Dell™ Inspiron™ 1210 Service Manual

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Replacing the Palm Rest Replacing the Display

Replacing the Internal Card With Bluetooth® Wireless Technology

Replacing the Hard Drive

Replacing the Power Button Board

Replacing the Speaker Communication Cards

Replacing the Power Cable

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Flashing the BIOS

Notes, Notices, and Cautions



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



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



▲ CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

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Model PP40S

September 2008 Rev. A00

Before You Begin

Dell™ Inspiron™ 1210 Service Manual

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

This section 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 <u>Turning Off Your Computer</u> and <u>Before Working Inside Your Computer</u>
- 1 You have read the safety information 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
- Plastic scribe
- 1 Flash BIOS update program CD

Turning Off Your Computer

NOTICE: 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:

Windows[®] Vista:

Click Start , click the arrow , and then click Shut Down.

Ubuntu[®] Dell Desktop:

Click → Quit → Shut down.

Ubuntu[®] Classic Desktop:

Click → Shut down.

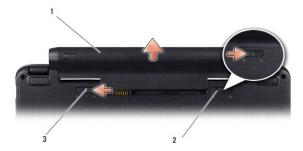
Ensure that the computer and all attached devices are turned off. If your computer and attached devices did not automatically turn off when you shut down your operating system, press and hold the power button until the computer turns off.

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.

- CAUTION: 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.
- NOTICE: 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.
- NOTICE: 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.
- NOTICE: 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.
- NOTICE: 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.
- NOTICE: 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 3-in-1 memory card reader.
- 5. Disconnect your computer and all attached devices from their electrical outlets.
- 6. Close the display and turn the computer over on a flat work surface.
- NOTICE: To avoid damaging the system board, you must remove the main battery before you service the computer.
- NOTICE: 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.
- 7. Remove the main battery:
 - a. Unlock the battery by sliding the battery-lock latch towards the outer edge.
 - b. Slide the battery-bay release latch and hold it.
 - c. Remove the battery from the battery bay.



1	battery	2	battery-lock latch
3	battery-bay release latch		

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™ 1210 Service Manual

- Flashing the BIOS From a CD
- Flashing the BIOS in Ubuntu

If a BIOS-update program CD is provided with the new system board, flash the BIOS from the CD. If you do not have a BIOS-update program CD, flash the BIOS from the hard drive.



NOTE: Your computer does not ship with an external optical drive. Use an external optical drive or any external storage device for the procedures that involve discs.

Flashing the BIOS From a CD

- 1. Ensure that the AC adapter is plugged in and that the main battery is installed properly.
- MOTE: If you use a BIOS-update program CD to flash the BIOS, set up the computer to boot from a CD before inserting the CD.
- 2. Insert the BIOS-update program CD, and restart the computer.

Follow the instructions that appear on the screen. The computer continues to boot and updates the new BIOS. When the flash update is complete, the computer will automatically reboot.

- 3. Press <F2> during POST to enter the system setup program.
- 4. Press <F9> to reset the computer defaults.
- 5. Press <Esc>, select Save changes and reboot, and press <Enter> to save configuration changes.
- 6. Remove the BIOS-update program CD from the drive and restart the computer.

Flashing the BIOS From the Hard Drive

- 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 Download Now to download the file
- 5. If the Export Compliance Disclaimer window appears, click Yes, I Accept this Agreement.

The File Download window appears.

6. Click Save this program to disk and then click OK.

The Save In window appears.

7. Click the down arrow to view the Save In menu, select Desktop, and then click Save.

The file downloads to your desktop.

8. 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.

9. Double-click the file icon on the desktop and follow the instructions on the screen.

Flashing the BIOS in Ubuntu

- 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.
- Select →Places→Documents.
- 4. Create a new folder and name it BIOS.
- 5. Locate the latest BIOS update file for your computer at support.dell.com.
- 6. Click **Download Now** to download the file.
- 7. If the Export Compliance Disclaimer window appears, click Yes, I Accept this Agreement.

The File Download window appears.

8. Click Save this program to disk and then click OK.

The Save In window appears.

- 9. Click the down arrow to view the Save In menu, select Documents → BIOS, and then click Save.
- 10. 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.

- 11. Open the terminal command line application and proceed as follows:
 - a. Type sudo -s
 - b. Type your password
 - c. Type cd Documents
 - d. Type cd BIOS
 - e. Type ./1210a00

 ${\tt flash \ start...} \ {\tt string \ appears}.$

The computer will restart automatically once the BIOS flash is complete.

