors on the drive, motherboard, and cables.
 - b. Check for bent or broken pins on the drive, motherboard, and cable connections.
 - c. Try an alternate cable, if available. If the drive works with the new cable, the original cable should be replaced.
4. Reseat the drive ensuring and all cables are connected correctly.
5. Replace the ODD. See “Removing the ODD” on page 53.

Drive Read Failure

If discs cannot be read when inserted in the drive, perform the following actions one at a time to correct the problem.

1. Remove and clean the failed disc.
2. Retry reading the CD or DVD.
 - d. Test the drive using other discs.
 - e. Play a DVD movie
 - f. Listen to a music CD

If the ODD works properly with alternate discs, the original disc is probably defective and should be replaced.

3. Turn off the power and remove the cover to inspect the connections to the ODD. See “Removing the ODD” on page 53.
 - a. Check for broken connectors on the drive, motherboard, and cables.
 - b. Check for bent or broken pins on the drive, motherboard, and cable connections.
 - c. Try an alternate cable, if available. If the drive works with the new cable, the original cable should be replaced.
4. Replace the ODD. See “Removing the ODD” on page 53.

Sound Problems

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

1. Reboot the computer.
2. Navigate to **Start**→ **Control Panel**→ **System and Maintenance**→ **System**→ **Device Manager**. Check the Device Manager to determine that:
 - The device is properly installed.
 - There are no red Xs or yellow exclamation marks.
 - There are no device conflicts.

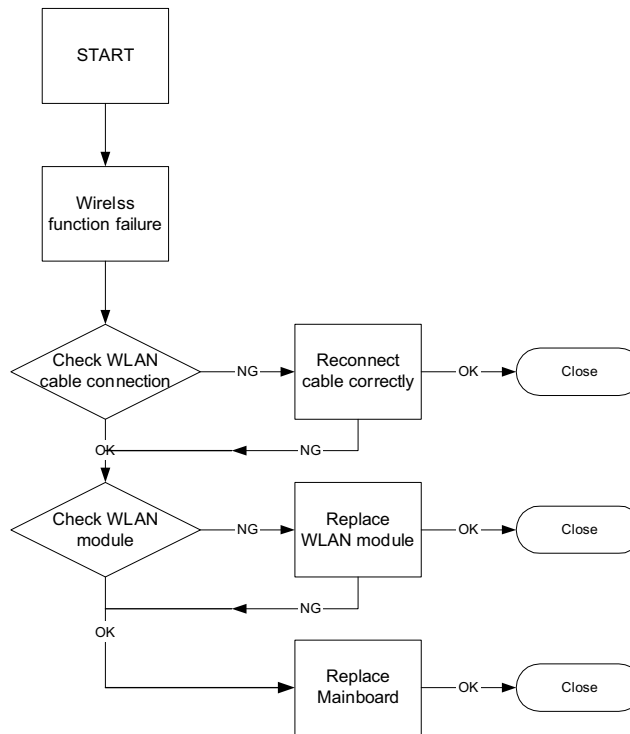
- No hardware is listed under Other Devices.
3. Roll back the audio driver to the previous version, if updated recently.
 4. Remove and reinstall the audio driver.
 5. Ensure that all volume controls are set mid range:
 - a. Click the volume icon on the taskbar and drag the slider to 50. Ensure that the volume is not muted.
 - b. Click Mixer to verify that other audio applications are set to 50 and not muted.
 6. Navigate to **Start→ Control Panel→ Hardware and Sound→ Sound**. Ensure that Speakers are selected as the default audio device (green check mark).

NOTE: If Speakers does not show, right-click on the **Playback** tab and select **Show Disabled Devices** (clear by default).
 7. Select Speakers and click **Configure** to start **Speaker Setup**. Follow the onscreen prompts to configure the speakers.
 8. Remove and recently installed hardware or software.
 9. Restore system and file settings from a known good date using **System Restore**.

If the issue is not fixed, repeat the preceding steps and select an earlier time and date.
 10. Reinstall the Operating System.
 11. If the Issue is still not resolved, see “Online Support Information” on page 184.

Wireless Failure

If the wireless functionality fails, use the following flowchart to determine the required action:



Speaker Failure

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

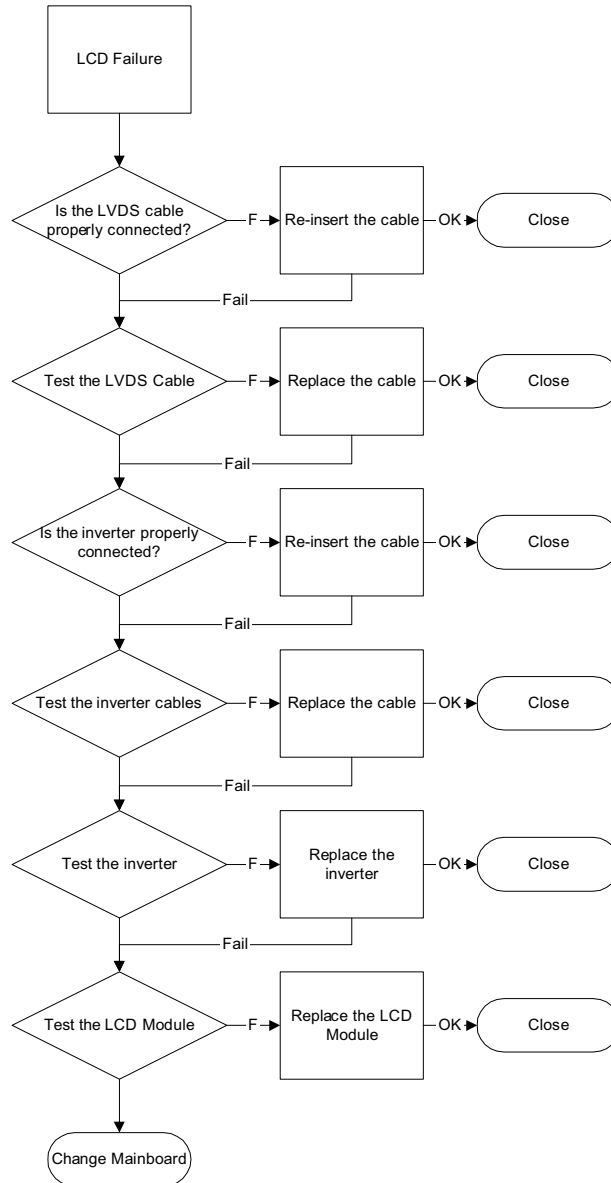
1. Reboot the computer.
2. Navigate to **Start** → **Control Panel** → **System and Maintenance** → **System** → **Device Manager**. Check the Device Manager to determine that:
 - The device is properly installed.
 - There are no red Xs or yellow exclamation marks.
 - There are no device conflicts.
 - No hardware is listed under Other Devices.
3. Roll back the audio driver to the previous version, if updated recently.
4. Remove and reinstall the audio driver.
5. Ensure that all volume controls are set mid range:
 - a. Click the volume icon on the taskbar and drag the slider to 50. Ensure that the volume is not muted.
 - b. Click Mixer to verify that other audio applications are set to 50 and not muted.
6. Navigate to **Start** → **Control Panel** → **Hardware and Sound** → **Sound**. Ensure that Speakers are selected as the default audio device (green check mark).

NOTE: If Speakers does not show, right-click on the **Playback** tab and select **Show Disabled Devices** (clear by default).
7. Select Speakers and click **Configure** to start **Speaker Setup**. Follow the onscreen prompts to configure the speakers.
8. Remove and recently installed hardware or software.

9. Restore system and file settings from a known good date using **System Restore**.
If the issue is not fixed, repeat the preceding steps and select an earlier time and date.
10. Reinstall the Operating System.
11. If the Issue is still not resolved, see “Online Support Information” on page 184.

LCD Failure

If the integrated LCD display fails, use the following flowchart to determine the required action:



No POST or Video

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

1. Make sure the computer has power by checking at least one of the following occurs:
 - Fans start up
 - Status LEDs light up
2. Drain any stored power by removing the power cable and battery and holding down the power button for 10 seconds. Reconnect the power and reboot the computer.
3. Disconnect power and all external devices including port replicators or docking stations. Remove any memory cards and CD/DVD discs. Restart the computer.

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

4. Reseat the memory modules.
5. Remove the drives (see “Disassembly Process” on page 40).
6. If the Issue is still not resolved, see “Online Support Information” on page 184.

Abnormal Video Display

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

1. Reboot the computer.
2. If permanent vertical/horizontal lines or dark spots display in the same location, the LCD is faulty and should be replaced. See “Removing the LCD Panel” on page 85.
3. If extensive pixel damage is present (different colored spots in the same locations on the screen), the LCD is faulty and should be replaced. See “Removing the LCD Panel” on page 85.
4. Adjust the brightness to its highest level. See the User Manual for instructions on adjusting settings.
NOTE: Ensure that the computer is not running on battery alone as this may reduce display brightness.

