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.

If you purchased a Dell n Series computer, any references in this document to Microsoft Windows operating systems are not applicable.
Battery
Dell Latitude 2120 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.

Removing the Battery

1. Follow the procedures in Before Working Inside Your Computer.
2. Slide the battery release latch into the unlock position.
3. Slide and remove the battery from the computer.

**NOTE:** You may need to install Adobe Flash Player from [Adobe.com](http://Adobe.com) in order to view the illustrations below.
Replacing the Battery

To replace the battery, perform the above steps in reverse order.

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Removing the Keyboard

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the screws that secure the keyboard.
4. Open the display and then push a flathead screwdriver through the screw socket from where you removed the keyboard screw.
5. Starting in the top left corner of the keyboard, lift the keyboard up, and then flip the keyboard.

6. Disconnect the keyboard data cable and remove the keyboard from the computer.
Replacing the Keyboard

To replace the keyboard, perform the above steps in reverse order.

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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.

NOTE: You may need to install Adobe Flash Player from Adobe.com in order to view the illustrations below.

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access-panel screws under the keyboard.
5. Remove the access-panel screws on the bottom of the computer.
6. Starting near the hinges, lift the access panel and remove it from the computer.

**Replacing the Access Panel**

To replace the access panel, perform the above steps in reverse order.

[Back to Contents Page]
Removing the Memory Modules

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Pry the retention clips away from the memory module.

6. Remove the memory module from the computer.
Replacing the Memory Modules

To replace the memory modules, insert the memory module in the memory slot at an angle, then press down the memory module to snap the memory module in place.

Back to Contents Page
Removing the Coin-Cell Battery

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Disconnect the coin-cell battery cable from the system board.
6. Remove the coin-cell battery.

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NOTE: You may need to install Adobe Flash Player from Adobe.com in order to view the illustrations below.
Replacing the Coin-Cell Battery

To replace the coin-cell battery, perform the above steps in reverse order.

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Removing the WLAN Card

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Disconnect the WLAN antenna cables from the card.
6. Remove the screw that secures the WLAN card to the system board.
7. Remove the WLAN card from the computer.

**Replacing the WLAN Card**

To replace the WLAN card, perform the above steps in reverse order.

[Back to Contents Page]
Removing the WWAN Card

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Disconnect the WWAN antenna cables from the card.
6. Remove the screw that secures the WWAN card to the system board.
7. Remove the WWAN card from the computer.

**Replacing the WWAN Card**

To replace the WWAN card, perform the above steps in reverse order.
1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Remove the screws that secure the hard drive to the system board.
6. Slide the hard drive towards the side of the computer to disengage the hard drive from the system board.
7. Lift the hard drive up to remove it from the computer.

8. Remove the hard-drive bracket screws from both sides of the hard drive.
9. Remove the hard-drive bracket from the hard drive.

**Replacing the Hard Drive/Hard-Drive Brackets**

To replace the hard drive/hard-drive brackets, perform the above steps in reverse order.

[Back to Contents Page]
Removing the Heatsink

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Disconnect the speaker cable from the system board and remove it from its routing path.
6. Disconnect the fan power cable from the system board.

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**NOTE:** You may need to install Adobe Flash Player from Adobe.com in order to view the illustrations below.
7. Loosen the captive screws on the heat sink.

8. Lift the heat sink up to remove it from the computer.
Replacing the Heatsink

To replace the heatsink, perform the above steps in reverse order.

Back to Contents Page
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.

Removing the DC Power Cable

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Disconnect the DC power cable from the system board.
6. Remove the screw that secures the DC power-cable connector to the system board.
7. Lift up to remove the DC power cable from the computer.

Replacing the DC Power Cable

To replace the DC power cable, perform the above steps in reverse order.

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Removing the Display Assembly

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Disconnect the speaker cable from the system board and remove it from its routing path.
6. Disconnect the antenna cables from the WLAN card and then remove the cables from their routing path.

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NOTE: You may need to install Adobe Flash Player from Adobe.com in order to view the illustrations below.
7. Disconnect the display data cable from the system board.

8. Remove the screws that secure the display assembly.
9. Remove the display assembly by sliding it toward the base of the computer.

Replacing the Display Assembly

To replace the display assembly, perform the above steps in reverse order.

Back to Contents Page
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.

Removing the Display Bezel

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Remove the display assembly.
6. Using a plastic scribe, pry and remove the rubber screw-covers from the display bezel.
7. Remove the screws that secure the display bezel to the display assembly.

NOTE: You may need to install Adobe Flash Player from Adobe.com in order to view the illustrations below.
8. Starting at the bottom of the display bezel, disengage the display bezel from the display assembly, and then remove the display bezel.