Replacing the Internal Card With Bluetooth® Wireless Technology Dell™ Inspiron™ 1210 Service Manual

CAUTION: 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.

NOTICE: 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 the back of the computer).

If you ordered a card with Bluetooth wireless technology with your computer, it is already installed.

- 1. Follow the instructions in Before You Begin.
- 2. Remove the palm rest. See Replacing the Palm Rest.
- 3. Turn the palm rest over.



1	bluetooth card cable	2	bluetooth card
3	securing tabs		

- 4. Pry the card out of the securing tabs that hold the card to the palm rest.
- 5. Lift the card out of the palm rest.
- 6. To replace the card, snap the card into its place on the palm rest.
- 7. Replace the palm rest. See Replacing the Palm Rest.
- 8. Slide the battery into the battery bay, until it clicks in place and slide the battery-lock latch towards the lock position.

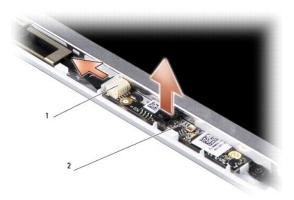
Replacing the Camera

Dell™ Inspiron™ 1210 Service Manual

CAUTION: 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.

NOTICE: 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 the back of the computer).

- 1. Follow the instructions in Before You Begin.
- 2. Remove the display assembly. See Follow the instructions in "Before You Begin" on page 9.
- 3. Remove the display bezel. See Replacing the Display Bezel.
- 4. Remove the display panel. See Replacing the Display Panel.



1 2-in1 camera and LVDS cable connector 2 camera board
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- 5. Remove the camera board out of the protrusions that secure it firmly to the display frame.
- 6. Disconnect the 2-in-1 camera and LVDS cable from its connector on the display frame.
- 8. To replace the camera, connect 2-in-1 camera and LVDS cable to its connector.
- 9. Align the camera board with the protrusions on the display frame.
- 10. Press the board gently until it sits firmly in the display frame.
- 11. Replace the display panel. See Replacing the Display Panel.
- 12. Replace the display bezel. See Replacing the Display Bezel.
- 13. Replace the display assembly. See Follow the instructions in "Before You Begin" on page 9.
- 14. Slide the battery into the battery bay, until it clicks into place.

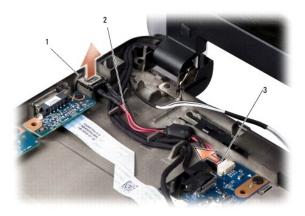
Replacing the Power Cable Dell™ Inspiron™ 1210 Service Manual

CAUTION: 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.



NOTICE: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching a connector on the back panel of

- 1. Follow the procedures in Before You Begin.
- 2. Remove the palm rest. See Replacing the Palm Rest.
- 3. Remove the power cable from the power cable connector on the system board.



1	AC adapter port	2	power cable
3	power cable connector		

- 4. Lift the power unit up and out of the securing tabs away from the base of the computer.
- 5. To replace the power cable, gently press the power unit into the tabs on the base of the computer so that the unit sits firmly.
- 6. Attach the power cable to the power cable connector on the system board.
- 7. Replace the palm rest. See Replacing the Palm Rest.
- 8. Slide the battery into the battery bay, until it clicks in place and slide the battery-lock latch towards the lock position.

Replacing the Coin-Cell Battery Dell™ Inspiron™ 1210 Service Manual

AUTION: 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.

- NOTICE: 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 the back of the computer).
- NOTICE: To help prevent damage to the system board, you must remove the battery from the battery bay before you begin working inside the
- 1. Follow the procedures in Before You Begin.
- 2. Remove the palm rest. See Replacing the Palm Rest.
- 3. The battery is glued to the computer, use a plastic scribe to pry the coin- cell battery from the slot.
- 4. Disconnect the coin-cell battery cable from the system board connector.



_		_	
1	coin-cell battery	2	coin-cell battery cable connector

- 5. To replace the coin-cell battery, connect the coin-cell battery cable to the system board connector.
- 6. Peel off the adhesive on the coin-cell battery and adhere it to the system board.
- 7. Replace the palm rest. See Replacing the Palm Rest.
- 8. Slide the battery into the battery bay, until it clicks into place and slide the battery-lock latch towards the lock position.

Replacing the 2-in-1 Processor and Memory Board Dell™ Inspiron™ 1210 Service Manual



CAUTION: 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.

- NOTICE: 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 the back of the computer).
- 1. Follow the instructions in Before You Begin.
- 2. Remove the palm rest. See Replacing the Palm Rest.
- NOTICE: When the 2-in-1 memory and processor board 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).
- NOTE: The thermal pads may stick to the bottom of the palm rest. Remove the thermal pads from the bottom of the palm rest.