If the display is too dim at the highest brightness setting, the LCD is faulty and should be replaced. See “Removing the LCD Panel” on page 85.

5. Check the display resolution is correctly configured:
 - a. Minimize or close all Windows.
 - b. If display size is only abnormal in an application, check the view settings and control/mouse wheel zoom feature in the application.
 - c. If desktop display resolution is not normal, right-click on the desktop and select **Personalize**→ **Display Settings**.
 - d. Click and drag the Resolution slider to the desired resolution.
 - e. Click **Apply** and check the display. Readjust if necessary.
6. Roll back the video driver to the previous version if updated.
7. Remove and reinstall the video driver.
8. Check the Device Manager to determine that:
 - The device is properly installed. There are no red Xs or yellow exclamation marks.
 - There are no device conflicts.
 - No hardware is listed under Other Devices.
9. Run the Windows Memory Diagnostic from the operating system DVD and follow the onscreen prompts.
10. If the Issue is still not resolved, see “Online Support Information” on page 184.

General Troubleshooting Issues

Computer Shutdown Intermittently

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

1. Check the power cable is properly connected to the computer and the electrical outlet.
2. Remove any extension cables between the computer and the outlet.
3. Remove any surge protectors between the computer and the electrical outlet. Plug the computer directly into a known good electrical outlet.
4. Disconnect the power and open the casing to check the Thermal Unit and fan airways are free of obstructions.
5. Remove all external and non-essential hardware connected to the computer that are not necessary to boot the computer to the failure point.
6. Remove any recently installed software.
7. If the Issue is still not resolved, see “Online Support Information” on page 184.

Random Loss of BIOS Settings

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

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

If the BIOS settings are still lost, replace the cables.

4. If HDD information is missing from the BIOS, the drive may be defective and should be replaced.
5. Replace the Motherboard.
6. If the Issue is still not resolved, see “Online Support Information” on page 184.

Microphone Problems

If external **Microphones** do not operate correctly, perform the following actions one at a time to correct the problem.

1. Check that the microphone is enabled. Navigate to **Start** → **Control Panel** → **Hardware and Sound** → **Sound** and select the **Recording** tab.
2. Right-click on the **Recording** tab and select **Show Disabled Devices** (clear by default).
3. The microphone appears on the **Recording** tab.
4. Right-click on the microphone and select **Enable**.
5. Select the microphone then click **Properties**. Select the **Levels** tab.
6. Increase the volume to the maximum setting and click **OK**.
7. Test the microphone hardware:
 - a. Select the microphone and click **Configure**.
 - b. Select **Set up microphone**.
 - c. Select the microphone type from the list and click **Next**.
 - d. Follow the onscreen prompts to complete the test.
8. If the Issue is still not resolved, see “Online Support Information” on page 184.

HDD Not Operating Correctly

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

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

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

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

If an issue is discovered, follow the onscreen information to resolve the problem.

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

If the issue is not fixed, repeat the preceding steps and select an earlier time and date.

11. Replace the HDD. See "Removing the Hard Disk Drive" on page 50.

External Mouse Failure

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

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

If the issue is not fixed, repeat the preceding steps and select an earlier time and date.

9. Run the Event Viewer to check the events log for errors. For more information see Windows Help and Support.
10. Roll back the mouse driver to the previous version if updated recently.

- 11.** Remove and reinstall the mouse driver.
- 12.** Check the Device Manager to determine that:
 - The device is properly installed. There are no red Xs or yellow exclamation marks.
 - There are no device conflicts.
 - No hardware is listed under Other Devices.
- 13.** If the Issue is still not resolved, see “Online Support Information” on page 184.

Intermittent Problems

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

When analyzing an intermittent problem, do the following:

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

Undetermined Problems

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

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

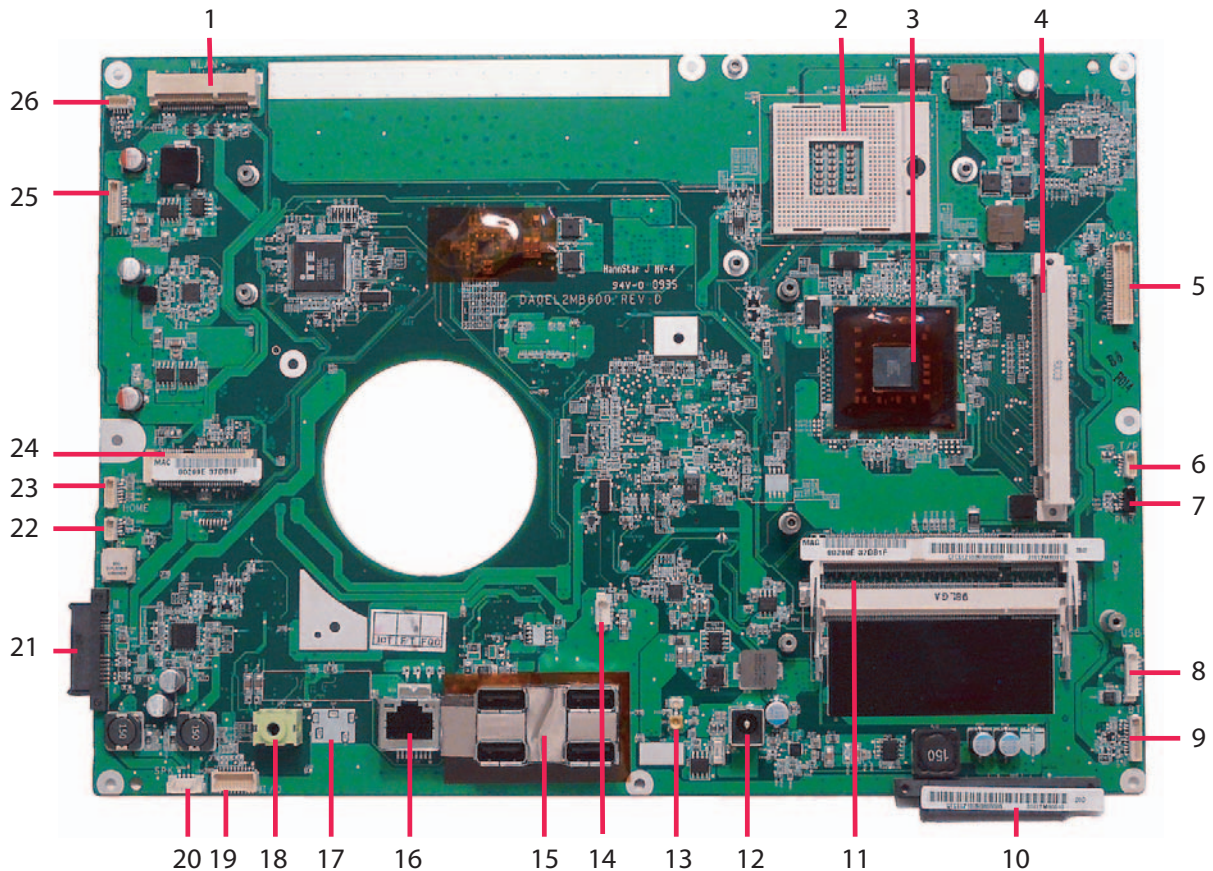
NOTE: Verify that all attached devices are supported by the computer.

NOTE: Verify that the power supply being used at the time of the failure is operating correctly.

1. Power-off the computer.
2. Visually check for damage. If any problems are found, replace the FRU.
3. Remove or disconnect all of the following devices:
 - Non-Acer devices
 - Printer, mouse, and other external devices
 - Hard disk drive
 - DIMM
 - CD-ROM/Diskette drive Module
4. Power-on the computer.
5. Determine if the problem has changed.
6. If the problem does not recur, reconnect the removed devices one at a time until you find the failing FRU.
7. If the Issue is still not resolved, see "Online Support Information" on page 184.