Replacing the Display Bezel

To replace the display bezel, perform the above steps in reverse order.

Back to Contents Page
Removing the Display-Hinge Covers

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Remove the display assembly.
6. Remove the display bezel.
7. Pivot the hinge cover away from the hinge and remove the hinge cover.

Replacing the Display-Hinge Covers

To replace the display-hinge covers, perform the above steps in reverse order.
Removing the Camera

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Remove the display assembly.
6. Remove the display bezel.
7. Disconnect the cable from the camera module.

8. Peel the tapes that secure the camera to the display assembly.
9. Remove the screws that secure the camera to the display assembly.

10. Lift the camera module up to remove it from the display assembly.
Replacing the Camera

To replace the camera, perform the above steps in reverse order.

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Removing the Display Panel/Bracket

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Remove the display assembly.
6. Remove the display bezel.
7. Disconnect the display touch-screen cable from the display assembly.

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NOTE: You may need to install Adobe Flash Player from Adobe.com in order to view the illustrations below.

8. Remove the screws that secure the display panel to the display assembly, and then flip over the display panel.
9. Remove the display data cable from the display panel.

10. Remove the display panel from the display assembly.
11. Remove the screws that secure the display bracket, and then remove the display bracket from the display assembly.

**Replacing the Display Panel/Bracket**

To replace the display panel/bracket, perform the above steps in reverse order.

[Back to Contents Page]
Removing the Display Cable

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Remove the display assembly.
6. Remove the display bezel.
7. Remove the display panel.
8. Disconnect the camera cable from the display assembly.
9. Remove the grounding captive screw from the display hinge.
10. Remove the display cable from the display assembly.

**Replacing the Display Cable**

To replace the display cable, perform the above steps in reverse order.

[Back to Contents Page]
Removing the Display Hinges

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Remove the display assembly.
6. Remove the display bezel.
7. Remove the display panel.
8. Loosen the display-cable captive screw and remove the screws that secures the display hinge to the display assembly.
9. Lift the display hinges and remove it from the display assembly.
Replacing the Display Hinges

To replace the display hinges, perform the above steps in reverse order.

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Removing the System Board/Bluetooth Module

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Remove the hard drive.
6. Remove the WWAN card.
7. Remove the WLAN card.
8. Remove the display assembly.
9. Remove the heatsink.
10. Open the touchpad-cable clip and disconnect the touchpad cable from the system board. Open the button-board-cable clip and disconnect the button-board data cable from the system board.

11. Remove the screws that secure the system board in place.
12. Starting from the side where the USB ports are located, lift up the system board and remove the system board.

13. Disconnect the Bluetooth module cable from the system board.
14. Remove the screw that secures the Bluetooth module to the system board.

15. Remove the Bluetooth module from the system board.
Replacing the System Board/Bluetooth Module

To replace the system board/Bluetooth module, perform the above steps in reverse order.

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Removing the SD Card

1. Follow the procedures in Before Working Inside Your Computer.
2. Press in on the SD Card to release it.
3. Pull and remove the SD Card from the computer.

NOTE: You may need to install Adobe Flash Player from Adobe.com in order to view the illustrations below.
Replacing the SD Card

To replace the SD Card, perform the above steps in reverse order.

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Removing the SIM Card

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Press in on the SIM Card to release it.
4. Pull and remove the SIM Card from the computer.
Replacing the SIM Card

To replace the SIM Card, perform the above steps in reverse order.

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Removing the Hard Drive Accelerator Card

1. Follow the procedures in Before Working Inside Your Computer.
2. Remove the battery.
3. Remove the keyboard.
4. Remove the access panel.
5. Remove the screw that secures the hard drive accelerator card to the system board.
6. Remove the hard drive accelerator card from the computer.

NOTE: You may need to install Adobe Flash Player from Adobe.com in order to view the illustrations below.

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.
7. Remove the hard drive accelerator card metal bracket from the card.

Replacing the Hard Drive Accelerator Card

To replace the hard drive accelerator card, perform the above steps in reverse order.

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Overview

Use System Setup to:

- Change the system configuration information after you add, change, or remove any hardware in your computer
- Set or change a user-selectable option such as the user password
- Read the current amount of memory or set the type of hard drive installed

Before you use System Setup, it is recommended that you write down the System Setup screen information for future reference.

⚠️ **CAUTION:** Unless you are an expert computer user, do not change the settings for this program. Certain changes can cause your computer to work incorrectly.

