

# Dell Latitude 10 – ST2 Owner's Manual

Regulatory Model: T05G  
Regulatory Type: T05G001



# 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.

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## การทำงานกับส่วนประกอบภายในของคอมพิวเตอร์

### 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 performed the steps in Working on Your Computer.
- 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](http://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.
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. 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. 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:** 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.

10. Remove any installed SmartCards from the 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:
  - Windows 8:
    - \* Using a touch-enabled device:  
Swipe in from the right edge of the screen, opening the Charms menu and select **Settings**. Select the  and then select **Shut down**
    - \* Using a mouse:  
Point to upper-right corner of the screen and click **Settings**. Click on the  and then select **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.

## หลังจากทำงานกับส่วนประกอบภายในของคอมพิวเตอร์

หลังจากที่คุณดำเนินการเปลี่ยนชิ้นส่วนใด ๆ เสร็จสิ้นแล้ว ตรวจสอบว่าคุณได้ต่ออุปกรณ์ต่อพ่วง การ์ด และสายใด ๆ ให้เรียบร้อยก่อนที่จะเปิดเครื่องคอมพิวเตอร์ของคุณ



**ข้อควรระวัง:** เพื่อป้องกันความเสียหายต่อคอมพิวเตอร์ ให้ใช้เฉพาะแบตเตอรี่ที่ได้รับการออกแบบมาสำหรับคอมพิวเตอร์ **Dell** รุ่นนี้โดยเฉพาะ ห้ามใช้แบตเตอรี่ที่ออกแบบมาสำหรับคอมพิวเตอร์ของ **Dell** รุ่นอื่น

1. ต่ออุปกรณ์ต่อพ่วง เช่น ตัวจำลองพอร์ด, battery slice หรือ media base แล้วใส่การ์ด เช่น ExpressCard กลับเข้าที่
2. เสียบสายโทรศัพท์หรือสายเครือข่ายเข้ากับคอมพิวเตอร์
  -  **ข้อควรระวัง:** สำหรับการเสียบสายเครือข่าย ให้เสียบสายเข้ากับอุปกรณ์เครือข่ายก่อน แล้วจึงเสียบสายอีกด้านเข้ากับคอมพิวเตอร์
3. ใส่แบตเตอรี่กลับเข้าที่
4. เสียบปลั๊กคอมพิวเตอร์และอุปกรณ์ต่าง ๆ ทั้งหมดที่ต่ออยู่กับคอมพิวเตอร์เข้ากับเต้ารับไฟฟ้า
5. เปิดคอมพิวเตอร์

## Overview

Your Dell Latitude 10-ST2 tablet is built for business with easy management and security. It provides:

- world class security
- easy management
- long term stability

It is shipped with Windows 8 operating system to fully utilize the touch experience.

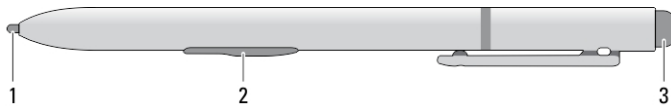
## Stylus

The Latitude 10–ST2 uses several input devices, they are:

- optional electrostatic pen (stylus)
- external USB mouse/keyboard

Your tablet is shipped with a Pen also known as Stylus.

### Stylus Information



1. Stylus tip
2. Right-click pen button
3. Eraser pen button

## Calibrating the Stylus

The stylus can function at the default calibration or at a calibration set by you or by another user. It is recommended that you use the stylus only while it is calibrated to your personal calibration settings. Calibration optimizes stylus performance for each user.

1. Open **Control Panel**.
2. Double-click **Tablet PC Settings**.
3. On the Tablet PC Settings window, click **Calibrate**.
4. On the Calibrate pen or touch input screens, select **Pen input**.




# Using a Stylus in a Tablet

The stylus allows you to actively navigate through the menus. You can use it as a mouse and also as a pen.

## Using the Stylus as a Mouse

You can use the stylus the same way you use a mouse or touch pad with a notebook computer. Holding the stylus near the display makes a small cursor appear. Moving the stylus moves the cursor. Table 1 describes how to use the stylus.

