Adamo XPS™ Service Manual

Notes, Cautions, and Warnings

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

CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

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

Base Cover
Adamo XPS™ Service Manual

● Removing the Base Cover
● Replacing the Base Cover

⚠ **WARNING: 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: 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 help prevent damage to the system board, remove the main battery (see Removing the Computer Battery) before working inside the computer.**

Removing the Base Cover

1. Follow the instructions in Before You Begin.

2. Remove the system board (see Removing the System Board).

3. Remove the display assembly (see Removing the Display Assembly).

4. Remove the right daughter board (see Removing the Right Daughter Board).

5. Remove the left daughter board (see Removing the Left Daughter Board).

6. Remove the bridge battery (see Removing the Bridge Battery).

7. Remove the two screws that secure the counterweights to the base cover.

8. Pry and lift the counterweights away from the base cover.
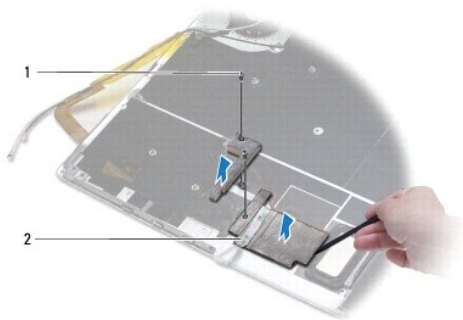
| 1 | screws (2) | 2 | counterweights (2) |

Replacing the Base Cover

1. Follow the instructions in Before You Begin.

2. Use the adhesive on the counterweights and adhere them to the base cover.

3. Replace the two screws that secure the counterweights to the base cover.

4. Replace the bridge battery (see Replacing the Bridge Battery).

5. Replace the left daughter board (see Replacing the Left Daughter Board).

6. Replace the right daughter board (see Replacing the Right Daughter Board).

7. Replace the system board (see Replacing the System Board).

8. 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.**

9. Turn on the computer.

Battery(s)
Adamo XPS™ Service Manual

⚠ **WARNING: 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: To help prevent damage to the system board, remove the main battery (see Removing the Computer Battery) before working inside the computer.**

⚠ **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.**

Removing the Computer Battery

1. Follow the instructions in Before You Begin.

2. Turn the computer over.

3. Slide and hold the battery release latch.

4. Using the grip on the computer battery, push the computer battery towards the computer and rotate it upwards.

5. Lift the computer battery out of the computer.

1	grip	2	battery release latch
3	computer battery		

Replacing the Computer Battery

1. Follow the instructions in Before You Begin.

2. Align the computer battery in the battery bay.

3. Rotate the battery into the computer until it snaps in place.

Removing the Coin-Cell Battery

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Open the display (see Opening the Display).

4. Remove the palm rest assembly (see Removing the Palm Rest Assembly).

5. Disconnect the coin-cell battery cable from the connector on the system board.

6. The coin-cell battery is glued to the system board. Using a plastic scribe pry the coin-cell battery out of the system board.
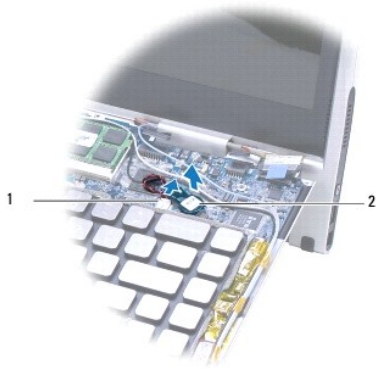
| 1 | coin-cell battery connector | 2 | coin-cell battery |

Replacing the Coin-Cell Battery

1. Follow the instructions 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 connector on the system board.

4. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

5. Replace the computer battery (see Replacing the Computer 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.**

Removing the Bridge Battery

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Open the display (see Opening the Display).

4. Remove the palm rest assembly (see Removing the Palm Rest Assembly).

5. Disconnect the bridge battery cable from the connector on the left daughter board.

6. The bridge battery is glued to the base cover. Using a plastic scribe pry the bridge battery out of the base cover.

1	bridge battery connector	2	bridge battery

Replacing the Bridge Battery

1. Follow the instructions in Before You Begin.

2. Use the adhesive on the bridge battery and adhere it to the base cover.

3. Connect the bridge battery cable to the connector on the left daughter board.

4. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

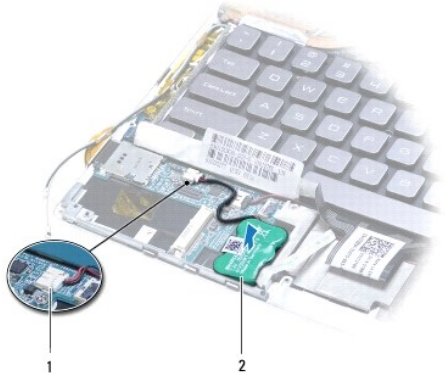5. Replace the computer battery (see Replacing the Computer Battery).

⚠ **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.**

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Before You Begin
Adamo XPS™ Service Manual

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

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

- l You have performed the steps in Turning Off Your Computer and Before Working Inside Your Computer.

- l You have read the safety information that shipped with your computer.

- l A component can be replaced or—if purchased separately—installed by performing the removal procedure in reverse order.

Recommended Tools

The instructions in this document may require the following tools:

- l T5 Torx screwdriver

- l Phillips screwdriver

- l Plastic scribe

- l 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 your computer:

   Click **Start** ⊕ → **Shut Down**.

3. The computer turns off after the operating system shutdown process finishes.

4. Ensure that the computer and any 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 for at least 8 to 10 seconds 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.

⚠ **WARNING: 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).

3. Disconnect your computer and all attached devices from their electrical outlets.

⚠ **CAUTION: To help prevent damage to the system board, remove the computer battery (see Removing the Computer Battery) before working inside the computer.**

4. Place your computer against an object for support before you start removing or replacing components.

⚠ **CAUTION: To prevent damage to the display hinges, ensure that you do not adjust the angle between the display and the computer base after removing the palm rest assembly.**

Flashing the BIOS
Adamo XPS™ Service Manual

1. Turn on the computer.

2. Go to **support.dell.com**.

3. Click **Drivers & Downloads→ Select Model**.

4. Locate the BIOS update file for your computer:

   NOTE: The Service Tag for your computer is located in the battery bay, for more information see <u>Locating the Service Tag and Express Service Code</u>.

   If you have your computer's Service Tag:

   a. Click **Enter a Service Tag**.

   b. Enter your computer's Service Tag in the **Enter a service tag:** field, click Go, and proceed to step 5.

   If you do not have your computer's Service Tag:

   a. Select the type of product in the **Select Your Product Family** list.

   b. Select the product brand in the **Select Your Product Line** list.

   c. Select the product model number in the **Select Your Product Model** list.

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

   d. Click **Confirm**.

5. A list of results appear on the screen. Click **BIOS**.

6. Click **Download Now** to download the latest BIOS file.The **File Download** window appears.

7. Click **Save** to save the file on your desktop. 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.

Internal Module With Bluetooth Wireless Technology
Adamo XPS™ Service Manual

- Removing the Bluetooth Card
- Replacing the Bluetooth Card

⚠ **WARNING: 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: To help prevent damage to the system board, remove the main battery (see Removing the Computer Battery) before working inside the computer.**

⚠ **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.**

Removing the Bluetooth Card

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Open the display (see Opening the Display).

4. Remove the palm rest assembly (see Removing the Palm Rest Assembly).

5. **Remove the screw that secures the Bluetooth™ card to the right daughter board.**

6. Lift the Bluetooth card to disconnect it from the connector on the right daughter board.

7. Turn the Bluetooth card over.

8. Disconnect the blue antenna cable from the Bluetooth card.

1	screw	2	Bluetooth card

Replacing the Bluetooth Card

1. Follow the instructions in Before You Begin.

2. Connect the blue antenna cable to the Bluetooth card.

3. Turn the Bluetooth card over.

4. Align the connector on the Bluetooth card with the connector on the right daughter board, and press gently to connect the Bluetooth card to the right daughter board.

5. Replace the screw that secures the Bluetooth card to the right daughter board.

6. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

7. Replace the computer battery (see Replacing the Computer 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
Adamo XPS™ Service Manual

This document provides information that you may need when updating drivers or upgrading your computer.

System Model

Dell Adamo™ XPS™

Processor

Type	Intel® Core™2 Duo SU9400
L2 cache	3 MB shared
External bus frequency	800 MHz

Memory

NOTE: The memory on your computer cannot be upgraded.