Entering System Setup

1. Turn on (or restart) your computer.
2. When the DELL logo is displayed, press <F2> immediately.

Boot Menu

The Boot menu lists all the valid boot devices for your computer. Use the Boot menu to:

- Run diagnostics on your computer
- Enter system setup
- Change the boot sequence without changing the boot sequence permanently in the system setup

To access the Boot menu:

1. Turn on (or restart) your computer.
2. When the blue DELL logo is displayed, press <F12> immediately.

Navigation Keystrokes

Use the following keystrokes to navigate the System Setup screens:

<table>
<thead>
<tr>
<th>Navigation</th>
<th>Keystroke(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand and collapse field</td>
<td>&lt;Enter&gt;, left- or right-arrow key</td>
</tr>
<tr>
<td>Exit BIOS</td>
<td>&lt;Esc&gt;, Exit button</td>
</tr>
<tr>
<td>Select field to change</td>
<td>&lt;Enter&gt;</td>
</tr>
<tr>
<td>Change a field</td>
<td>Make the required change and click <strong>Apply</strong></td>
</tr>
<tr>
<td>Cancel modification</td>
<td>&lt;Esc&gt;</td>
</tr>
<tr>
<td>Reset defaults</td>
<td><strong>Load Defaults</strong> button</td>
</tr>
</tbody>
</table>

System Setup Menu Options

The following tables describe the menu options for the System Setup program:

<table>
<thead>
<tr>
<th>General</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This section lists the primary hardware features of your computer. There are no configurable options in this section.</td>
</tr>
<tr>
<td></td>
<td><strong>System Information</strong></td>
</tr>
<tr>
<td></td>
<td>o BIOS Version</td>
</tr>
<tr>
<td></td>
<td>o Service Tag</td>
</tr>
<tr>
<td></td>
<td>o Asset Tag</td>
</tr>
<tr>
<td></td>
<td>o Ownership Tag</td>
</tr>
<tr>
<td></td>
<td><strong>Memory Information</strong></td>
</tr>
<tr>
<td></td>
<td>o Memory Installed</td>
</tr>
<tr>
<td></td>
<td>o Memory Available</td>
</tr>
<tr>
<td></td>
<td>o Memory Speed</td>
</tr>
<tr>
<td></td>
<td>o Memory Channel Mode</td>
</tr>
</tbody>
</table>
### System Information
- Memory Technology
- DIMM A Size

### Processor Information
- Processor Type
- Core Count
- Processor ID
- Current Clock Speed

### Device Information
- Primary Hard Drive
- Video Controller
- Video BIOS Version
- Video Memory
- Panel Type
- Native Resolution
- Audio Controller
- Wi-Fi Device
- Cellular Device
- Bluetooth Device
- Integrated NIC MAC

### Battery Information
Displays the status of the battery and the type of AC adapter connected to the computer.

### Boot Sequence
Specifies the order in which the computer attempts to find an operating system.

- Diskette drive
- Internal HDD
- USB Storage Device
- CD/DVD/CD-RW Drive
- Onboard NIC

This list specifies the order in which the BIOS searches for bootable devices. To change the boot order, select the device to be changed in the list and click the Up/Down arrows or use the Page Up/Page Down keys to change the position of the device. You can also exclude devices from this list using the check boxes.

### Date/Time
Displays current date and time settings. Allows you to change the computer's date and time.

---

**System Configuration**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated NIC</td>
<td>Allows you to configure the integrated network controller. The options are:</td>
</tr>
<tr>
<td></td>
<td>Disabled, Enabled, Enabled w/PXE, and Enabled w/RPL.</td>
</tr>
<tr>
<td>System Management</td>
<td>Allows you to change the system management mechanism. The options are:</td>
</tr>
<tr>
<td></td>
<td>Disabled, Alert Only, and ASF 2.0.</td>
</tr>
<tr>
<td>SATA Operation</td>
<td>Allows you to configure the operating mode of the internal SATA hard drive controller. The options are: Disabled, ATA, and AHCI.</td>
</tr>
</tbody>
</table>

### Miscellaneous Devices
Allows you to enable or disable the following devices:

- External USB Port
- Microphone
- Media Card
- Camera

### Network Activity LED
Allows you to configure the network LED behavior.

The options are:

- Enable ACPI OS Control — Allows the activity LED to be controlled by an ACPI operating system and ACPI driver.
- Wireless LAN Indicator — The network activity LED indicates WLAN activity.
- Off — Switches off the network activity LED.

**NOTE:** If you use Ubuntu operating system, the network activity LED can only function as a WLAN-radio on/off indicator and you must select the option Wireless LAN Indicator. Selecting any other option disables the network activity LED.