1	M2x4-mm screw (2)	2	thermal pads (2)
3	tab in the connector slot	4	securing clips (2)

3. Remove the two thermal pads on the processor.



- 4. Place the thermal pads on the new 2-in-1 memory and processor board.
- 5. Remove the two M2x4-mm screws that secure the 2-in-1 memory and processor board.
- 6. Use your fingertips to carefully spread apart the securing clips on either side of 2-in-1 memory and processor board connector until the board pops up.

- 7. Lift the 2-in-1 memory and processor board out of its system board connector.
- 8. To replace the 2-in-1 memory and processor board, align the notch in the 2-in-1 memory and processor edge connector with the tab in the connector slot.
- 9. Slide the 2-in-1 memory and processor board firmly into the slot at a 45- degree angle, and gently press the 2-in-1 memory and processor board down until it clicks into place. If you do not hear the click, remove the module and reinstall it.
- 10. Replace the two M2x4-mm screws that secure the processor.
- 11. Replace the palm rest. See Replacing the Palm Rest.
- 12. Slide the battery into the battery bay, until it clicks into place and slide the battery-lock latch towards the lock position.
- NOTICE: 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.
- 13. Update the BIOS using a flash BIOS-update program CD. See <u>Flashing the BIOS</u>".

Processor Heat Sink

Dell™ Inspiron™ 1210 Service Manual

- Removing the Processor Heat Sink



▲ CAUTION: Before working inside your computer, follow the safety instructions shipped with your computer.

NOTICE: 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 the back of the computer).

Removing the Processor Heat Sink

- 1. Follow the instructions in Before You Begin.
- 2. Remove the module cover (see Base Cover).
- 3. Loosen the five captive screws that secure the processor heat sink to the system board.



l	1	processor heat sink	2	captive screws (5)
ı	3	fan connector		

- 4. Disconnect the fan connector from the system board connector
- **NOTE:** The fan is a part of the processor heat sink.
- 5. Lift the processor heat sink out of the computer by sliding it away from the bracket.

Replacing the Processor Heat Sink

- NOTE: The original thermal pad can be reused if the original processor and processor heat sink are reinstalled together. If either the processor or the processor heat sink is replaced, use the thermal pad provided in the kit to ensure that thermal conductivity is achieved.
- MOTE: This procedure assumes that you have already removed the processor heat sink and are ready to replace it.
- 1. Peel the backing off the thermal pad and adhere the pad to the portion of the processor heat sink that covers the processor.
- 2. Slide the processor heat sink under the bracket and align the five captive screws with the screw holes on the system board.
- 3. Tighten the five captive screws.
- 4. Connect the fan connector to the system board connector.
- 5. Replace the module cover (see Base Cover).
- 6. Slide the battery into the battery bay, until it clicks into place.

Replacing the Display

Dell™ Inspiron™ 1210 Service Manual

- Replacing the Display Assembly
- Replacing the Display Panel

CAUTION: 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.

NOTICE: 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 the back of the computer).

NOTICE: To help prevent damage to the system board, you must remove the battery from the battery bay before you begin working inside the

Replacing the Display Assembly

- 1. Follow the instructions in "Before You Begin" on page 9.
- 2. Remove the palm rest. See Replacing the Palm Rest.

MOTE: Note how the display cable and the 2-in-1 camera and LVDS cable have been connected on the system board.



	1	display	2	M2.5 x 3-mm screws (4)
Γ	3	2-in-1 cable: camera end	4	2-in-1 cable: LVDS end

- 3. Pull the display cable tab to disconnect the display cable from the system board connector.
- 4. Disconnect the 2-in-1 camera and LVDS cable from the system board connector.
- 5. Remove the four M2.5 x 3-mm screws from the display hinges.
- 6. Lift and remove the display assembly from the computer base.

- 7. To replace the display assembly, route and connect the display cable to the connector on the system board.
- 8. Route and connect the 2-in-1 camera and LVDS cable to the connector on the system board.
- 9. Replace the four M2.5 \times 3-mm screws on each side of the display assembly.
- 10. Replace the palm rest. See Replacing the Palm Rest.
- 11. Slide the battery into the battery bay, until it clicks in place and slide the battery-lock latch towards the lock position.

Replacing the Display Bezel

- NOTICE: The display bezel is extremely fragile. Be careful when removing it to prevent damaging the bezel.
- 1. Remove the display assembly (see Follow the instructions in "Before You Begin" on page 9.).