Jumper and Connector Locations

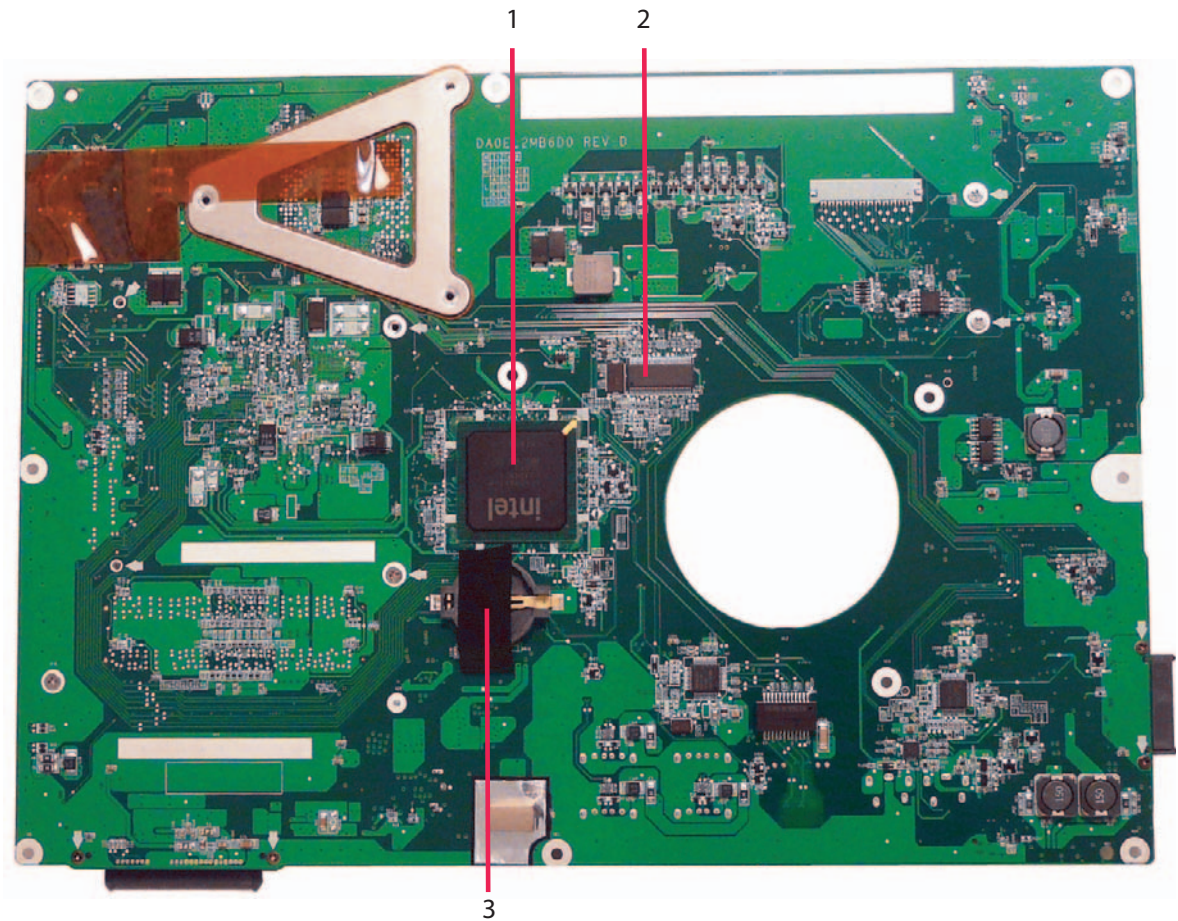
Mainboard Top View



Item	Description
1	WLAN module connector
2	CPU socket
3	North Bridge chipset
4	Mobile PCI Express Module connector
5	LCD connector
6	Touch Screen connector
7	Power OFF/ON connector
8	Internal USB connector
9	Bluetooth module connector
10	Internal SATA hard disk drive connector
11	DIMM slot for memory
12	Mains power adaptor connector

Item	Description
13	TV antenna connector
14	Fan connector
15	4 external USB connectors
16	RJ45 LAN port
17	External IR Blaster connection
18	External stereo headphones or speaker audio jack
19	I/O daughter board connector
20	speaker connector
21	SATA optical disk drive connector
22	Internal IR connector
23	Home button connector
24	TV-tuner module connector
25	Inverter Connector
26	Internal webcam connector

Mainboard Bottom View



Item	Description
1	South Bridge chipset
2	Clock generator chip
3	RTC Battery connector and holding bracket

BIOS Recovery

This section provides the standard operating procedures for BIOS recovery.

BIOS Recovery by Crisis Disk

BIOS Recovery Boot Block:

BIOS Recovery Boot Block is a special block of BIOS. It is used to boot up the system with minimum BIOS initialization. Users can enable this feature to restore the BIOS firmware to a successful one once the previous BIOS flashing process failed.

BIOS Recovery Hotkey:

The system provides a function hotkey: Fn+Esc, for enable BIOS Recovery process when system is powered on during BIOS POST. To use this function, it is strongly recommended to have the AC adapter and Battery present. If this function is enabled, the system will force the BIOS to enter a special BIOS block, called Boot Block.

Steps for BIOS Recovery from USB Storage:

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

Follow the steps below:

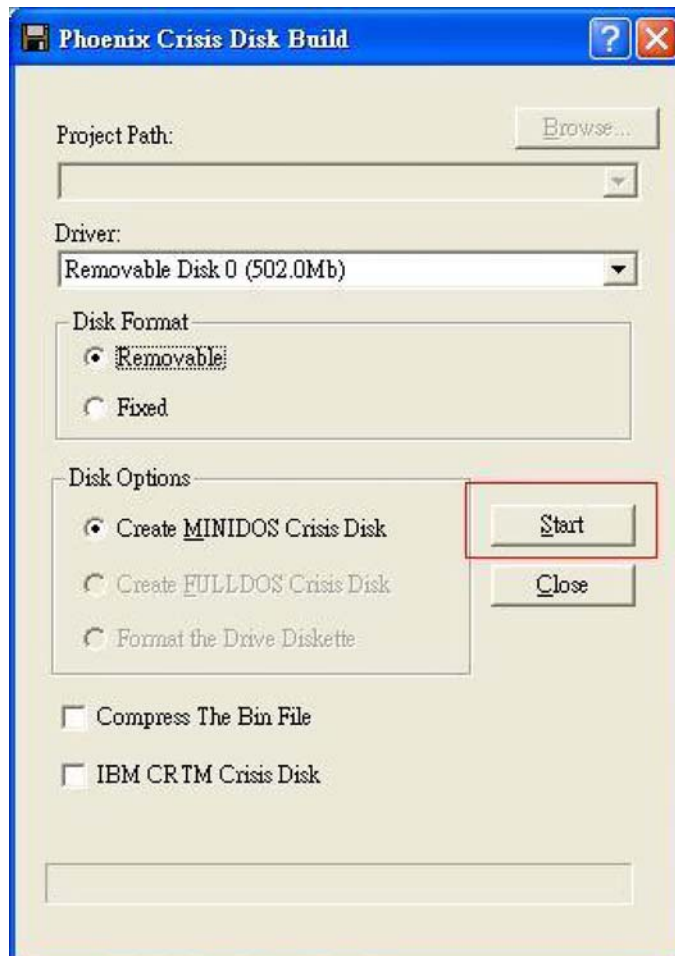
1. Save ROM file (file name: JAL90x64.fd) to the root directory of USB storage.
2. Plug USB storage into USB port.
3. Press Brightness up + Brightness down + Power button to initiate system CRISIS mode.
When CRISIS is complete, the system auto restarts with a workable BIOS.
4. Update the latest version BIOS for this machine by regular BIOS flashing process.

Steps for BIOS Recovery by Crisis Disk:

Before doing this, a Crisis Diskette should be prepared ready in hand. The Crisis Diskette could be made by executing the Crisis Disk program in another system with Windows XP OS.

Follow the steps below:

1. Power Off failed system.
2. Attach a USB floppy drive to the failed system.
3. Copy xxxxx.wph to tool's folder and rename it as BIOS.wph.
4. Execute wincris.exe to start the Crisis Disk Build.
5. Select Removable and click Start.



A confirmation screen displays.



6. Click the OK button on the left to continue.
7. Click the (N) button when prompted to complete the process.



8. Insert the Crisis Disk in the USB floppy drive attached to the BIOS flash failed system.

9. In the power-off state, unplug the AC power and hold Fn+Esc then plug the AC power in.

10. Press the Power button.

The system powers on and the Crisis BIOS Recovery process begins.

BIOS Boot Block begins restoring the BIOS code from the Crisis floppy disk to BIOS ROM on the failed systems.

When the Crisis flash process is finished, the system restarts with a workable BIOS.

Update to the latest version BIOS for the system using the regular BIOS flashing process.