### Video

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCD Brightness</td>
<td>Allows you to set the display brightness depending up on the power source (On Battery and On AC).</td>
</tr>
</tbody>
</table>

### Security

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin Password</td>
<td>Allows you to set, change, or delete the administrator (admin) password. When set, the admin password enables several security features including:</td>
</tr>
<tr>
<td></td>
<td>- Restricts changes to the settings in Setup</td>
</tr>
<tr>
<td></td>
<td>- Restricts the boot devices listed in the &lt;F12&gt; Boot Menu to those enabled in the &quot;Boot Sequence&quot; field</td>
</tr>
<tr>
<td></td>
<td>- Prohibits changes to the owner and asset tags</td>
</tr>
<tr>
<td></td>
<td>- Substitutes for the system and hard drive password</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> You must set the admin password before you set the system or hard drive password.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> Successful password changes take effect immediately.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> Deleting the admin password automatically deletes the system password as well.</td>
</tr>
</tbody>
</table>

### System Password
Allows you to set, change, or delete the system password. When set, your computer requests you to enter the system password every time your computer turns on or restarts.
<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal HDD Password</td>
<td>This field lets you set, change, or delete the password on the system's internal hard disk drive (HDD). Successful changes take place immediately and require a system restart. The HDD password travels with the hard drive, so the HDD is protected even when installed in another system.</td>
</tr>
<tr>
<td>Password Bypass</td>
<td>Allows you to bypass the system and internal hard drive password prompts when your computer restarts or resumes from standby. You can set Password Bypass to: Disabled, Reboot Bypass, Resume Bypass, and Reboot &amp; Resume Bypass.</td>
</tr>
<tr>
<td></td>
<td>NOTE: You cannot bypass the system or hard drive password when you turn on your computer that has been shut down.</td>
</tr>
<tr>
<td>Password Change</td>
<td>Allows you to enable or disable changes to the System and hard drive passwords when the admin password is set.</td>
</tr>
<tr>
<td>Computrace</td>
<td>Allows you to enable or disable the optional Computrace software. The options are Deactivate, Disable, and Activate.</td>
</tr>
<tr>
<td></td>
<td>NOTE: The Activate and Disable options will permanently activate or disable the feature and no further changes will be allowed.</td>
</tr>
<tr>
<td>CPU XD Support</td>
<td>Allows you to enable or disable the Execute Disable mode of the processor. Default setting: Enabled</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel SpeedStep</td>
<td>Enables or disables the Intel SpeedStep feature.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power Management</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wake on AC</td>
<td>Allows you to enable or disable the computer from turning on automatically when an AC adapter is connected.</td>
</tr>
<tr>
<td>Auto On Time</td>
<td>Allows you to set the time at which the computer must turn on automatically. You can set the days on which you want the computer to turn on automatically. The settings are Disabled, Everyday, or Weekdays. Default setting: Disabled</td>
</tr>
<tr>
<td>USB Wake Support</td>
<td>Allows you to enable or disable the ability of USB devices to wake the computer from Standby. This feature is only functional when the AC power adapter is connected. If the AC power adapter is removed during Standby, the BIOS will remove power from all of the USB ports to conserve battery power.</td>
</tr>
<tr>
<td>Wake on LAN</td>
<td>Allows the computer to turn on by a special LAN signal or from Hibernate state when triggered by a special wireless LAN signal. Wake-up from the Standby state is unaffected by this setting and must be enabled in the operating system.</td>
</tr>
<tr>
<td></td>
<td>i  Disabled — Do not allow the system to power on when it receives a wake-up signal from the LAN or wireless LAN.</td>
</tr>
<tr>
<td></td>
<td>i  LAN Only — Allow the system to be powered on by special LAN signals. The factory default setting is Disabled.</td>
</tr>
<tr>
<td>ExpressCharge</td>
<td>Allows you to enable or disable the ExpressCharge feature.</td>
</tr>
<tr>
<td></td>
<td>NOTE: ExpressCharge may not be available for all batteries.</td>
</tr>
<tr>
<td>Charger Behavior</td>
<td>Allows you to enable or disable the battery charger. If disabled, the battery will not lose power when the system is connected to an AC adapter but it will not charge either. Default setting: Charger Enabled</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POST Behavior</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapter Warnings</td>
<td>Allows you to enable or disable the BIOS warning messages when you use certain power adapters. The BIOS displays these messages if you attempt to use a power adapter that has too little capacity for your configuration. The factory default setting is Enable Adapter Warnings.</td>
</tr>
<tr>
<td>Keypad (Embedded)</td>
<td>Allows you to select one of two methods to enable the keypad that is embedded in the internal keyboard.</td>
</tr>
<tr>
<td></td>
<td>i  Fn Key Only — The keypad is only enabled when you hold down the &lt;Fn&gt; key.</td>
</tr>
<tr>
<td></td>
<td>i  By Num Lk — The keypad is enabled when (1) the Num Lock LED is on and (2) no external keyboard is attached. Note that the system might not notice immediately when an external keyboard is detached. The factory default setting is Fn Key Only.</td>
</tr>
<tr>
<td>Numlock LED</td>
<td>Allows you to enable or disable the Num Lock LED when the computer boots. Default setting: Enabled.</td>
</tr>
<tr>
<td>USB Emulation</td>
<td>Defines how the BIOS handles the USB devices. USB emulation is always enabled during POST. The factory default setting is Enabled.</td>
</tr>
<tr>
<td>Fn Key Emulation</td>
<td>Allows you to use the &lt;Scroll Lock&gt; key on an external PS/2 keyboard the same way you use the &lt;Fn&gt; key on the computer's internal keyboard.</td>
</tr>
<tr>
<td></td>
<td>NOTE: USB keyboards cannot emulate the &lt;Fn&gt; key if you are running an ACPI operating system such as Microsoft Windows XP. USB keyboards will only emulate the &lt;Fn&gt; key in non-ACPI mode (e.g., when you are running a DOS). Default setting: Enabled.</td>
</tr>
</tbody>
</table>
Fast Boot