Type	dual channel 800 MHz DDR3 SDRAM
Configuration	4 GB

Computer Information

Chipset	Mobile Intel 4 Series Express
PCI bus	32 bits
Data bus width	64 bits
DRAM bus width	128 bits dual channel

Communications

802.11n Wireless LAN	Intel® Ultimate N WiFi Link 5300
Bluetooth	Bluetooth 2.1 + Enhanced Data Rate (EDR)
Network adapter **NOTE:** A network adapter is shipped with the computer.	External USB 10/100

Video

Type	Intel Graphics Media Accelerator
Data bus	Internal PCI-E
Controller	GMA X4500HD
Memory	256 MB shared frame buffer

Audio

Type	Intel High Definition Audio 2.0
Controller	Realtek ALC269
Speaker	one mono speaker
Microphone	one digital microphone
Headphone	one stereo 3.5-mm headphone connector

Camera

NOTE: Your computer camera supports facial recognition feature.

Pixel	2.0 megapixel
Resolution	1600 (H) x 1200 (V)

Drive(s)

Internal	128-GB Solid State Drive
External	l optional 250-GB/500-GB USB SATA hard drive l optional Dual Layer DVD+/-RW and Blu-Ray Disc™ Drive

Ports and Connectors

USB	two 4-pin USB 2.0-compliant connectors
Headphone	one stereo 3.5-mm headphone connector
DisplayPort	one 20-pin connector

NOTE: A DisplayPort to DVI adapter is shipped with the computer.

Display

Type	Active-matrix TFT LCD
Dimensions (viewable area)	
Height	296.4 mm (11.67 inches)
Width	166.6 mm (6.56 inches)
Diagonal	340.4 mm (13.4 inches)
Power consumption (maximum)	4.3 W
Resolution	1366 x 768

Battery

NOTE: Your computer has an internal bridge battery that allows you to replace the depleted main battery with a new one while the computer is in sleep mode.
You do not have to turn off the computer to replace the battery.

Type	Li-Ion battery pack - 20 Whr standard pack
	Li-Ion battery pack - 40 Whr extended pack
Dimensions	296 x 39.5 x 8.9 mm (standard pack)
	296 x 39.5 x 16.7 mm (extended pack)

Weight	
20 Whr	164 g to 175 g
40 Whr	290 g to 298 g
Voltage	11.1 V (nominal)

AC Adapter

U.S./Mexico/Canada	
Type	DA45NM102-00
Input voltage (nominal)	100 V – 240 V (nominal)
Input current (maximum)	1.5 A (continuous)
Input frequency	50 Hz – 60 Hz (single phase nominal)
Output power (maximum)	45 W
Output current (maximum)	3.21 A
Dimensions	
Length	117.6 mm (4.63 inches)
Width	68.6 mm (2.7 inches)
Height	16.8 mm (0.66 inches)
Weight (maximum)	195 g (without AC adapter cable)
Rest of the World	
Type	DA45NM103-00
Input voltage (nominal)	100 V – 240 V (nominal)
Input current (maximum)	1.5 A (continuous)
Input frequency	50 Hz – 60 Hz (single phase nominal)
Output power (maximum)	45 W
Output current (maximum)	3.21 A
Dimensions	
Length	114.4 mm (4.5 inches)
Width	68.6 mm (2.7 inches)
Height	16.8 mm (0.66 inches) to 23.3mm (0.91 inches)
Weight (maximum)	201 g (without AC adapter cable)

Physical Characteristics

Dimensions	
Depth	273.9 mm (10.78 inches)
Width	339.9 mm (13.38 inches)
Height	9.99 mm (0.39 inches)
Weight (approximate)	1.44 kg (3.17 lb)

Environment

Temperature range	Operating: 0° to 35°C (32° to 95°F) Storage: –40° to 65°C (–40° to 149°F)
Maximum relative humidity	Operating: 10% to 90% (noncondensing) Storage: 5% to 95% (noncondensing)
Maximum vibration	Operating: 0.66 GRMS Storage: 1.3 GRMS
Maximum shock	Operating: 110 G Storage: 163 G
Altitude (maximum):	
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 ISAS71.04- 1985

Thermal Cooling Assembly
Adamo XPS™ Service Manual

● Removing the Thermal Cooling Assembly
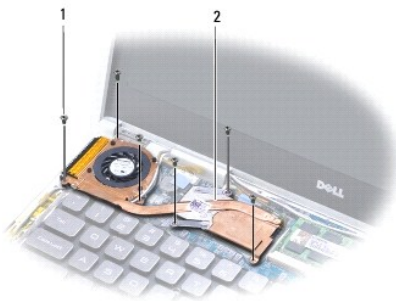● Replacing the Thermal Cooling Assembly

⚠️ **WARNING: 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 thermal cooling assembly from the computer when the thermal cooling assembly is hot, do not touch the metal housing of the thermal cooling assembly.**

⚠️ **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 Removing the Computer Battery) before working inside the computer.**

⚠️ **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.**

Removing the Thermal Cooling Assembly

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Open the display (see Opening the Display).

4. Remove the palm rest assembly (see Removing the Palm Rest Assembly).

5. Remove the six screws that secure the thermal cooling assembly to the system board.

   📝 **NOTE:** The screws that secure the thermal cooling assembly are of different sizes. Note the location and size of the screws as you remove them so that you can replace them correctly.

6. Lift the thermal cooling assembly off the system board.

   📝 **NOTE:** The antenna cables are routed under the thermal cooling assembly, make note of the antenna cable routing and the tape placement around the keyboard.

1	screws (6)	2	thermal cooling assembly

Replacing the Thermal Cooling Assembly

NOTE: To ensure that thermal conductivity is achieved, use the thermal cooling pad provided in the kit.

NOTE: This procedure assumes that you have already removed the thermal cooling assembly and are ready to replace it.

1. Follow the instructions in Before You Begin.

2. Peel the backing off the thermal cooling pad and adhere the pad to the portion of the thermal cooling assembly that covers the processor.

3. Route the antenna cables under the thermal cooling assembly and replace the tape around the keyboard.

4. Place the thermal cooling assembly on the system board.

5. Replace the six screws that secure the thermal cooling assembly to the system board.

   NOTE: The screws that secure the thermal cooling assembly are of different sizes. Ensure that you replace the correct screws to the thermal cooling assembly.

6. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

7. Replace the computer battery (see Replacing the Computer 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.

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Display Assembly
Adamo XPS™ Service Manual

- Removing the Display Assembly
- Replacing the Display Assembly

⚠ **WARNING: 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: 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 help prevent damage to the system board, remove the main battery (see Removing the Computer Battery) before working inside the computer.**

Removing the Display Assembly

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Open the display (see Opening the Display).

4. Remove the palm rest assembly (see Removing the Palm Rest Assembly).

5. **Remove the Bluetooth™ card (see Removing the Bluetooth Card).**

6. Remove the WLAN card (see Removing the WLAN Card).

7. Make note of the antenna cable routing and the tape placement.

8. Disconnect the following cables from their corresponding connectors on the system board:

   l display cable — lift the tab and pull the cable away from the connector

   l left I/O board cable — lift the tab and pull the cable away from the connector

   l battery power cable — pull the cable away from the connector

   l AC adapter power cable — pull the cable away from the connector

   l right I/O board cable — lift the tab and pull the cable away from the connector

1	display cable connector	2	left I/O board cable connector
3	battery power cable connector	4	AC adapter power cable connector
5	right I/O board cable connector	6	antenna cables (2 sets)

9. Remove the two screws that secure the display assembly to the computer base.

| 1 | screws (2) |

10. Slide and lift the computer base away from the display assembly.

🖉 **NOTE:** Remove the service tag panel if you are replacing the display assembly (see Removing the Service Tag Panel).

Replacing the Display Assembly

1. Follow the instructions in Before You Begin.

2. Place the computer base in position and replace the two screws that secure the display assembly to the computer base.

3. Route the antenna cables and tape them in place if required.

4. Connect the following cables to their corresponding connectors on the system board:

   l display cable

   l left I/O board cable

   l battery power cable

   l AC adapter power cable

   l right I/O board cable

5. **Replace the Bluetooth™ card (see** Replacing the Bluetooth Card).

6. Replace the WLAN card (see Replacing the WLAN Card).

7. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

🖉 **NOTE:** Replace the service tag panel if you are replacing the display assembly (see Replacing the Service Tag Panel).

8. Replace the computer battery (see Replacing the Computer 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.**

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Solid State Drive
Adamo XPS™ Service Manual

- Removing the Solid State Drive
- Replacing the Solid State Drive

⚠ **WARNING: 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: To help prevent damage to the system board, remove the main battery (see Removing the Computer Battery) before working inside the computer.**

⚠ **CAUTION: To prevent data loss, turn off your computer (see Turning Off Your Computer) before removing the solid state drive. Do not remove the solid state drive while the computer is On or in Sleep state.**

⚠ **CAUTION: Solid state drives are extremely fragile. Exercise care when handling the solid state 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: 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.**

📝 **NOTE:** Dell does not guarantee compatibility or provide support for solid state drives from sources other than Dell.