1	M2.5 x 5-mm screws (2)	2	rubber bumpers(2)
3	display bezel		

- 2. Remove the two rubber bumpers at the bottom of the display bezel on either side.
- 3. Remove the two M2.5 x 5-mm screws at the bottom of the display bezel on either side.



- 4. Using your fingertips, carefully pry up the inside edge of the display bezel.
- 5. Remove the display bezel.
- 6. To replace the display bezel, align the display bezel over the display panel, and gently snap into place.
- 7. Replace the two M2.5 x 5-mm screws at the bottom of the display bezel on either side.

- 8. Replace the two rubber bumpers at the bottom of the display bezel on either side.
- 9. Replace the display assembly (see Follow the instructions in "Before You Begin" on page 9.).

Replacing the Display Panel

- 1. Remove the display assembly (see Follow the instructions in "Before You Begin" on page 9.).
- 2. Remove the display bezel (see Replacing the Display Bezel).



1	M2.5 x 3-mm screws (6)	2	inverter board connectors (2)
3	connector on the camera board		

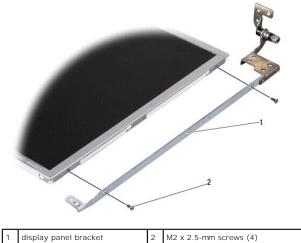
3. Remove the six M2.5 x 3-mm screws securing the display panel.



- 4. Disconnect the cables from the connectors on either side of the inverter board and the 2-in-1 camera and LVDS cable from the connector on the camera board.
- 5. Remove the display panel.



6. Remove the 2-in-1 camera and LVDS cable.



- 1 display panel bracket 2 M2 x 2.5-mm screws (4)
- 8. To replace the display panel, align the display panel bracket with the display panel.
- 9. Replace the four M2 x 2.5-mm screws that secure the display panel brackets to each side of the display panel.

7. Remove the four M2 x 2.5-mm screws (two on each side) that secure the display panel bracket to the display panel.

- 10. Replace the 2-in-1 camera and LVDS cable.
- 11. Align the display panel with the display panel frame and replace the six M2.5 x 3-mm screws.
- 12. Route the cables back through their routing channels.
- 13. Replace the cables from the connectors on either side of the inverter board and the 2-in-1 camera and LVDS cable from the connector on the camera board.
- 14. Replace the display bezel (see Replacing the Display Bezel).
- 15. Replace the display assembly (see Follow the instructions in "Before You Begin" on page 9.).

Replacing the Hard Drive

Dell™ Inspiron™ 1210 Service Manual

CAUTION: 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.

ACAUTION: If you remove the hard drive from the computer when the drive is hot, do not touch the metal housing of the hard drive.

NOTICE: To prevent data loss, turn off your computer (see <u>Turning Off Your Computer</u>) before removing the hard drive. Do not remove the hard drive while the computer is on or in Sleep state.

NOTICE: Hard drives are extremely fragile. Exercise care when handling the hard drive.

NOTE: 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

- 1. Follow the procedures in Before You Begin.
- 2. Remove the palm rest. See Replacing the Palm Rest.

NOTICE: 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).



1	hard-drive cable	2	hard-drive system board connector
3	hard drive	4	hard-drive compartment
5	hard-drive cable connector		

- 3. Remove the hard drive cable from the hard-drive system board connector.
- 4. Lift the hard drive out of the hard drive compartment.



5. Detach the hard drive cable from the hard drive cable connector.



- 6. Remove the hard drive from the rubber case.
- 7. To replace the hard drive, replace the rubber case onto the hard drive.
- 8. Attach the hard drive cable to the hard drive cable connector.
- 9. Place the hard drive in the hard drive compartment.
- 10. Attach the hard drive cable to the hard-drive system board connector.
- 11. Replace the palm rest. See Replacing the Palm Rest.
- 12. Slide the battery into the battery bay, until it clicks into place and slide the battery-lock latch towards the lock position.
- 13. Install the operating system for your computer, as needed. See "Restoring Your Operating System" in your computer Setup Guide or Ubuntu Quick Start Guide.
- 14. Install the drivers and utilities for your computer, as needed. See "Reinstalling Drivers and Utilities" in your Dell Technology Guide.

Replacing the Hinge Cover Dell™ Inspiron™ 1210 Service Manual



AUTION: 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.

NOTICE: 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 the back of the computer).

NOTICE: To help prevent damage to the system board, you must remove the battery from the battery bay before you begin working inside the computer.