**Table 1. Electrostatic Pen Usage**

Appearance	Action	Function
	Gently tap the stylus tip on the screen of your Tablet PC	Same as a single-click on a mouse.
	Gently tap the stylus tip twice in quick succession on the screen of your Tablet PC.	Same as a double-click on a mouse.
	Touch the stylus on the screen and hold it in place momentarily until Windows draws a complete circle around the cursor.	Same as a right-click on a mouse.

## Using the Stylus or Finger on Touch Keyboard

The **Touch Keyboard** or **Handwriting recognition** makes it easy to enter text into your applications with the stylus or finger. Applications like Windows Journal, allow you to write with the stylus directly into the application window.

### Touch Keyboard

Some of the Windows text input boxes will bring out the Touch Keyboard automatically when you tap on the boxes. When it does not come out, you can open the Touch Keyboard by clicking on the keyboard icon on the system toolbar. The Touch Keyboard is like a standard keyboard will appear on the screen which can be used to enter text by tapping the keys with your stylus pen or finger

### Working with Files

You can open, delete, or move many files or folders at one time by selecting multiple items from a list.

1. Hover over one item at a time.
2. Select the check box that appears to the left of each item.

To turn check boxes on:

1. Open **Control Panel**.


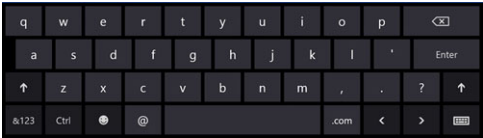



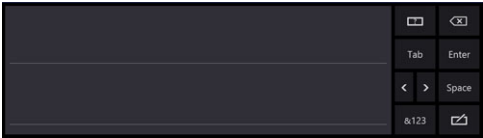



2. Go to **Folder options**.
3. Click **View**.
4. Under **Advanced settings** , select the **Use check boxes to select items** check box, and then click **OK**.

## Entering Text

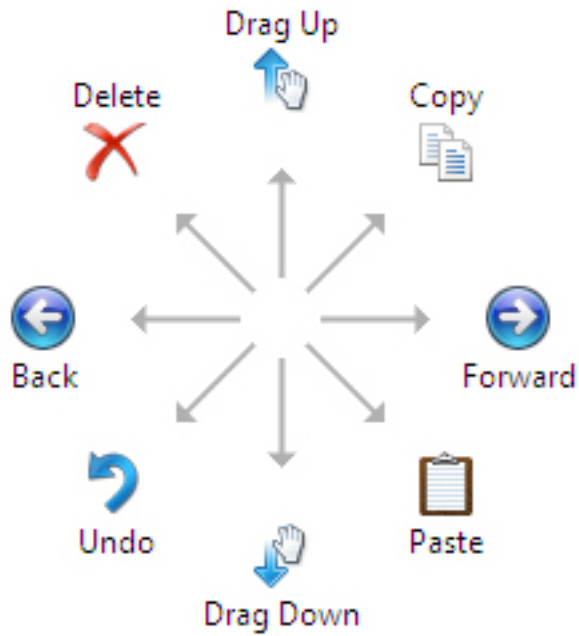
You can use handwriting recognition application or the touch keyboard to enter text.

**Table 2. Input Panel Icons**

Icon	Name	Function
		The touch keyboard is like a standard keyboard, you can enter text by tapping the keys with your stylus or finger.
		The touch keyboard is like a standard keyboard, you can enter text by tapping the keys with your stylus or your thumb.
		The writing pad and character pad convert handwriting into typed text. You can write continuously on the writing pad, like writing on a piece of lined paper. Use the character pad to enter one character at a time. The character pad converts your handwriting to typed text, one letter, number or symbol at a time, but does not take the context of the full word into account and does not take advantage of the handwriting dictionary. To switch to the character pad in <b>Input Panel</b> , tap <b>Tools</b> , and then <b>Write character by character</b>
		To minimize the Touch keyboard, click the minimize icon.

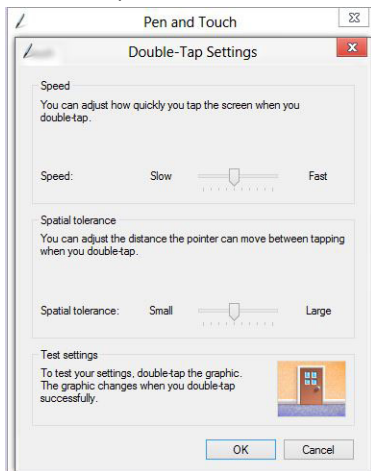
## Stylus Flicks

Stylus flicks enable you to use the stylus to perform actions that normally require a keyboard, such as pressing <Page Up> or using the directional arrow keys. Stylus flicks are quick, directional gestures. You can quickly draw a short line in one of eight directions. When a stylus flick is recognized, the Tablet PC performs the action assigned.