Allows you to enable or disable the Fast Boot feature. The following options are available:

- **Minimal** — Boot quickly unless the BIOS has been updated, memory changed, or the previous POST did not complete.
- **Thorough** — Do not skip any steps in the boot process.
- **Auto** — Allow the operating system to control this setting (this works only when the operating system supports Simple Boot Flag).

Default setting: Minimal

<table>
<thead>
<tr>
<th>Wireless Devices</th>
<th>Allows you to enable or disable the following internal wireless devices: WWAN, WLAN, and Bluetooth.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Maintenance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Tag</td>
<td>Displays your computer’s Service Tag. If for some reason the Service Tag was not already set, you can use this field to set the Service Tag. If a Service Tag has not been set for this computer, the computer will automatically bring up this screen when you enter the System Setup. You will be prompted to enter the Service Tag.</td>
</tr>
<tr>
<td>Asset Tag</td>
<td>Allows you to create a system Asset Tag. The field can only be updated if the Asset Tag is not already set.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>System Logs</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS Events</td>
<td>Allows you to view and clear BIOS POST events. It includes the date and time of the event as well as the LED code.</td>
</tr>
<tr>
<td>DellDiag Events</td>
<td>Allows you to view the diagnostic results from Dell Diagnostics and PSA. It includes the time and date, the diagnostic and version which was run and the resulting code.</td>
</tr>
<tr>
<td>Thermal Events</td>
<td>Allows you to view and clear thermal events. It includes the date and time as well as the name of the event.</td>
</tr>
<tr>
<td>Power Events</td>
<td>Allows you to view and clear power events. It includes the date and time of the event as well as the power state and reason.</td>
</tr>
</tbody>
</table>
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.

Battery Status Lights

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

- Alternately blinking amber light and blue light — An unauthenticated or unsupported non-Dell AC adapter is attached to your laptop.
- Alternately blinking amber light with steady blue light — Temporary battery failure with AC adapter present.
- Light off — Battery in full charge mode with AC adapter present.
- Blue light on — Battery in charge mode with AC adapter present.

Battery Charge and Health

To check the battery charge, press and release the status button on the battery charge gauge to illuminate the charge-level lights. Each light represents approximately 20 percent of the total battery charge. For example, if four lights are on, the battery has 80 percent of its charge remaining. If no lights appear, the battery has no charge.

To check battery health using the charge gauge, press and hold the status button on the battery charge gauge for at least three seconds. If no lights appear, the battery is in good condition and more than 80 percent of its original charge capacity remains. Each light represents incremental degradation. If five lights appear, less than 60 percent of the charge capacity remains, and you should consider replacing the battery.

Keyboard Status Lights

The green lights located above the keyboard indicate the following:

- Turns on when the numeric keypad is enabled.
- Turns on when the Caps Lock function is enabled.
- Turns on when the Scroll Lock function is enabled.

LED Error Codes

The following table shows the possible LED codes that may display in a no-Power On Self Test (POST) situation.

