# **Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual**

Before You Begin	Coin-Cell Battery
Battery	Wireless Mini-Card(s)
Keyboard	Processor Heat Sink
Palm Rest	Memory and Processor Board
Speakers	I/O Board
Hard Drive	AC Adapter Connector
Memory Module	Display
Palm Rest Bracket	Camera Board
LED Board	System Board
Processor Fan	Flashing the BIOS
Internal Card With Bluetooth Wireless Technology	Comprehensive Specifications

### Notes, Cautions, and Warnings

**NOTE:** A NOTE indicates important information that helps you make better use of your computer.

🛆 CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

MARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Regulatory Model P03T series; Regulatory Type: P03T001

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#### AC Adapter Connector Dell™ Inspiron™ 11 Service Manual

- <u>Removing the AC Adapter Connector</u>
- Replacing the AC Adapter Connector
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

### **Removing the AC Adapter Connector**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see <u>Removing the Battery</u>).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Disconnect the speaker cable from the speaker cable connector on the I/O board (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Remove the memory module (see <u>Removing the Memory Module</u>).
- 8. Remove the palm rest bracket (see Removing the Palm Rest Bracket).
- 9. Remove the I/O board (see Removing the I/O Board).
- 10. Disconnect the antenna cables from the WWAN card, if applicable (see Removing the WWAN Card).
- 11. Disconnect the antenna cables from the WLAN card, if applicable (see Removing the WLAN Card).
- 12. Make note of the cable routing and carefully dislodge the Mini-Card antenna cables from the routing guides.
- 13. Disconnect the AC adapter connector cable from the system board connector.
- 14. Lift the AC adapter connector off the computer base.



1 AC adapter connector	2	system board connector
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### **Replacing the AC Adapter Connector**

- 1. Follow the procedures in Before You Begin.
- 2. Place the AC adapter connector on the system board.
- 3. Connect the AC adapter connector cable to the system board connector.
- 4. Route the Mini-Card antenna cables through the routing guides.
- 5. Connect the antenna cables to the WWAN card, if applicable (see Replacing the WWAN Card).
- 6. Connect the antenna cables to the WLAN card, if applicable (see Replacing the WLAN Card).
- 7. Replace the I/O board (see Replacing the I/O Board).
- 8. Replace the palm rest bracket (see Replacing the Palm Rest Bracket).
- 9. Replace the memory module (see <u>Replacing the Memory Module</u>).
- 10. Replace the hard drive (see Replacing the Hard Drive).
- 11. Connect the speaker cable to the speaker cable connector on the I/O board (see Replacing the Speakers).
- 12. Replace the palm rest (see Replacing the Palm Rest).
- 13. Replace the keyboard (see Replacing the Keyboard).
- 14. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

#### Before You Begin Dell™ Inspiron™ 11 Service Manual

- Recommended Tools
- Turning Off Your Computer
- Before Working Inside Your Computer.

This manual provides procedures for removing and installing the components in your computer. Unless otherwise noted, each procedure assumes that the following conditions exist:

- 1 You have performed the steps in Turning Off Your Computer and Before Working Inside Your Computer.
- 1 You have read the safety information that shipped with your computer.
- 1 A component can be replaced or-if purchased separately-installed by performing the removal procedure in the reverse order.

### **Recommended Tools**

The procedures in this document may require the following tools:

- 1 Small flat-blade screwdriver
- 1 Phillips screwdriver
- 1 Plastic scribe
- 1 BIOS executable update program available at support.dell.com

### **Turning Off Your Computer**

- △ CAUTION: To avoid losing data, save and close all open files and exit all open programs before you turn off your computer.
- 1. Save and close all open files and exit all open programs.
- 2. Shut down the operating system; click Start 🚳 , click the arrow 🎦 , and then click Shut Down.
- 3. Ensure that the computer is turned off. If your computer did not automatically turn off when you shut down the operating system, press and hold the power button until the computer turns off.

### Before Working Inside Your Computer

Use the following safety guidelines to help protect your computer from potential damage and to help to ensure your own personal safety.

- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: Handle components and cards with care. Do not touch the components or contacts on a card. Hold a card by its edges or by its metal mounting bracket. Hold a component such as a processor by its edges, not by its pins.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell is not covered by your warranty.
- CAUTION: When you disconnect a cable, pull on its connector or on its pull-tab, not on the cable itself. Some cables have connectors with locking tabs; if you are disconnecting this type of cable, press in on the locking tabs before you disconnect the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before you connect a cable, ensure that both connectors are correctly oriented and aligned.
- △ CAUTION: To avoid damaging the computer, perform the following steps before you begin working inside the computer.
- 1. Ensure that the work surface is flat and clean to prevent the computer cover from being scratched.
- 2. Turn off your computer (see Turning Off Your Computer) and all attached devices.

△ CAUTION: To disconnect a network cable, first unplug the cable from your computer and then unplug the cable from the network device.

- 3. Disconnect all telephone or network cables from the computer.
- 4. Press and eject any installed cards from the Memory Card Reader.
- 5. Disconnect your computer and all attached devices from their electrical outlets.
- 6. Disconnect all attached devices from your computer.
- △ CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.
- 7. Remove the battery (see <u>Removing the Battery</u>).
- 8. Turn the computer top-side up, open the display, and press the power button to ground the system board.

#### Flashing the BIOS Dell™ Inspiron™ 11 Service Manual

- 1. Ensure that the AC adapter is plugged in, the main battery is properly installed, and a network cable is attached.
- 2. Turn on the computer.
- 3. Locate the latest BIOS update file for your computer at support.dell.com.
- 4. Click Drivers & Downloads→ Select Model.
- 5. Select the type of product in the Select Your Product Family list.
- 6. Select the product brand in the Select Your Product Line list.
- 7. Select the product model number in the Select Your Product Model list.

MOTE: If you have selected a different model and want to start over again, click Start Over on the top right of the menu.

- 8. Click Confirm.
- 9. A list of results appear on the screen. Click **BIOS**.
- 10. Click **Download Now** to download the latest BIOS file. The **File Download** window appears.
- 11. Click Save to save the file on your desktop. The file downloads to your desktop.
- 12. Click Close if the Download Complete window appears. The file icon appears on your desktop and is titled the same as the downloaded BIOS update file.
- 13. Double-click the file icon on the desktop and follow the procedures that appear on the screen.

#### Internal Card With Bluetooth Wireless Technology Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

Removing the Bluetooth Card

- Replacing the Bluetooth Card
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

If you ordered a card with Bluetooth<sup>®</sup> wireless technology with your computer, it is already installed.

### **Removing the Bluetooth Card**

- 1. Follow the procedures in Before You Begin
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Disconnect the speaker cable from the speaker cable connector on the I/O board (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Remove the memory module (see Removing the Memory Module).
- 8. Remove the palm rest bracket (see Removing the Palm Rest Bracket).
- 9. Remove the screw that secures the Bluetooth card to the system board.
- 10. Lift the Bluetooth card to disconnect it from the system board connector.



1	screw	2	Bluetooth card

### **Replacing the Bluetooth Card**

- 1. Follow the procedures in Before You Begin.
- 2. Align the connector on the Bluetooth card with the connector on the system board and press gently.