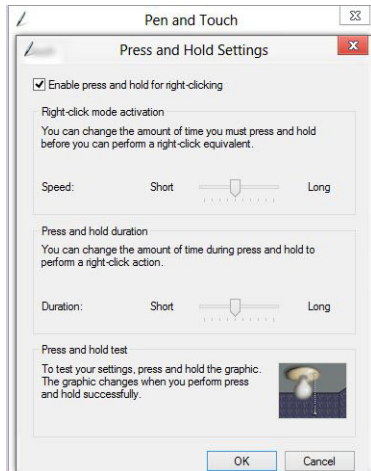


## Pen and Touch Settings

Using the stylus, you can adjust how quickly you tap the screen when you double-tap the screen. It also allows you define the spatial tolerance.



The Press and Hold settings allow you to define the speed and the duration for a right-click action.



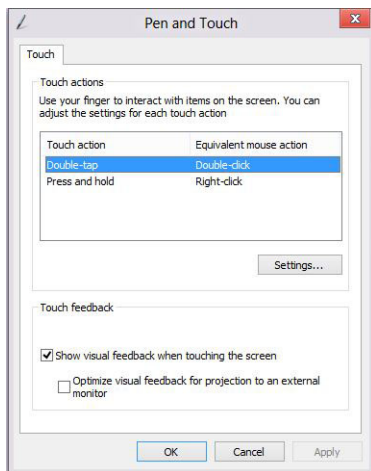
## Touch Usage

One of the key advantages of the Tablet PC is the ability to easily switch from pen input to touch input.



When you use **Touch Mode**, a translucent image of a computer mouse, called the touch pointer, floats beneath your finger. The touch pointer has left and right mouse buttons that you can tap with your finger. You use the area beneath the buttons to drag the touch pointer.

To show the touch pointer, go to **Control Panel** → **Pen and Touch** and clicking on the **Touch** tab. In the **Touch action** section, select the option **Show visual feedback when touching the screen**





## การถอดและติดตั้งส่วนประกอบต่าง ๆ

เนื้อหาในส่วนนี้ระบุรายละเอียดในการถอดหรือติดตั้งส่วนประกอบต่าง ๆ ในคอมพิวเตอร์

### Recommended Tools

The procedures in this document may require the following tools:

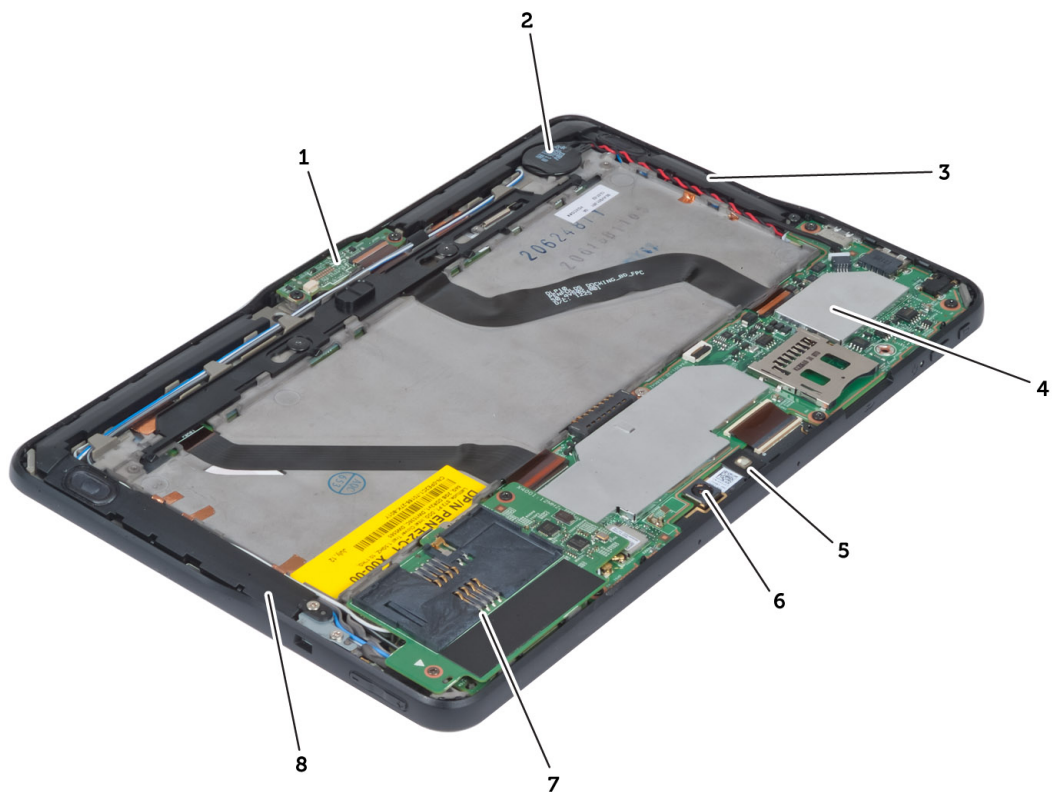
- Small flat-blade screwdriver
- #0 Phillips screwdriver
- #1 Phillips screwdriver
- Small plastic scribe