📝 **NOTE:** If you are installing a solid state drive from a source other than Dell, you need to install an operating system, drivers, and utilities on the new solid state drive.

Removing the Solid State Drive

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Open the display (see Opening the Display).

4. Remove the palm rest assembly (see Removing the Palm Rest Assembly).

5. Remove the screw that secures the solid state drive to the computer base.

6. Slide and lift the solid state drive to disconnect it from the connector on the right daughter board.

1	screw	2	solid state drive
3	connector		

⚠ **CAUTION: When the solid state drive is not in the computer, store it in protective antistatic packaging.**

Replacing the Solid State Drive

1. Follow the instructions in Before You Begin.

2. Remove the new drive from its packaging.

   Save the original packaging for storing or shipping the solid state drive.

📝 **NOTE:** If your existing solid state drive was shipped with a mylar cover, replace the mylar cover on the new drive.

3. Push the solid state drive until it is fully connected to the connector on the right daughter board.

4. Replace the screw that secures the solid state drive to the computer base.

5. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

6. Replace the computer battery (see Replacing the Computer 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.**

7. Install the operating system for your computer, as needed. See Restoring Your Operating System.

8. Install the drivers and utilities for your computer, as needed.

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Getting Help

Adamo XPS™ Service Manual

- Obtaining Assistance
- Product Information
- Returning Items for Warranty Repair or Credit
- Before You Call
- Contacting Dell

Obtaining Assistance

If you experience a problem with your computer, you can complete the following steps to diagnose and troubleshoot the problem:

1. See Troubleshooting Tips for information and procedures that pertain to the problem your computer is experiencing.

2. See Dell Diagnostics for procedures on how to run Dell Diagnostics.

3. Fill out the Diagnostic Checklist.

4. Use Dell's extensive suite of online services available at Dell Support (**support.dell.com**) for help with installation and troubleshooting procedures. See Online Services for a more extensive list of Dell Support online.

5. If the preceding steps have not resolved the problem, see Contacting Dell.

   NOTE: Call Dell Support from a telephone at or near the affected computer so that the support staff can assist you with any necessary procedures.

   NOTE: Dell's express service code system may not be available in all countries.

When prompted by Dell's automated telephone system, enter your express service code to route the call directly to the proper support personnel.

For instructions on using the Dell Support, see Technical Support and Customer Service.

NOTE: Some of the following services are not always available in all locations outside the continental U.S. Call your local Dell representative for information on availability.

Technical Support and Customer Service

Dell's support service is available to answer your questions about Dell™ hardware. Our support staff uses computer-based diagnostics to provide fast, accurate answers.

To contact Dell's support service, see Before You Call, and then see the contact information for your region or go to **support.dell.com**.

DellConnect

DellConnect™ is a simple online access tool that allows a Dell service and support associate to access your computer through a broadband connection, diagnose your problem and repair it all under your supervision. For more information, go to **www.dell.com/dellconnect**.

Online Services

You can learn about Dell products and services at the following websites:

- **www.dell.com**

- **www.dell.com/ap** (Asian/Pacific countries only)

- **www.dell.com/jp** (Japan only)

- **www.euro.dell.com** (Europe only)

- **www.dell.com/la** (Latin American and Caribbean countries)

- **www.dell.ca** (Canada only)

You can access Dell Support through the following websites and e-mail addresses:

Dell Support websites:

- l **support.dell.com**
- l **support.jp.dell.com** (Japan only)
- l **support.euro.dell.com** (Europe only)

Dell Support e-mail addresses:

- l **mobile_support@us.dell.com**
- l **support@us.dell.com**
- l **la-techsupport@dell.com** (Latin America and Caribbean countries only)
- l **apsupport@dell.com** (Asian/Pacific countries only)

Dell Marketing and Sales e-mail addresses:

- l **apmarketing@dell.com** (Asian/Pacific countries only)
- l **sales_canada@dell.com** (Canada only)

Anonymous file transfer protocol (FTP):

- l **ftp.dell.com –** log in as user anonymous, and use your e-mail address as your password

Automated Order-Status Service

To check on the status of any Dell products that you have ordered, you can go to **support.dell.com**, or you can call the automated order-status service. A recording prompts you for the information needed to locate and report on your order. For the telephone number to call for your region, see Contacting Dell.

Problems With Your Order

If you have a problem with your order, such as missing parts, wrong parts, or incorrect billing, contact Dell for customer assistance. Have your invoice or packing slip available when you call. For the telephone number to call for your region, see Contacting Dell.

Product Information

If you need information about additional products available from Dell, or if you would like to place an order, visit the Dell website at **www.dell.com**. For the telephone number to call for your region or to speak to a sales specialist, see Contacting Dell.

Returning Items for Warranty Repair or Credit

NOTE: Before you return the product to Dell, make sure to back up any data on the solid state drive in the product. Remove any and all confidential, proprietary and personal information. Dell is not responsible for any of your confidential, proprietary or personal information; lost or corrupted data; or damaged or lost removable media that may be included with your return.

Prepare all items being returned, whether for repair or credit, as follows:

1. Call Dell to obtain a Return Material Authorization Number, and write it clearly and prominently on the outside of the box.

   For the telephone number to call for your region, see Contacting Dell. Include a copy of the invoice and a letter describing the reason for the return.

2. Include a copy of the invoice and a letter describing the reason for the return.

3. Include a copy of the Diagnostics Checklist (see Diagnostic Checklist), indicating the tests that you have run and any error messages reported by the Dell Diagnostics (see Contacting Dell).

4. Include any accessories that belong with the item(s) being returned (power cables, software floppy disks, guides, and so on) if the return is for credit.

5. Pack the equipment to be returned in the original (or equivalent) packing materials.
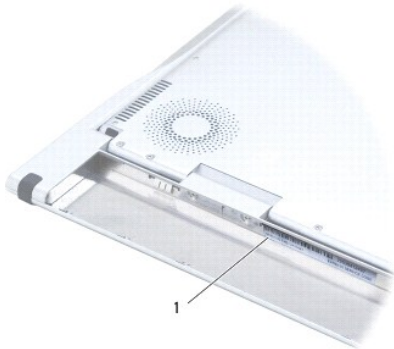
Before You Call

NOTE: Have your express service code ready when you call. The code helps Dell's automated-support telephone system direct your call more efficiently. You may also be asked for your service tag.

Locating the Service Tag and Express Service Code

The service tag and express service code are required when you contact Dell for assistance. These details help Dell's automated support telephone system direct your calls more efficiently.

You can identify the service tag and express service code in the following ways:

l The service tag and express service code are located in the battery bay. To remove the computer battery see Removing the Computer Battery.

l The service tag is listed in the security menu of the system setup program. For information on accessing the system setup program, see Entering the System Setup Program.

1	service tag and express service code

Diagnostic Checklist

Remember to fill out the Diagnostic Checklist (see Diagnostic Checklist). If possible, turn on your computer before you call Dell for assistance and call from a telephone at or near the computer. You may be asked to type some commands at the keyboard, relay detailed information during operations, or try other troubleshooting steps possible only at the computer itself. Ensure that the computer documentation is available.

Diagnostic Checklist
Name:
Date:
Address:
Phone number:
Service tag:
Express service code:
Return Material Authorization Number (if provided by Dell support technician):
Operating system and version:
Devices:
Expansion cards:
Are you connected to a network? Yes/No
Network, version, and network adapter:
Programs and versions:
See your operating system documentation to determine the contents of the system's start-up files. If the computer is connected to a printer, print each file. Otherwise, record the contents of each file before calling Dell.
Error message, beep code, or diagnostic code:

Description of problem and troubleshooting procedures you performed:

Contacting Dell

NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Visit **www.dell.com/contactdell**.

2. Select your country or region.

3. Select the appropriate service or support link based on your need.

4. Choose the method of contacting Dell that is convenient for you.

Keyboard
Adamo XPS™ Service Manual

● Removing the Keyboard
● Replacing the Keyboard

⚠ **WARNING: 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: 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 help prevent damage to the system board, remove the main battery (see Removing the Computer Battery) before working inside the computer.**

Removing the Keyboard

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Open the display (see Opening the Display).