- 3. Replace the screw that secures the Bluetooth card to the system board.
- 4. Replace the palm rest bracket (see Replacing the Palm Rest Bracket).
- 5. Replace the memory module (see Replacing the Memory Module).
- 6. Replace the hard drive (see Replacing the Hard Drive).
- 7. Connect the speaker cable to the speaker cable connector on the I/O board (see Replacing the Speakers).
- 8. Replace the palm rest (see Replacing the Palm Rest).
- 9. Replace the keyboard (see Replacing the Keyboard).
- 10. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

#### Camera Board Dell™ Inspiron™ 11 Service Manual

Removing the Camera Board

- <u>Replacing the Camera Board</u>
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

### **Removing the Camera Board**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Disconnect the speaker cable from the speaker cable connector on the I/O board (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Remove the memory module (see Removing the Memory Module).
- 8. Remove the palm rest bracket (see Removing the Palm Rest Bracket).
- 9. Remove the display assembly (see Removing the Display Assembly).
- 10. Remove the hinge caps (see Removing the Hinge Caps).
- 11. Remove the display bezel (see Removing the Display Bezel).
- 12. Remove the display panel (see Removing the Display Panel)
- 13. Disconnect the camera cable from the connector on the camera board.
- 14. Lift the camera board off the display back cover.



1 camera cable connector

#### **Replacing the Camera Board**

- 1. Follow the procedures in Before You Begin.
- 2. Replace the camera board on the display cover.
- 3. Connect the camera cable to the connector on the camera board.
- 4. Replace the display panel (see Replacing the Display Panel).
- 5. Replace the display bezel (see Replacing the Display Bezel).
- 6. Replace the hinge caps (see <u>Replacing the Hinge Caps</u>).
- 7. Replace the display assembly (see Replacing the Display Assembly).
- 8. Replace the palm rest bracket (see Replacing the Palm Rest Bracket).
- 9. Replacing the memory module (see Replacing the Memory Module).
- 10. Replace the hard drive (see Replacing the Hard Drive).
- 11. Connect the speaker cable to the speaker cable connector on the I/O board (see Replacing the Speakers).
- 12. Replace the palm rest (see Replacing the Palm Rest).
- 13. Replace the keyboard (see Replacing the Keyboard).
- 14. Replace the battery (see Replacing the Battery).
- CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

# Comprehensive Specifications Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

This document provides information that you may need when setting up, updating drivers for, and upgrading your computer.

NOTE: Offerings may vary by region. For more information regarding the configuration of your computer, click Start <sup>●</sup> → Help and Support and select the option to view information about your computer.