### Internal and External View



**Figure 1. External View**

1. micro SIM card (located below the battery)
2. SmartCard reader slot
3. battery
4. Secure Digital (SD) card slot
5. fingerprint reader (optional)



**Figure 2. Internal View**

- |                      |   |
|----------------------|---|
| 1. docking board     | 6. rear camera  |
| 2. coin-cell battery | 7. SmartCard reader/WWAN card (WWAN card is located below the SmartCard reader) |
| 3. speaker           |   |
| 4. system board      |   |
| 5. front camera      |   |

## Removing the Battery

1. Follow the procedures in *Before Working Inside Your Computer*.
2. Slide the battery release latch to the unlock position. Lift up the battery in an outward direction and remove it 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 the battery.
3. Remove the screws that secure the base cover to the computer.

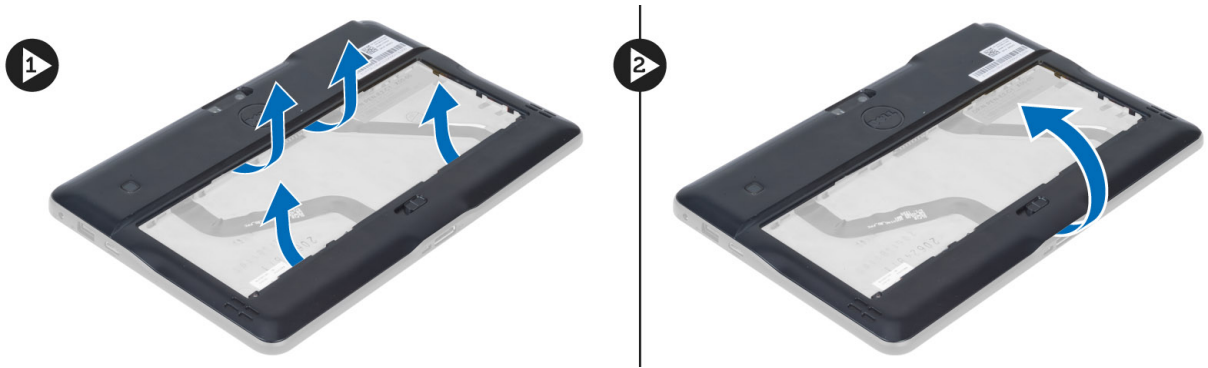


4. Pry and release the tabs that secure the base cover by following the arrow sequence in the diagram.

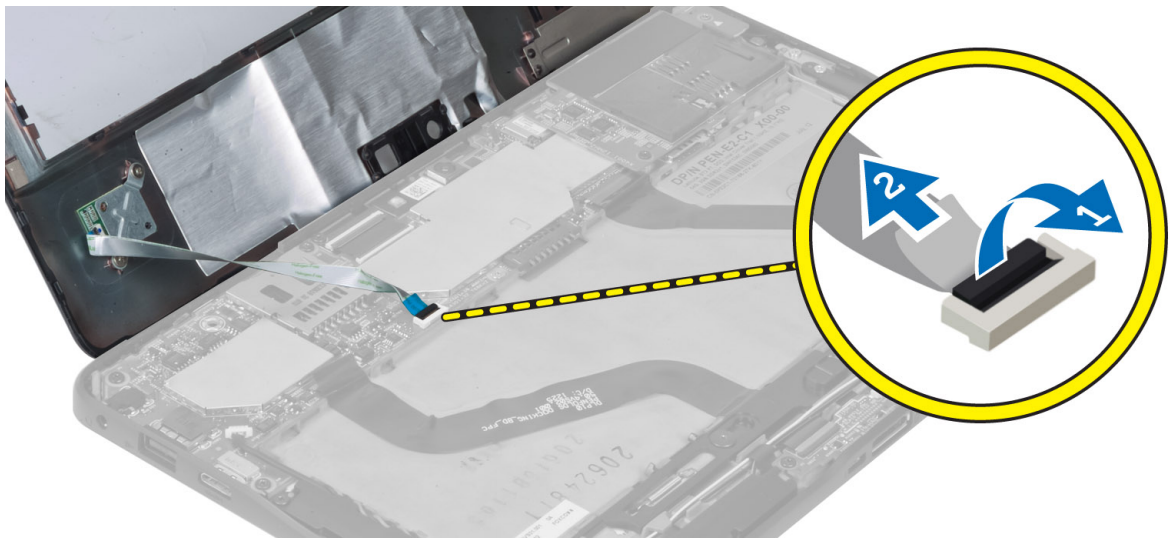