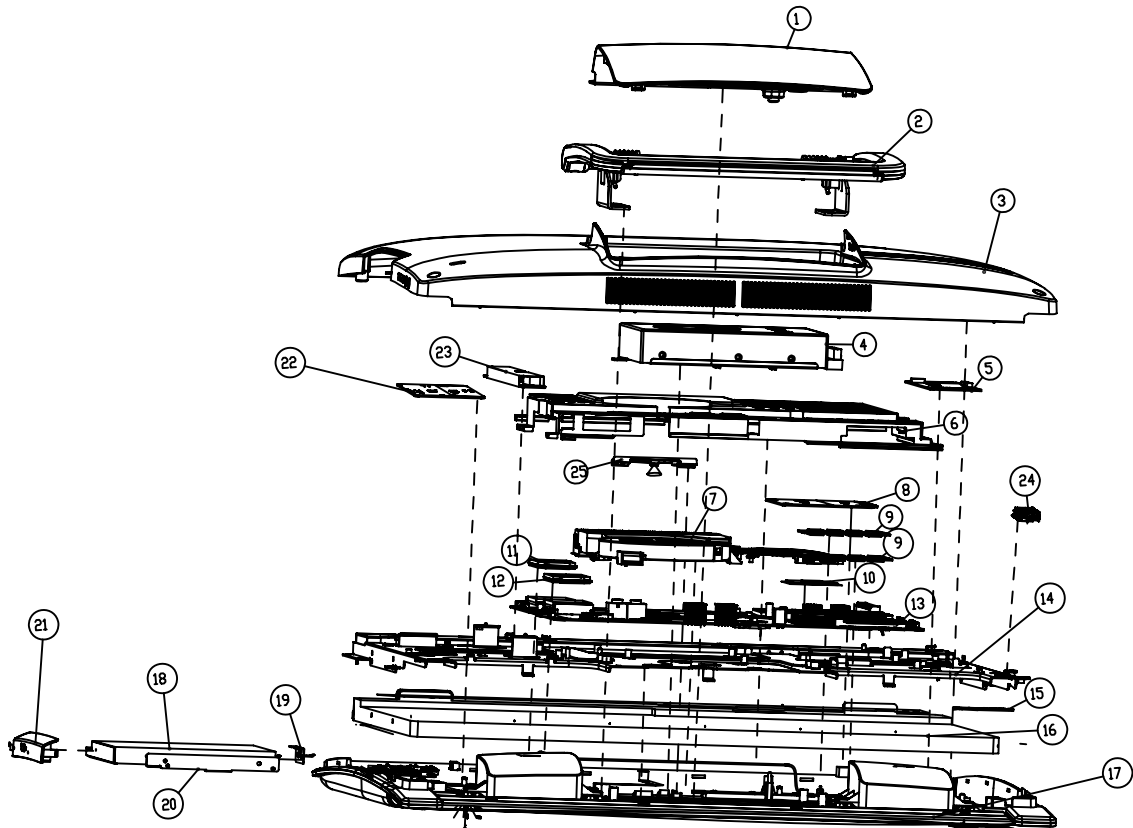
FRU (Field Replaceable Unit) List

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

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

To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional Acer office on how to return it.

Exploded Diagrams




Main Assembly













No.	Description	Acer P/N
1	Stand Cap Sub Assembly	42.G8507.002
2	Hinge Jar	33.G8507.005
3	Back Cover Assembly	60.G8507.002
4	HDD Assembly	33.G8507.006
5	Arm Board	55.G8507.002
6	M/B Shielding Sub Assembly	33.G8507.003
7	Fan Module	23.G8507.003
8	VGA Assembly	VG.M9209.001
9	RAM	KN.1GB03.025
10	CPU	KC.74501.DPP
11	WLAN Card Assembly	NI.10200.032
12	TV Card Assembly	TU.10500.051
13	M/B VGA Assembly	MB.G9806.003
14	LCD Frame Touch Assembly	33.G8507.008
15	EL9 Power Board Assembly	55.G8507.001
16	Touch Panel*	6K.G8507.001
17	Front Cover Assembly	60.G8507.001
18	Optical Disk Drive	N/A
19	Frame ODD Back	33.G8507.002
20	Frame ODD Side	33.G8507.001
21	ODD Bezel Sub Assembly	42.G8507.001
22	I/O Board Assembly	55.G8507.002
23	Inv Module	55.G8507.003
24	USB	50.G8507.001
25	Camera Assembly	57.G8507.001

IMPORTANT: *The touchscreen control board and LCD panel must be returned together for RMA purposes. See “Removing the Touchscreen Control Board” on page 58.. The touchscreen control board records the specific panel's data, please do not separate these for RMA.


FRU List

CATEGORY	Acer Description	ACER PART NO.
ADAPTER		
	ADAPTER DELTA 65W 19V 3.42A ADP-65JH DBK	AP.06501.030
BOARD		
	Quanta EM307 WLAN EM307, Ralink RT3090 802.11b/g/n 1Tx1R WLAN(mini-card) Half Size (QMI)	NI.10200.032
	Lite-On WN6605LH-AA WLAN Lite-On WN6605LH-AA, Realtek RTL8191SE 802.11b/g/n 1Tx1R WLAN(mini-card) Half Size	NI.10200.033

CATEGORY	Acer Description	ACER PART NO.
	POWER BOARD	55.G8507.001
	I/O BOARD W/CARD READER	55.G8507.002
	VGA CARD M92XT_512M	VG.M9209.001
	QMI QBT400UB Bluetooth Qcom Technology Inc., Broadcom BCM2046, Bluetooth2.1 + EDR, USB interface module	BT.14500.001
	INVERTER BOARD TWS-449-364	55.G8507.003
TV TURN		
	AverMedia A336-A Mini-Card WW Analog + ATSC Digital	TU.10500.051
	AverMedia A336-D Mini-Card WW Analog + DVB-T Digital	TU.10500.052
IR Blaster		
	SMK IR BLASTER RWS9000-1301FP	RV.RWS07.001
WEBCAM		
	CAMERA 1.3M CNF706921004171L	57.G8507.001
POWER CORD		
	POWER CORD US-110V 3P	27.G8507.001
	POWER CORD 1.8M BLACK EU 3P	27.SCY07.001
CABLE		
	USB PORT W/CABLE	50.G8507.001
	CABLE - AUDIO/B TO MB	50.G8507.002
	POWER CABLE	50.G8507.003
	LVDS CABLE	50.G8507.004



CATEGORY	Acer Description	ACER PART NO.
	INVERTER CABLE	50.G8507.005
	CABLE - MB TO CONTROL/B	50.G8507.006
	CABLE - SENSOR/B L TO CONTROL/B	50.G8507.007
	CABLE - SENSOR/B R TO CONTROL/B	50.G8507.008
	HDD CABLE	50.G8507.009
	TV TUNER CABLE	50.G8507.010
	TV EXTERNAL ANTENNA - ATSC	50.G8507.011
	CABLE - CCD TO MB	50.G8507.012
	BLUETOOTH CABLE	50.G8507.013
CASE/COVER/BRACKET ASSEMBLY		
	FRONT COVER ASSY W/SPEAKER,ANTENNA,HOME BUTTON/B W/CABLE,IR RECEIVER FOR GW	60.G8507.001
	BACK COVER ASSY FOR GW	60.G8507.002
	ODD BEZEL	42.G8507.001

CATEGORY	Acer Description	ACER PART NO.
	ODD SIDE BRACKET	33.G8507.001
	ODD BACK BRACKET	33.G8507.002
	STAND COVER W/TV IR	42.G8507.002
	STAND COVER W/O TV W/ IR	42.G8507.004
	STAND COVER W/O TV IR	42.G8507.004
	EMI SHIELDING FOR VGA	33.G8507.003
	EMI SHIELDING W/O VGA	33.G8507.004
	HINGE	33.G8507.005
	HDD BRACKET	33.G8507.006
	HDD FRAME SUB ASSY	33.G8507.007
	LCD FRAME FOR TOUCH	33.G8507.008
Heat SINK		
	CPU HEATSINK FOR DIS	23.G8507.001
	CPU HEATSINK FOR UMA	23.G8507.002
FAN		
	CPU FAN	23.G8507.003
CPU/PROCESSOR		
	CPU Intel Core2Dual P7450 PGA 2.13G 3M 1066 TJ, noVT	KC.74501.DPP
	CPU Intel Core2Dual T6600 PGA 2.2G 2M 800 35W R-0	KC.66001.DTP
	CPU Intel Celeron 900 PGA 2.2G 1M 800 35W	KC.N0001.900
	CPU Intel Pentium Dual-Core T4300 PGA 2.1G 1M 800 R-0	KC.43001.DTP
	CPU Intel Celeron T3000 PGA 1.8G 1M 800 35W	KC.30001.CMT