4. Remove the palm rest assembly (see Removing the Palm Rest Assembly).

5. Remove the four screws that secure the keyboard to the computer base.

6. Ease the keyboard up using a plastic scribe.

7. Carefully rotate the keyboard away from the computer as indicated in the following illustration.

1	screws (4)	2	keyboard

⚠ **CAUTION: Be extremely careful when removing and handling the keyboard. Failure to do so could result in damaging the keyboard cable.**

8. Release the connector tabs and disconnect the keyboard cable from the system board connector.

| 1 | connector tabs (2) | 2 | keyboard cable |

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

9. Lift the keyboard off the computer.

Replacing the Keyboard

1. Follow the instructions in Before You Begin.

2. Slide the keyboard cable into the system board connector and push the connector tabs to secure the keyboard cable.

⚠ **CAUTION: The keycaps on the keyboard are fragile, easily dislodged, and time-consuming to replace. Be careful while replacing the keyboard.**

3. Replace the four screws that secure the keyboard to the computer base.

4. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

5. Replace the computer battery (see Replacing the Computer 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.**

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Display
Adamo XPS™ Service Manual

● Opening the Display

⚠ **WARNING: 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: 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.**

Opening the Display

1. Follow the instructions in Before You Begin.

2. Place the computer on a flat surface.

3. Open the display

   using the latch swipe sensor:

   a. Connect the AC adapter cable to the computer. Connect the other end of the AC adapter cable to a power outlet.

   📝 **NOTE:** To open the display, you must connect your computer to a power outlet or the computer battery must be charged.

1	AC adapter cable

   b. Swipe the latch swipe sensor and lift to open the display.
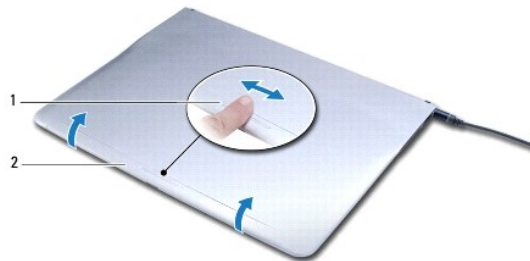
1	latch swipe sensor	2	display

   using the release latch:

   📝 **NOTE:** Use the release latch to open the display when your computer is not powered using an AC adapter or battery.

a. Slide the release latch between the display and the computer base along the length of the latch.

1	release latch

Memory Module
Adamo XPS™ Service Manual

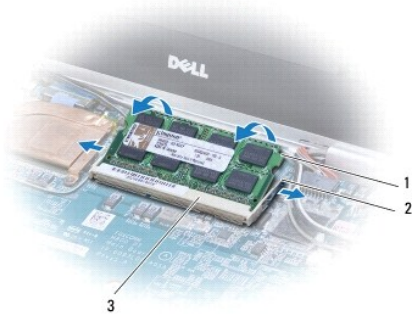● Removing the Memory Module

● Replacing the Memory Module

⚠ **WARNING: 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: 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 help prevent damage to the system board, remove the main battery (see Removing the Computer Battery) before working inside the computer.**

📝 **NOTE:** The memory on your computer cannot be upgraded.

Removing the Memory Module

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Open the display (see Opening the Display).

4. Remove the palm rest assembly (see Removing the Palm Rest Assembly).

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

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

6. Remove the memory module from the memory module connector.

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

Replacing the Memory Module

📝 **NOTE:** The memory on your computer cannot be upgraded.

1. Follow the instructions in Before You Begin.

2. Align the notch in the memory module with the tab in the memory module connector.

3. Slide the module firmly into the slot at a 45-degree angle, and press the other end of the module down until it clicks into place. If you do not hear the click, remove the module and reinstall it.

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

4. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

5. Replace the computer battery (see Replacing the Computer 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.

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

   To confirm the amount of memory installed in the computer,

   Click **Start** → **Control Panel**→ **System and Security**→ **System**.

Palm Rest Assembly
Adamo XPS™ Service Manual

- Removing the Palm Rest Assembly
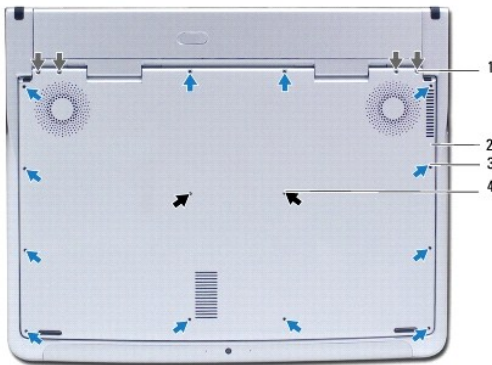- Replacing the Palm Rest Assembly

⚠ **WARNING: 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: 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 help prevent damage to the system board, remove the main battery (see Removing the Computer Battery) before working inside the computer.**

Removing the Palm Rest Assembly

1. Follow the instructions in Before You Begin.

2. Turn the computer over and remove the eighteen screws on the base cover.

📓 **NOTE:** The screws that secure the base cover are of different sizes. Note the location and size of the screws as you remove them so that you can replace them correctly.

1	M2 x 4.3 screws (4)	2	base cover
3	M1.6 x 3.25 screws (12)	4	M1.6 x 2.25 screws (2)

3. Remove the computer battery (see Removing the Computer Battery).

4. Open the display (see Opening the Display).

5. Starting at the back of the palm rest assembly, use your fingers to gently ease the palm rest assembly from the computer base.

⚠ **CAUTION: Pull on the plastic tab on top of the cables to avoid damaging the connectors.**

⚠ **CAUTION: Exercise extreme care while lifting the palm rest assembly to avoid damaging the function key cable.**

6. Lift the palm rest assembly up gently to access the function key cable.

⚠ **CAUTION: To prevent damage to the function key cable, do not disconnect the function key cable from the palm rest.**

7. Disconnect the function key cable from the connector on the system board.

8. Lift the connector latch that secures the touch pad cable to the touch pad connector and remove the cable.

1	palm rest assembly	2	touch pad cable
3	function key cable		

⚠ **CAUTION: To prevent damage to the display hinges, ensure that you do not adjust the angle between the display and the computer base after removing the palm rest assembly.**

9. Lift the palm rest assembly off the computer base.

Replacing the Palm Rest Assembly

1. Follow the instructions in Before You Begin.

2. Slide the touch pad cable into the connector on the touch pad. Press down on the connector latch to secure the touch pad cable to connector on the touch pad.

3. Connect the function key cable to the connector on the system board.

⚠ **CAUTION: You must route these cables properly to prevent them from being pinched or crimped at the hinges.**

4. Align the palm rest assembly with the computer base and gently snap the palm rest assembly into place.

5. Close the display and turn the computer over.

6. Replace the eighteen screws that secure the base cover to the computer.

📝 **NOTE:** The screws that secure the base cover are of different sizes. Ensure that you replace the correct screws to the base cover.

7. Replace the computer battery (see Replacing the Computer Battery).

Service Tag Panel
Adamo XPS™ Service Manual

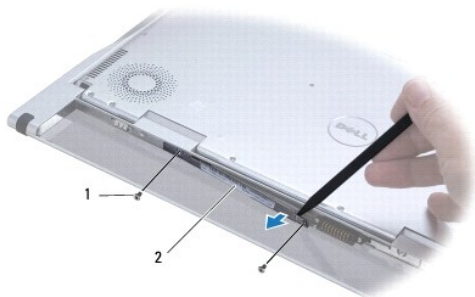● Removing the Service Tag Panel
● Replacing the Service Tag Panel

⚠ **WARNING: 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: To help prevent damage to the system board, remove the main battery (see Removing the Computer Battery) before working inside the computer.**

⚠ **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.**

Removing the Service Tag Panel

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Remove the two screws that secure the service tag panel to the computer.

⚠ **CAUTION: Be extremely careful when removing and handling the service tag panel. Failure to do so could result in damaging the service tag panel.**

4. Pry the right side of service tag panel as shown in the illustration.

5. Slide the service tag panel out of the slot on the battery bay.

1	screws (2)	2	service tag panel

Replacing the Service Tag Panel

1. Follow the instructions in Before You Begin.

2. Align the antenna cables below the service tag panel clamp.

3. Slide the left side of the service tag panel into the slot on the battery bay.

4. Replace the two screws that secure the service tag panel to the computer.

5. Replace the computer battery (see Replacing the Computer Battery).

6. Turn on your computer.

Reinstalling Software
Adamo XPS™ Service Manual

- Drivers
- Restoring Your Operating System

Drivers

If you experience a problem with any device, identify whether the driver is the source of your problem and, if necessary, update the driver.

1. Click , and right-click **Computer**.

2. Click **Properties→ Device Manager**.

   NOTE: The **User Account Control** window may appear. If you are an administrator on the computer, click **Continue**; otherwise, contact your administrator to continue.

Scroll down the list to see if any device has an exclamation point (a yellow circle with a [!]) on the device icon.

If an exclamation point is next to the device name, you may need to reinstall the driver or install a new driver (see Reinstalling Drivers and Utilities).

