Dell Latitude E7240 Owner's Manual



Notes, cautions, and warnings



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



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



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

Copyright © **2015 Dell Inc. All rights reserved.** This product is protected by U.S. and international copyright and intellectual property laws. Dell™ and the Dell logo are trademarks of Dell Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

Contents

1 Working on Your Computer	5
Before Working Inside Your Computer	5
Turning Off Your Computer	6
After Working Inside Your Computer	7
2 Docking Your Computer	8
3 Removing and Installing Components	9
Recommended Tools	9
System Overview	9
Removing the SD Card	10
Installing the SD Card	
Removing the Battery	
Installing the Battery	12
Removing the Base Cover	12
Installing the Base Cover	14
Removing the mSATA SSD card	14
Installing the mSATA SSD card	14
Removing the Keyboard Trim	14
Installing the Keyboard Trim	15
Removing the Keyboard	15
Installing the Keyboard	16
Removing the Palmrest	16
Installing the Palmrest	17
Removing the Wi-Fi Switch Board	17
Installing the Wi-Fi Switch Board	18
Removing the Memory Module	18
Installing the Memory Module	19
Removing the WLAN Card	19
Installing the WLAN Card	19
Removing the WWAN Card	19
Installing the WWAN Card	20
Removing the Display Bezel	20
Installing the Display Bezel	21
Removing the Display Panel	21
Installing the Display Panel	22
Removing the Coin-Cell Battery	22
Installing the Coin-Cell Battery	22

Installing the Speakers	23
motating the opeaters	23
Removing the Display-Hinge Cover	24
Installing the Display-Hinge Cover	24
Removing the Heatsink	24
Installing the Heatsink	25
Removing the Display Assembly	25
Installing the Display Assembly	27
Removing the System Fan	27
Installing the System Fan	28
Removing the System Board	28
Installing the System Board	29
Removing the Power Connector	30
Installing the Power Connector	30
System Setup	72
·	
Boot Sequence	32
Boot Sequence Navigation Keys	32 32
Boot Sequence Navigation Keys System Setup Options	32 32 33
Boot Sequence Navigation Keys System Setup Options Updating the BIOS	32 32 33
Boot Sequence Navigation Keys System Setup Options Updating the BIOS System and Setup Password.	
Boot Sequence Navigation Keys System Setup Options Updating the BIOS	
Boot Sequence Navigation Keys System Setup Options Updating the BIOS System and Setup Password Assigning a System Password and Setup Password Deleting or Changing an Existing System and/or Setup Password	
Boot Sequence Navigation Keys System Setup Options Updating the BIOS System and Setup Password Assigning a System Password and Setup Password	32 33 42 43 44
Boot Sequence Navigation Keys System Setup Options Updating the BIOS System and Setup Password Assigning a System Password and Setup Password Deleting or Changing an Existing System and/or Setup Password Diagnostics	32 33 42 43 44 45
Boot Sequence	32 32 33 42 43 44 45 46
Boot Sequence	32 32 33 42 43 43 44 45 46

Working on Your Computer

Before Working Inside Your Computer

Use the following safety guidelines to help protect your computer from potential damage and to help to ensure your personal safety. Unless otherwise noted, each procedure included in this document assumes that the following conditions exist:

- You have read the safety information that shipped with your computer.
- A component can be replaced or--if purchased separately--installed by performing the removal procedure in reverse order.



WARNING: Disconnect all power sources before opening the computer cover or panels. After you finish working inside the computer, replace all covers, panels, and screws before connecting to the power source.



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



CAUTION: Many repairs may only be done by a certified service technician. You should only perform troubleshooting and simple repairs as authorized in your product documentation, or as directed by the online or telephone service and support team. Damage due to servicing that is not authorized by Dell is not covered by your warranty. Read and follow the safety instructions that came with the product.



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 the back of the



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: 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: The color of your computer and certain components may appear differently than shown in this document.

To avoid damaging your computer, perform the following steps before you begin working inside the computer.

- 1. Ensure that your work surface is flat and clean to prevent the computer cover from being scratched.
- 2. Turn off your computer (see Turning off Your Computer).

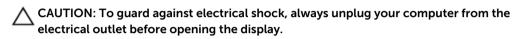
3. If the computer is connected to a docking device (docked), undock it.

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

- 4. Disconnect all network cables from the computer.
- 5. Disconnect your computer and all attached devices from their electrical outlets.
- 6. Close the display and turn the computer upside-down on a flat work surface.

NOTE: To avoid damaging the system board, you must remove the main battery before you service the computer.

- 7. Remove the main battery.
- 8. Turn the computer top-side up.
- 9. Open the display.
- 10. Press the power button to ground the system board.



CAUTION: Before touching anything inside your computer, ground yourself by touching an unpainted metal surface, such as the metal at the back of the computer. While you work, periodically touch an unpainted metal surface to dissipate static electricity, which could harm internal components.

11. Remove any installed ExpressCards or Smart Cards from the appropriate slots.

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.** Shut down the operating system:
 - In Windows 8:
 - Using a touch-enabled device:
 - Swipe in from the right edge of the screen, opening the Charms menu and select Settings.
 - b. Select the O and then select **Shut down**
 - Using a mouse:
 - a. Point to upper-right corner of the screen and click **Settings**.
 - b. Click the \circlearrowleft and select **Shut down**.
 - In Windows 7:
 - 1. Click Start
 - Click Shut Down.

or

1. Click **Start** .

2. Click the arrow in the lower-right corner of the **Start** menu as shown below, and then click



Shut Down...

2. Ensure that the computer and all attached devices are turned off. If your computer and attached devices did not automatically turn off when you shut down your operating system, press and hold the power button for about 4 seconds to turn them off.

After Working Inside Your Computer

After you complete any replacement procedure, ensure you connect any external devices, cards, and cables before turning 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.

- 1. Connect any external devices, such as a port replicator or media base, and replace any cards, such as an ExpressCard.
- 2. Connect any telephone or network cables to your computer.

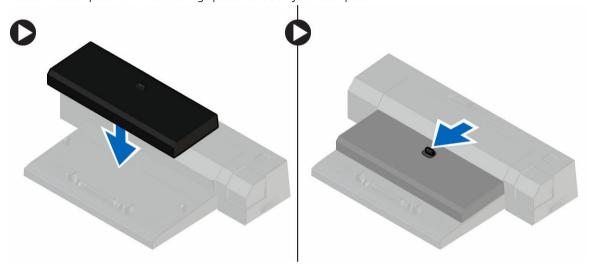
CAUTION: To connect a network cable, first plug the cable into the network device and then plug it into the computer.

- **3.** Replace the battery.
- 4. Connect your computer and all attached devices to their electrical outlets.
- 5. Turn on your computer.

Docking Your Computer

Follow the steps to dock your computer:

- a. Place the docking spacer until the docking spacer clicks on its place in the docking station.
- b. Place the computer on the docking spacer to dock your computer.



NOTE: This docking spacer can be used to dock only the Latitude E7240 / Latitude E7440 computers. You cannot dock any other Dell computers using this docking station.

Removing and Installing Components

This section provides detailed information on how to remove or install the components from your computer.