5. Pry and lift the tabs that secure the base cover in the battery bay area in an upward direction. Pry and flip the base cover.





6. Lift the retention clasp in an upward direction and release the fingerprint reader cable outward to remove it from the system board. Lift the base cover away from the computer.

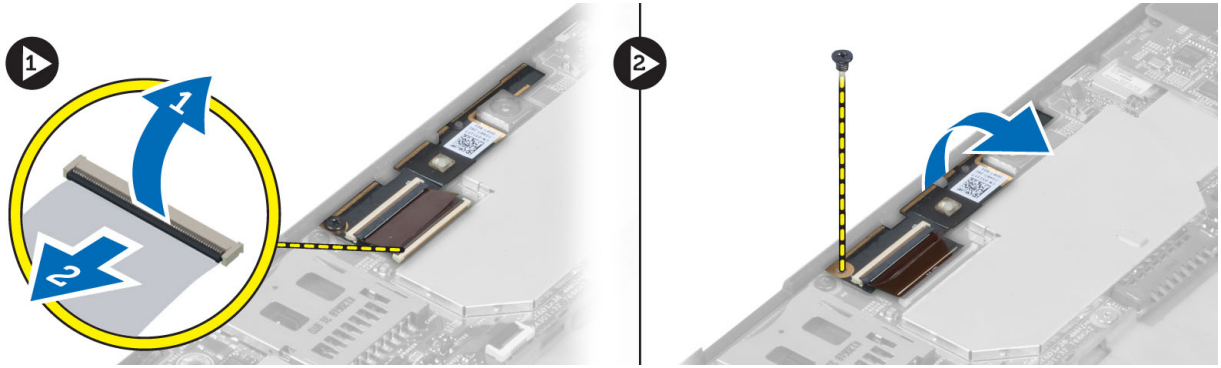


## Installing the Base Cover

1. Attach the fingerprint reader flex cable from the base cover to the system board.
2. Attach the base cover to the computer.
3. Push the edges of the base cover into the securing clips until they are fully engaged.
4. Tighten the screws to secure the base cover.
5. Install the battery.
6. Follow the procedures in *After Working Inside Your Computer*.

## Removing the Front Camera

1. Follow the procedures in *Before Working Inside Your Computer*.
2. Remove the:
  - a) battery
  - b) base cover
3. Lift up the connector latch and disconnect the camera cable. Remove the screw that secures the camera module to the computer. Remove the camera module from the computer.