1. Follow the procedures in Before You Begin.



1 hinge cover 2 securing tabs

- 2. Open the display as far as possible.
- 3. Pry out the hinge cover from side to side.
- 4. Remove the hinge cover.
- 5. To replace the hinge cover, align the tabs on the hinge cover to the top of the keyboard and press the hinge cover back in place.
- 6. Slide the battery into the battery bay, until it clicks in place and slide the battery-lock latch towards the lock position.

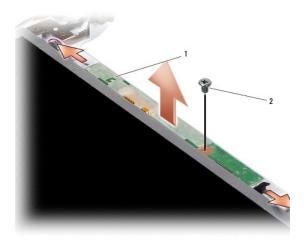
Replacing the Inverter Board

Dell™ Inspiron™ 1210 Service Manual

CAUTION: 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.

NOTICE: 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 the back of the computer).

- 1. Follow the instructions in Before You Begin.
- 2. Remove the display assembly. See Follow the instructions in "Before You Begin" on page 9.
- 3. Remove the display bezel. See Replacing the Display Bezel.
- 4. Remove the display panel. See Replacing the Display Panel.



1	inverter board	2	screw

- 5. Remove the screw that secures the inverter board firmly to the display frame.
- 6. Remove the inverter board.
- 7. To replace the inverter board, align the inverter board with the protrusion on the display frame.
- 8. Replace the screw that secures the inverter board firmly to the display frame.
- 9. Replace the display panel. See Replacing the Display Panel.
- 10. Replace the display bezel. See Replacing the Display Bezel.
- 11. Replace the display assembly. See Follow the instructions in "Before You Begin" on page 9.
- 12. Slide the battery into the battery bay, until it clicks in place and slide the battery-lock latch towards the lock position.

Replacing the Keyboard

Dell™ Inspiron™ 1210 Service Manual

- CAUTION: 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.
- NOTICE: 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 the back of the computer).
- NOTICE: To help prevent damage to the system board, you must remove the battery from the battery bay before you begin working inside the
- 1. Follow the procedures in Before You Begin.
- 2. Remove the hinge cover. See Replacing the Hinge Cover.
- 3. Remove the two M2 x 4-mm screws at the top of the keyboard.
- NOTICE: The keycaps on the keyboard are fragile, easily dislodged, and time-consuming to replace. Be careful when removing and handling the keyboard.
- NOTICE: Be extremely careful when removing and handling the keyboard. Failure to do so could result in scratching the display panel.
- 4. Carefully slide the keyboard out of the computer and turn it over as shown in the illustration. Do not pull hard on the keyboard.



1	M2 x 4-mm screws (2)	2	keyboard
3	keyboard tabs (4)	4	connector latch

- 5. Release the connector latch that secures the keyboard cable to the connector on the system board and remove the cable.
- 6. Lift the keyboard away from the system.
- NOTICE: The keycaps on the keyboard are fragile, easily dislodged, and time-consuming to replace. Be careful when removing and handling the keyboard.
- 7. To replace the keyboard, slide the keyboard cable into the connector on the system board and pull down on the connector latch that secures the keyboard cable to the system board.
- 8. Align the four tabs along the bottom of the keyboard and slide the keyboard under the palm rest.
- 9. Replace the two M2 x 4-mm screws at the top of the keyboard.
- 10. Replace the hinge cover. See Replacing the Hinge Cover.
- 11. Slide the battery into the battery bay, until it clicks in place and slide the battery-lock latch towards the lock position.

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Memory Module Dell™ Inspiron™ 1210 Service Manual

- Removing the Memory Module(s)



CAUTION: Before you begin any of the procedures in this section, follow the safety instructions shipped with your computer.

NOTICE: 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 the back of the computer).

You can increase your computer memory by installing memory modules on the system board. See "Specifications" in your Setup Guide for information on the memory supported by your computer. Install only memory modules that are intended for your computer.

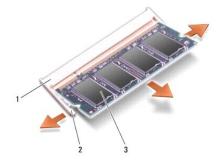
NOTE: Memory modules purchased from Dell are covered under your computer warranty.

Your computer has two user-accessible SODIMM sockets that can be accessed from the bottom of the computer.

NOTICE: If you need to install memory modules in both connectors, first install a memory module in the connector located at the bottom of the computer (DIMM 1) before you install a module in the connector directly above it (DIMM 2).

Removing the Memory Module(s)

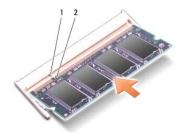
- **NOTICE:** If a memory module is installed in the DIMM 2 connector, remove it prior to removing the memory module from the DIMM 1 connector. Failure to do so could result in damaging both memory modules.
- 1. Follow the procedures in Before You Begin.
- 2. Remove the module cover (see Base Cover).
- NOTICE: To prevent damage to the memory module connector, do not use tools to spread the memory module securing clips.
- 3. Use your fingertips to carefully spread apart the securing clips on each end of the memory module connector until the module pops up.
- 4. Remove the module from the connector.