Recommended Tools

The procedures in this document may require the following tools:

- Small flat-blade screwdriver
- Phillips screwdriver
- Small plastic scribe

System Overview

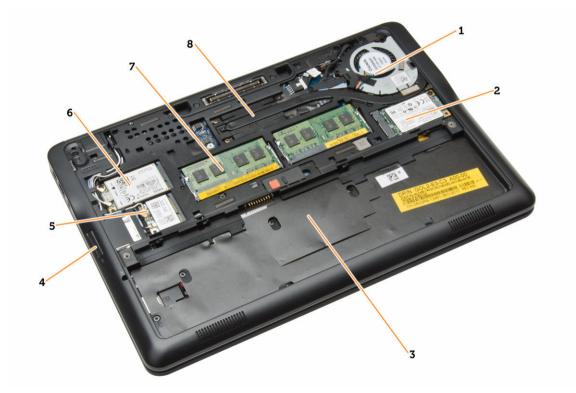


Figure 1. Inside View — Back

- 1. system fan
- 2. mSATA card
- 3. battery bay

- 4. SD card
- 5. WLAN card
- 6. WWAN card
- 7. memory module
- 8. heatsink

Figure 2. Inside view — Front



- 1. coin-cell battery
- 3. speaker
- 5. wi-fi switch board
- 7. display assembly

- 2. SIM card board
- 4. system board
- 6. system fan

Removing the SD Card

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Press in on the SD card to release it from the computer.









3. Slide the SD card out of the computer.

Installing the SD Card

- 1. Slide the SD card into its slot until it clicks into place.
- 2. Follow the procedures in After Working Inside Your Computer.

Removing the Battery

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Slide the release latch to unlock the battery.



3. Lift the battery from the computer.

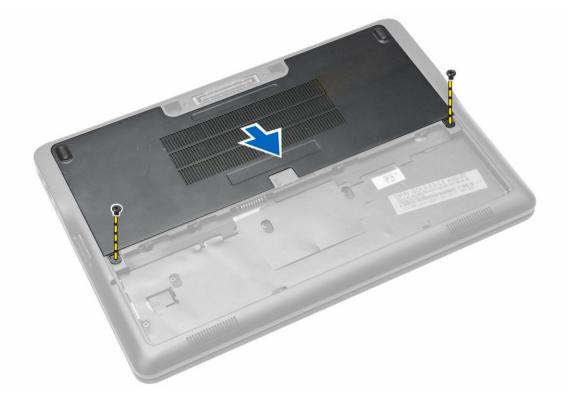


Installing the Battery

- 1. Slide the battery into its slot until it clicks into place.
- 2. Follow the procedures in After Working Inside Your Computer.

Removing the Base Cover

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove battery.
- **3.** Remove the screws that secure the base cover to the computer.



4. Lift the base cover to remove it from the computer.



Installing the Base Cover

- 1. Place the base cover to align with the screw holes correctly on the computer.
- 2. Tighten the screws to secure the base cover to the computer.
- **3.** Install battery.
- **4.** Follow the procedures in After Working Inside Your Computer.

Removing the mSATA SSD card

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. battery
 - b. base cover
- **3.** To remove the mSATA SSD card:
 - a. Remove the screw that secures the mSATA SSD card to the computer.
 - b. Disconnect the mSATA SSD card from the connector on the system board.



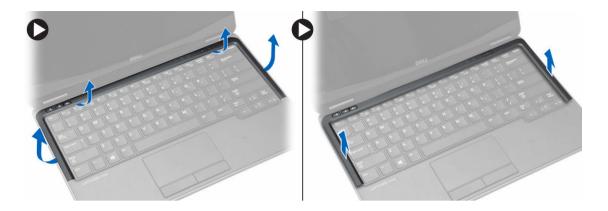


Installing the mSATA SSD card

- 1. Connect the mSATA SSD card to the connector on the system board.
- 2. Tighten the screw to secure the mSATA SSD to the computer.
- 3. Install:
 - a. base cover
 - b. battery
- **4.** Follow the procedures in After Working Inside Your computer.

Removing the Keyboard Trim

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove battery.
- **3.** Using a plastic scribe, pry the keyboard trim to release it from the computer. Lift up to remove the keyboard trim from the computer.

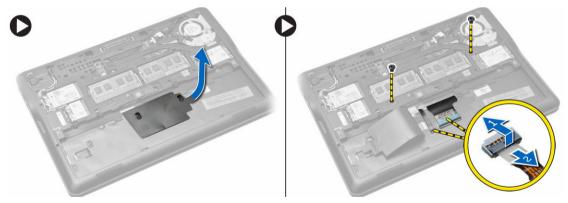


Installing the Keyboard Trim

- 1. Align the keyboard trim to its slot.
- 2. Press along the sides of the keyboard trim until it clicks in place.
- 3. Install battery.
- **4.** Follow the procedures in After Working Inside Your Computer.

Removing the Keyboard

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. battery
 - b. base cover
 - c. keyboard trim
- 3. Lift the battery bay and remove the screw that secures the keyboard to the computer.
- **4.** Perform the following steps as shown in the illustration:
 - a. Lift the latch that secure the keyboard cable to the computer [1].
 - b. Disconnect the keyboard cable the computer [2].



- **5.** Flip the computer and remove the screws that secure the keyboard to the computer.
- **6.** Perform the following steps as shown in the illustration:
 - a. Slide the keyboard from the computer [1].
 - b. Lift the keyboard from the computer [2].



Installing the Keyboard

- 1. Connect the keyboard cable and tighten the screw that secures the keyboard to the computer.
- 2. Slide the keyboard into its compartment and ensure that it clicks into place.
- **3.** Flip the computer, place the keyboard, and tighten the screws that secure the keyboard to the computer.
- 4. Install:
 - a. keyboard trim
 - b. base cover
 - c. battery
- 5. Follow the procedures in After Working Inside Your Computer.

Removing the Palmrest

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. SD card
 - b. battery
 - c. base cover
 - d. keyboard trim
 - e. keyboard
- 3. Remove the screws that secure the palmrest assembly and flip the computer.
- **4.** Perform the following steps as shown in the illustration:
 - a. Disconnect the cable from the computer.
 - b. Lift the latch that secures the keyboard cable to the computer [1].
 - c. Disconnect the keyboard cable [2].
 - d. Disconnect the touch cable from the computer [3].
 - e. Unroute the cables from the slot [4].



5. Remove the screws that secure the palmrest assembly to the front of the computer. Pry the edges and lift the palmrest assembly from the computer.



Installing the Palmrest

- 1. Align the palm rest assembly to its original position in the computer and snap it into place.
- 2. Tighten the screws to secure the palmrest assembly to the front of the computer.
- 3. Route the touch cable and connect to the system board.
- **4.** Tighten the screws that secure the palmrest assembly to the base of the computer.
- 5. Install:
 - a. keyboard
 - b. keyboard trim
 - c. base cover
 - d. battery
 - e. SD card
- **6.** Follow the procedures in After Working Inside Your Computer.

Removing the Wi-Fi Switch Board

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. SD card
 - b. battery

- c. base cover
- d. keyboard trim
- e. keyboard
- f. palmrest
- **3.** Disconnect the wi-fi switch board cable from the system board and remove the screw that secures the wi-fi switch board to the computer. Remove the wi-fi switch board.