Processor         Interference           Type         Interference           External Los frequency         000 Mu           12 cache         1 MB or 2 MB           External Los frequency         000 Mu           Memory         External Los frequency           Memory Yoe         000 Mut DDE2           Memory Yoe         108.0 CBA           System Chipsek         Intel GS45           Data bus Width         40 Ib3           DAta bus Width         40 Ib3           DAta bus Width         122 Ib3           Flash FRMOM         1 MB           Communications         Internal WLAN Mul Card with WiTI           Optimal WWAN and Blueton Ib3 Mul Card Mut Card M			
Type         Intel Rentium®           External bus frequency         300 Mirz           La cache         100 Mirz           La cache         100 Mirz           Cannectors         Marce           Memory         600 Mirz (accessible 50.01MM socked           Memory type         800 Mirz (accessible 50.01MM socked           Memory type         168.2 GB.or 4 GB           Data bus width         64 BtS           Data bus width         64 BtS           Data bus width         1046           Processor address bus width         1048           Communications         101/00 Ethernet LAN on system board           Vieto         Controller (WAM MinCard with WFI i coptional WAM MinCard with WFI i coptional WAM and Bluetocht% Min-Cards           Vieto         Controller         Intergrated intel GS45 UMA           Vieto         Controller         Intergrated intel GS45 U	Processor		
External bus frequency         800 Mtz           12 cache         1 MB 2 MB           Kennery         Kennery           Connectors         one internally-accessible S0-DIAM socket           Menory type         800 Mtz D682           Menory type         800 Mtz D682           Menory type         1 GB, 2 GB, or 4 GB           Computer Information         1 GB, 2 GB, or 4 GB           System chisset         Intel CS45           Data bas with         54 Bits           System chisset         1 MB CS46           Data bas with         12 Dits           Processor address bas with         12 Dits           Processor address bas with         12 Dits           Virales         10/100 Ethernet LAN on system board           Virales         1 Integrated on system board           Virales </th <th>Туре</th> <th>Intel® Celeron® Intel Pentium®</th>	Туре	Intel® Celeron® Intel Pentium®	
L2 cache     1 MB or 2 M8       Kernory     Connectors       Memory type     800 MHz D0R2       Memory type     105 A5       Data bus width     64 bits       DRAM bus width     31gle channel 64 bit buses       Drocessor address bus width     32 bits       Processor address bus width     32 bits       Vator bus address bus width     32 bits       Vators dagter     10/100 Ehernet LAN on system board       Vators dagter     10/100 Ehernet LAN on system board       Vators dagter     10 bits	External bus frequency	800 MHz	
Memory           Connectors         one Internally accessible SO DIMM socket           Memory configuration possible         0 60 M#z DDR2           Memory configuration possible         1 GR. 2 GR, or 4 GR           Memory configuration possible         1 GR. 2 GR, or 4 GR           Computer Information         1 GR 2 GR           System chapset         Intel GS45           Data bus width         64 bits           Data bus width         20 bits           Bask bus width         32 Dits           Faster RROM         1 M8           Communications         1 GR - Configuration possible           Communications         0 ritronal WAAN Min-Card with WFI           Network adapter         1 Mengrated inn system board           Video         Integrated on system board           Video         Integrated on system board           Video memory         dynamic based on system memory capacity           Udeo memory         dynamic based on system memory capacity           LCD interface         Low Vidtage Differential Signaling (VDS)           Controller         Reatte	L2 cache	1 MB or 2 MB	
Memory         Connectors         one Internally-accessible SO-DIMM socket           Memory type         300 Mes DDR2         Memory configuration possible         1 08, 2 08, or 4 08           Memory configuration possible         1 08, 2 08, or 4 08         Memory configuration possible         1 08, 2 08, or 4 08           Computer Information         System chapset         Memory configuration possible         1 08, 2 08, or 4 08           Data bus width         Single channel 64-bit buses         Processor address bus width         32 bits           Decessors address bus width         32 bits         Processors address         Processors address           Communications         32 bits         Processors address         Processors			
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Connectors         one internally-accessible S0-DIAM socket           Memory type         800 MHz DBR2           Memory configuration possible         1 GB, 2 GB, or 4 GB           Computer Information         System chipset           System chipset         Intel GS45           Data bus width         64 bits           Data bus width         32 bits           Processor address bus width         32 bits           Video         Internal WUAN Min-Card with WFI           Optional WWAN and Bluetooth® Mini-Card's           Video         Use onerooy           Video controller         Integrated on system board           Video memory         dynamic based on system board           Video onerooy         dynamic based on system memory capacity	Memory		
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Computer Information           System chipset         Intel GS45           Data bus width         64 bits           DRAM bus width         single channel 64-bit buses           Processor address bus width         32 bits           Flash EPROM         1 MB           Communications            Network adapter         10/100 Ethernet LAN on system board           Wireless         Internal WLAN Mini-Card with WiFi           Optional WWAN and Bluetooth® Mini-Cards           Video            Video            Video controller         Integrated on system board           Video controller         Integrated on system board           Video controller         Integrated Intel GS45 UWA           Video controller         Relatek ALC272           LCD Interface         Low Vitage Differential Signaling (LVDS)           Controller         Relatek ALC272           Internal Interface         Intel High D			
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Flash EPROM       1 MB         Communications         Network adapter         10/100 Ethernet LAN on system board         Wireless       Internal WLAN Mini-Card with WiFi         Optional WWAN and Bluetooth® Mini-Cards         Video         Wireless         Video optional WWAN and Bluetooth® Mini-Cards         Video controller         Video integrated on system board         Video controller       Integrated on system board         Video controller       Integrated Intel CS45 UMA         Video controller       Integrated Intel CS45 UMA         Video controller       Integrated Intel CS45 UMA         Video controller       Low Voltage Differential Signaling (LVDS)         Controller         Audio controller         Realtek ALC272         Internal Interface       Intel High Definition audio         Speaker       two 1.0 watt speakers         Vorts and Connectors         Audio         Optione connector, one mono headphone/stereo speaker connector         Mini-Card         Network adapter	Processor address bus width	32 bits	
communications           Network adapter         10/100 Ethernet LAN on system board           Wireless         internal WLAN Mini-Card with WiFi           Optional WWAN and Bluetooth® Mini-Cards           Video	Flash EPROM	1 MB	
Communications           Network adapter         10/100 Ethernet LAN on system board           Wireless         Internal WLAN Mini-Card with WiFi Optional WWAN and Bluetooth@ Mini-Cards           Video         Video to the system board           Video to the system board         Video to the system board           Video to the system board         Video controller           Video to the system board         Integrated on system board           Video controller         Integrated Intel GS45 UMA           Video memory         dynamic based on system memory capacity           LCD interface         Low Voltage Differential Signaling (LVDS)           Audio         Active A channel High Definition audio           Audio type         4 channel High Definition audio           Audio type         Intel High Definition audio           Speaker         Intel High Definition audio           Speaker         Intel High Definition audio           Speaker         Ivo 1.0 watt speakers           Ports and Connectors         Audio           Audio         one microphone connector, one mono headphone/stereo speaker connector           Mini-Card         one full size Mini-Card slot and one half size Mini-Card slot, supports dual Interface			
Communications           Network adapter         10/100 Ethernet LAN on system board           Wireless         internal WLAN Mini-Card with WFi           Optional WWAN and Bluetooth@ Mini-Cards           Video           Video           Video view           Video view           Video view           Video view           Video view           Video ontroller           Video ontroller           Video memory           dynamic based on system memory capacity           LCD interface           Low Voltage Differential Signaling (LVDS)           Audio type           Audio type           Audio type           Internal interface           Internal interface           Internal interface           Vide Jupe No 1.0 watt speakers           Vide one nore row           Vide one nore row on the prophone connector, one mono headphone/stereo speaker connector           Mini-Card         one microphone connector, one mono headphone/stereo speaker connector			
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Network adapter         Internal WLAN dnis/Seten doard           Wireless         internal WLAN Mini-Card with WFi           Optional WWAN and Bluetooth® Mini-Cards           Video           Video support           Video type           Integrated on system board           Video ontroller           Integrated on system board           Video ontroller           Integrated Intel GS45 UMA           Video memory           dynamic based on system memory capacity           LCD interface           LOW tage Differential Signaling (LVDS)           Video           Audio           Audio triefface           Intel High Definition audio           Speaker           wo 1.0 watt speakers           Video           Video           Audio           Audio           Audio           Audio           Speaker           Moni 1.0 watt speakers           Video           Video           Mini-Card           Network adapter           Network adapter           One Mids connector			
Miterial WCAV Mini-Card with With       Optional WWAN and Bluetooth® Mini-Cards       Video       Video       UMA:       Video toppe       Integrated on system board       Video controller       Integrated intel GS45 UMA       Video memory       dynamic based on system memory capacity       LCD interface       Low Voltage Differential Signaling (LVDS)       Audio type       Audio type       Audio type       Internal interface       Intel High Definition audio       Speaker       two 1.0 watt speakers       Ports and Connectors       Audio       One microphone connector, one mono headphone/stereo speaker connector       Mini-Card     one Ridi Size Mini-Card slot and one half size Mini-Card slot, supports dual interface       Network adapter     one Rid45 connector	Wireless	internal WLAN Mini Card with WIEi	
Optional WWAN and Bluetooth@ Mini-Cards           Video         Video           UMA:         Integrated on system board           Video type         Integrated intel GS45 UMA           Video controller         integrated intel GS45 UMA           Video memory         dynamic based on system memory capacity           LCD interface         Low Voltage Differential Signaling (LVDS)           Audio         Realtek ALC272           Internal interface         Intel High Definition audio           Speaker         two 1.0 watt speakers           Ports and Connectors         One microphone connector, one mono headphone/stereo speaker connector           Audio         one microphone connector, one mono headphone/stereo speaker connector           Network adapter         one RI45 connector	Wileless		
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Video           UMA:         Integrated on system board           Video controller         Integrated Intel GS45 UMA           Video memory         dynamic based on system memory capacity           LCD interface         Low Voltage Differential Signaling (LVDS)           Controller           Audio           Audio           Audio toppe         4 channel High Definition audio           Audio controller         Realtek ALC272           Internal interface         Intel High Definition audio           Speaker         two 1.0 watt speakers           Controller           Audio           Audio           Audio onenctors           Audio           Audio onenctors           Audio           Audio onenctors           Audio           Audio onenctors           Audio onenctors           Audio onenctors           Audio onenctors           Audio onenctors           Audio onenctor           Audio onenctor           Audio onen full size Mini-Card slot and one half size Mini-Card slot, supp			
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LCD interface       Low Voltage Differential Signaling (LVDS)         Audio       Audio         Audio type       4 channel High Definition audio         Audio controller       Realtek ALC272         Internal interface       Intel High Definition audio         Speaker       two 1.0 watt speakers         Ports and Connectors       Voltage Differential Signaling (LVDS)         Audio       one microphone connector, one mono headphone/stereo speaker connector         Mini-Card       one full size Mini-Card slot and one half size Mini-Card slot, supports dual interface         Network adapter       one RJ45 connector	Video memory	dynamic based on system memory capacity	
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Internal interface     Intel High Definition audio       Speaker     two 1.0 watt speakers       Ports and Connectors       Audio     one microphone connector, one mono headphone/stereo speaker connector       Mini-Card     one full size Mini-Card slot, supports dual interface       Network adapter     one RJ45 connector	Audio controller	Realtek ALC272	
Speaker     two 1.0 watt speakers       Ports and Connectors       Audio     one microphone connector, one mono headphone/stereo speaker connector       Mini-Card     one full size Mini-Card slot and one half size Mini-Card slot, supports dual interface       Network adapter     one RJ45 connector	Internal interface	Intel High Definition audio	
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Ports and Connectors         Audio       one microphone connector, one mono headphone/stereo speaker connector         Mini-Card       one full size Mini-Card slot and one half size Mini-Card slot, supports dual interface         Network adapter       one RJ45 connector			
Ports and Connectors           Audio         one microphone connector, one mono headphone/stereo speaker connector           Mini-Card         one full size Mini-Card slot and one half size Mini-Card slot, supports dual interface           Network adapter         one RJ45 connector			
Audio     one microphone connector, one mono headphone/stereo speaker connector       Mini-Card     one full size Mini-Card slot and one half size Mini-Card slot, supports dual interface       Network adapter     one RJ45 connector	Ports and Connectors		
Mini-Card         one full size Mini-Card slot and one half size Mini-Card slot, supports dual interface           Network adapter         one RJ45 connector	Audio	one microphone connector, one mono headphone/stereo speaker connector	
Network adapter one RJ45 connector	Mini-Card	one full size Mini-Card slot and one half size Mini-Card slot, supports dual interface	
	Network adapter	one RJ45 connector	