Reinstalling Drivers and Utilities

⚠ **CAUTION: For Dell™ drivers, see** support.dell.com or the *Drivers and Utilities* disc provided with your computer. If you install drivers obtained from other sources, your computer might not work as expected.

Returning to a Previous Device Driver Version

1. Click , and right-click **Computer**.

2. Click **Properties→ Device Manager**.

   NOTE: The **User Account Control** window may appear. If you are an administrator on the computer, click **Continue**; otherwise, contact your administrator to enter the Device Manager.

3. Right-click the device for which the new driver was installed and click **Properties**.

4. Click the **Drivers** tab→ **Roll Back Driver**.

If Device Driver Rollback does not resolve the problem, then use System Restore (see Restoring Your Operating System) to return your computer to the operating state that existed before you installed the new driver.

Using the Drivers and Utilities Disc

NOTE: Your computer does not have an optical drive. You need to connect an external optical drive to use the *Drivers and Utilities* disc.

If using Device Driver Rollback or System Restore (see Restoring Your Operating System) does not resolve the problem, reinstall the driver from your *Drivers and Utilities* disc.

1. With the Windows desktop displayed, insert your *Drivers and Utilities* disc.

2. If this is your first time to use the *Drivers and Utilities* disc, go to step 3. If not, go to step 6.

3. When the *Drivers and Utilities* disc installation program starts, follow the instructions on the screen.

   NOTE: In most cases, the *Drivers and Utilities* program starts running automatically. If it does not, start Windows Explorer, click your disc drive directory to display the disc contents, and then double-click the **autorcd.exe** file.

4. When the **InstallShield Wizard Complete** window appears, remove the *Drivers and Utilities* disc and click **Finish** to restart the computer.

5. When you see the Windows desktop, reinsert the *Drivers and Utilities* disc.

6. At the **Welcome Dell System Owner** screen, click **Next**.

7. A message appears, stating that the *Drivers and Utilities* disc is detecting hardware in your computer.

8. The drivers that are used by your computer are automatically displayed in the **My Drivers—The ResourceCD has identified these components in your system** window.

9. Click the driver that you want to reinstall and follow the instructions on the screen.

10. If a particular driver is not listed, then that driver is not required by your operating system.

Manually Reinstalling Drivers

After extracting the driver files to your hard drive as described in the previous section:

1. Click 🟦 , and right-click **Computer**.

2. Click **Properties**→ **Device Manager**.

   📝 **NOTE:** The **User Account Control** window may appear. If you are an administrator on the computer, click **Continue**; otherwise, contact your administrator to enter the Device Manager.

3. Double-click the type of device for which you are installing the driver (for example, **Audio** or **Video**).

4. Double-click the name of the device for which you are installing the driver.

5. Click the **Driver** tab→ **Update Driver**→ **Browse my computer for driver software**.

6. Click **Browse** and browse to the location to which you previously copied the driver files.

7. When the name of the appropriate driver appears, click the name of the driver→ **OK**→ **Next**.

8. Click **Finish** and restart your computer.

Restoring Your Operating System

You can restore your operating system in the following ways:

l   System Restore returns your computer to an earlier operating state without affecting data files. Use System Restore as the first solution for restoring your operating system and preserving data files.

l   Dell Factory Image Restore returns your hard drive to the operating state it was in when you purchased the computer. This procedure permanently deletes all data on the hard drive and removes any programs installed after you received the computer. Use Dell Factory Image Restore only if System Restore did not resolve your operating system problem.

l   If you received the *Operating System* disc with your computer, you can use it to restore your operating system. However, using the *Operating System* disc also deletes all data on the hard drive. Use the disc *only* if System Restore did not resolve your operating system problem.

Using Microsoft® Windows® System Restore

The Windows operating systems provide a System Restore option that allows you to return your computer to an earlier operating state (without affecting data files) if changes to the hardware, software, or other system settings have left the computer in an undesirable operating state. Any changes that System Restore makes to your computer are completely reversible.

⚠ **CAUTION: Make regular backups of your data files. System Restore does not monitor your data files or recover them.**

📝 **NOTE:** The procedures in this document were written for the Windows default view, so they may not apply if you set your Dell™ computer to the Windows Classic view.

Starting System Restore

1. Click **Start** 🟦 .

2. In the **Start Search** box, type System Restore and press <Enter>.

> NOTE: The **User Account Control** window may appear. If you are an administrator on the computer, click **Continue**; otherwise, contact your administrator to continue the desired action.

3. Click **Next** and follow the remaining prompts on the screen.

In the event that System Restore did not resolve the issue, you may undo the last system restore (see Undoing the Last System Restore).

Undoing the Last System Restore

> CAUTION: Before you undo the last system restore, save and close all open files and exit any open programs. Do not alter, open, or delete any files or programs until the system restoration is complete.

1. Click **Start** .

2. In the **Start Search** box, type System Restore and press <Enter>.

3. Click **Undo my last restoration** and click **Next**.

Using Dell™ Factory Image Restore

> CAUTION: Dell Factory Image Restore permanently deletes all data on the hard drive and removes any programs or drivers installed after you received your computer. If possible, back up the data before using these options. Use Dell Factory Image Restore only if System Restore did not resolve your operating system problem.

> NOTE: Dell Factory Image Restore may not be available in certain countries or on certain computers.

Use Dell Factory Image Restore only as the last method to restore your operating system. These options restore your hard drive to the operating state it was in when you purchased the computer. Any programs or files added since you received your computer—including data files—are permanently deleted from the hard drive. Data files include documents, spreadsheets, e-mail messages, digital photos, music files, and so on. If possible, back up all data before using Factory Image Restore.

Dell Factory Image Restore

1. Turn on the computer. When the Dell logo appears, press <F8> several times to access the **Advanced Boot Options** window.

2. Select **Repair Your Computer**.

3. The **System Recovery Options** window appears.

4. Select a keyboard layout and click **Next**.

5. To access the recovery options, log on as a local user. To access the command prompt, type administrator in the **User name** field, then click **OK**.

6. Click **Dell Factory Image Restore**.

> NOTE: Depending upon your configuration, you may need to select **Dell Factory Tools**, then **Dell Factory Image Restore**.

7. On the **Dell Factory Image Restore** welcome screen, click **Next.**

   The **Confirm Data Deletion** screen appears.

> CAUTION: If you do not want to proceed with Factory Image Restore, click Cancel.

8. Select the check box to confirm that you want to continue reformatting the hard drive and restoring the system software to the factory condition, then click **Next**.

   The restore process begins and may take 5 or more minutes to complete. A message appears when the operating system and factory-installed applications have been restored to factory condition.

9. Click **Finish** to restart the computer.

Using the Operating System Disc

Before You Begin

If you are considering reinstalling the Windows operating system to correct a problem with a newly installed driver, first try using Windows Device Driver Rollback. See Returning to a Previous Device Driver Version. If Device Driver Rollback does not resolve the problem, use Microsoft Windows System Restore to return your operating system to the operating state it was in before you installed the new device driver. See Using Microsoft® Windows® System Restore.

⚠ **CAUTION: Before performing the installation, back up all data files on your primary hard drive. For conventional hard drive configurations, the primary hard drive is the first drive detected by the computer.**

To reinstall Windows, you need the Dell™ *Operating System* disc and the Dell *Drivers and Utilities* disc.

✍ **NOTE:** The Dell *Drivers and Utilities* disc contains drivers that were installed during the assembly of the computer. Use the Dell *Drivers and Utilities* disc to load any required drivers. Depending on the region from which you ordered your computer, or whether you requested the disc, the Dell *Drivers and Utilities* disc and Dell *Operating System* disc may not ship with your computer.

Reinstalling Windows

The reinstallation process can take 1 to 2 hours to complete. After you reinstall the operating system, you must also reinstall the device drivers, virus protection program, and other software.

1. Save and close any open files and exit any open programs.

   ✍ **NOTE:** Your computer does not have an optical drive. You need to connect an external optical drive to use the *Drivers and Utilities* disc.

2. Insert the *Operating System* disc.

3. If the `Install Windows` message appears, click **Exit**.

4. Restart the computer.

5. When the DELL logo appears, press <F12> immediately.

   ✍ **NOTE:** If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft® Windows® desktop; then, shut down your computer and try again.

   ✍ **NOTE:** The next steps change the boot sequence for one time only. On the next start-up, the computer boots according to the devices specified in the system setup program.

6. When the boot device list appears, highlight **CD/DVD/CD-RW Drive** and press <Enter>.

7. Press any key to **Boot from CD-ROM**, and follow the instructions on the screen to complete the installation.

Back to Contents Page

System Board
Adamo XPS™ Service Manual

- Removing the System Board
- Replacing the System Board
- Entering the Service Tag in the BIOS

⚠ **WARNING: 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: To help prevent damage to the system board, remove the main battery (see Removing the Computer Battery) before working inside the computer.**

⚠ **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: Handle components and cards by their edges, and avoid touching pins and contacts.**

The system board's BIOS chip contains the Service Tag, which is visible on a barcode label in the battery bay (see Locating the Service Tag and Express Service Code). The replacement kit for the system board includes a CD that provides a utility for transferring the Service Tag to the replacement system board.