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

Replacing the Memory Module(s)

- 1. Align the notch in the module edge connector with the tab in the connector slot.
- 2. Slide the module firmly into the slot at a 45-degree angle, and rotate the module down until it clicks into place. If the module does not click into place, remove the module and reinstall it.
 - NOTE: If the memory module is not installed properly, the computer may not boot.



1	tab	2	notch

- 3. Replace the module cover (see Base Cover).
- 4. Slide the battery into the battery bay, until it clicks into place.
- 5. Turn on the computer.

As the computer boots, it detects the additional memory and automatically updates the system configuration information.

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

Communication Cards

Dell™ Inspiron™ 1210 Service Manual

- Subscriber Identity Module

Subscriber Identity Module

Subscriber Identity Modules (SIM) identify users uniquely through an International Mobile Subscriber Identity.

CAUTION: 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.

Installing the SIM

- 1. Follow the instructions in Before You Begin.
- 2. In the battery bay, slide the SIM into the compartment.



1 1	SIM	2	hattery hay
	JIIVI	-	Dattery bay

Removing the SIM

Press the SIM into the slot to release it. When it is partially ejected, remove the SIM from the battery bay.

Wireless Mini-Cards

CAUTION: 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.



NOTICE: To help prevent damage to the system board, you must remove the battery from the battery bay before you begin working inside the computer.



NOTE: 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:

1 Two Full Mini-Card slots - for WLAN and Mobile Broadband or WWAN



MOTE: Depending on the configuration of the computer when it was sold, the Mini-Card slots may not have Mini-Cards installed in them.

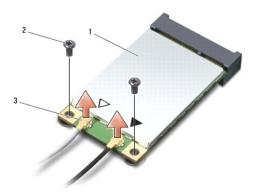
Your computer supports two types of wireless Mini-Cards:

- 1 Wireless Local Area Network (WLAN)
- 1 Mobile Broadband or Wireless Wide Area Network (WWAN)

Replacing the Mini-Card

1. Follow the instructions in Before You Begin.

2. Remove the palm rest. See Replacing the Palm Rest.



1	Mini-Card	2	securing screw (2)
3	antenna cable connector (2)		

- 3. Disconnect the antenna cables from the Mini-Card.
- 4. Release the Mini-Card by removing the securing screws.
- 5. Lift the Mini-Card out of its system board connector.



- NOTICE: When the Mini-Card is not in the computer, store it in protective antistatic packaging. See the information on protection against electrostatic discharge in the safety information that shipped with your computer.
- NOTICE: The connectors are keyed to ensure correct insertion. If you feel resistance, check the connectors on the card and on the system board, and realign the card.
- NOTICE: To avoid damage to the Mini-Card, never place cables under the card.
- 6. To replace the Mini-Card, remove the new Mini-Card from its packing.
- NOTICE: Use firm and even pressure to slide the card into place. If you use excessive force, you may damage the connector.
- 7. Insert the Mini-Card at a 45-degree angle into the appropriate system board connector. For example, the WLAN card connector is labeled WLAN and so on.
- 8. Press the other end of the WLAN card down into the slot on the system board and replace the two securing screws.
- 9. Connect the appropriate antenna cables to the Mini-Card you are installing. The following table provides the antenna cable color scheme for each Mini-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
WLAN (2 or 3 antenna cables)	
Main WLAN (white triangle)	white
Auxiliary WLAN (black triangle)	black

- 10. Secure unused antenna cables in the protective mylar sleeve.
- 11. Replace the palm rest. See Replacing the Palm Rest.
- 12. Slide the battery into the battery bay, until it clicks in place and slide the battery-lock latch to the lock position.
- 13. 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 information, see the Dell Technology Guide.

Optical Drive

Dell™ Inspiron™ 1210 Service Manual

- Removing the Optical Drive



⚠ CAUTION: Before performing the following procedures, follow the safety instructions shipped with your computer.

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

Removing the Optical Drive

- 1. Follow the procedures in Before You Begin.
- 2. Remove the display assembly (see Replacing the Display).
- 3. Remove the keyboard (see Replacing the Keyboard).
- 4. Remove the palm rest (see Replacing the Palm Rest).
- 5. Remove the four M2 x 3-mm screws that secure the optical drive to the computer base.