	-		
USB	two 4-pin USB 2.0-compliant connectors		
	one 4-pin power USB 2.0-compliant connector		
HDMI	one HDMI connector		
Display			
Туро	11.6 inch HD - WIED with Truel ife		
Dimensions	TT.0-IICH HD+ WEED WITH HIdeLife		
Height	144 mm (5.7 inches)		
Width	256.12 mm (10.1 inches)		
Diagonal	293.83 mm (11.6 inches)		
Maximum resolution	1366 x 768 at 262 K colors		
Refresh rate	60 Hz		
Operating angle	$0^{\circ}$ (closed) to 135°		
	180  min 200 typ. cd/m <sup>2</sup>		
Viewing Angles:			
Horizontal	±40° min		
Vertical	+15°/-30° min		
Pixel pitch	0.1875 x 0.1875 mm		
Controls	brightness can be controlled through keyboard shortcuts	(for more information, see the Dell Technology Guide on	
	your hard drive or at support.dell.com)	·	
Keyboard (Backlit)			
Number of keys	86 (US); 87 (UK/Brazil); 90 (Japan)		
Layout	QWERTY		
Camera			
Pixel	1.3 megapixel		
Video resolution	640 x 480 at 30 fps (maximum)		
Diagonal viewing angle	66°		
Touch Pad			
X/Y position resolution (graphics table mode)	240 срі		
Size:			
Width	84.45 mm (3.32 inches) sensor-active area		
Height	41.6 mm (1.64 inches) rectangle		
Battery			
Туре	3-cell lithium ion	6-cell lithium ion	
Attributes	3-cell	6-cell	
Depth	23.1 mm (0.91 inches)	45.62 mm (1.80 inches)	
Height	39.04 mm (1.54 inches)	45.7 mm (1.80 inches)	
Width	204.14 mm (8.04 inches)	214.0 mm (8.42 inches)	
Weight	0.165 kg (0.36 lb)	0.350 kg (0.77 lb)	
Voltage	11.1 VDC	11.1 VDC	
Charge time when the computer is off (approximate)	3.0 hours (3-cell)	4.0 hours (6-cell)	
Operating time	Battery operating time varies depending on operating co	I nditions and can be significantly reduced under certain	
	power-intensive conditions.		
	For more information, see the Dell Technology Guide on yo	our hard drive or at support.dell.com.	
Life span (approximate)	300 discharge/charge cycles		
Temperature range:	•		
Operating	Derating 0° to 35°C (32° to 95°F)		

Storage	-40° to 65°C (-40° to 149°F)
Coin-cell battery	CR-2032
AC Adapter	
Input voltage	100-240 VAC
Input current (maximum)	1.5 A
Input frequency	50-60 Hz
Output power	65 W
Output current	3.34 A (continuous)
Rated output voltage	19.5 ± 1 VDC
Dimensions:	
Height	16 mm (0.63 inches)
Width	66 mm (2.6 inches)
Length	127 mm (5 inches)
Weight (without cables)	0.25 kg (0.55 lbs)
Temperature ranges:	
Operating	0° to 35°C (32° to 95°F)
Storage	-30° to 65°C (-22° to 149°F)
Physical	
Height	16.4 mm to 25.8 mm ( $0.64$ inches to 1.01 inches)
Width	292 mm (11 49 inches)
Depth	214 mm (8.42 inches)
Weight (with 3-cell battery):	
Configurable to less than	1.35 kg (2.98 lbs)
Temperature range:	
Storage	-40° to 65°C (-40° to 149°F)
Characterize	10% to $00%$ (paragraphics)
Change	
Novimum vibration (using a random vibrati	5% to 90% (noncondensing)
Operating	
Non Operating	1.3 CDMS
Maximum chack (for operating: measured u	1.3 GRWD
in head-parked position and a 2-ms half-sin	nin Den Diagnostics running on the nard unve and a 2-ms nan-sine puise, for non-operating. measured with hard unve e pulse): 
Operating	110 GRMS
Non-Operating	160 GRMS
Altitude (maximum):	1
Operating	-15.2 to 3048 m (-50 to 10,000 ft)
Storage	-15.2 to 10,668 m (-50 to 35,000 ft)
Airborne contaminant level	G2 or lower as defined by ISA-S71.04-1985

#### Memory and Processor Board Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

Removing the Memory and Processor Board

- Replacing the Memory and Processor Board
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

### **Removing the Memory and Processor Board**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see <u>Removing the Battery</u>).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Disconnect the speaker cable from the speaker cable connector on the I/O board (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Remove the memory module (see <u>Removing the Memory Module</u>).
- 8. Remove the palm rest bracket (see Removing the Palm Rest Bracket).
- 9. Remove the processor heat sink (see Removing the Processor Heat Sink).
- CAUTION: When the memory and processor board is removed from the computer, store it in protective antistatic packaging (see "Protecting Against Electrostatic Discharge" in the safety instructions that shipped with your computer).
- 10. Remove the four screws that secure the memory and processor board to the computer base.
- 11. Use your fingertips to carefully spread apart the securing clips on either side of the memory and processor board connector until the board pops up.



1	screws (4)	2	memory and processor board connector
3	securing clips (2)	4	memory and processor board

12. Lift the memory and processor board off the system board.

### **Replacing the Memory and Processor Board**

- 1. Follow the procedures in Before You Begin.
- 2. Align the notch in the memory and processor board with the tab in the connector.
- Slide the memory and processor board firmly into the slot at a 30-degree angle, and press the memory and processor board down until it clicks into place. If you do not hear the click, remove the memory and processor board and reinstall it.
- 4. Replace the four screws that secure the memory and processor board to the system board.
- 5. Replace the processor heat sink (see Replacing the Processor Heat Sink).
- 6. Replace the palm rest bracket (see Replacing the Palm Rest Bracket).
- 7. Replace the memory module (see Replacing the Memory Module).
- 8. Replace the hard drive (see Replacing the Hard Drive).
- 9. Connect the speaker cable to the speaker cable connector on the I/O board (see Replacing the Speakers).
- 10. Replace the palm rest (see <u>Replacing the Palm Rest</u>).
- 11. Replace the keyboard (see Replacing the Keyboard).
- 12. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

#### Processor Heat Sink Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

- Removing the Processor Heat Sink
- Replacing the Processor Heat Sink
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- MARNING: If you remove the processor heat sink from the computer when the heat sink is hot, do not touch the metal housing of the heat sink.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

### **Removing the Processor Heat Sink**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see <u>Removing the Battery</u>).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Disconnect the speaker cable from the speaker cable connector on the I/O board (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Remove the memory module (see Removing the Memory Module).
- 8. Remove the palm rest bracket (see Removing the Palm Rest Bracket).
- 9. In sequential order (indicated on the processor heat sink), loosen the four captive screws that secure the processor heat sink to the system board.



1	captive screws (4)	2	processor heat sink

△ CAUTION: To ensure maximum cooling for the processor, do not touch the heat transfer areas on the processor heat sink assembly. The oils in your skin can reduce the heat transfer capability of the thermal pads.

10. Lift the processor heat sink off the system board.

### **Replacing the Processor Heat Sink**

**NOTE:** This procedure assumes that you have already removed the processor heat sink and are ready to replace it.

NOTE: The original thermal pad can be reused if the original heat sink is replaced. If the heat sink is replaced, use the thermal pad provided in the kit to ensure that thermal conductivity is achieved.