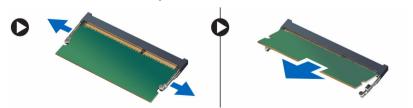


Installing the Wi-Fi Switch Board

- 1. Insert the wi-fi switch board in its slot.
- 2. Connect the wi-fi switch board to the system board.
- **3.** Tighten the screw that secures the wi-fi switch board to the system board.
- 4. Install:
 - a. palmrest
 - b. keyboard
 - c. keyboard trim
 - d. base cover
 - e. battery
 - f. SD card
- 5. Follow the procedures in After Working Inside Your Computer.

Removing the Memory Module

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. battery
 - b. base cover
- **3.** Pry the securing clips away from the memory module until it pops up. Remove the memory module from its connector on the system board.



Installing the Memory Module

- 1. Insert the memory module into the socket.
- 2. Press the retention clips to secure the memory module to the system board.
- 3. Install:
 - a. base cover
 - b. battery
- **4.** Follow the procedures in After Working Inside Your Computer.

Removing the WLAN Card

- 1. Follow the procedures in Before Working Inside Your Computer.
- 2. Remove:
 - a. battery
 - b. base cover
- **3.** Disconnect the antenna cables from the WLAN card and remove the screw that secures the WLAN card to the computer. Remove the WLAN card from the computer.



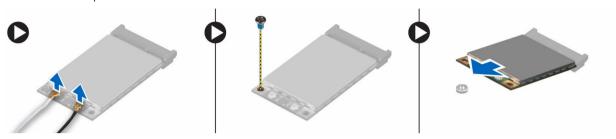
Installing the WLAN Card

- 1. Insert the WLAN card into its connector at a 45-degree angle into its slot.
- 2. Tighten the screw to secure the WLAN card to the computer.
- 3. Connect the antenna cables to their respective connectors marked on the WLAN card.
- 4. Install:
 - a. base cover
 - b. battery
- 5. Follow the procedures in After Working Inside Your Computer.

Removing the WWAN Card

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. battery

- b. SD card
- c. base cover
- 3. Disconnect the antenna cables from the WWAN card.
- **4.** Remove the screw that secures the WWAN card to the computer.
- **5.** Disconnect the antenna cables from the WWAN card. Remove the screw that secures the WWAN card to the computer and remove it.

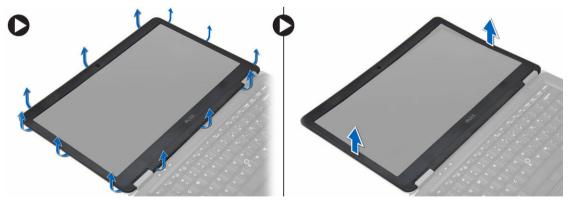


Installing the WWAN Card

- **1.** Place the WWAN card in its slot in the system board.
- 2. Press the WWAN card down and tighten the screw to secure the WWAN card to the computer.
- 3. Connect the antenna cables to their respective connectors marked on the WWAN card.
- 4. Install:
 - a. base cover
 - b. SD card
 - c. battery
- 5. Follow the procedures in After Working Inside Your Computer.

Removing the Display Bezel

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove the battery.
- 3. Pry the edges of the display bezel. Remove the display bezel from the display assembly.

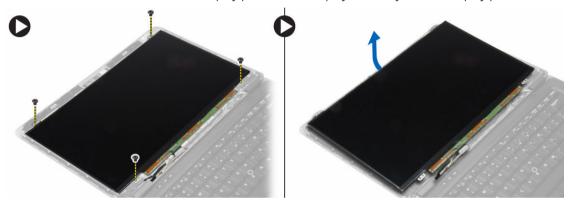


Installing the Display Bezel

- 1. Align the display bezel in place and snap it in place.
- 2. Align the hinge covers on display assembly and snap it in place.
- **3.** Install the battery
- **4.** Follow the procedures in After Working Inside Your Computer.

Removing the Display Panel

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. battery
 - b. display bezel
- 3. Remove the screws that secure the display panel to the display assembly. Lift the display panel over.



- **4.** Perform the following steps as shown in the illustration:
 - a. Peel the LVDS cable connector tape [1].
 - b. Disconnect the LVDS cable from the display panel [2].
 - c. Remove the display panel from the display assembly [3].

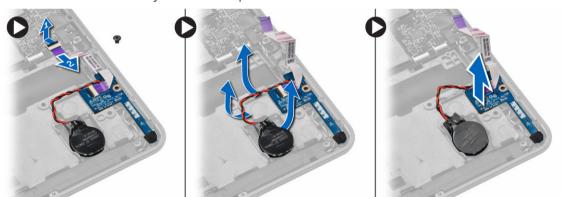


Installing the Display Panel

- 1. Connect the display cable (LVDS cable) to its connector on the display panel.
- 2. Place the display panel to its original position on the display assembly.
- **3.** Tighten the screws to secure the display panel to the display assembly.
- 4. Install:
 - a. display bezel
 - b. battery
- **5.** Follow the procedures in After Working Inside Your Computer.

Removing the Coin-Cell Battery

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. SD card
 - b. battery
 - c. base cover
 - d. keyboard trim
 - e. keyboard
 - f. palmrest
- 3. Remove the screw that secures the coin-cell battery to the system board.
- **4.** Perform the following steps as shown in the illustration:
 - a. Lift the latch that secures I/O cable to the computer [1].
 - b. Disconnect the I/O cable from the system board [2].
- 5. Disconnect the coin-cell battery cable from the system board. Unroute the cables from the slot and remove the coin-cell battery from the computer.



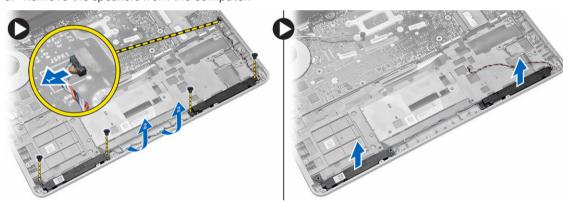
Installing the Coin-Cell Battery

- 1. Place the coin-cell battery in its slot.
- 2. Route the cables and connect the coin-cell battery cable to the system board.
- 3. Connect the I/O cable to the system board.
- 4. Tighten the screw that secures the coin-cell battery to the system board.

- 5. Install:
 - a. palmrest
 - b. keyboard
 - c. keyboard trim
 - d. base cover
 - e. battery
 - f. SD card
- **6.** Follow the procedures in After Working Inside Your Computer.

Removing the Speakers

- 1. Follow the procedures in Before Working Inside Your Computer.
- 2. Remove:
 - a. SD card
 - b. battery
 - c. base cover
 - d. keyboard trim
 - e. keyboard
 - f. palmrest
- **3.** Perform the following steps as shown in the illustration:
 - a. Disconnect the speaker cable [1].
 - b. Remove the screws that secure the speakers to the computer.
 - c. Unroute the speaker cable from the system board [2].
 - d. Remove the speakers from the computer.