CATEGORY	Acer Description	ACER PART NO.
HDD/HARD DISK DRIVE		
	HDD SEAGATE 3.5" 7200rpm 320GB ST3320418AS(Pharaoh) SATA II 16MB LF F/W:CC44	KH.32001.015
	HDD HGST 3.5" 7200rpm 320GB HDT721032SLA380 Saturn SATA II LF F/W:31B	KH.32007.006
	HDD WD 3.5" 7200rpm 320GB WD3200AAJS-22L7A0 XL320S-3 320G SATA II 8MB LF F/W:01.03E01	KH.32008.016
	HDD WD 3.5" 7200rpm 640GB WD6400AAKS-22A7B2 XL320M 640G SATA II 16MB LF F/W:01.03B01	KH.64008.003
	HDD SEAGATE 3.5" 7200rpm 750GB ST3750528AS (Pharaoh) SATA II 32MB LF F/W:CC44	KH.75001.008
	HDD HGST 3.5" 7200rpm 640GB HDT721064SLA360 Saturn SATA II 16MB LF F/W:31B	KH.64007.001
KEYBOARD		
	Keyboard CHICONY KU-0833 USB Standard 104KS Black US	KB.USB03.234
	Keyboard CHICONY KU-0833 USB Standard 105KS Black UK	KB.USB03.235
	Keyboard CHICONY KU-0833 USB Standard 105KS Black Spanish Latin	KB.USB03.236
	Keyboard CHICONY KU-0833 USB Standard 105KS Black English/Canadian French	KB.USB03.237
	Keyboard CHICONY KU-0833 USB Standard 109KS Black Japanese	KB.USB03.238
	Keyboard CHICONY KU-0833 USB Standard 104KS Black Traditional Chinese	KB.USB03.239
	Keyboard CHICONY KU-0833 USB 104KS Black Simplified Chinese	KB.USB03.305
	Keyboard CHICONY KU-0833 USB 104KS Black Thailand	KB.USB03.306
	Keyboard CHICONY KG-0833 RF2.4 Standard 104KS Black US	KB.RF403.179
	Keyboard CHICONY KG-0833 RF2.4 Standard 105KS Black UK	KB.RF403.180
	Keyboard CHICONY KG-0833 RF2.4 RF2.4 Standard 105KS Black Spanish Latin	KB.RF403.181
	Keyboard CHICONY KG-0833 RF2.4 Standard 105KS Black English/Canadian French	KB.RF403.182
	Keyboard CHICONY KG-0833 RF2.4 Standard 109KS Black Japanese	KB.RF403.183
	Keyboard CHICONY KG-0833 RF2.4 Standard 104KS Black Traditional Chinese	KB.RF403.184
	Keyboard CHICONY KG-0833 RF2.4 Standard 104KS Black Thailand	KB.RF403.185
	Keyboard CHICONY KG-0833 RF2.4 104KS Black Simplified Chinese	KB.RF403.244
	Keyboard CHICONY KU-0420 USB 105KS Black US International	KB.USB03.247
	Keyboard CHICONY KU-0420 USB 105KS Black Spanish	KB.USB03.248
	Keyboard CHICONY KU-0420 USB 105KS Black Portuguese	KB.USB03.249
	Keyboard CHICONY KU-0420 USB 105KS Black Italian	KB.USB03.250
	Keyboard CHICONY KU-0420 USB 105KS Black Swedish	KB.USB03.251
	Keyboard CHICONY KU-0420 USB 105KS Black Dutch	KB.USB03.252

CATEGORY	Acer Description	ACER PART NO.
	Keyboard CHICONY KU-0420 USB 105KS Black Swiss/G	KB.USB03.253
	Keyboard CHICONY KU-0420 USB 105KS Black Belgium	KB.USB03.254
	Keyboard CHICONY KU-0420 USB 105KS Black Icelandic	KB.USB03.255
	Keyboard CHICONY KU-0420 USB 105KS Black Norwegian	KB.USB03.256
	Keyboard CHICONY KU-0420 USB 105KS Black Hebrew	KB.USB03.257
	Keyboard CHICONY KU-0420 USB 105KS Black Polish	KB.USB03.258
	Keyboard CHICONY KU-0420 USB 105KS Black Slovenian	KB.USB03.259
	Keyboard CHICONY KU-0420 USB 105KS Black Slovak	KB.USB03.260
	Keyboard CHICONY KU-0420 USB 105KS Black Russian	KB.USB03.261
	Keyboard CHICONY KU-0420 USB 105KS Black Hungarian	KB.USB03.262
	Keyboard CHICONY KU-0420 USB 105KS Black Greek	KB.USB03.263
	Keyboard CHICONY KU-0420 USB 105KS Black Danish	KB.USB03.264
	Keyboard CHICONY KU-0420 USB 105KS Black Czech	KB.USB03.265
	Keyboard CHICONY KU-0420 USB 105KS Black Romanian	KB.USB03.266
	Keyboard CHICONY KU-0420 USB 105KS Black Turkish	KB.USB03.267
	Keyboard CHICONY KU-0420 USB 105KS Black UK	KB.USB03.268
	Keyboard CHICONY KU-0420 USB 105KS Black French	KB.USB03.269
	Keyboard CHICONY KU-0420 USB 105KS Black German	KB.USB03.270
	Keyboard CHICONY KU-0420 USB 105KS Black Nordic	KB.USB03.271
	Keyboard CHICONY KU-0420 USB Standard 105KS Black Arabic/English	KB.USB03.272
	Keyboard CHICONY WUG0570 RF2.4 105KS Black US International with PB logo	KB.RF403.186
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Spanish with PB logo	KB.RF403.187
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Portuguese with PB logo	KB.RF403.188
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Italian with PB logo	KB.RF403.189
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Swedish with PB logo	KB.RF403.190
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Dutch with PB logo	KB.RF403.191
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Swiss/G with PB logo	KB.RF403.192
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Belgium with PB logo	KB.RF403.193
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Icelandic with PB logo	KB.RF403.194
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Norwegian with PB logo	KB.RF403.195
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Hebrew with PB logo	KB.RF403.196
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Polish with PB logo	KB.RF403.197
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Slovenian with PB logo	KB.RF403.198

CATEGORY	Acer Description	ACER PART NO.
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Slovak with PB logo	KB.RF403.199
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Russian with PB logo	KB.RF403.200
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Hungarian with PB logo	KB.RF403.201
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Greek with PB logo	KB.RF403.202
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Danish with PB logo	KB.RF403.203
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Czech with PB logo	KB.RF403.204
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Romanian with PB logo	KB.RF403.205
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Turkish with PB logo	KB.RF403.206
	Keyboard CHICONY WUG0570 RF2.4 105KS Black UK with PB logo	KB.RF403.207
	Keyboard CHICONY WUG0570 RF2.4 105KS Black French with PB logo	KB.RF403.208
	Keyboard CHICONY WUG0570 RF2.4 105KS Black German with PB logo	KB.RF403.209
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Nordic with PB logo	KB.RF403.210
	Keyboard CHICONY WUG0570 RF2.4 105KS Black Arabic/English	KB.RF403.212
LCD PANEL w/touch		
	LCD TOUCH MODULE W/CONTROL BOARD - LPL 20"W HD+ None Glare LM200WD1 TLC1	6K.G8507.001
	LCD TOUCH MODULE W/CONTROL BOARD - CMO 20"W HD+ None Glare M200O1-L01 C1	6K.G8507.002
MAINBOARD		
	Mainboard Henley - Intel GM45 w Discrete ICH9M LF Intel GM45 ICH9M W/O 1394 LF	MB.G9806.003
	Mainboard ZX4810 - GM45 Intel GM45 ICH9M LF	MB.G9806.002
	Mainboard ZX4600 Intel GL40 ICH9M Proprietary W/O 1394 LF	MB.G8506.002
MEMORY		
	Memory NANYA SO-DIMM DDRII 800 1GB NT1GT64UH8D0FN-AD LF 64*16 0.07um	KN.1GB03.025
	Memory NANYA SO-DIMM DDRII 800 2GB NT2GT64U8HD0BN-AD LF 128*8 0.07um	KN.2GB03.010
	Memory UNIFOSA SO-DIMM DDRII 800 2GB GU332G0ALEPR8H2C6F1 LF 128*8 0.065um	KN.2GB0H.008
	Memory UNIFOSA SO-DIMM DDRII 800 1GB GU331G0ALEPR612C6F1 LF 128*8 0.065um	KN.1GB0H.014
	Memory SAMSUNG SO-DIMM DDRII 800 2GB M470T5663EH3-CF7 LF 128*8 0.055um	KN.2GB0B.018
	Memory SAMSUNG SO-DIMM DDRII 800 1GB M470T2864EH3-CF7 LF 64*16 0.055um	KN.1GB0B.033

CATEGORY	Acer Description	ACER PART NO.
Remote Controller		
	Philips Vista MCE iconized RC with 2 batteries for US	RT.11300.006
	Philips Vista MCE iconized RC with 2 batteries for EMEA	RT.11300.005
MOUSE		
	Primax Mouse USB G4M-3B black	MS.11200.050
	Chicony optical mouse USB MSU0960	MS.11200.061
	Chicony mouse RF2.4 MG-0846 black	MS.11200.060
	Chicony mouse RF2.4 MG-0570T without logo	MS.11200.062
	Chicony mouse RF2.4 MG-0570T without logo	MS.11200.062
RECEIVER		
	USB RF RECEIVER RG-0618U-E93L (PB)	

Screw List

Item	Description	Acer Part No.
SCREW	SCREW M2.5*4.0-I(NYLOK)IRON	86.G8507.001
SCREW	SCREW M2.5*4.0-I(NI)(NYLOK)IRON	86.G8507.002
SCREW	SCREW M2.5*7.0-I(B) (NYLOK)IRON	86.G8507.003
SCREW	SCREW M4.0*6-I(NI,NYLOK)	86.G8507.004
SCREW	SCREW M2.5*4.0-I(NI)(NYLOK)IRON	86.G8507.005
SCREW	SCREW M2.5*5.0-I(BNI)(NYLOK)IRON	86.G8507.006
SCREW	SCREW M3*4-I(NI)(NYLOK)IRON	86.G8507.007
SCREW	SCREW 6-32UNC*5-B(NYLOK)IRON	86.G8507.008
SCREW	SCREW M2.5*4.0-I(NI)(NYLOK)IRON	86.G8507.009
SCREW	SCREW M2.0*2.5-I (BNI,NYLOK)IRON	86.G8507.0010