- 1. Follow the procedures in Before You Begin.
- 2. Place the processor heat sink on the system board.
- 3. Align the four captive screws on the processor heat sink with the screw holes on the system board and tighten the screws in sequential order (indicated on the processor heat sink).
- 4. Replace the palm rest bracket (see Replacing the Palm Rest Bracket).
- 5. Replace the memory module (see Replacing the Memory Module).
- 6. Replace the hard drive (see Replacing the Hard Drive).
- 7. Connect the speaker cable to the speaker cable connector on the I/O board (see Replacing the Speakers).
- 8. Replace the palm rest (see Replacing the Palm Rest).
- 9. Replace the keyboard (see Replacing the Keyboard).
- 10. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

#### Display

### Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

- Display Assembly
- Hinge Caps
- Display Bezel
- Display Panel Brackets
- Display Panel
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

### **Display Assembly**

### **Removing the Display Assembly**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Disconnect the speaker cable from the speaker cable connector on the I/O board (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Remove the memory module (see Removing the Memory Module).
- 8. Remove the palm rest bracket (see Removing the Palm Rest Bracket).
- 9. Remove the I/O board (see Removing the I/O Board).
- 10. Disconnect the antenna cables from the WWAN card, if applicable (see Removing the WWAN Card)
- 11. Disconnect the antenna cables from the WLAN card, if applicable (see Removing the WLAN Card).
- 12. Make note of the cable routing and carefully dislodge the Mini-Card antenna cables from the routing guides.
- 13. Disconnect the display cable and the camera cable from the system board connectors.



1	camera cable connector	2	display cable connector
3	Mini-Card antenna cables		

14. Remove the two screws (one on each side) that secure the display assembly to the computer base.



15. Lift the display assembly off the computer.

### Replacing the Display Assembly

- 1. Follow the procedures in Before You Begin.
- 2. Place the display assembly in position and replace the two screws (one on each side) that secure the display assembly to the computer base.
- 3. Route the Mini-Card antenna cables through the routing guides.
- 4. Connect the antenna cables to the WWAN card, if applicable (see Replacing the WWAN Card).
- 5. Connect the antenna cables to the WLAN card, if applicable (see Replacing the WLAN Card).

- 6. Connect the display cable and the camera cable to the system board connectors.
- 7. Replace the I/O board (see Replacing the I/O Board).
- 8. Replace the palm rest bracket (see Replacing the Palm Rest Bracket).
- 9. Replace the memory module (see Replacing the Memory Module).
- 10. Replace the hard drive (see Replacing the Hard Drive).
- 11. Connect the speaker cable to the speaker cable connector on the I/O board (see Replacing the Speakers).
- 12. Replace the palm rest (see Replacing the Palm Rest).
- 13. Replace the keyboard (see Replacing the Keyboard).
- 14. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

### Hinge Caps

### **Removing the Hinge Caps**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the display assembly (see Removing the Display Assembly).
- 3. Press both sides of each hinge cap and lift the hinge caps out.



### **Replacing the Hinge Caps**

- 1. Follow the procedures in Before You Begin.
- 2. Place the hinge caps on the hinges and push them in.
- 3. Replace the display assembly (see Replacing the Display Assembly).
- CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

### **Display Bezel**

### **Removing the Display Bezel**

△ CAUTION: The display bezel is extremely fragile. Be careful when removing it to prevent damaging the bezel.

- 1. Follow the procedures in Before You Begin.
- 2. Remove the display assembly (see Removing the Display Assembly).
- 3. Remove the hinge caps (see Removing the Hinge Caps).
- 4. Remove the two rubber pads (one on either side) covering the screws on the display bezel.
- 5. Remove the two screws that secure the display bezel to the display back cover.
- 6. Using your fingertips, carefully pry up the inside edge of the display bezel.
- 7. Remove the display bezel.



1	display bezel	2	rubber pads (2)
3	screws (2)		

### **Replacing the Display Bezel**

- 1. Follow the procedures in Before You Begin.
- 2. Align the display bezel over the display panel, and gently snap into place.
- 3. Replace the two screws that secure the display bezel to the display back cover.
- 4. Replace the two rubber pads (one on either side) over the display bezel screws.
- 5. Replace the hinge caps (see Replacing the Hinge Caps).
- 6. Replace the display assembly (see Replacing the Display Assembly).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

### **Display Panel Brackets**

#### **Removing the Display Panel Brackets**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the display assembly (see Removing the Display Assembly).
- 3. Remove the hinge caps (see Removing the Hinge Caps).
- 4. Remove the display bezel (see Removing the Display Bezel).
- 5. Remove the four screws (two on each bracket) that secure the display panel brackets to the display back cover.
- 6. Lift the display panel brackets off the display panel.



#### **Replacing the Display Panel Brackets**

- 1. Follow the procedures in Before You Begin.
- 2. Replace the display panel brackets.
- 3. Replace the four screws (two on each bracket) that secure the display panel brackets to the display back cover.
- 4. Replace the display bezel (see Replacing the Display Bezel).
- 5. Replace the hinge caps (see Replacing the Hinge Caps).
- 6. Replace the display assembly (see Replacing the Display Assembly).

△ CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

# **Display Panel**

### **Removing the Display Panel**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the display assembly (see Removing the Display Assembly).
- 3. Remove the hinge caps (see Removing the Hinge Caps).
- 4. Remove the display bezel (see Removing the Display Bezel).
- 5. Remove the display panel brackets (see Removing the Display Panel Brackets).
- 6. Turn the display panel over, as shown in the illustration.



1 display panel
-----------------

7. Peel the pull-tab on the display cable and lift the pull-tab to disconnect the display cable from the display cable connector.



1	display cable connector	2	pull-tab
3	display back cover	4	display panel

8. Lift the display panel off the display back cover.

# **Replacing the Display Panel**

- 1. Follow the procedures in Before You Begin.
- 2. Connect the display cable to the display cable connector on the display panel.
- 3. Align the display panel with the display back cover.
- 4. Replace the display panel brackets (see <u>Replacing the Display Panel Brackets</u>).
- 5. Replace the display bezel (see Replacing the Display Bezel).
- 6. Replace the hinge caps (see Replacing the Hinge Caps).
- 7. Replace the display assembly (see Replacing the Display Assembly).

△ CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

#### Processor Fan Dell™ Inspiron™ 11 Service Manual

- Removing the Processor Fan.
- Replacing the Processor Fan
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

### **Removing the Processor Fan**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see <u>Removing the Battery</u>).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Disconnect the speaker cable from the speaker cable connector on the I/O board (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Remove the memory module (see Removing the Memory Module).
- 8. Remove the palm rest bracket (see Removing the Palm Rest Bracket).
- 9. Remove the screw that secures the processor fan to the computer base.
- 10. Disconnect the processor fan cable from the system board connector.



1	processor fan cable connector	2	processor fan
3	screw		

11. Lift the processor fan, along with the cable, off the system board.

### **Replacing the Processor Fan**

MOTE: This procedure assumes that you have already removed the processor fan and are ready to replace it.

- 1. Follow the procedures in Before You Begin.
- 2. Place the processor fan on the system board.
- 3. Replace the screw that secures the processor fan to the computer base.
- 4. Connect the processor fan cable to the system board connector.
- 5. Replace the palm rest bracket (see Replacing the Palm Rest Bracket).
- 6. Replace the memory module (see Replacing the Memory Module).
- 7. Replace the hard drive (see Replacing the Hard Drive).
- 8. Connect the speaker cable to the speaker cable connector on the I/O board (see Replacing the Speakers).
- 9. Replace the palm rest (see Replacing the Palm Rest).
- 10. Replace the keyboard (see Replacing the Keyboard).
- 11. Replace the battery (see <u>Replacing the Battery</u>).