Installing the Speakers

- **1.** Align the speakers to their original position and tighten the screws to secure the speakers to the computer.
- 2. Route the speaker cable on the computer and connect it to the system board.
- 3. Install:
 - a. palmrest
 - b. keyboard
 - c. keyboard trim
 - d. base cover
 - e. battery

- f. SD card
- **4.** Follow the procedures in After Working Inside Your Computer.

Removing the Display-Hinge Cover

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove battery.
- **3.** Remove the screws that secure the display-hinge cover to the computer. Lift the display-hinge cover.

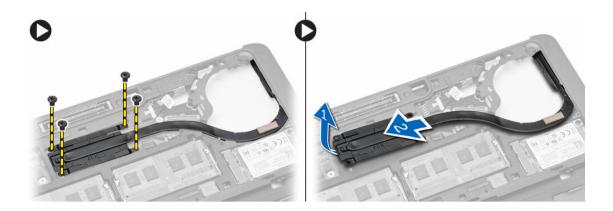


Installing the Display-Hinge Cover

- 1. Place the display-hinge cover and tighten the screws to secure the display-hinge cover to the computer.
- 2. Install battery.
- 3. Follow the procedures in After Working Inside Your Computer.

Removing the Heatsink

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. SD card
 - b. battery
 - c. base cover
 - d. mSATA
 - e. keyboard trim
 - f. keyboard
 - g. palmrest
 - h. display-hinge cover
 - i. display assembly
- 3. Remove the screws that secure the heatsink to the computer.
- **4.** Perform the following steps as shown in the illustration:
 - a. Lift the heatsink from the computer [1].
 - b. Remove the heatsink from the computer [2].



Installing the Heatsink

- 1. Place the heatsink into its original position on the computer.
- 2. Tighten the screws to secure the heatsink to the computer.
- **3.** Install:
 - a. display assembly
 - b. display-hinge cover
 - c. palmrest
 - d. keyboard
 - e. keyboard trim
 - f. mSATA
 - g. base cover
 - h. battery
 - i. SD card
- **4.** Follow the procedures in After Working Inside Your Computer.

Removing the Display Assembly

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. battery
 - b. SD card
 - c. base cover
 - d. keyboard
 - e. palmrest
- **3.** Perform the following steps as shown in the illustration:
 - a. Disconnect the WLAN cable from the system board [1].
 - b. Unroute the WLAN cables from the slot [2].
 - c. Remove the screw that secures the heatsink to the computer.



- **4.** Perform the following steps as shown in the illustration: Disconnect the antenna cables from the wireless solution.
 - a. Disconnect the LVDS cable from the system board [1].
 - b. Unroute the cable from the slot [2].
 - c. Remove the screws and pull the antenna cables from the holes on the base chassis that secure the display assembly to the computer.



5. Remove the screws that secure the display assembly to the computer and lift the display assembly from the computer.



Installing the Display Assembly

- 1. Insert the LVDS and wireless antenna cables through the holes on the base chassis and connect them.
- 2. Place the display assembly onto the computer.
- 3. Tighten the screws on both sides to secure the display assembly.
- **4.** Tighten the screw that secures heatsink to the computer.
- 5. Route and connect the LVDS cables through the routing channel.
- **6.** Connect the WLAN cable to the computer.
- 7. Install:
 - a. palmrest
 - b. keyboard
 - c. base cover
 - d. SD card
 - e. battery
- 8. Follow the procedures in After Working Inside Your Computer.

Removing the System Fan

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. battery
 - b. SD card
 - c. base cover
 - d. keyboard trim
 - e. keyboard
 - f. palmrest
 - g. display-hinge cover
- **3.** Remove the screws that secure the system fan to the computer and lift the system fan. Disconnect the system fan cable and lift the fan from the computer.

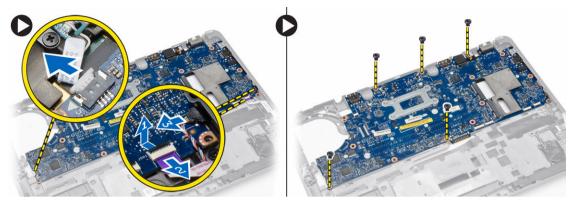


Installing the System Fan

- 1. Connect the system-fan cable to the system board.
- 2. Tighten the screws that secure the system fan to the computer.
- 3. Align the system fan in its place on the system board.
- 4. Install:
 - a. display-hinge cover
 - b. palmrest
 - c. keyboard
 - d. keyboard trim
 - e. base cover
 - f. SD card
 - g. battery
- 5. Follow the procedures in After Working Inside Your Computer.

Removing the System Board

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. SD card
 - b. battery
 - c. base cover
 - d. mSATA
 - e. keyboard trim
 - f. keyboard
 - g. palmrest
 - h. speaker
 - i. display-hinge cover
 - j. display assembly
 - k. system fan
 - l. heat sink
 - m. I/O cable
- **3.** Perform the following steps as shown in the illustration:
 - a. Lift the I/O latch [1].
 - b. Remove the I/O cable from the system board [2].
 - c. Disconnect the I/O cable from system board[3].
 - d. Disconnect the speaker cable from the system board.
 - e. Remove the screws that secure the system board to the computer.



- **4.** Perform the following steps as shown in the illustration:
 - a. Lift the left edge of system board partially to a 45-degree angle [1].
 - b. Remove the system board from the computer [2].



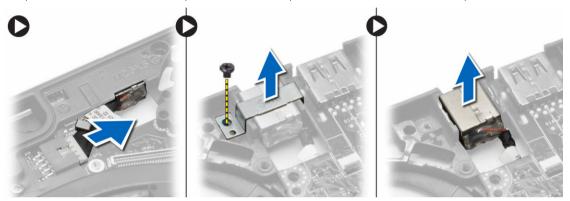
Installing the System Board

- 1. Align the system board in its place on the computer.
- 2. Tighten the screws to secure the system board.
- **3.** Connect the following cables to the system board:
 - a. speaker
 - b. I/O cable
- 4. Install:
 - a. system fan
 - b. heat sink
 - c. display assembly
 - d. display-hinge cover
 - e. speaker
 - f. palmrest
 - g. keyboard
 - h. keyboard trim
 - i. mSATA
 - j. base cover
 - k. battery
 - l. SD card

5. Follow the procedures in After Working Inside Your Computer.

Removing the Power Connector

- **1.** Follow the procedures in *Before Working Inside Your Computer*.
- 2. Remove:
 - a. SD card
 - b. battery
 - c. base cover
 - d. keyboard
 - e. palmrest
 - f. system fan
- **3.** Disconnect the power-connector cable from the system board and remove the screw that secures the power connector to the computer. Remove the power connector from the computer.



Installing the Power Connector

- 1. Insert the power connector in its slot.
- 2. Connect the power connector to the system board.
- **3.** Tighten the screw that secures the power connector to the system board.
- 4. Install:
 - a. system fan
 - b. palmrest
 - c. keyboard
 - d. base cover
 - e. battery
 - f. SD card
- **5.** Follow the procedures in After Working Inside Your Computer.

Docking Port Information

The docking port is used for connecting the laptop to a docking station (optional).