1	M2 x 3-mm screws (4)	2	optical drive

- 6. Lift the optical drive out of the computer base.
- 7. Pull the connector away from the back of the optical drive.

Replacing the Optical Drive

- 1. Attach the connector to the back of the optical drive.
- 2. Replace the optical drive and the four M2 x 3-mm screws that secure the optical drive to the computer base.
- 3. Replace the palm rest (see Replacing the Palm Rest).
- 4. Replace the keyboard (see Replacing the Keyboard).
- 5. Replace the display assembly (see Replacing the Display).
- 6. Slide the battery into the battery bay, until it clicks into place.

Replacing the Palm Rest

Dell™ Inspiron™ 1210 Service Manual



CAUTION: 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.

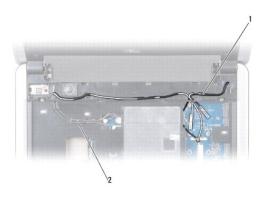


NOTICE: When you disconnect a cable, pull on its connector or on its pull-tab, not on the cable itself. Some cables have connectors with locking tabs; if you are disconnecting this type of cable, press in on the locking tabs before you disconnect the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before you connect a cable, ensure that both connectors are correctly oriented and aligned.

- 1. Follow the instructions in Before You Begin.
- 2. Remove the hinge cover. See Follow the procedures in "Before You Begin" on page 9.
- 3. Remove the keyboard. See Replacing the Keyboard.

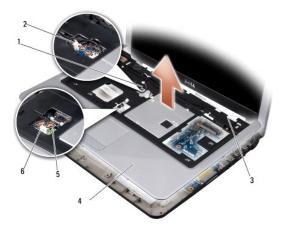


- 4. Loosen the 16 M2.5x 5-mm screws on the base cover.
- 5. Disconnect the antenna cables from the Mini-Card(s).



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Ŀ	1	antenna cables (2)	2	display cable

6. Make note of the cable routing and carefully dislodge the antenna cables and the display cable from their routing guides. Pull the cables away, so that they are clear of the palm rest.



1	speaker cable	2	power button board cable
3	antenna cables (2)	4	palm rest
5	touch pad cable	6	bluetooth card cable

- 7. Disconnect the Bluetooth card cable, touch pad cable, the power button board cable, and speaker cable from the respective system board connectors.
- NOTICE: Carefully separate the palm rest from the computer base to avoid damage to the palm rest.
- 8. Starting at the top of the palm rest, use your fingers to separate the palm rest from the computer base by lifting the inside of the palm rest while pushing in on the outside.
- 9. To replace the palm rest, route the antenna cables and display cable along the routing guides.
- 10. Connect the antenna cables to the Mini-Card.
- 11. Connect the Bluetooth card cable, touch pad cable, the power button cable, and speaker cable to the respective system board connectors.
- 12. Align the palm rest with the computer base and gently snap it into place.
- 13. Turn the computer over and replace the 16 M2.5x 5-mm screws on the computer base.
- 14. Replace the keyboard. See Replacing the Keyboard.
- 15. Replace the hinge cover. See Follow the procedures in "Before You Begin" on page 9.
- 16. Slide the battery into the battery bay, until it clicks in place and slide the battery-lock latch towards the lock position.

Replacing the Power Button Board Dell™ Inspiron™ 1210 Service Manual

CAUTION: 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.



NOTICE: 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 the back of the computer).

- 1. Follow the instructions in <u>Before You Begin</u>.
- 2. Remove the palm rest. See Replacing the Palm Rest.



	1	M2.5x3-mm screw	2	power button board
ı	3	power button cable		

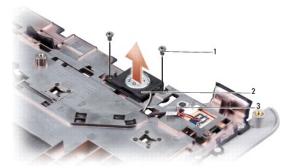
- 3. Turn the palm rest over and remove the M2.5x3-mm screw that secures the power button board to the palm rest.
- 4. Lift the power button board off the palm rest.
- 5. To replace the Power Button Board, insert the power button board into the tabs and tighten the M2.5x3-mm screw.
- 6. Replace the palm rest. See Replacing the Palm Rest.
- 7. Slide the battery into the battery bay, until it clicks in place and slide the battery-lock latch towards the lock position.

Replacing the Speaker Dell™ Inspiron™ 1210 Service Manual

CAUTION: 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.

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

- 1. Follow the instructions in <u>Before You Begin</u>.
- 2. Remove the palm rest. See Replacing the Palm Rest.