# △ CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

# Hard Drive

Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

- Removing the Hard Drive
- Replacing the Hard Drive
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- WARNING: If you remove the hard drive from the computer when the drive is hot, do not touch the metal housing of the hard drive.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell is not covered by your warranty.
- CAUTION: To prevent data loss, turn off your computer (see Turning Off Your Computer) before removing the hard drive. Do not remove the hard drive while the computer is On or in Sleep state.
- △ CAUTION: Hard drives are extremely fragile. Exercise care when handling the hard drive.
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.
- MOTE: Dell does not guarantee compatibility or provide support for hard drives from sources other than Dell.

NOTE: If you are installing a hard drive from a source other than Dell, you need to install an operating system, drivers, and utilities on the new hard drive (see the *Dell Technology Guide*).

### **Removing the Hard Drive**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the three screws that secure the hard drive assembly to the computer base.
- 5. Pull the pull-tab on the hard drive bracket towards the right to disconnect the hard drive assembly from the interposer.



1	screws (3)	2	pull-tab
3	hard drive assembly		

CAUTION: When the hard drive is not in the computer, store it in protective antistatic packaging (see "Protecting Against Electrostatic Discharge" in the safety instructions that shipped with your computer).

6. Pull the pull-tab on the hard drive bracket to lift the hard drive assembly at an angle and out of the hard drive compartment as shown in the illustration.



i puir tab		1	pull-tab	2	hard drive assembly
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7. Remove the four screws that secure the hard drive bracket to the hard drive and remove the hard drive bracket.



1	screws (4)	2	hard drive bracket

# **Replacing the Hard Drive**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the new hard drive from its packaging. Save the original packaging for storing or shipping the hard drive.
- 3. Replace the hard drive bracket and the four screws that secure the hard drive bracket to the hard drive.
- 4. Place the hard drive assembly in the hard drive compartment.
- 5. Push the hard drive assembly towards the left until it is fully connected to the interposer.
- 6. Replace the three screws that secure the hard drive assembly to the computer base.
- 7. Replace the keyboard (see Replacing the Keyboard).
- 8. Replace the battery (see Replacing the Battery).
- CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.
- 9. Install the operating system for your computer, as needed. See "Restoring Your Operating System" in the Setup Guide.
- 10. Install the drivers and utilities for your computer, as needed. See "Reinstalling Drivers and Utilities" in the Dell Technology Guide.

# Keyboard

Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

- Removing the Keyboard
- Replacing the Keyboard
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

# Removing the Keyboard

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see <u>Removing the Battery</u>).
- 3. Remove the three screws that secure the keyboard to the computer base.



CAUTION: The keycaps on the keyboard are fragile, easily dislodged, and time-consuming to replace. Be careful when removing and handling the keyboard.

CAUTION: Be extremely careful when removing and handling the keyboard. Failure to do so could result in scratching the display panel.

- 4. Turn the computer over and open the display as far as possible.
- 5. Pry out the left side of the keyboard by using a plastic scribe. Gently release the left side of the keyboard and then the right side until it comes out from the palm rest bracket.



- 6. Ease the keyboard up until the keyboard cable connector is visible.
- 7. Without pulling hard on the keyboard, hold it towards the display.
- 8. Lift the connector latch and pull the pull-tab on the keyboard cable to disconnect the keyboard cable from the system board connector.
- 9. Lift the keyboard off the palm rest bracket.



1	keyboard	2	tabs (5)
3	keyboard cable	4	pull-tab
5	connector latch		

### **Replacing the Keyboard**

- 1. Follow the procedures in Before You Begin.
- 2. Slide the keyboard cable into the connector on the system board. Press down on the connector latch to secure the keyboard cable to the system board connector.
- 3. Align the tabs on the keyboard with the slots on the palm rest bracket and gently press the keyboard to snap it into place.
- 4. Turn the computer over and replace the three screws that secure the keyboard to the computer base.
- 5. Replace the battery (see Replacing the Battery).
- △ CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

# LED Board

# Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

Removing the LED Board

- Replacing the LED Board
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

# Removing the LED Board

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Disconnect the speaker cable from the speaker cable connector on the I/O board (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Remove the memory module (see Removing the Memory Module).
- 8. Remove the palm rest bracket (see Removing the Palm Rest Bracket).
- 9. Disconnect the LED board cable from the system board connector.
- 10. Remove the screw that secures the LED board to the computer base.
- 11. Lift the LED board off the computer base.



1	screw	2	LED board
3	system board connecto	or	

### **Replacing the LED Board**

- 1. Follow the procedures in Before You Begin.
- 2. Place the LED board on the computer base.

- 3. Replace the screw that secures the LED board to the computer base.
- 4. Connect the LED board cable to the system board connector.
- 5. Replace the palm rest bracket (see Replacing the Palm Rest Bracket).
- 6. Replace the memory module (see Replacing the Memory Module).
- 7. Replace the hard drive (see Replacing the Hard Drive).
- 8. Connect the speaker cable to the speaker cable connector on the I/O board (see Replacing the Speakers).
- 9. Replace the palm rest (see Replacing the Palm Rest).
- 10. Replace the keyboard (see Replacing the Keyboard).
- 11. Replace the battery (see Replacing the Battery).

△ CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

#### Memory Module Dell™ Inspiron™ 11 Service Manual

- Removing the Memory Module
- Replacing the Memory Module
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.
- NOTE: Memory modules purchased from Dell are covered under your computer warranty.

### Removing the Memory Module

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see <u>Removing the Battery</u>).
- 3. Remove the keyboard (see Removing the Keyboard).

△ CAUTION: To prevent damage to the memory module connector, do not use tools to spread the memory module securing clips.

- 4. Use your fingertips to carefully spread apart the securing clips on each end of the memory module connector until the memory module pops up.
- 5. Remove the memory module from the memory module connector.



1	memory module connector	2	securing clips (2)
3	memory module		

### **Replacing the Memory Module**

- 1. Follow the procedures in Before You Begin.
- 2. Align the notch in the memory module with the tab in the memory module connector.
- 3. Slide the memory module firmly into the slot at a 45-degree angle, and press the memory module down until it clicks into place. If you do not hear the click, remove the memory module and reinstall it.

**NOTE:** If the memory module is not installed properly, the computer may not boot.



1	memory module connector	2	tab
3	notch		

- 4. Replace the keyboard (see Replacing the Keyboard).
- 5. Replace the battery (see Replacing the Battery).
- △ CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.
- 6. Turn on the computer.

To confirm the amount of memory installed in the computer, click Start 9  $\rightarrow$  Help and Support  $\rightarrow$  Dell System Information.

#### Wireless Mini-Card(s) Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

- WWAN Card
- <u>WLAN Card</u>

MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

△ CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

MOTE: Dell does not guarantee compatibility or provide support for Mini-Cards from sources other than Dell.

If you ordered a wireless Mini-Card with your computer, the card is already installed.

Your computer supports two Mini-Card slots - one full size and one half size.

- 1 one half Mini-Card slot for WLAN
- 1 one full Mini-Card slot for WWAN

MOTE: Depending on the configuration of the computer when it was sold, the Mini-Card slot may not have a Mini-Card installed.

### WWAN Card

#### **Removing the WWAN Card**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Disconnect the antenna cables from the WWAN card.