Model Definition and Configuration

Model Name	RO	Country	Acer Part no	Description
ZX4800	AAP	Philippines	PW.G8502.013	ZX4800 AAP001 W7HP64EMPHG2/PMDT4300/SO2GBII8*1/D320GB7.2KS*1/NSM8XS/D20.1H/A336-D/802.11bgn/bluetooth/US Win7 WMC/RF2.4/G4/RF2.4/G4
ZX4800	PA	Mexico	PW.G8502.012	ZX4800 PA001 W7HP64EMUSG13/PMDT4300/SO2GBII8*2/D640GB7.2KS*1/NSM8XS/D20.1H/802.11bgn/USB/G4/USB/G4_3B
ZX4800	AAP	Philippines	PW.G8502.011	ZX4800 AAP001 W7HP64EMPHG2/PMDT4300/SO2GBII8*1/D320GB7.2KS*1/NSM8XS9.5/D20.1H/802.11bgn/bluetooth/RF2.4/G4/RF2.4/G4
ZX4800	AAP	Philippines	PW.G8502.011	ZX4800 AAP001 W7HP64EMPHG2/PMDT4300/SO2GBII8*1/D320GB7.2KS*1/NSM8XS9.5/D20.1H/802.11bgn/bluetooth/RF2.4/G4/RF2.4/G4
ZX4800	PA	Mexico	PW.G8502.009	ZX4800 PA001 W7HP64EMUSG13/PMDT4300/SO2GBII8*1+SO1GBII8*1/D640GB7.2KS*1/NSM8XS/D20.1H/802.11bgn/USB/G4/USB/G4_3B
ZX4800	AAP	Japan	PW.G8502.004	ZX4800 AAP001 W7HP64JPG2/CMT3000/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/802.11bgn/KB/RF2.4/G4
ZX4800	PA	USA/Canada	PW.G8502.010	ZX4800 PA001 W7HP64USG12/PMDT4300/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/802.11bgn/RF2.4/G4/RF2.4/G4
ZX4800	PA	USA/Canada	PW.G8502.010	ZX4800 PA001 W7HP64USG12/PMDT4300/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/802.11bgn/RF2.4/G4/RF2.4/G4
ZX4800	PA	Mexico	PW.G8502.008	ZX4800 PA001 W7HP64EMUSG13/PMDT4300/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/802.11bgn/RF2.4/G4/RF2.4/G4
ZX4800	PA	USA/Canada	PW.G8502.001	ZX4800 PA001 W7HP64USG10/PMDT4300/SO2GBII8*2/D320GB7.2KS*1/NSM8XS/D20.1H/A336-A/802.11bgn/US Win7 WMC/KB/RF2.4/G4
ZX4800	PA	USA/Canada	PW.G8502.001	ZX4800 PA001 W7HP64USG10/PMDT4300/SO2GBII8*2/D320GB7.2KS*1/NSM8XS/D20.1H/A336-A/802.11bgn/US Win7 WMC/KB/RF2.4/G4
ZX4800	AAP	Philippines	PW.G8502.007	ZX4800 AAP001 W7HP64EMPHG2/C2DP7450/SO2GBII8*1/D320GB7.2KS*1/NSM8XS/D20.1H/A336-D/802.11bgn/bluetooth/US Win7 WMC/KB/RF2.4/G4
ZX4800	AAP	Philippines	PW.G8502.007	ZX4800 AAP001 W7HP64EMPHG2/C2DP7450/SO2GBII8*1/D320GB7.2KS*1/NSM8XS/D20.1H/A336-D/802.11bgn/bluetooth/US Win7 WMC/KB/RF2.4/G4
ZX4800	AAP	Philippines	PW.G8502.007	ZX4800 AAP001 W7HP64EMPHG2/C2DP7450/SO2GBII8*1/D320GB7.2KS*1/NSM8XS/D20.1H/A336-D/802.11bgn/bluetooth/US Win7 WMC/KB/RF2.4/G4

Model Name	RO	Country	Acer Part no	Description
ZX4800	PA	USA/Canada	PW.G8502.006	ZX4800 PA001 W7HP64USG10/PMDT4300/ SO1GBII8*1+SO2GBII8*1/D320GB7.2KS*1/ NSM8XS/D20.1H/802.11bgn/RF2.4/G4/RF2.4/G4
ZX4800	PA	USA/Canada	PW.G8502.006	ZX4800 PA001 W7HP64USG10/PMDT4300/ SO1GBII8*1+SO2GBII8*1/D320GB7.2KS*1/ NSM8XS/D20.1H/802.11bgn/RF2.4/G4/RF2.4/G4
ZX4800	PA	USA/Canada	PW.G8502.002	ZX4800 PA001 W7HP64USG10/PMDT4300/ SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/ 802.11bgn/KB/RF2.4/G4
ZX4800	PA	USA/Canada	PW.G8502.002	ZX4800 PA001 W7HP64USG10/PMDT4300/ SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/ 802.11bgn/KB/RF2.4/G4
ZX4800	PA	USA	S1.G8502.001	ZX4800 Sample PA001 W7HP641/CM900/ SO2GBII8*1+SO1GBII8*1/D320GB7.2KS*1/ NSM8XS/D20H/802.11bgn/US RC/USB/0910B/ USB/0910B
ZX4800	PA	USA	S1.G8502.001	ZX4800 Sample PA001 W7HP641/CM900/ SO2GBII8*1+SO1GBII8*1/D320GB7.2KS*1/ NSM8XS/D20H/802.11bgn/US RC/USB/0910B/ USB/0910B
ZX4800	AAP	Japan	PW.G8502.005	ZX4800 AAP001 W7HP64JPG2/C2DP7450/ SO2GBII8*2/D320GB7.2KS*1/NSM8XS/D20.1H/ RF2.4/G4/RF2.4/G4
ZX4800	AAP	Japan	PW.G8502.003	ZX4800 AAP001 W7HP64JPG2/C2DT6600/ SO2GBII8*2/D320GB7.2KS*1/NSM8XS/D20.1H/ RF2.4/G4/RF2.4/G4
ZX4800	PA	USA	S1.G8502.003	ZX4800 Sample PA002 W7HP641/C2DP7450/ SO1GBII8*2/D640GB7.2KS*1/NSM8XS/D20H/ HD4530/802.11bgn/US RC/USB/0910B/USB/ 0910B
ZX4800	PA	USA	S1.G8502.003	ZX4800 Sample PA002 W7HP641/C2DP7450/ SO1GBII8*2/D640GB7.2KS*1/NSM8XS/D20H/ HD4530/802.11bgn/US RC/USB/0910B/USB/ 0910B
ZX4800	PA	USA	S1.G8502.002	ZX4800 Sample PA002 W7HP641/C2DT6600/ SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20H/ HD4530/802.11bgn/US RC/USB/0910B/USB/ 0910B
ZX4800	PA	USA	S1.G8502.002	ZX4800 Sample PA002 W7HP641/C2DT6600/ SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20H/ HD4530/802.11bgn/US RC/USB/0910B/USB/ 0910B
ZX4830	AAP	Indonesia	PW.GA702.00 1	ZX4830 AAP001 W7HP64EMAING4/C2DT6600/ SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/ HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Indonesia	PW.GA702.00 1	ZX4830 AAP001 W7HP64EMAING4/C2DT6600/ SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/ HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Indonesia	PW.GA702.00 1	ZX4830 AAP001 W7HP64EMAING4/C2DT6600/ SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/ HD4570/802.11bgn/bluetooth/KB/RF2.4/G4

Model Name	RO	Country	Acer Part no	Description
ZX4830	AAP	Thailand	PW.GA702.011	ZX4830 AAP001 W7HP64EMTHG2/C2DP7450/SO2GBII8*2/D1000GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/RF2.4/G4/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.011	ZX4830 AAP001 W7HP64EMTHG2/C2DP7450/SO2GBII8*2/D1000GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/RF2.4/G4/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.010	ZX4830 AAP001 W7HP64EMTHG2/C2DT6600/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/RF2.4/G4/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.010	ZX4830 AAP001 W7HP64EMTHG2/C2DT6600/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/RF2.4/G4/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.003	ZX4830 AAP001 W7HP64EMTHG3/C2DT6600/SO2GBII8*2/D320GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.009	ZX4830 AAP001 W7HP64EMTHG3/C2DP8700/SO2GBII8*2/D1000GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.004	ZX4830 AAP001 W7HP64EMTHG3/C2DP7450/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.004	ZX4830 AAP001 W7HP64EMTHG3/C2DP7450/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.004	ZX4830 AAP001 W7HP64EMTHG3/C2DP7450/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.003	ZX4830 AAP001 W7HP64EMTHG3/C2DT6600/SO2GBII8*2/D320GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.003	ZX4830 AAP001 W7HP64EMTHG3/C2DT6600/SO2GBII8*2/D320GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.007	ZX4830 AAP001 W7HP64EMTHG3/C2DT6600/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.007	ZX4830 AAP001 W7HP64EMTHG3/C2DT6600/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.008	ZX4830 AAP001 W7HP64EMTHG3/C2DP7450/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.007	ZX4830 AAP001 W7HP64EMTHG3/C2DT6600/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.009	ZX4830 AAP001 W7HP64EMTHG3/C2DP8700/SO2GBII8*2/D1000GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4
ZX4830	AAP	Thailand	PW.GA702.008	ZX4830 AAP001 W7HP64EMTHG3/C2DP7450/SO2GBII8*2/D750GB7.2KS*1/NSM8XS/D20.1H/HD4570/802.11bgn/bluetooth/KB/RF2.4/G4