Removing the System Board

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Open the display (see Opening the Display).

4. Remove the palm rest assembly (see Removing the Palm Rest Assembly).

5. Remove the keyboard (see Removing the Keyboard).

6. Remove the coin-cell battery (see Removing the Coin-Cell Battery).

7. Remove the thermal cooling assembly (see Removing the Thermal Cooling Assembly).

8. Remove the memory module (see Removing the Memory Module).

9. Remove the solid state drive (see Removing the Solid State Drive).

10. Remove the WLAN card (see Removing the WLAN Card).

11. Remove the Bluetooth™ card (see Removing the Bluetooth Card).

12. Disconnect the right daughter board cable from the connector on the system board (see Removing the Right Daughter Board).

13. Disconnect the left daughter board cable from the connector on the system board (see Removing the Left Daughter Board).

14. Make note of the cable routing and the tape placement. Disconnect the following cables from their corresponding connectors on the system board:

    - thermal fan cable — pull the cable away from the connector

    - display cable — lift the tab and pull the cable away from the connector

    - left I/O board cable — lift the tab and pull the cable away from the connector

    - battery power cable — pull the cable away from the connector

    - AC adapter power cable — pull the cable away from the connector

    - right I/O board cable — lift the tab and pull the cable away from the connector

15. Remove the two screws that secure the system board to the computer base.
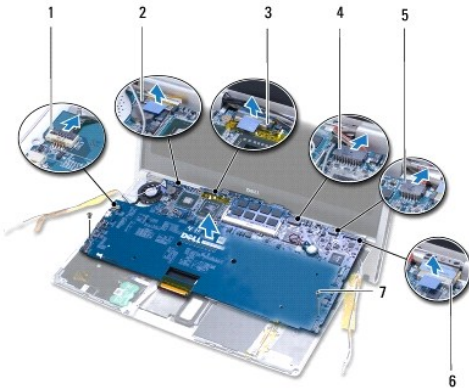
1	thermal fan cable connector	2	display cable connector
3	left I/O board cable connector	4	battery power cable connector
5	AC adapter power cable connector	6	right I/O board cable connector
7	screws (2)		

16. Lift the system board at an angle towards the side of the computer and out of the computer base.

Replacing the System Board

1. Follow the instructions in Before You Begin.

2. Place the system board on the computer base.

3. Replace the two screws that secure the system board to the computer base.

4. Connect the following cables to their corresponding connectors on the system board:

   l thermal fan cable

   l display cable

   l left I/O board cable

   l battery power cable

   l AC adapter power cable

   l right I/O board cable

5. Route the antenna cables and tape them in place if required.

6. Connect the left daughter board cable to the connector on the system board (see Replacing the Left Daughter Board).

7. Connect the right daughter board cable to the connector on the system board (see Replacing the Right Daughter Board).

8. **Replace the Bluetooth™ card (see** Replacing the Bluetooth Card**).**

9. Replace the WLAN card (see Replacing the WLAN Card).

10. Replace the solid state drive (see Replacing the Solid State Drive).

11. Replace the memory module (see Replacing the Memory Module).

12. Replace the thermal cooling assembly (see Replacing the Thermal Cooling Assembly).

13. Replace the coin-cell battery (see Replacing the Coin-Cell Battery).

14. Replace the keyboard (see Replacing the Keyboard).

15. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

16. Replace the computer battery (see Replacing the Computer 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.**

17. 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.

18. Enter the service tag (see Entering the Service Tag in the BIOS).

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. Turn on the computer.

3. Press <F2> during POST to enter the system setup program.

4. Navigate to the security tab and enter the service tag in the Set Service Tag field.

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System Setup
Adamo XPS™ Service Manual

● Changing the BIOS Settings

Use the system setup program to:

l   Set or change user-selectable options such as your password

l   Change the system configuration information after you add, change, or remove any hardware in your computer

l   Verify information about your computer's current configuration, such as the amount of system memory

Your operating system may override some of the options that you set through the system setup program.

> ⚠ **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: Do not change the settings in system setup unless you are an expert computer user. Certain changes can cause your computer to work incorrectly.**

> 📝 **NOTE:** Before you use System Setup, it is recommended that you write down the System Setup screen information for future reference.

Entering the System Setup Program

1.   Turn on (or restart) your computer.

2.   When the DELL™ logo appears, press <F2> immediately.

> 📝 **NOTE:** If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft® Windows® desktop. Then, shut down your computer and try again.

Working With Options on the System Setup Program Screen

> 📝 **NOTE:** To learn more about a specific item on a system setup program screen, highlight the item and see the **Help** area on the screen.

On each screen, the system setup options are listed at the left. To the right of each option is the setting or value for that option.

You cannot change options or values that are in grey or blue because they are determined by the computer.

Press <F1> for information on highlighted items. System setup key functions are listed across the bottom of the screen.

The system setup screens display the current setup information and settings for your computer, such as:

l   System configuration

l   Boot order

l   Boot (start-up) configuration

l   Basic device configuration settings

l   System security and hard drive password settings

Changing the Boot Sequence

The boot sequence, or boot order, tells the computer where to find the software needed to start the operating system. You can control the boot sequence and enable/disable devices using the **Boot** page of the system setup program.

The **Boot** page displays a general list of the bootable devices that may be installed in your computer, including but not limited to the following:

l   Hard Drive

l   USB Storage

l   Removable Devices

l   Network

During the boot routine, the computer starts at the top of the list and scans each enabled device for the operating system start-up files. When the computer finds the files, it stops searching and starts the operating system.

To control the boot devices, select (highlight) a device by pressing the down-arrow or up-arrow key, and then enable or disable the device or change its order in the list.

1. Enter the system setup program.

2. Press the left- and right-arrow keys to highlight the **Boot** tab.

3. Press the up- and down-arrow keys to highlight the **Boot Device Property,** and then press <Enter>.

4. Press the up- and down-arrow keys to select the boot device you want to change, and then press <Shift + 1> to enable or disable a device, or <+> to move the device up in the list, or <-> to move the device down in the list.

5. Press <F10> and then press <Enter> to exit the system setup program and resume the boot process.

Boot sequence changes take effect as soon as you save the changes and exit the system setup program.

Changing the Boot Sequence for the Current Boot

You can use this setting to boot your system from your preferred device only for the current boot. The system reverts to the original boot sequence the next time you restart your computer.

1. Shut down the computer through the **Start** menu.

2. Turn on the computer. When the DELL logo appears, press <F12> immediately.

   📝 **NOTE:** If you wait too long and the Windows logo appears, continue to wait until you see the Windows desktop, then shut down your computer and try again.

3. When the boot device list appears, highlight the device from which you want to boot and press <Enter>.

   The computer boots to the selected device.

Changing the Boot Sequence to a USB Device

1. Connect the USB device to a USB port.

2. Turn on (or restart) your computer.

3. When F2 = Setup, F12 = Boot Menu appears in the bottom corner of the screen, press <F12>.

   📝 **NOTE:** If you wait too long and the operating system logo appears, continue to wait until you see the Windows desktop, then shut down your computer and try again.

4. The **Boot Menu** appears, listing all available boot devices.

5. Use the arrow keys to select the appropriate device (for the current boot only).

   📝 **NOTE:** To boot to a USB device, the device must be bootable. To ensure that a device is bootable, check the device documentation.

Changing the BIOS Settings

The system setup program allows you to configure user-selectable options in the BIOS, such as date and time or system password.

Viewing the BIOS Settings

1. Click the **Start** button and select **All Programs**.

2. Click **Accessories**→ **System Tools** → **System Information**.

3. Locate the **BIOS Version/Date** item in **System Summary**.

   The **BIOS Version/Date** item displays the BIOS version and date.

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Adamo XPS™ Service Manual

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

CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

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

Troubleshooting
Adamo XPS™ Service Manual

● System Messages
● Troubleshooting Tips

System Messages

If your computer has an issue or error, it may display a System Message that will help you identify the cause and action needed to resolve the issue.

NOTE: If the message you received is not listed below, see the documentation for either the operating system or the program that was running when the message appeared.

Alert! Previous attempts at booting this system have failed at checkpoint [nnnn]. For help in resolving this problem, please note this checkpoint and contact Dell Technical Support —

The computer failed to complete the start routine three consecutive times for the same error. Contact Dell (see Contacting Dell).