1. Docking Port

System Setup

Boot Sequence

Boot Sequence allows you to bypass the System Setup-defined boot device order and boot directly to a specific device (for example: optical drive or hard drive). During the Power-on Self Test (POST), when the Dell logo appears, you can:

- Access System Setup by pressing <F2> key
- Bring up the one-time boot menu by pressing <F12> key

The one-time boot menu displays the devices that you can boot from including the diagnostic option. The boot-menu options are:

- Removable Drive (if available)
- STXXXX Drive
 - **NOTE:** XXX denotes the SATA drive number.
- · Optical Drive
- Diagnostics

NOTE: Choosing Diagnostics, will display the **ePSA diagnostics** screen.

The boot sequence screen also displays the option to access the System Setup screen.

Navigation Keys

The following table displays the system setup navigation keys.



NOTE: For most of the system setup options, changes that you make are recorded but do not take effect until you re-start the system.

Table 1. Navigation Keys

Keys	Navigation
Up arrow	Moves to the previous field.
Down arrow	Moves to the next field.
<enter></enter>	Allows you to select a value in the selected field (if applicable) or follow the link in the field.
Spacebar	Expands or collapses a drop-down list, if applicable.
<tab></tab>	Moves to the next focus area.

Keys	Navigation
	NOTE: For the standard graphics browser only.
<esc></esc>	Moves to the previous page till you view the main screen. Pressing <esc> in the main screen displays a message that prompts you to save any unsaved changes and restarts the system.</esc>
<f1></f1>	Displays the System Setup help file.

System Setup Options



NOTE: Depending on your computer and its installed devices, the items listed in this section may or may not appear.

Table	2	Conoral	

Option	Description
System Information	This section lists the primary hardware features of your computer.
	 System Information: Displays BIOS Version, Service Tag, Asset Tag, Ownership Tag, Ownership Date, Manufacture Date, and the Express Service Code.
	 Memory Information: Displays Memory Installed, Memory Available Memory Speed, Memory Channels Mode, Memory Technology, DIMM ASize, DIMM B Size,
	 Processor Information: Displays Processor Type, Core Count, Processor ID, Current Clock Speed, Minimum Clock Speed, Maximum Clock Speed, Processor L2 Cache, Processor L3 Cache, HT Capable, and 64-Bit Technology.
	Device Information: Displays Primar Hard Drive, Fixed bay Device, Syster eSATA Device, Dock eSATA Device, LOM MAC Address, Video Controlle Video BIOS Version, Video Memory, Panel Type, Native Resolution, Audi Controller, Modem Controller, Wi-F Device, WiGig Device, Cellular Device, Bluetooth Device.
Battery Information	Displays the battery status and the type of AC adapter connected to the computer
Boot Sequence	Allows you to change the order in which the computer attempts to find an operating system. Diskette Drive Internal HDD USB Storage Device CD/DVD/CD-RW Drive

Option	Description
	Onboard NIC
Advance Boot Option	This option is required for Legacy boot mode. This option is not allowed if Secure Boot is enabled.
	 Enable Legacy Option ROMs — This option is disabled by default.
Date/Time	Allows you to set the date and time.
Table 3. System Configuration	
Option	Description
Integrated NIC	Allows you to configure the integrated network controller. The options are: Disabled Enabled Enabled w/PXE: This option is enabled by default. Enable UEFI Network Stack: This allows you to enable UEFI Networking Protocols in pre-OS and
Parallel Port	early OS networking environment. Allows you to define and set how the parallel port on the docking station operates. You can set the parallel port to: Disabled AT PS2 ECP (Latitude 7440)
Serial Port	Identifies and defines the serial port settings. You can set the serial port to: • Disabled • COM1 (Default Setting) • COM2 • COM3 • COM4
SATA Operation	NOTE: The operating system may allocate resources even if the setting is disabled. Allows you to configure the internal SATA hard-drive controller. The options are:
	DisabledAHCIRAID On (Default Setting)

Option	Description
	NOTE: SATA is configured to support RAID mode.
Drives	Allows you to configure the SATA drives on board. The options are:
	• SATA-0
	• SATA-1
	• SATA-2
	• SATA-3
	Default Setting: All drives are enabled.
SMART Reporting	This field controls if the hard drive errors for the integrated drives are reported during system startup. This technology is part of the SMART (Self Monitoring Analysis and Reporting Technology) specification.
	 Enable SMART Reporting - This option is disabled by default.
USB Configuration	Allows you to define the USB configuration. The options are: • Enable Boot Support • Enable External USB Port • Enable USB3.0 Controller
	Default Setting: all the options are enabled.
USB PowerShare	Allows you to configure the behavior of the USB PowerShare feature. The option is disabled by default. • Enable USB PowerShare
Audio	Allows you to enables or disables the integrated audio controller.
	 Enable Audio Controller. Enable Audio This option is enabled by default.
Keyboard Illumination	Allows you to choose the operating mode of the keyboard illumination feature. The options are:
	 Disabled (Default Setting)
	• Level is 25%
	• Level is 50%
	• Level is 75%
	• Level is 100%
Unobtrusive Mode	Allows you to set the mode that will turn off all light and sound emissions from

Option	Description
	the system. The option is disabled by default.
	Enable Unobtrusive Mode
Miscellaneous Devices	Allows you enable or disable the various on board devices. The options are:
	Enable Microphone
	 Enable Hard Drive Free Fall Protection
	Enable Camera
	 Enable Media Card
	 Disable Media Card
	Default Setting: All devices are enabled

Table 4. Video

Option	Description
LCD Brightness	Allows you to set the display brightness depending up on the power source (On Battery and On AC).
Table 5. Security	
Option	Description
Admin Password	This field lets you set, change, or delete the administrator (admin) password (sometimes called the setup password). The admin password enables several security features.
	Enter the old password
	Enter the new password
	Confirm the new password
	Default Setting: Not set
System Password	Allows you to set, change or delete the system password.
	Enter the old password
	Enter the new password
	Confirm the new password
	Default Setting: Not set
Internal HDD-1 Password	Allows you to set, change or delete the administrator password. The drive does not have a password set by default.
	Enter the old passwordEnter the new passwordConfirm the new password
	Default Setting: Not set

Allows you to enforce the option to always set strong passwords.

Strong Password

Option	Description		
	Default Setting: Enable Strong Password is not selected.		
Password Configuration	You can define the length of your password. Min = 4 , Max = 32		
Password Bypass	Allows you to enable or disable the permission to bypass the System and the Internal HDD password, when they are set. The options are: • Disabled (Default Setting) • Reboot bypass		
Password Change	Allows you to enable the disable permission to the System and Hard Drive passwords when the admin password is set. Default Setting: Allow Non-Admin Password Changes is not selected		
Non-Admin Setup Changes	Allows you to determine whether changes to setup option are permitted when an administrator password is set. The option is disabled.		
	Allows Wireless Switch Changes		
TPM Security	Allows you to enable the Trusted Platform Module (TPM) during POST. Default Setting: The option is disabled.		
Computrace	Allows you to activate or disable the optional Computrace software The options are: • Deactivate (Default Setting) • Disable • Activate NOTE: The Activate and Disable options will permanently activate or disable the feature and no further changes will be allowed		
CPU XD Support	Allows you to enable the Execute Disable mode of the processor. Default Setting: Enable CPU XD Support		
OROM Keyboard Access	Allows you to set access to enter the Option ROM Configuration screens using hotkeys during boot process. The options are: • Enable (Default Setting) • One Time Enable • Disable		
Admin Setup Lockout	Allows you to prevent users from entering Setup when an Administrator password is set. Default Setting: Disabled		
Table 6. Secure Boot			
Secure Boot Enable	Allows you to enable or disable Secure Boot feature • Disabled • Enabled(Default Setting)		



NOTE: For enable system needs to be UEFI boot mode and enable legacy option ROMs to be turned off.