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Description</th>
<th>Next Step</th>
</tr>
</thead>
</table>
| ON-FLASH-FLASH     | No SODIMMs are installed | 1. Install supported memory modules.  
                      | 2. If memory is already present, reseat the module(s) one at a time in each slot.  
                      | 3. Try known good memory from another computer or replace the memory.  
<pre><code>                  | 4. Replace the system board. |
</code></pre>
<p>| FLASH-ON-ON        | System board error    | 1. Replace the system board.                                               |
| FLASH-ON-FLASH     |                      |                                                                           |</p>
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
<th>Actions</th>
</tr>
</thead>
</table>
| OFF-FLASH-OFF     | LCD panel error                                  | 1. Reseat the LCD cable.  
2. Replace the LCD panel.  
3. Replace the video card/system board. |
| ON-FLASH-ON       | Memory compatibility error                       | 1. Install compatible memory modules.  
2. If two modules are installed, remove one and test. Try the other module in the same slot and test. Test the other slot with both modules.  
3. Replace the memory.  
4. Replace the system board. |
| FLASH-FLASH-FLASH | Memory is detected but has errors                 | 1. Reseat the memory.  
2. If two modules are installed, remove one and test. Try the other module in the same slot and test. Test the other slot with both modules.  
3. Replace the memory.  
4. Replace the system board. |
| OFF-ON-OFF        | System board error                               | 1. Replace the system board.                 |
| FLASH-FLASH-ON    | Storage device error                             | 1. Reseat the hard drive.  
2. Replace the hard drive.  
3. Replace the system board. |
| Video card error  | 1. Replace the system board.                     |                                              |
Adding and Replacing Parts
Dell Latitude 2120 Service Manual

- Secure Digital Card
- SIM Card
- Access Panel
- Coin-Cell Battery
- WWAN Card
- Heatsink
- DC Power Cable
- Display-Hinge Covers
- Display/Display Brackets
- Display Hinge
- System Board/Bluetooth Module
- Battery
- Keyboard
- Memory
- WLAN Card
- Hard Drive Accelerator Card
- Hard Drive/Hard-Drive Bracket
- Display Assembly
- Display Bezel
- Camera
- Display Cable
NOTE: Offerings may vary by region. For more information regarding the configuration of your computer, click Start -> Help and Support and select the option to view information about your computer.

### System Information

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chipset</td>
<td>Intel NM10 Express Chipset</td>
</tr>
<tr>
<td>DRAM bus width</td>
<td>64 bits</td>
</tr>
<tr>
<td>Flash EPROM</td>
<td>2 MB</td>
</tr>
<tr>
<td>PCI-e bus</td>
<td>x1 PCI Express, 4 ports</td>
</tr>
</tbody>
</table>

### Processor

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types</td>
<td>Intel Atom</td>
</tr>
<tr>
<td>L1 cache</td>
<td>32 KB per instruction, 24 KB write-back data cache</td>
</tr>
<tr>
<td>L2 cache</td>
<td>512 KB</td>
</tr>
</tbody>
</table>

### Memory

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>DDR2 SDRAM</td>
</tr>
<tr>
<td>Speed</td>
<td>667 MHz</td>
</tr>
<tr>
<td>Connectors</td>
<td>one SODIMM slot</td>
</tr>
<tr>
<td>Module capacities</td>
<td>1 GB, 2 GB</td>
</tr>
<tr>
<td>Minimum memory</td>
<td>1 GB</td>
</tr>
<tr>
<td>Maximum memory</td>
<td>2 GB</td>
</tr>
</tbody>
</table>

### Video

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Intel UMA graphics (integrated on the processor)</td>
</tr>
<tr>
<td>Controller</td>
<td>Intel Graphics Media Accelerator</td>
</tr>
<tr>
<td>Output</td>
<td>15-pin VGA connector</td>
</tr>
</tbody>
</table>

### Audio

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>two-channel integrated audio</td>
</tr>
<tr>
<td>Controller</td>
<td>Realtek ALC269</td>
</tr>
<tr>
<td>Speakers</td>
<td>two</td>
</tr>
<tr>
<td>Internal speaker amplifier</td>
<td>2 W per channel</td>
</tr>
<tr>
<td>Volume controls</td>
<td>media control buttons, program menus</td>
</tr>
</tbody>
</table>

### Communications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network adapter</td>
<td>Gigabit Ethernet</td>
</tr>
<tr>
<td>Wireless</td>
<td>wireless local area network (WLAN) wireless wide area network (WWAN) worldwide Interoperability for microwave access (WiMAX) Bluetooth</td>
</tr>
</tbody>
</table>

### Ports and Connectors

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio</td>
<td>microphone connector, stereo headphone/speakers connector</td>
</tr>
<tr>
<td>Video</td>
<td>15-pin VGA connector</td>
</tr>
<tr>
<td>Network adapter</td>
<td>RJ-45 connector</td>
</tr>
<tr>
<td>USB</td>
<td>three USB 2.0-compliant connectors</td>
</tr>
<tr>
<td>Memory card reader</td>
<td>3-in-1 memory-card reader</td>
</tr>
</tbody>
</table>