CMOS checksum error —

Possible system board failure or RTC battery low. Replace the coin-cell battery (see Replacing the Coin-Cell Battery) or contact Dell (see Contacting Dell).

CPU fan failure —

Processor fan failure. Contact Dell (see Contacting Dell).

Hard-disk drive failure —

Possible solid state drive failure during solid state drive POST. Contact Dell (see Contacting Dell).

Hard-disk drive read failure —

Possible solid state drive failure during solid state drive start test. Contact Dell (see Contacting Dell).

Keyboard failure —

Keyboard failure or keyboard cable loose. Contact Dell (see Contacting Dell).

No boot device available —

No bootable partition on solid state drive, or the solid state drive cable is loose, or no bootable device exists.

 l   If the solid state drive is your boot device, ensure that the drive is partitioned as a boot device.

 l   Enter system setup and ensure that the boot sequence information is correct.

No timer tick interrupt —

A chip on the system board might be malfunctioning or system board failure. Contact Dell (see Contacting Dell).

USB over current error —

Disconnect the USB device. Use external power source for the USB device.

NOTICE - Hard Drive SELF MONITORING SYSTEM has reported that a parameter has exceeded its normal operating range. Dell recommends that you back up your data regularly. A parameter out of range may or may not indicate a potential hard drive problem —

S.M.A.R.T error, possible solid state drive failure. This feature can be enabled or disabled in BIOS setup.

Troubleshooting Software and Hardware Problems

If a device is either not detected during the operating system setup or is detected but incorrectly configured, you can use the Hardware Troubleshooter to resolve the incompatibility.

To start the Hardware Troubleshooter:

1. Click 🪟 , and click **Help and Support.**

2. Type `hardware troubleshooter` in the search field and press <Enter> to start the search.

3. In the search results, select the option that best describes the problem and follow the remaining troubleshooting steps.

Dell Diagnostics

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

When to Use the Dell Diagnostics

If you experience a problem with your computer, perform the checks in Lockups and Software Problems (see Lockups and Software Problems) and run the Dell Diagnostics before you contact Dell for technical assistance.

It is recommended that you print these procedures before you begin.

📝 **NOTE:** The Dell Diagnostics works only on Dell computers.

📝 **NOTE:** The Dell *Drivers and Utilities* disc is optional and may not ship with your computer.

See System Setup to review your computer's configuration information, and ensure that the device that you want to test displays in the system setup program and is active.

Start the Dell Diagnostics from your solid state drive or from the Dell *Drivers and Utilities* disc.

Starting the Dell Diagnostics From Your Solid State Drive

The Dell Diagnostics is located on a hidden diagnostic utility partition on your solid state drive.

📝 **NOTE:** If your computer cannot display a screen image, see Contacting Dell.

1. Ensure that the computer is connected to an electrical outlet that is known to be working properly.

2. Turn on (or restart) your computer.

3. When the DELL™ logo appears, press <F12> immediately. Select **Diagnostics** from the start menu and press <Enter>.

   This may invoke the Pre-Boot System Assessment (PSA) on your computer.

   📝 **NOTE:** If you wait too long and the operating system logo appears, continue to wait until you see the Windows® desktop, and then shut down your computer and try again.

   📝 **NOTE:** If you see a message stating that no diagnostics utility partition has been found, run the Dell Diagnostics from the *Drivers and Utilities* media.

If PSA *is invoked*:

   a. The PSA will start running tests.

   b. If the PSA completes successfully, the following message is displayed:

   "No problems have been found with this system so far. Do you want to run the remaining memory tests? This will take about 30 minutes or more. Do you want to continue? (Recommended)."

   c. If you are experiencing memory issues, press <y>, otherwise press <n>. The following message is displayed:

   "Booting Dell Diagnostic Utility Partition. Press any key to continue."

   d. Press any key to go to the **Choose An Option** window.

If PSA is *not invoked*:

Press any key to start the Dell Diagnostics from the diagnostic utility partition on your solid state drive and go to the **Choose An Option** window.

4. Select the test you want to run.

5. If a problem is encountered during a test, a message appears with an error code and a description of the problem. Write down the error code and problem description and contact Dell (see Contacting Dell).

   ![NOTE icon] **NOTE:** The Service Tag for your computer is displayed at the top of each test screen. If you contact Dell, technical support will ask for your Service Tag.

6. When the tests are complete, close the test screen to return to the **Choose An Option** window.

7. To exit the Dell Diagnostics and restart the computer, click **Exit**.

Starting the Dell Diagnostics From the Dell Drivers and Utilities Disc

![NOTE icon] **NOTE:** Your computer does not have an optical drive. You need to connect an external optical drive to use the *Drivers and Utilities* disc.

1. Insert the *Drivers and Utilities* disc.

2. Shut down and restart the computer.

   When the DELL logo appears, press <F12> immediately.

   ![NOTE icon] **NOTE:** If you wait too long and the operating system logo appears, continue to wait until you see the Windows desktop; then, shut down your computer and try again.

   ![NOTE icon] **NOTE:** The next steps change the boot sequence for one time only. On the next start-up, the computer starts according to the devices specified in the system setup program.

3. When the boot device list appears, highlight **CD/DVD/CD-RW** and press <Enter>.

4. Select the **Boot from CD-ROM** option from the menu that appears and press <Enter>.

5. Type 1 to start the CD menu and press <Enter> to proceed.

6. Select **Run the 32 Bit Dell Diagnostics** from the numbered list. If multiple versions are listed, select the version that is appropriate for your computer.

7. Select the test you want to run.

8. If you encounter a problem during a test, a message with the error code and a description of the problem will appear on your screen. Write down the error code and problem description and see Contacting Dell.

   ![NOTE icon] **NOTE:** The Service Tag for your computer is located at the top of each test screen. The Service Tag helps you identify your computer when you contact Dell.

9. When the tests complete, close the test screen to return to the **Choose An Option** window.

10. To exit the Dell Diagnostics and to restart the computer, click **Exit**.

11. Remove the *Drivers and Utilities* disc.

Troubleshooting Tips

Follow these tips when troubleshooting your computer:

- l If a device does not work, ensure that the device is properly connected.
- l If an error message appears on the screen, write down the exact message. This message may help support personnel to diagnose and fix the problem(s).
- l If an error message occurs in a program, see the program documentation.

![CAUTION icon] **CAUTION: Before you begin any of the procedures in this section, follow the safety information that shipped with your computer.**

![NOTE icon] **NOTE:** The procedures in this document were written for the Windows default view, so they may not apply if you set your Dell computer to the Windows Classic view.

Power Problems

NOTE: For location of the power light, see Front View Features.

If the power light is off — The computer is either turned off, in hibernate mode or is not receiving power.

- Press the power button. The computer resumes normal operation if it is off or in hibernate mode.

- Reseat the AC adapter cable into the power connector on the computer and the electrical outlet.

- If the AC adapter is plugged into a power strip, ensure that the power strip is plugged into an electrical outlet and that the power strip is turned on. Also bypass power protection devices, power strips, and power extension cables to verify that the computer turns on properly.

- Ensure that the electrical outlet is working by testing it with another device, such as a lamp.

- Check the AC adapter cable connections. If the AC adapter has a light, ensure that the light on the AC adapter is on.

If the power light is solid white — The computer is off or in hibernate mode or the display may not responding.

- Press the power button. The computer resumes normal operation if it is off or in hibernate mode.

- If the display is not responding, press the power button until the computer turns off and then turn it back on.

- If the problem persists, contact Dell (see Contacting Dell).

If the power light is blinking white — The computer is in standby mode.

- Move the connected mouse or press the power button to resume normal operation.

- If the problem persists, contact Dell (see Contacting Dell).

If the power light is solid amber and the computer is not responding — The computer is on with low battery or the display may not be responding.

- Connect the AC adapter to power the computer and charge the battery.

- If the display is not responding, press the power button until the computer turns off and then turn it back on.

- If the problem persists, contact Dell (see Contacting Dell).

If the power light is blinking amber — The computer is in standby mode with low battery.

- Connect the AC adapter to power the computer and charge the battery.

- Move the connected mouse or press the power button to resume normal operation.

- If the problem persists, contact Dell (see Contacting Dell).

If you encounter interference that hinders reception on your computer — An unwanted signal is creating interference by interrupting or blocking other signals. Some possible causes of interference are:

- Power, keyboard, and mouse extension cables.

- Too many devices connected to a power strip.

- Multiple power strips connected to the same electrical outlet.

Memory Problems

If you receive an insufficient memory message —

- Save and close any open files and exit any open programs you are not using to see if that resolves the problem.

- See the software documentation for minimum memory requirements.

- Reseat the memory module (see Replacing the Memory Module) to ensure that your computer is successfully communicating with the memory.