Expert key Management

Allows you to manipulate the security key databases only if the system is in Custom Mode. The Enable Custom Mode option is disabled by default. The options are:

- PK
- KEK
- db
- dbx

If you enable the Custom Mode, the relevant options for PK, KEK, db, and dbx appear. The options are:

- Save to File- Saves the key to a user-selected file
- Replace from File- Replaces the current key with a key from a userselected file
- Append from File- Adds a key to the current database from a userselected file
- Delete- Deletes the selected key
- · Reset All Keys- Resets to default setting
- Delete All Keys- Deletes all the keys



NOTE: If you disable the Custom Mode, all the changes made will be erased and the keys will restore to default settings.

Table 7. Performance

Option	Description
Multi Core Support	This field specifies whether the process will have one or all cores enabled. The performance of some applications will improve with the additional cores. This option is enabled by default. Allows you to enable or disable multi-core support for the processor. The options are: • All (Default Setting) • 1 • 2
Intel SpeedStep	Allows you to enable or disable the Intel SpeedStep feature. Default Setting: Enable Intel SpeedStep
C States Control	Allows you to enable or disable the additional processor sleep states. Default Setting: The option C states is enabled.
Intel TurboBoost	Allows you to enable or disable the Intel TurboBoost mode of the processor.

Option	Description
	Default Setting: Enable Intel TurboBoost
Hyper-Thread Control	Allows you to enable or disable the HyperThreading in the processor. Default Setting: Enabled
Rapid Start Technology	The Intel Rapid Start feature might improve the battery life by automatically putting the system into a low power state during sleep after a user specified time. The options are enabled by default: • Intel Rapid Start Feature
	 Transition to Rapid Start when using Timer
	The Rapid Start Timer value can be configure to put the system into Rapid State as per requirement.

Table 8. Power Management

Option	Description
AC Behavior	Allows the computer to power-on automatically, when AC adapter is plugged. The option is disabled.
	Wake on AC
Auto On Time	Allows you to set the time at which the computer must turn on automatically. The options are:
	Disabled (Default Setting)
	Every Day
	Weekdays
	Select Days
USB Wake Support	Allows you to enable the USB devices to wake the computer from standby mode. The option is disabled
	Enable USB Wake Support
Wireless Radio Control	Allows you to control the WLAN and WWAN radio. The options are:
	Control WLAN radio
	Control WWAN radio
	Default Setting: both the options are disabled.
Wake on LAN/WLAN	This option allows the computer to power up from the off state when triggered by a special LAN signal. Wake-up from the Standby state is unaffected by this setting and must be enabled in the operating system. This feature only works when the computer is connected to AC power supply.

Option	Description		
	Disabled - Does not allow the system to power on by special LAN signals when it receives a wake-up signal from the LAN or wireless LAN. (Default Setting)		
	 LAN Only - Allows the system to be powered on by special LAN signals. 		
	WLAN Only		
	• LAN or WLAN		
	LAN with PXE Boot		
Block Sleep	Allows you to block the computer from entering into the sleep state. Option is disabled by default.		
	Block Sleep (S3)		
Peak Shift	Peak Shift can be used to minimize AC consumption during peak powers times of day. Set the start and end time to run in Peak Shift mode.		
	Enable Peak Shift (Disabled)		
Advanced Battery Charge Configuration	Allows batteries in the system in Advanced Battery Charge Mode to maximize battery health. This uses standard charging algorithm and other techniques during non-work hours to maximize battery health		
	Enable Advanced Battery Charge Mode(Disabled)		
Primary Battery Configuration	Allows you to define how to use the battery charge, when AC is plugged in. The options are:		
	Adaptive(Enabled)		
	Standard Charge		
	Express Charge		
	Primary AC Use		
	 Custom Charge — you can set the percentage to which the battery must charge. 		
Intel Smart Connect Technology	The option is disabled by default. If option enables will periodically sense nearby wireless connection while the system is asleep. It will synchronize emails or social media application that were open when system entered the sleep state.		
	Smart Connection(Disabled)		

Table 9. POST Behavior

Option	Description
Adapter Warnings	Allows you to activate the adapter warning messages when certain power adapters are used. The option is enabled by default.
	Enable Adapter Warnings
Keypad (Embedded)	Allows you to choose one of two mode it enable the keypad that us embedded in the internal keyboard.
	Fn Key Only
	By Numlock

Option	Description		
	NOTE: When setup is running, this option has no effect, Setup works in the "Fn Key Only" mode.		
Mouse/Touchpad	Allows you to define how the computer handles the mouse and touchpad input. The options are:		
	Serial Mouse		
	PS2 Mouse		
	Touchpad/PS-2 Mouse (Default Setting)		
Numlock Enable	Specifies if the NumLock function can be enabled when the computer boots. This option is enabled by default.		
	Enable Numlock		
Fn Key Emulation	Allows you to match the <scroll lock=""> key feature of PS-2 keyboard with the <fn> key feature in an internal keyboard. The option is enabled by default.</fn></scroll>		
	Enable Fn Key Emulation		
Fastboot	Allows you to speed up the boot process by bypassing some compatibility steps. • Minimal • Thorough • Auto		
Extended BIOS POST Time	Allows to creates an additional pre-boot delay and allows the user to see POST status message. • 0 seconds • 5 seconds • 10 seconds		

Table 10. Virtualization Support

Option	Description
Virtualization	Allows you to enable or disable the Intel Virtualization Technology. Default Setting: Enable Intel Virtualization Technology
VT for Direct I/O	Enables or disables the Virtual Machine Monitor (VMM) from utilizing the additional hardware capabilities provided by Intel® Virtualization technology for direct I/O. Enable VT for Direct I/O — This option is enabled by default.
Trusted Execution	This option specifies whether a Measured Virtual Machine Monitor (MVMM) can utilize the additional hardware capabilities provided by Intel Trusted Execution Technology. The TPM virtualization Technology, and Virtualization technology for direct I/O must be enabled to use this feature. Trusted Execution — disabled by default.

Table 11. Wireless

Option	Description		
Wireless Switch	Allows you to determine which wireless device can be controlled by the wireless switch. The options are:		
	• WWAN		
	• WLAN		
	• Bluetooth		
	• WiGig		
	All options are enabled by default.		
Wireless Device Enable	Allows you to enable or disable the wireless devices. The options are:		
	WWAN Division of the		
	Bluetooth		
	WLAN/WiGig		
	All options are enabled by default.		
	·		

Table 12. Maintenance

Option	Description
Service Tag	Displays the service tag of your computer.
Asset Tag	Allows you to create a system asset tag if an asset tag is not already set. This option is not set by default.