Model Name	RO	Country	Acer Part no	Description
ZX4830	AAP	Australia/ New Zealand	PW.GA702.00 6	ZX4830 AAP001 W7HP64AUG4/PMDT4300/ SO2GBII8*1+SO1GBII8*1/D320GB7.2KS*1/ NSM8XS/D20.1H/N/N/KB/RF2.4/G4
ZX4830	AAP	Australia/ New Zealand	PW.GA702.00 6	ZX4830 AAP001 W7HP64AUG4/PMDT4300/ SO2GBII8*1+SO1GBII8*1/D320GB7.2KS*1/ NSM8XS/D20.1H/N/N/KB/RF2.4/G4
ZX4830	AAP	Australia/ New Zealand	PW.GA702.00 6	ZX4830 AAP001 W7HP64AUG4/PMDT4300/ SO2GBII8*1+SO1GBII8*1/D320GB7.2KS*1/ NSM8XS/D20.1H/N/N/KB/RF2.4/G4
ZX4830	AAP	Australia/ New Zealand	PW.GA702.00 5	ZX4830 AAP001 W7HP64AUG4/PMDT4300/ SO2GBII8*2/D320GB7.2KS*1/NSM8XS/D20.1H/ A336-D/N/N/EMEA Win7 WMC/KB/RF2.4/G4
ZX4830	AAP	Australia/ New Zealand	PW.GA702.00 5	ZX4830 AAP001 W7HP64AUG4/PMDT4300/ SO2GBII8*2/D320GB7.2KS*1/NSM8XS/D20.1H/ A336-D/N/N/EMEA Win7 WMC/KB/RF2.4/G4
ZX4830	AAP	Australia/ New Zealand	PW.GA702.00 5	ZX4830 AAP001 W7HP64AUG4/PMDT4300/ SO2GBII8*2/D320GB7.2KS*1/NSM8XS/D20.1H/ A336-D/N/N/EMEA Win7 WMC/KB/RF2.4/G4
ZX4830	AAP	Australia/ New Zealand	PW.GA702.00 2	ZX4830 AAP001 W7HP64AUG4/PMDT4300/ SO2GBII8*2/D640GB7.2KS*1/NSM8XS/D20.1H/ N/N/KB/RF2.4/G4
ZX4830	AAP	Australia/ New Zealand	PW.GA702.00 2	ZX4830 AAP001 W7HP64AUG4/PMDT4300/ SO2GBII8*2/D640GB7.2KS*1/NSM8XS/D20.1H/ N/N/KB/RF2.4/G4
ZX4830	AAP	Australia/ New Zealand	PW.GA702.00 2	ZX4830 AAP001 W7HP64AUG4/PMDT4300/ SO2GBII8*2/D640GB7.2KS*1/NSM8XS/D20.1H/ N/N/KB/RF2.4/G4

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 OS Linux, Windows® XP Home Edition, Windows® Vista, Windows® 7 Home Premium, Windows® 7 Professional, and Windows® 7 Starter.

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

BRAND	Type	Description
Adapter		
DELTA	90W	Adapter DELTA 90W 19V 1.7x5.5x11 Blue ADP-90CD DB A, LV5 LED LF
DELTA	90W	Adapter DELTA 90W 19V 2.5x5.5x11 Black ADP-90SB ABACF, for PB/Pegatron LF
HIPRO	65W	Adapter HIPRO 65W 19V 1.7x5.5x11 Yellow HP-A0652R3B 1LF, LV5 LED LF
HIPRO	90W	Adapter HIPRO 90W 19V 1.7x5.5x11 Blue HP-A0904A3 B1LF, LV5 LED LF
LITE-ON	120W-DE	Adapter LITE-ON 120W-DE 19V 1.7x5.5x11 Green PA-1121-04AC, LV5+OBL LED LF
LITE-ON	65W	Adapter LITE-ON 65W 19V 1.7x5.5x11 Yellow PA-1650-22AC LV5 LED LF
LITE-ON	90W	Adapter LITE-ON 90W 19V 1.7x5.5x11 Blue PA-1900-34AR, LV5 LED LF
Add on card		
Foxconn	802.11 b/g (mini-card)	Foxconn T60H976.00 Atheros XB63 WLAN Atheros PCI-Express WLAN 802.11 minicard b/g (firmware : v0.7)
Foxconn	802.11 b/g/n (mini-card)	Foxconn T77H053.00 Atheros XB91 802.11 b/g/n (mini-card) Atheros XB91 802.11 b/g/n WLAN (mini-card), 1Tx2R
Lite-On	802.11 b/g/n (mini-card)(half size)	Lite-On WN6605LH-AA WLAN Lite-On WN6605LH-AA, Realtek RTL8191SE 802.11b/g/n 1Tx1R WLAN(mini-card) Half Size
QMI	Bluetooth	QMI QBT400UB Bluetooth Qcom Technology Inc., Broadcom BCM2046, Bluetooth2.1 + EDR, USB interface module
Quanta	802.11 b/g/n (mini-card)(half size)	Quanta EM307 WLAN EM307, Ralink RT3090 802.11b/g/n 1Tx1R WLAN(mini-card) Half Size (QMI)
Bezel		
	20 gHenley Black	Bezel 20 gHenley Black
Card Reader		
	AIO 4-in-1 CR eClapton	AIO 4-in-1 CR eClapton AIO
Chassis		
Gateway	20 inch Henley AIO Black	Gateway Henley 20 inch Henley AIO Black ZX4600
CPU		
INTEL	CM900	CPU Intel Celeron 900 PGA 2.2G 1M 800 35W

BRAND	Type	Description
INTEL	CMT3000	CPU Intel Celeron T3000 PGA 1.8G 1M 800 35W
INTEL	CMT3100	CPU Intel Celeron T3100 PGA 1.9G 1M 800 35W
INTEL	C2DP7450	CPU Intel Core2Dual P7450 PGA 2.13G 3M 1066 TJ, noVT
INTEL	C2DP8700	CPU Intel Core2Dual P8700 PGA 2.53G 3M 1066 25W R-0
INTEL	C2DT6600	CPU Intel Core2Dual T6600 PGA 2.2G 2M 800 35W R-0
INTEL	PMDT4300	CPU Intel Pentium Dual-Core T4300 PGA 2.1G 1M 800 R-0
HDD		
HGST	D1000GB7.2KS	HDD HGST 3.5" 7200rpm 1000GB HDT721010SLA360 Saturn SATA II 16MB LF F/W:31B
HGST	D320GB7.2KS	HDD HGST 3.5" 7200rpm 320GB HDT721032SLA380 Saturn SATA II LF F/W:31B
HGST	D640GB7.2KS	HDD HGST 3.5" 7200rpm 640GB HDT721064SLA360 Saturn SATA II 16MB LF F/W:31B
SEAGATE	D1000GB7.2KS	HDD SEAGATE 3.5" 7200rpm 1000GB ST31000528AS(Pharaoh) SATA II 32MB LF F/W:CC44
SEAGATE	D320GB7.2KS	HDD SEAGATE 3.5" 7200rpm 320GB ST3320418AS(Pharaoh) SATA II 16MB LF F/W:CC44
SEAGATE	D640GB7.2KS	HDD SEAGATE 3.5" 7200rpm 640GB ST3640623AS(Brinks) SATA II 16MB LF F/W:CC4H
SEAGATE	D750GB7.2KS	HDD SEAGATE 3.5" 7200rpm 750GB ST3750528AS (Pharaoh) SATA II 32MB LF F/W:CC44
WD	D320GB7.2KS	HDD WD 3.5" 7200rpm 320GB WD3200AAJS-22L7A0 XL320S-3 320G SATA II 8MB LF F/W:01.03E01
WD	D640GB7.2KS	HDD WD 3.5" 7200rpm 640GB WD6400AAKS-22A7B2 XL320M 640G SATA II 16MB LF F/W:01.03B01
WD	D750GB7.2KS	HDD WD 3.5" 7200rpm 750GB WD7502AALS-22E3A0 (XL500) SATA II 32MB LF F/W:05.01D05
IR Blaster		
	SMK	SMK IR BLASTER RWS9000-1301FP
Keyboard		
CHICONY	RF2.4/G4	Keyboard CHICONY KG-0833 RF2.4 104KS Black Simplified Chinese
CHICONY	RF2.4/G4	Keyboard CHICONY KG-0833 RF2.4 RF2.4 Standard 105KS Black Spanish Latin
CHICONY	RF2.4/G4	Keyboard CHICONY KG-0833 RF2.4 Standard 104KS Black Thailand
CHICONY	RF2.4/G4	Keyboard CHICONY KG-0833 RF2.4 Standard 104KS Black Traditional Chinese
CHICONY	RF2.4/G4	Keyboard CHICONY KG-0833 RF2.4 Standard 104KS Black US
CHICONY	Canadian French	Keyboard CHICONY KG-0833 RF2.4 Standard 105KS Black English/Canadian French
CHICONY	RF2.4/G4	Keyboard CHICONY KG-0833 RF2.4 Standard 105KS Black UK
CHICONY	RF2.4/G4	Keyboard CHICONY KG-0833 RF2.4 Standard 109KS Black Japanese
CHICONY	USB/G4	Keyboard CHICONY KU-0833 USB 104KS Black Simplified Chinese