- Run the Dell Diagnostics (see Dell Diagnostics).

- If the problem persists, contact Dell (see Contacting Dell).

If you experience other memory problems:

- Ensure that the memory you are using is supported by your computer. For more information about the type of memory supported by your computer, see Comprehensive Specifications.

- Run the Dell Diagnostics (see Dell Diagnostics).

- Reseat the memory module (see Replacing the Memory Module) to ensure that your computer is successfully communicating with the memory.

- If the problem persists, contact Dell (see Contacting Dell).

Lockups and Software Problems

The computer does not start up

Ensure that the AC adapter cable is firmly connected to the computer and to the electrical outlet.

The computer stops responding or a solid blue screen appears

⚠ **CAUTION: You may lose data if you are unable to perform an operating system shutdown.**

Turn the computer off —

If you are unable to get a response by pressing a key on your keyboard or moving your mouse, press and hold the power button for at least 8 to 10 seconds (until the computer turns off), and then restart your computer.

A program stops responding

End the program —

1. Press <Ctrl><Shift><Esc> simultaneously to access the Task Manager, and click the **Applications** tab.

2. Click to select the program that is no longer responding, and click **End Task**.

A program crashes repeatedly

📝 **NOTE:** Most software includes installation instructions in its documentation or on a CD or DVD.

Check the software documentation —

Try to repair the program. If necessary, uninstall and then reinstall the program.

A program is designed for an earlier Microsoft® Windows® operating system

Run the Program Compatibility Wizard —

The Program Compatibility Wizard configures a program so that it runs in an environment similar to non-Windows 7 operating system environments.

1. Click **Start**.

2. In the search box, type Use an older program with this version of Windows and press <Enter>.

3. Follow the instructions on the **Program Compatibility** wizard.

Other software problems

Check the software documentation or contact the software manufacturer for troubleshooting information —

- Ensure that the program is compatible with the operating system installed on your computer.
- Ensure that your computer meets the minimum hardware requirements needed to run the software. See the software documentation for information.
- Ensure that the program is installed and configured properly.
- Verify that the device drivers do not conflict with the program.
- If necessary, uninstall and then reinstall the program.
- Back up your files immediately.
- Use a virus-scanning program to check the hard drive.
- Save and close any open files or programs and shut down your computer through the Start menu.

Dell Technical Update Service

The Dell Technical Update service provides proactive e-mail notification of software and hardware updates for your computer. This service is free and can be customized for content, format, and how frequently you receive notifications.

To register for the Dell Technical Update service, go to **support.dell.com/technicalupdate**.

Using Your Computer
Adamo XPS™ Service Manual

- Left View Features
- Right View Features
- Front View Features
- Power Light Status

This section provides information about the features available on your Adamo XPS computer.

Left View Features

1	**USB 2.0 connector —** Connects to USB devices, such as a mouse, keyboard, printer, external drive, or MP3 player.
2	**DisplayPort connector —** Connects to external monitors, TVs, or projectors.

Right View Features

1	**Audio out/Headphone connector —** Connects to a pair of headphones or to a powered speaker or sound system.
2	**USB 2.0 connector —** Connects to USB devices, such as a mouse, keyboard, printer, external drive, or MP3 player.
3	**AC adapter connector —** Connects to the AC adapter to power the computer and charge the computer battery.

Front View Features
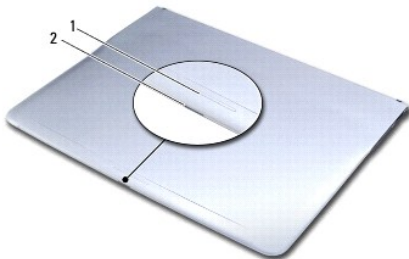
1	**Latch swipe sensor —** Swipe the latch to open the display.
2	**Power/latch light —** Illuminates when the latch is swiped and indicates the power status of the computer.

Power Light Status

The power light indicates the following states when powered using an AC adapter or a battery.

Power Light Status			
	Computer state(s)	Indicator light status	Battery charge level
AC adapter	on	solid white	0-100%
	standby	blinking white	0-100%
	off/hibernate	off	0-100%
Battery	on	solid amber	<10%
		solid white	>10%
	standby	blinking amber	<10%
		blinking white	>10%
	off/hibernate	off	0-100%

NOTE: For location of the power light see Front View Features.

NOTE: The battery is charging when the computer is powered using an AC adapter.

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WLAN Card
Adamo XPS™ Service Manual

- Removing the WLAN Card
- Replacing the WLAN Card

⚠ **WARNING: 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: To help prevent damage to the system board, remove the main battery (see Removing the Computer Battery) before working inside the computer.**

⚠ **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.**

Removing the WLAN Card

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Open the display (see Opening the Display).

4. Remove the palm rest assembly (see Removing the Palm Rest Assembly).

5. Remove the screw that secures the WLAN card to the computer base.

6. Slide and lift the WLAN card out of the connector on the right daughter board.

7. Turn the WLAN card over.

8. Disconnect the antenna cables from the WLAN card.

1	screw	2	antenna cables (2)
3	WLAN card		

Replacing the WLAN Card

1. Follow the instructions in Before You Begin.

2. Remove the new WLAN card from its packaging.

3. Connect the appropriate antenna cables to the WLAN card you are installing. The following table provides the antenna cable color scheme for the Mini-Card supported by your computer.

Connectors on the WLAN card	Antenna Cable Color Scheme
WLAN (2 antenna cables)	
Main WLAN	white
Auxiliary WLAN	black

4. Turn the WLAN card over.

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

5. Insert the WLAN card into the connector at a 45-degree angle.

6. Press the other end of the WLAN card down.

7. Replace the screw that secures the WLAN card to the computer base.

8. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

9. Replace the computer battery (see Replacing the Computer 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.**

10. Install the drivers and utilities for your computer, as required.

📝 **NOTE:** If you are installing a WLAN card from a source other than Dell, you must install the appropriate drivers and utilities.

Daughter Board(s)
Adamo XPS™ Service Manual

- Removing the Left Daughter Board
- Replacing the Left Daughter Board
- Removing the Right Daughter Board
- Replacing the Right Daughter Board

⚠️ **WARNING: 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: To help prevent damage to the system board, remove the main battery (see Removing the Computer Battery) before working inside the computer.**

⚠️ **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.**

Removing the Left Daughter Board

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Open the display (see Opening the Display).

4. Remove the palm rest assembly (see Removing the Palm Rest Assembly).

5. Disconnect the left daughter board cable from the connectors on the system board and the left daughter board.

6. Disconnect the touch pad cable, speaker cable, and the bridge battery cable from the connectors on the left daughter board.

7. Remove the two screws that secure the left daughter board to the computer base.

8. Lift the left daughter board away from the computer base.

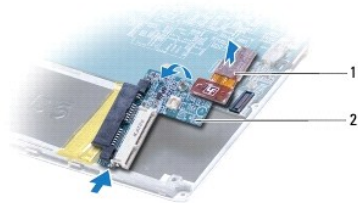| 1	left daughter board cable	2	screws (2)
3	left daughter board	4	bridge battery cable connector
5	speaker cable connector	6	touch pad cable connector

Replacing the Left Daughter Board

1. Follow the instructions in Before You Begin.

2. Place the left daughter board on the base of the computer.

3. Replace the two screws that secure the left daughter board to the computer base.

4. Connect the touch pad cable, speaker cable, and the bridge battery cable to the connectors on the left daughter board.

5. Connect the left daughter board cable to the connectors on the system board and the left daughter board.

6. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

7. Replace the computer battery (see Replacing the Computer 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.**

Removing the Right Daughter Board

1. Follow the instructions in Before You Begin.

2. Remove the computer battery (see Removing the Computer Battery).

3. Open the display (see Opening the Display).

4. Remove the palm rest assembly (see Removing the Palm Rest Assembly).

5. Remove the solid state drive (see Removing the Solid State Drive).

6. Remove the Bluetooth card (see Removing the Bluetooth Card).

7. Remove the WLAN card (see Removing the WLAN Card).

8. Disconnect the right daughter board cable from the connector on the system board.

9. Lift and slide the right daughter board away from the computer.

| 1 | right daughter board cable | 2 | right daughter board |

Replacing the Right Daughter Board

1. Follow the instructions in Before You Begin.

2. Slide and place the right daughter board towards the edge of the computer.

3. Connect the right daughter board cable to the connector on the system board.

4. Replace the WLAN card (see Replacing the WLAN Card).

5. Replace the Bluetooth card (see Replacing the Bluetooth Card).

6. Replace the solid state drive (see Replacing the Solid State Drive).

7. Replace the palm rest assembly (see Replacing the Palm Rest Assembly).

8. Replace the computer battery (see Replacing the Computer 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.**