Table 13. System Logs

Option	Description		
BIOS events	Displays the system event log and allows you to clear the log. • Clear Log		
Thermal Events	Displays the thermal event log and allows you to clear the log. • Clear Log		
Power Events	Displays the power event log and allows you to clear the log. • Clear Log		

Updating the BIOS

It is recommended to update your BIOS (system setup), on replacing the system board or if an update is available. For laptops, ensure that your computer battery is fully charged and connected to a power outlet

- 1. Re-start the computer.
- 2. Go to dell.com/support.
- 3. Enter the Service Tag or Express Service Code and click Submit.
 - **NOTE:** To locate the Service Tag, click **Where is my Service Tag?**

- NOTE: If you cannot find your Service Tag, click **Detect My Product**. Proceed with the instructions on screen.
- 4. If you are unable to locate or find the Service Tag, click the Product Category of your computer.
- 5. Choose the **Product Type** from the list.
- 6. Select your computer model and the **Product Support** page of your computer appears.
- 7. Click Get drivers and click View All Drivers.
 - The Drivers and Downloads page opens.
- 8. On the Drivers and Downloads screen, under the Operating System drop-down list, select BIOS.
- 9. Identify the latest BIOS file and click **Download File**.
 - You can also analyze which drivers need an update. To do this for your product, click Analyze System for Updates and follow the instructions on the screen.
- 10. Select your preferred download method in the Please select your download method below window, click Download File.
 - The **File Download** window appears.
- 11. Click **Save** to save the file on your computer.
- 12. Click Run to install the updated BIOS settings on your computer.

Follow the instructions on the screen.

System and Setup Password

You can create a system password and a setup password to secure your computer.

Password Type Description

Password that you must enter to log on to your system. System password

Setup password Password that you must enter to access and make changes to the BIOS settings of

your computer.

CAUTION: The password features provide a basic level of security for the data on your computer.

CAUTION: Anyone can access the data stored on your computer if it is not locked and left unattended.

NOTE: Your computer is shipped with the system and setup password feature disabled.

Assigning a System Password and Setup Password

You can assign a new System Password and/or Setup Password or change an existing System Password and/or Setup Password only when Password Status is Unlocked. If the Password Status is Locked, you cannot change the System Password.

NOTE: If the password jumper is disabled, the existing System Password and Setup Password are deleted and you need not provide the system password to log on to the computer.

To enter a system setup, press <F2> immediately after a power-on or re-boot.

- 1. In the System BIOS or System Setup screen, select System Security and press <Enter>. The **System Security** screen appears.
- 2. In the System Security screen, verify that Password Status is Unlocked.
- 3. Select System Password, enter your system password, and press <Enter> or <Tab>.

Use the following guidelines to assign the system password:

- A password can have up to 32 characters.
- The password can contain the numbers 0 through 9.
- Only lower case letters are valid, upper case letters are not allowed.
- Only the following special characters are allowed: space, ("), (+), (,), (-), (.), (/), (;), ([), (\), (\).

Re-enter the system password when prompted.

- **4.** Type the system password that you entered earlier and click **OK**.
- **5.** Select **Setup Password**, type your system password and press <Enter> or <Tab>.

A message prompts you to re-type the setup password.

- **6.** Type the setup password that you entered earlier and click **OK**.
- 7. Press <Esc> and a message prompts you to save the changes.
- **8.** Press <Y> to save the changes.

The computer reboots.

Deleting or Changing an Existing System and/or Setup Password

Ensure that the **Password Status** is Unlocked (in the System Setup) before attempting to delete or change the existing System and/or Setup password. You cannot delete or change an existing System or Setup password, if the **Password Status** is Locked.

To enter the System Setup, press <F2> immediately after a power-on or reboot.

- 1. In the **System BIOS** or **System Setup** screen, select **System Security** and press <Enter>. The **System Security** screen is displayed.
- 2. In the System Security screen, verify that Password Status is Unlocked.
- 3. Select System Password, alter or delete the existing system password and press <Enter> or <Tab>.
- 4. Select Setup Password, alter or delete the existing setup password and press <Enter> or <Tab>.



NOTE: If you change the System and/or Setup password, re-enter the new password when promoted. If you delete the System and/or Setup password, confirm the deletion when promoted.

- **5.** Press <Esc> and a message prompts you to save the changes.
- **6.** Press <Y> to save the changes and exit from the System Setup.

The computer reboots.

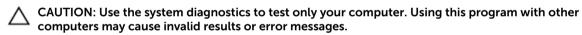
Diagnostics

If you experience a problem with your computer, run the ePSA diagnostics before contacting Dell for technical assistance. The purpose of running diagnostics is to test your computer's hardware without requiring additional equipment or risking data loss. If you are unable to fix the problem yourself, service and support personnel can use the diagnostics results to help you solve the problem.

Enhanced Pre-Boot System Assessment (ePSA) Diagnostics

The ePSA diagnostics (also known as system diagnostics) performs a complete check of your hardware. The ePSA is embedded with the BIOS and is launched by the BIOS internally. The embedded system diagnostics provides a set of options for particular devices or device groups allowing you to:

- Run tests automatically or in an interactive mode
- Repeat tests
- Display or save test results
- Run thorough tests to introduce additional test options to provide extra information about the failed device(s)
- View status messages that inform you if tests are completed successfully
- View error messages that inform you of problems encountered during testing





NOTE: Some tests for specific devices require user interaction. Always ensure that you are present at the computer terminal when the diagnostic tests are performed.

- 1. Power-on the computer.
- 2. As the computer boots, press the <F12> key as the Dell logo appears.
- 3. On the boot menu screen, select the **Diagnostics** option.

The **Enhanced Pre-boot System Assessment** window is displayed, listing all devices detected in the computer. The diagnostics starts running the tests on all the detected devices.

- **4.** If you wish to run a diagnostic test on a specific device, press <Esc> and click **Yes** to stop the diagnostic test.
- 5. Select the device from the left pane and click Run Tests.
- **6.** If there are any issues, error codes are displayed. Note the error code and contact Dell.

Device Status Lights

Table 14. Device Status Lights

- Turns on when you turn on the computer and blinks when the computer is in a power management mode.
- Turns on when the computer reads or writes data.
- Turns on steadily or blinks to indicate battery charge status.
- Turns on when wireless networking is enabled.

The device status LEDs are usually located either on the top or left side of the keyboard. They display the storage, battery and wireless devices connectivity and activity. Apart from that they can be useful as a diagnostic tool when there's a possible failure to the system.

The following table lists how to read the LED codes when possible errors occur.

Table 15. LED Lights

Storage LED	Power LED	Wireless LED	Fault Description
Blinking	Solid	Solid	A possible processor failure has occurred.
Solid	Blinking	Solid	The memory modules are detected but encountered an error.
Blinking	Blinking	Blinking	A system board failure has occurred.
Blinking	Blinking	Solid	A possible graphics card/video failure has occurred.
Blinking	Blinking	Off	System failed on hard drive initialization OR System failed in Option ROM initialization.
Blinking	Off	Blinking	The USB controller encountered a problem during initialization.
Solid	Blinking	Blinking	No memory modules are installed/detected.
Blinking	Solid	Blinking	The display encountered a problem during initialization.
Off	Blinking	Blinking	The modem is preventing the system from completing POST
Off	Blinking	Off	Memory failed to initialize or memory is unsupported.