5. Remove the screw that secures the WWAN card to the system board.

6. Lift the WWAN card out of the system board connector.



#### **Replacing the WWAN Card**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the new WWAN card from its packaging.

🛆 CAUTION: Use firm and even pressure to slide the card into place. If you use excessive force, you may damage the connector.

- 3. Insert the WWAN card connector at a 45-degree angle into the system board connector.
- 4. Press the other end of the WWAN card down on the system board.
- 5. Replace the screw that secures the WWAN card to the system board.
- 6. Connect the appropriate antenna cables to the WWAN card you are installing. The following table provides the antenna cable color scheme for the WWAN card supported by your computer.

Connectors on the Mini-Card	Antenna Cable Color Scheme
WWAN (2 antenna cables)	
Main WWAN (white triangle)	white with gray stripe
Auxiliary WWAN (black triangle)	black with gray stripe

- 7. Replace the keyboard (see Replacing the Keyboard).
- 8. Replace the battery (see Replacing the Battery).
- △ CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.
- 9. Install the drivers and utilities for your computer, as required. For more information, see the Dell Technology Guide.
- NOTE: If you are installing a communication card from a source other than Dell, you must install the appropriate drivers and utilities. For more generic driver information, see the *Dell Technology Guide*.

### WLAN Card

### Removing the WLAN Card

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see Removing the Battery).

- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Disconnect the speaker cable from the speaker cable connector on the I/O board (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Remove the memory module (see Removing the Memory Module).
- 8. Remove the palm rest bracket (see Removing the Palm Rest Bracket).
- 9. Disconnect the antenna cables from the WLAN card.



- 10. Remove the screw that secures the WLAN card to the system board.
- 11. Lift the WLAN card out of the system board connector.



 $\Delta$  CAUTION: When the Mini-Card is not in the computer, store it in protective antistatic packaging. For more information, see "Protecting Against Electrostatic Discharge" in the safety information that shipped with your computer.

### Replacing the WLAN Card

- 1. Follow the procedures in Before You Begin.
- 2. Remove the new WLAN card from its packaging.
- 🛆 CAUTION: Use firm and even pressure to slide the card into place. If you use excessive force, you may damage the connector.

- 3. Insert the WLAN card connector at a 45-degree angle into the system board connector.
- 4. Press the other end of the WLAN card down on the system board.
- 5. Replace the screw that secures the WLAN card to the system board.
- 6. Connect the appropriate antenna cables to the WLAN card you are installing. The following table provides the antenna cable color scheme for the WLAN card supported by your computer.

Connectors on the Mini-Card	Antenna Cable Color Scheme
WLAN (2 antenna cables)	
Main WLAN (white triangle)	white
Auxiliary WI AN (black triangle)	black

- 7. Replace the palm rest bracket (see Replacing the Palm Rest Bracket).
- 8. Replace the memory module (see Replacing the Memory Module).
- 9. Replace the hard drive (see Replacing the Hard Drive).
- 10. Connect the speaker cable to the speaker cable connector on the I/O board (see Replacing the Speakers).
- 11. Replace the palm rest (see Replacing the Palm Rest).
- 12. Replace the keyboard (see Replacing the Keyboard).
- 13. Replace the battery (see Replacing the Battery).
- △ CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

14. Install the drivers and utilities for your computer, as required. For more information, see the Dell Technology Guide.

NOTE: If you are installing a communication card from a source other than Dell, you must install the appropriate drivers and utilities. For more generic driver information, see the Dell Technology Guide.

# Palm Rest

Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

- Removing the Palm Rest
- Replacing the Palm Rest
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

# **Removing the Palm Rest**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the two screws that secure the palm rest to the computer base.

△ CAUTION: Carefully separate the palm rest from the palm rest bracket to avoid damage to the palm rest.



4. Turn the computer over and starting at the right side or left side of the palm rest, use your fingers or a flat-blade screwdriver to separate the palm rest from the palm rest bracket.



- 5. Turn the palm rest over the keyboard to access the touch pad cable connector.
- 6. Release the connector latch that secures the touch pad cable.
- 7. Pull the pull-tab on the touch pad cable to disconnect the touch pad cable from the touch pad cable connector.
- 8. Lift the palm rest off the computer.



1	touch pad cable connector	2	connector latch
3	pull-tab	4	touch pad cable
5	palm rest bracket		

# **Replacing the Palm Rest**

- 1. Follow the procedures in Before You Begin.
- 2. Slide the touch pad cable into the touch pad cable connector. Gently push back the connector latch to secure the touch pad cable to the touch pad cable connector.
- 3. Align the palm rest on the palm rest bracket and gently snap the palm rest into place.
- 4. Turn the computer over and replace the two screws that secure the palm rest to the computer base.
- 5. Replace the battery (see Replacing the Battery).

△ CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

#### Palm Rest Bracket Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

- Removing the Palm Rest Bracket
- Replacing the Palm Rest Bracket
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

### **Removing the Palm Rest Bracket**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Remove the speakers (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Turn the computer over and remove the four screws from the computer base.



- 8. Turn the computer top-side up, open the display, and remove the four screws that secure the palm rest bracket to the computer base.
- 9. Disconnect the power button cable from the system board connector.



1	power button cable	2	screws (4)
3	palm rest bracket		

10. Lift the palm rest bracket off the computer base.

# **Replacing the Palm Rest Bracket**

- 1. Follow the procedure in Before You Begin.
- 2. Place the palm rest bracket on the computer base.
- 3. Replace the four screws that secure the palm rest bracket to the computer base.
- 4. Connect the power button cable to the system board connector.
- 5. Turn the computer over and replace the four screws that secure the palm rest bracket to the computer base.
- 6. Replace the hard drive (see <u>Replacing the Hard Drive</u>).
- 7. Replace the speakers (see Replacing the Speakers).
- 8. Replace the palm rest (see Replacing the Palm Rest).
- 9. Replace the keyboard (see Replacing the Keyboard).
- 10. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

# Battery

# Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

- Removing the Battery
- <u>Replacing the Battery</u>
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, you must remove the battery from the battery bay before you begin working inside the computer.

# **Removing the Battery**

- 1. Follow the procedures in Before You Begin.
- 2. Turn the computer over.
- 3. Slide the battery lock latch and the battery release latch to the unlock position.
- 4. Pull the battery up and out of the battery bay.



1 50	attery release latch	2	battery
3 ba	battery lock latch		

### **Replacing the Battery**

- CAUTION: To avoid damage to the computer, use only the battery designed for this particular Dell computer. Do not use batteries designed for other Dell computers.
- 1. Follow the procedures in Before You Begin.
- 2. Align the slots on the battery with the tabs in the battery bay.
- 3. Push the battery in place till it snaps into place.
- 4. Slide the battery lock latch to the lock position.

#### Coin-Cell Battery Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

- Removing the Coin-Cell Battery
- Replacing the Coin-Cell Battery
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

### **Removing the Coin-Cell Battery**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Disconnect the speaker cable from the speaker cable connector on the I/O board (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Remove the memory module (see Removing the Memory Module).
- 8. Remove the palm rest bracket (see Removing the Palm Rest Bracket).
- 9. Remove the Bluetooth card (see Removing the Bluetooth Card).
- 10. Disconnect the coin-cell battery cable from the system board connector.
- 11. The coin-cell battery is glued to the system board. Using a plastic scribe pry the coin-cell battery from the system board.



2

1 coin-cell battery

system board connector

# **Replacing the Coin-Cell Battery**

- 1. Follow the procedures in Before You Begin.
- 2. Use the adhesive on the coin-cell battery and adhere it to the system board.