BRAND	Type	Description
CHICONY	USB/G4	Keyboard CHICONY KU-0833 USB 104KS Black Thailand
CHICONY	USB/G4	Keyboard CHICONY KU-0833 USB Standard 104KS Black Traditional Chinese
CHICONY	USB/G4	Keyboard CHICONY KU-0833 USB Standard 104KS Black US
CHICONY	USB/G4	Keyboard CHICONY KU-0833 USB Standard 105KS Black English/Canadian French
CHICONY	USB/G4	Keyboard CHICONY KU-0833 USB Standard 105KS Black Spanish Latin
CHICONY	USB/G4	Keyboard CHICONY KU-0833 USB Standard 105KS Black UK
CHICONY	USB/G4	Keyboard CHICONY KU-0833 USB Standard 109KS Black Japanese
LCD		
CMO	D20.1HD+	CCFL LCD CMO 20"W HD+ None Glare M200O1-L01 C1 LF 300nit 5ms 1000:1
LPL	D20.1HD+	CCFL LCD LPL 20"W HD+ None Glare LM200WD1 TLA1 LF 300nit 5ms HF
LPL	D20.1HD+	CCFL LCD LPL 20"W HD+ None Glare LM200WD1 TLC1 LF 250nit 5ms 1000:1 2CCFL HF
SAMSUNG	D20.1HD+	CCFL LCD SAMSUNG 20"W HD+ None Glare LTM200KT03 A02 LF 250nit 5ms 1000:1 2 CCFL
Mainboard		
	gHenley_Discrete QI82GM45M_1394(N)_Logo(N)	Mainboard Mainboard Henley - Intel GM45 w Discrete ICH9M LF Intel GM45 ICH9M W/O 1394 LF
	gHenley QI82GL40M_1394(N)_Logo(N)	Mainboard ZX4600 Intel GL40 ICH9M Proprietary W/O 1394 LF
	gHenley QI82GM45M_1394(N)_Logo(N)	Mainboard ZX4810 - GM45 Intel GM45 ICH9M LF
	gHenley_Discrete QI82GM45M_1394(N)_Logo(N)	MB Kit Mainboard Henley - Intel GM45 w Discrete ICH9M LF Intel GM45 ICH9M W/O 1394 LF
	gHenley QI82GL40M_1394(N)_Logo(N)	MB Kit ZX4600 Intel GL40 ICH9M Proprietary W/O 1394 LF
	gHenley QI82GM45M_1394(N)_Logo(N)	MB Kit ZX4810 - GM45 Intel GM45 ICH9M LF
MEM		
ELPIDA	SO1GBII8	Memory ELPIDA SO-DIMM DDRII 800 1GB EBE10UE8AFSA-8G-F LF 128*8 0.065um
ELPIDA	SO2GBII8	Memory ELPIDA SO-DIMM DDRII 800 2GB EBE21UE8AFSA-8G-F LF 128*8 0.065um
NANYA	SO1GBII8	Memory NANYA SO-DIMM DDRII 800 1GB NT1GT64UH8D0FN-AD LF 64*16 0.07um
NANYA	SO2GBII8	Memory NANYA SO-DIMM DDRII 800 2GB NT2GT64U8HD0BN-AD LF 128*8 0.07um
SAMSUNG	SO1GBII8	Memory SAMSUNG SO-DIMM DDRII 800 1GB M470T2864EH3-CF7 LF 64*16 0.055um

BRAND	Type	Description
SAMSUNG	SO2GBII8	Memory SAMSUNG SO-DIMM DDRII 800 2GB M470T5663EH3-CF7 LF 128*8 0.055um
TRANSCEND	SO1GBII8	Memory TRANSCEND SO-DIMM DDRII 800 1GB JM800QSU-1G LF 128*8 0.065um
TRANSCEND	SO2GBII8	Memory TRANSCEND SO-DIMM DDRII 800 2GB JM800QSU-2G LF 128*8 0.065um
UNIFOSA	SO1GBII8	Memory UNIFOSA SO-DIMM DDRII 800 1GB GU331G0ALEPR612C6F1 LF 128*8 0.065um
UNIFOSA	SO2GBII8	Memory UNIFOSA SO-DIMM DDRII 800 2GB GU332G0ALEPR8H2C6F1 LF 128*8 0.065um
Mouse		
	RF2.4/0910B	black mouse RF2.4 MGR0919 with Receiver
Chicony	RF2.4/G4	Chicony mouse RF2.4 MG-0846 black
Logitech	USB/0910B	Logitech optical mouse USB M-U0005 Black
Primax	USB/G4_3B	Primax Mouse USB G4M-3B black
Primax	USB/G4_5B	Primax Mouse USB G4M-5B black
ODD		
HLDS	NSM8XS	ODD HLDS Super-Multi DRIVE 12.7mm Tray DL 8X GT20N LF W/O bezel SATA
HLDS	NSM8XS	ODD HLDS Super-Multi DRIVE 12.7mm Tray DL 8X GT30N LF W/O bezel SATA (HF + Windows 7)
HLDS	NSM8XS9.5	ODD HLDS Super-Multi DRIVE 9.5mm Tray DL 8X GU10N LF W/O bezel SATA (HF + Windows 7)
HLDS	DSM16XSLF	ODD HLDS Super-Multi DRIVE HH LabelFlash 16X GH40F LF Black Bezel SATA w/ Win7
PANASONIC	NSM8XS9.5	ODD PANASONIC Super-Multi DRIVE 9.5mm Tray DL 8X UJ892 LF W/O bezel SATA GBAS2.0, (HF + Windows7)
PLDS	NSM8XS	ODD PLDS Super-Multi DRIVE 12.7mm Tray DL 8X DS-8A3S LF W/O bezel SATA
PLDS	NSM8XS	ODD PLDS Super-Multi DRIVE 12.7mm Tray DL 8X DS-8A4SH LF W/O bezel SATA (HF + Windows 7)
Remote Control		
Philips	EMEA Win7 WMC	Philips Remote Controller RC2604301/01B MSFT code EMEA;pair with OVU430005
Philips	US Win7 WMC	Philips Remote Controller RC2604302/01B MSFT code US;pair with OVU430005
Philips	EMEA Win7/Philips	Philips Remote Controller RC2604307/01BG for EMEA ;pair with RV.11000.007
Philips	EMEA Vista MCE	Philips Vista MCE iconized RC with 2 batteries for EMEA
Philips	EMEA Vista RC	Philips Vista remote control for OVU71
SMK	US Vista RC	SMK Vista MCE iconized RC with 2 batteries for US
TV Tuner		
AverMedia	mCard/Digital/DMB-TH	AverMedia A328 Mini-Card DMB-TH Digital
AverMedia	mCard/SW/ATSC	AverMedia A336-A Mini-Card Kits WW Analog + ATSC Digital w/i Quanta internal/external cable
AverMedia	mCard/SW/DVB-T	AverMedia A336-D Mini-Card Kits WW Analog + DVB-T Digital w/i Quanta internal/external cable

BRAND	Type	Description
VGA Card		
Quanta	ATI HD4570 D2 512MB - Henleyey Type A	Quanta VGA Card AMD M92XT DDRII 512M 500MHz 64*16 MXM 3.0 Type A w/ Hynix H5PS1G63EFR-20L for Henley

Online Support Information

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

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

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

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

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

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

Also contained on this website are:

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

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

B

BIOS

- vendor 14
- Version 14

BIOS Utility 19–32

- Advanced 23
- Exit 32
- Navigating 19
- PC Health 32
- Power 32
- Save and Exit 32
- System Security 32

Board Layout

- Bottom View 161
- Top View 159

D

Disassembly

- General Information 38

Disassembly Requirements 38

F

FRU (Field Replaceable Unit) List 165

I

Intermittent Problems 158

J

Jumper and Connector Locations 159

- Top View 159

K

Keyboard

- Usage 9

M

Main Unit Disassembly

- Flowchart 40

Model Definition 174

O

Online Support Information 184

P

Panel 5

- front 5

S

System

- Block Diagram 4

T

Test Compatible Components 178

U

Undetermined Problems 158

utility

- BIOS 19–32

W

Windows 2000 Environment Test 178