Battery Status Lights

If the computer is connected to an electrical outlet, the battery light operates as follows:

amber light and

Alternately blinking An unauthenticated or unsupported non-Dell AC adapter is attached to your laptop.

white light

Alternately blinking Temporary battery failure with AC adapter present.

amber light with steady white light

Constantly blinking Fatal battery failure with AC adapter present.

amber light

Light off Battery in full charge mode with AC adapter present.

White light on Battery in charge mode with AC adapter present.

Specifications



NOTE: Offerings may vary by region. The following specifications are only those required by law to ship with your computer. For more information about the configuration of your computer, go to Help and Support in your Windows operating system and select the option to view information about your computer.

Table 16. System Information

Feature	Specification
Chipset	Lynx Point-LP (Latitude 7240)
	Intel QM87 Express Chipset (Latitude 7440)
DRAM bus width	64-bit
Flash EPROM	SPI 32 Mbits, 64 Mbits
PCIe bus	100 MHz
External Bus Frequency	DMI (5GT/s)

Table 17. Processor

Feature	Specification	
Types	Intel Core i3 / i5 / i7series	
L3 cache	3 MB, 4MB, 6 MB, and 8 MB	

Table 18. Memory

Specification
Two SODIMM slots
2GB, 4GB, or 8GB
DDR3L SDRAM (1600 MHz)
2 GB
16 GB

Table 19. Audio

Feature	Specification	
Type	four-channel high-definition audio	
Controller	Realtek ALC3226	

Feature	Specification	
Stereo conversion	24-bit (analog-to-digital and digital-to-analog)	
Interface:		
Internal	high-definition audio	
External	microphone-in, stereo headphones, and headset combo connector	
Speakers	two	
Internal speaker amplifier	1 W (RMS) per channel	
Volume controls	hot keys	

Table 20. Video

Feature	Specification	
Туре	integrated on system board	
Controller:		
UMA	Intel HD Graphics 4600	
Discrete	AMD Radeon HD 8690M Graphics	
Data bus	PCI-E Gen3 x8	
External display support	one HDMI	
	NOTE: Support two DP/DVI ports through Docking station.	

Table 21. Camera

Features	Specification
Camera Resolution	1280 x 720 pixels
Video Resolution (maximum)	1280 x 720 pixels
Diagonal viewing angle	74 °

Table 22. Communications

Features	Specification	
Network adapter	10/100/1000 Mb/s Ethernet (RJ-45)	
Wireless	internal wireless local area network (WLAN) and wireless wide area network (WWAN)	
	Bluetooth 4.0	

Table 23. Ports and Connectors

Features	Specification
Audio	one microphone/stereo headphone/speakers connector
Video	Mini DisplayPort connector
Network adapter	RJ-45 connector
USB 3.0	two USB 3.0 compliant connectors
Memory card reader	Support upto SD4.0
Micro Subscriber Identity Module (uSIM) card	one
Docking port	one

Table 24. Display

Feature	Specification		
	Latitude 7240	Latitude 7440	
Туре	HD Anti-Glare	HD Anti-Glare	
Dimensions:			
Height	180.0 mm (7.08 inches)	205.6 mm (8.09 inches)	
Width	300.90 mm (11.84 inches)	320.9 mm (12.63 inches)	
Diagonal	3.6 mm (0.14 inch)	3.6 mm (0.14 inch)	
Maximum resolution	1366 x 768	1366 x 768	
Refresh rate	60 Hz	60 Hz	
Minimum Viewing Angles	:		
Horizontal	+/-40°	+/-40°	
Vertical	+15°/-30°	+15°/-30°	
Pixel pitch	1.05	1.05	

Table 25. Keyboard

Feature	Specification
Number of keys	United States: 86 keys, United Kingdom: 87 keys, Brazil:
	87 keys, and Japan: 90 keys

Table 26. Touchpad

Feature	Specification	
	Latitude 7240 Latitude 7440	
Active Area:		
X-axis	98.8 mm	100 mm

Feature	Specification		
	Latitude 7240	Latitude 7440	
Y-axis	60.8 mm	47 mm	

Table 27. Battery

Feature	Specification	
Туре	 3-cell "smart" Lithium ion 4cell "smart" Lithium ion	
Dimensions:	Latitude 7240	Latitude 7440
3-cell/4-cell		
Depth	80.75 mm (3.18 inches)	74.75 mm (2.94 inches)
Height	7.20 mm (0.28 inch)	8.00 mm (0.31 inch)
Width	282.00 mm (11.10 inches)	308.50 mm (12.15 inches)
Weight:		
3-cell	250.00 g (0.55 lb)	247.00 g (0.54 lb)
4-cell	300.00 g (0.66 lb)	308.00 g (0.68 lb)
Voltage		
3-cell	11.10 VDC	
4-cell	7.40 VDC	
Life span	300 discharge/charge cycles	
Temperature range:		
Operating	Charge: 0 °C to 50 °C (32 °F to 158 °F)	
	Discharge: 0 °C to 70 °C (32 °F	to 122 °F)
Non-Operating	−20 °C to 65 °C (4 °F to 149 °F)	
Coin-cell battery	3 V CR2032 lithium coin cell	

Table 28. AC Adapter

Feature	Specification
Type	65 W and 90 W
Input voltage	100 VAC to 240 VAC
Input current (maximum)	1.50 A
Input frequency	50 Hz to 60 Hz
Output power	65 W
Output current	3.34 A (continuous)

Feature	Specification
Rated output voltage	19.5 VDC
Weight	0.51 lb (0.23 kg)
Dimensions	0.87 x 2.60 x 4.17 inches (22 x 66 x 106 mm)
Temperature range:	
Operating	0 °C to 40 °C (32 °F to 104 °F)
Non-Operating	-40 °C to 70 °C (-40 °F to 158 °F)

Table 29. Physical

Feature	Latitude 7240	Latitude 7440
Height	20.0 mm (0.79 inch)	21.0 mm (0.80 inch)
Width	310.5 mm (12.22 inches)	337 mm (13.2 inches)
Depth	211.0 mm (8.3 inches)	231.5 mm (9.1 inches)
Weight (with 3-cell battery)	1.36 kg (2.99 lb)	1.63 kg (3.6 lb)

Table 30. Environmental

Feature	Specification
Temperature:	
Operating	0 °C to 60 °C (32 °F to 140 °F)
Storage	−51 °C to 71 °C (−59 °F to 159 °F)
Relative humidity (maximum):	
Operating	10 % to 90 % (non condensing)
Storage	5 % to 95 % (non condensing)
Altitude (maximum):	
Operating	-15.2 m to 3048 m (-50 to 10,000 ft)
	0° to 35°C
Non-Operating	-15.24 m to 10,668 m (-50 ft to 35,000 ft)
Airborne contaminant level	G2 or lower as defined by ISA S71.04–1985

Contacting Dell

Ø

NOTE: If you do not have an active internet connection, you can find the 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:

Go to Dell.com/contactdell.