- 3. Connect the coin-cell battery cable to the system board connector.
- 4. Replace the Bluetooth card (see Replacing the Bluetooth Card).
- 5. Replace the palm rest bracket (see Replacing the Palm Rest Bracket).
- 6. Replace the memory module (see Replacing the Memory Module).
- 7. Replace the hard drive (see <u>Replacing the Hard Drive</u>).
- 8. Connect the speaker cable to the speaker cable connector on the I/O board (see Replacing the Speakers).
- 9. Replace the palm rest (see <u>Replacing the Palm Rest</u>).
- 10. Replace the keyboard (see Replacing the Keyboard).
- 11. Replace the battery (see Replacing the Battery).

△ CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

# I/O Board

# Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

- Removing the I/O Board
- Replacing the I/O Board
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

### Removing the I/O Board

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Disconnect the speaker cable from the speaker cable connector on the I/O board (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Remove the memory module (see Removing the Memory Module).
- 8. Remove the palm rest bracket (see Removing the Palm Rest Bracket).



1	I/O board cable	2	I/O board cable connector
3	screw	4	I/O board

- 9. Remove the screw that secures the I/O board to the computer base.
- 10. Disconnect the I/O board cable from the I/O board cable connector.
- 11. Lift the I/O board out of the computer base.

# Replacing the I/O Board

- 1. Follow the procedures in Before You Begin.
- 2. Align the connectors on the I/O board with the slots on the computer base.
- 3. Replace the screw that secures the I/O board to the computer base.
- 4. Connect the I/O board cable to the I/O board cable connector.
- 5. Replace the palm rest bracket (see Replacing the Palm Rest Bracket).
- 6. Replace the memory module (see Replacing the Memory Module).
- 7. Replace the hard drive (see Replacing the Hard Drive).
- 8. Connect the speaker cable to the speaker cable connector on the I/O board (see Replacing the Speakers).
- 9. Replace the palm rest (see Replacing the Palm Rest).
- 10. Replace the keyboard (see Replacing the Keyboard).
- 11. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

# Speakers

Dell<sup>™</sup> Inspiron<sup>™</sup> 11 Service Manual

- Removing the Speakers
- Replacing the Speakers
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).
- CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

# **Removing the Speakers**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see <u>Removing the Battery</u>).
- 3. Remove the palm rest (see Removing the Palm Rest).
- 4. Disconnect the speaker cable from the speaker cable connector on the I/O board.
- 5. Make note of the cable routing and carefully dislodge the speaker cables from the routing guides.
- 6. Remove the four screws (two on each side) that secure the speakers to the palm rest bracket.



1	screws (4)	2	palm rest bracket
3	speakers (2)	4	speaker cable connector

7. Lift the speakers off the palm rest bracket.

# **Replacing the Speakers**

- 1. Follow the procedures in Before You Begin.
- 2. Place the speakers on the palm rest bracket.
- 3. Replace the four screws (two on each side) that secure the speakers to the palm rest bracket.
- 4. Route the speaker cable through the routing guides.
- 5. Connect the speaker cable to the speaker cable connector on the I/O board.

- 6. Replace the palm rest (see Replacing the Palm Rest).
- 7. Replace the battery (see Replacing the Battery).

 $\Delta$  CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

#### System Board Dell™ Inspiron™ 11 Service Manual

- Removing the System Board
- Replacing the System Board
- Setting the Keyboard Matrix
- MARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory\_compliance.
- CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.
- △ CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

△ CAUTION: To help prevent damage to the system board, remove the main battery (see <u>Removing the Battery</u>) before working inside the computer.

### **Removing the System Board**

- 1. Follow the procedures in Before You Begin.
- 2. Remove the battery (see Removing the Battery).
- 3. Remove the keyboard (see Removing the Keyboard).
- 4. Remove the palm rest (see Removing the Palm Rest).
- 5. Disconnect the speaker cable from the speaker cable connector on the I/O board (see Removing the Speakers).
- 6. Remove the hard drive (see Removing the Hard Drive).
- 7. Remove the memory module (see Removing the Memory Module).
- 8. Remove the palm rest bracket (see Removing the Palm Rest Bracket).
- 9. Remove the Bluetooth card (see Removing the Bluetooth Card).
- 10. Remove the WWAN card, if applicable (see Removing the WWAN Card).
- 11. Remove the WLAN card, if applicable (see Removing the WLAN Card).
- 12. Remove the processor heat sink (see Removing the Processor Heat Sink).
- 13. Remove the memory and processor board (see Removing the Memory and Processor Board).
- 14. Disconnect the display cable, camera cable, processor fan cable, AC adapter connector cable, I/O board cable, and the LED board cable from the system board connectors.



1	camera cable connector	2	display cable connector
3	processor fan cable connector	4	AC adapter connector cable
5	I/O board cable connector	6	LED board cable connector

- 15. Remove the processor fan (see <u>Removing the Processor Fan</u>).
- 16. Remove the coin-cell battery (see Removing the Coin-Cell Battery).
- 17. Remove the three screws that secure the system board to the computer base.
- 18. Lift the system board off the computer base.



# Replacing the System Board

- 1. Follow the procedures in Before You Begin.
- 2. Place the system board on the computer base.
- 3. Replace the three screws that secure the system board to the computer base.
- 4. Replace the processor fan (see Replacing the Processor Fan).

- 5. Connect the display cable, camera cable, processor fan cable, AC adapter connector cable, I/O board cable, and the LED board cable to the system board connectors.
- 6. Replace the WLAN card, if applicable (see Replacing the WLAN Card).
- 7. Replace the WWAN card, if applicable (see Replacing the WWAN Card).
- 8. Replace the memory and processor board (see Replacing the Memory and Processor Board).
- 9. Replace the processor heat sink (see Replacing the Processor Heat Sink).
- 10. Replace the coin-cell battery (see Replacing the Coin-Cell Battery).
- 11. Replace the Bluetooth card (see Replacing the Bluetooth Card).
- 12. Replace the palm rest bracket (see Replacing the Palm Rest Bracket).
- 13. Replace the memory module (see Replacing the Memory Module).
- 14. Replace the hard drive (see Replacing the Hard Drive).
- 15. Connect the speaker cable to the speaker cable connector on the I/O board (see Replacing the Speakers).
- 16. Replace the palm rest (see Replacing the Palm Rest).
- 17. Replace the keyboard (see Replacing the Keyboard).
- 18. Replace the battery (see Replacing the Battery).
- CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.
- 19. Turn on the computer.
- 🖉 NOTE: After you have replaced the system board, enter the computer's Service Tag into the BIOS of the replacement system board.
- 20. Enter the Service Tag. If you need help to enter the service tag, contact Dell, see "Contacting Dell" in the Setup Guide.
- 21. The keyboard matrix may change after you replace the system board. To set the keyboard matrix according to your country, see Setting the Keyboard Matrix.

### Setting the Keyboard Matrix

- 1. Turn off your computer (see Turning Off Your Computer).
- 2. If your computer is connected to the AC adapter, disconnect the AC adapter from the computer.
- 3. Press and hold the following key combination for the desired keyboard matrix:
  - All countries except Brazil: <Fn><S>
  - o Brazil only: <Fn><E>
- 4. Connect the AC adapter to the computer and then plug it into a wall outlet or surge protector.
- 5. Release the key combination.

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**NOTE:** A NOTE indicates important information that helps you make better use of your computer.

🛆 CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

MARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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