### Drives
### Display

<table>
<thead>
<tr>
<th>Type</th>
<th>WSVGA (1024 x 600 pixels) and HD (1366 x 768 pixels), high definition, anti glare (AG), white light-emitting diode (WLED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>10.1 inches</td>
</tr>
<tr>
<td>Active area (X/Y)</td>
<td></td>
</tr>
<tr>
<td>WSVGA</td>
<td>222.72 mm x 125.28 mm (8.76 inches x 4.93 inches)</td>
</tr>
<tr>
<td>HD</td>
<td>222.73 mm x 125.22 mm (8.76 inches x 4.93 inches)</td>
</tr>
<tr>
<td>Dimensions</td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>235.00 mm (9.2 inches)</td>
</tr>
<tr>
<td>Width</td>
<td>143.00 mm (5.6 inches)</td>
</tr>
<tr>
<td>Diagonal</td>
<td>256.00 mm (10.1 inches)</td>
</tr>
<tr>
<td>Maximum resolution</td>
<td>1366 x 768 at 262 K colors</td>
</tr>
<tr>
<td>Maximum brightness</td>
<td>250 nits</td>
</tr>
<tr>
<td>Operating angle</td>
<td></td>
</tr>
<tr>
<td>WSVGA</td>
<td>Horizontal—40°/40°, Vertical—15°/30°</td>
</tr>
<tr>
<td>HD</td>
<td>Horizontal—40°/40°, Vertical—10°/30°</td>
</tr>
<tr>
<td>Refresh rate</td>
<td>60 Hz</td>
</tr>
<tr>
<td>Viewing angles</td>
<td></td>
</tr>
<tr>
<td>Horizontal</td>
<td>40°/40°</td>
</tr>
<tr>
<td>Vertical</td>
<td>13°/35°</td>
</tr>
<tr>
<td>Pixel pitch</td>
<td>0.2148 mm</td>
</tr>
<tr>
<td>Horizontal</td>
<td>0.21750 mm x 0.20880 mm</td>
</tr>
<tr>
<td>Vertical</td>
<td>0.16305 mm x 0.16305 mm</td>
</tr>
</tbody>
</table>

### Keyboard

<table>
<thead>
<tr>
<th>Number of keys</th>
<th>United States: 83 keys</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>United Kingdom: 84 keys</td>
</tr>
<tr>
<td></td>
<td>Brazil: 85 keys</td>
</tr>
<tr>
<td></td>
<td>Japan: 87 keys</td>
</tr>
<tr>
<td>Layout</td>
<td>QWERTY/AZERTY/Kanji</td>
</tr>
</tbody>
</table>

### Touchpad

<table>
<thead>
<tr>
<th>Active area</th>
<th>X-axis</th>
<th>60.40 mm (2.37 inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y-axis</td>
<td>34.00 mm (1.34 inches)</td>
</tr>
</tbody>
</table>

### Battery

<table>
<thead>
<tr>
<th>Type</th>
<th>3-cell &quot;smart&quot; lithium ion (28 WHr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6-cell &quot;smart&quot; lithium ion (36 WHr)</td>
</tr>
<tr>
<td>Charge time with computer off</td>
<td>Approximately 80% charge on the battery is restored in 1 hour (on a fully discharged battery)</td>
</tr>
<tr>
<td>Operating time</td>
<td>Battery operating time varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.</td>
</tr>
<tr>
<td>Life span</td>
<td>Approximately 300 charge/discharge cycles</td>
</tr>
<tr>
<td>Depth</td>
<td>3-cell 40.50 mm (1.59 inches)</td>
</tr>
<tr>
<td></td>
<td>6-cell 48.13 mm (1.89 inches)</td>
</tr>
<tr>
<td>Height</td>
<td>3-cell 23.24 mm (0.92 inches)</td>
</tr>
<tr>
<td></td>
<td>6-cell 42.46 mm (1.67 inches)</td>
</tr>
<tr>
<td>Width</td>
<td>3-cell 204.00 mm (8.03 inches)</td>
</tr>
<tr>
<td></td>
<td>6-cell 204.00 mm (8.03 inches)</td>
</tr>
<tr>
<td>Weight</td>
<td>3-cell 185 g – 190 g (0.40 lb – 0.41 lb)</td>
</tr>
<tr>
<td></td>
<td>6-cell 340 g – 350 g (0.74 lb – 0.77 lb)</td>
</tr>
<tr>
<td>Voltage</td>
<td>11.1 VDC (6-cell and 3-cell)</td>
</tr>
<tr>
<td>Temperature range</td>
<td>Operating 0 °C to 35 °C (32 °F to 95 °F)</td>
</tr>
<tr>
<td>Storage</td>
<td>-40 °C to ~65 °C (–40 °F to ~149 °F)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Coin-cell battery</td>
<td>3 V CR2032 lithium coin cell</td>
</tr>
</tbody>
</table>