1	M2x4-mm screw (2)	2	speaker
3	speaker cable		

- 3. Turn the palm rest over.
- 4. Remove the two speaker M2x4-mm screws from the palm rest.
- 5. Make note of the speaker cable routing.
- 6. Remove the speaker.
- 7. To replace the speaker, replace the speaker and route the speaker cable through the guide.
- 8. Replace the two speaker M2x4-mm screws that secure the speaker to the palm rest.
- 9. Replace the palm rest (see Replacing the Palm Rest).
- 10. Slide the battery into the battery bay, until it clicks in place and slide the battery-lock latch towards the lock position.

Replacing the System Board

Dell™ Inspiron™ 1210 Service Manual

- Entering the Service Tag in the BIOS



CAUTION: 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.

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

MOTE: The system board's BIOS chip contains the service tag, which is also visible on a barcode label at the bottom of the computer.

- 1. Follow the instructions in Before You Begin.
- 2. Remove the palm rest. See Replacing the Palm Rest.
- 3. Disconnect the display cable from its system board connector. See Replacing the Display.



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1	power cable	2	2-in-1 cable: LVDS connector
3	CRT cable	4	USB cable
5	2-in-1 camera connector	6	coin-cell battery cable
7	hard disk cable		

- 4. Disconnect power cable from the respective system board connector. See Replacing the Power Cable.
- 5. Disconnect CRT cable from the respective system board connector. See Replacing the CRT Board.
- 6. Disconnect USB cable from the respective system board connector. See Replacing the USB Board.
- 7. Disconnect coin-cell battery cable from the respective system board connector. See Replacing the Coin-Cell Battery.
- 8. Disconnect hard drive cable from the respective system board connector. See Replacing the Hard Drive.
- 9. Remove the two screws that secure the system board to the computer base.
- 10. Lift the system board at an angle towards the side of the computer and out of the computer base.
- $11. \ \ \text{To replace the System Board, follow all of the steps in } \underline{\text{Replacing the System Board}} \ \text{in reverse order}.$
- NOTICE: 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.
- 12. Turn on the computer.

NOTE: After you have replaced the system board, enter the computer Service Tag into the BIOS of the replacement system board.

- 13. Enter the service tag. See Entering the Service Tag in the BIOS.
- 14. The keyboard matrix may change after you replace the system board. To set the keyboard matrix according to your country, see <u>Setting the Keyboard Matrix</u>.

Entering the Service Tag in the BIOS

- 1. Ensure that the AC adapter is plugged in and that the main battery is installed properly.
- 2. Press <F2> during POST to enter the system setup program.
- 3. Navigate to the security tab and enter the service tag in the Set Service Tag field.
- NOTE: Your computer may or may not ship with an external optical drive. Use an external optical drive or any external storage device for the procedures that involve discs.
- NOTICE: Handle components and cards by their edges, and avoid touching pins and contacts.

Setting the Keyboard Matrix

- 1. Turn off your computer. See <u>Turning Off Your Computer</u>.
- 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:
 - o 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.

Replacing the USB Board Dell™ Inspiron™ 1210 Service Manual

CAUTION: 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.



NOTICE: 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 the back of the computer).

- 1. Follow the instructions in <u>Before You Begin</u>.
- 2. Remove the palm rest. See Replacing the Palm Rest.



1	USB board	2	M2.5x3-mm screw			

- 3. Remove the M2.5x3-mm screw that secure the USB board to the base of the computer.
- 4. Lift the USB board up and out from the base of the computer.
- 5. To replace the USB board, align the holes on the USB board to the protrusions on the base of the computer.
- 6. Replace the USB M2.5x3-mm screw to secure the USB board to the base of the computer.
- 7. Replace the palm rest. See Replacing the Palm Rest.
- 8. Slide the battery into the battery bay, until it clicks in place and slide the battery-lock latch towards the lock position.

Replacing the CRT Board Dell™ Inspiron™ 1210 Service Manual

CAUTION: 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.



NOTICE: 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 the back of the computer).

- 1. Follow the instructions in <u>Before You Begin</u>.
- 2. Remove the palm rest. See Replacing the Palm Rest.



1	CRT board	2	M2.5x3-mm screw

- 3. Remove the M2.5x3-mm screw that secure the CRT board to the base of the computer.
- 4. Lift the CRT board up and out from the base of the computer.
- 5. To replace the CRT board, align the holes on the CRT board to the protrusions on the base of the computer.
- 6. Replace the CRT M2.5x3-mm screw to secure the CRT board to the base of the computer.
- 7. Replace the palm rest. See Replacing the Palm Rest.
- 8. Slide the battery into the battery bay, until it clicks in place and slide the battery-lock latch towards the lock position.