**AC Adapter**

<table>
<thead>
<tr>
<th>Input voltage</th>
<th>100 VAC–240 VAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input current (maximum)</td>
<td>1.5 A</td>
</tr>
<tr>
<td>Input frequency</td>
<td>50 Hz–60 Hz</td>
</tr>
<tr>
<td>Output power</td>
<td>65 W</td>
</tr>
<tr>
<td>Output current</td>
<td>4.34 A (maximum at 4-second pulse) 3.34 A (continuous)</td>
</tr>
<tr>
<td>Depth</td>
<td>66.00 mm (2.59 inches)</td>
</tr>
<tr>
<td>Height</td>
<td>16.00 mm (0.63 inches)</td>
</tr>
<tr>
<td>Width</td>
<td>127.00 mm (4.99 inches)</td>
</tr>
<tr>
<td>Temperature range</td>
<td>Operating 0 °C to 35 °C (32 °F to 95 °F) Storage -40 °C to 65 °C (–40 °F to 149 °F)</td>
</tr>
</tbody>
</table>

**Physical**

<table>
<thead>
<tr>
<th>Height</th>
<th>without touchscreen 22.50 mm – 39.90 mm (0.89 inch – 1.57 inches) with touchscreen 24.10 mm – 41.50 mm (0.95 inch – 1.63 inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>265.00 mm (10.43 inches)</td>
</tr>
<tr>
<td>Depth</td>
<td>187.00 mm (7.36 inches)</td>
</tr>
<tr>
<td>Weight</td>
<td>(3-cell battery without touchscreen) 1.30 kg (2.86 lb) (6-cell battery without touchscreen) 1.50 kg (3.30 lb)</td>
</tr>
</tbody>
</table>

**Environmental**

<table>
<thead>
<tr>
<th>Temperature range</th>
<th>Operating 0 °C to 35 °C (32 °F to 95 °F) Non-operating -40 °C to 65 °C (–40 °F to 149 °F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative humidity (maximum)</td>
<td>Operating 10 % to 90 % (noncondensing) Non-operating 20 % to 95 % (noncondensing)</td>
</tr>
<tr>
<td>Altitude (maximum)</td>
<td>Operating -15.20 m to 3048 m (~50 ft to 10,000 ft) Storage -15.20 m to 10,668 m (~50 ft to 35,000 ft)</td>
</tr>
<tr>
<td>Maximum vibration</td>
<td>Operating 0.66 Grms (2 Hz–600 Hz) Non-operating 1.30 Grms (2 Hz–600 Hz)</td>
</tr>
</tbody>
</table>

**NOTE:** Vibration is measured using a random-vibration spectrum that simulates user environment.

**Maximum shock**

<table>
<thead>
<tr>
<th>Operating</th>
<th>110 G (2 ms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-operating</td>
<td>160 G (2 ms)</td>
</tr>
</tbody>
</table>

**NOTE:** Shock is measured with hard drive in head-parked position and a 2 ms half-sine pulse.
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: 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 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: 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. Remove any installed ExpressCards or Smart Cards from the appropriate slots.
4. If the computer is connected to a docking device (docked) such as the optional Media Base or Battery Slice, undock it.
5. Disconnect all network cables from the computer.
6. Disconnect your computer and all attached devices from their electrical outlets.
7. Close the display and turn the computer upside-down on a flat work surface.
8. Remove the main battery.
9. Turn the computer top-side up.
10. Open the display.
11. Press the power button to ground the system board.

CAUTION: To guard against electrical shock, always unplug your computer from the electrical outlet before opening the display.

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

12. Remove the hard drive.

Recommended Tools

The procedures in this document may require the following tools:

- Small flat-blade screwdriver
- #0 Phillips screwdriver
- #1 Phillips screwdriver
- Small plastic scribe
- Flash BIOS update program CD

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® 7:

Click Start , then click Shut Down.

In Windows Vista®:

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

In Windows® XP:

Click Start →Turn Off Computer →Turn Off.

The computer turns off after the operating system shutdown process is complete.

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 four 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, battery slice, 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 hard drive.
4. Replace the battery.
5. Connect your computer and all attached devices to their electrical outlets.
6. Turn on your computer.