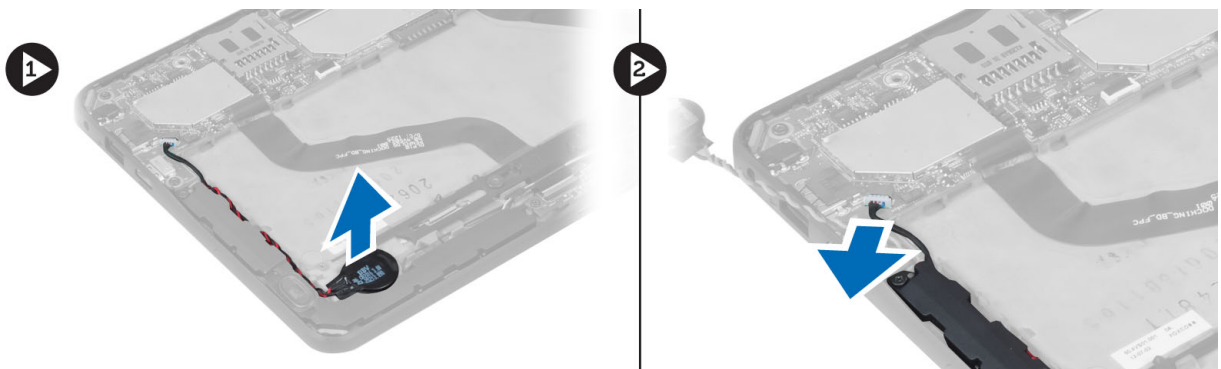


## Installing the Front Camera

1. Place the camera module in its slot on the computer.
2. Tighten the screw to secure the camera module to the computer.
3. Connect the camera cable to the connector.
4. Install the:
  - a) base cover
  - b) battery
5. Follow the procedures in *After Working Inside Your Computer*.

## Removing the Speakers

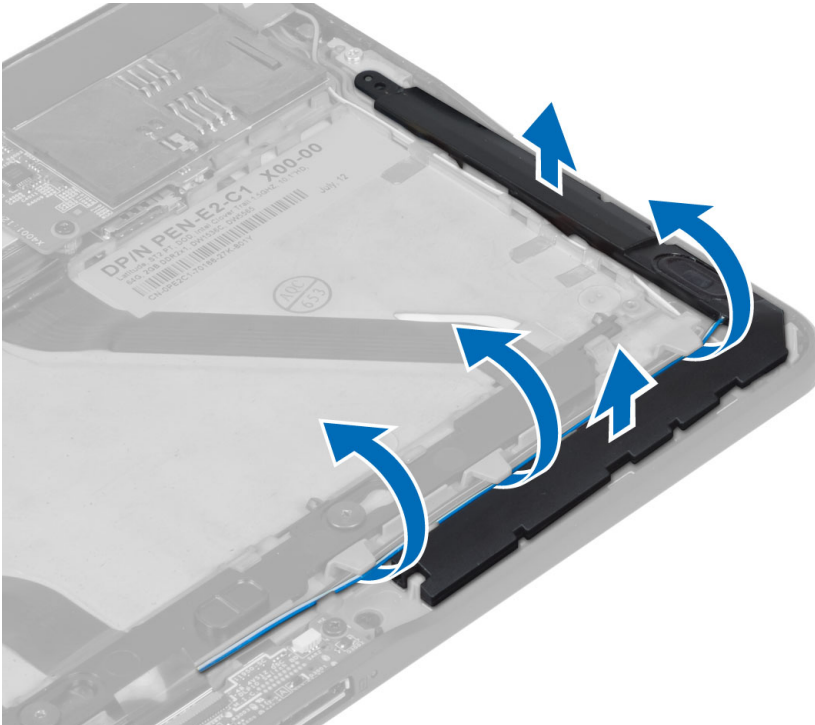
1. Follow the procedures in *Before Working Inside Your Computer*.
2. Remove the :
  - a) battery
  - b) base cover
3. Lift up the coin-cell battery from its slot and un-route its cabling from below the speaker. Disconnect the speaker connector from the system board.



4. Remove the screws that secure the speakers to the computer.



5. Un-route the speaker cables on the right-hand side of the computer and lift up to release the right speaker from the computer.



6. Un-route the speaker cables on the left-hand side of the computer and lift up to release the left speaker from the computer.



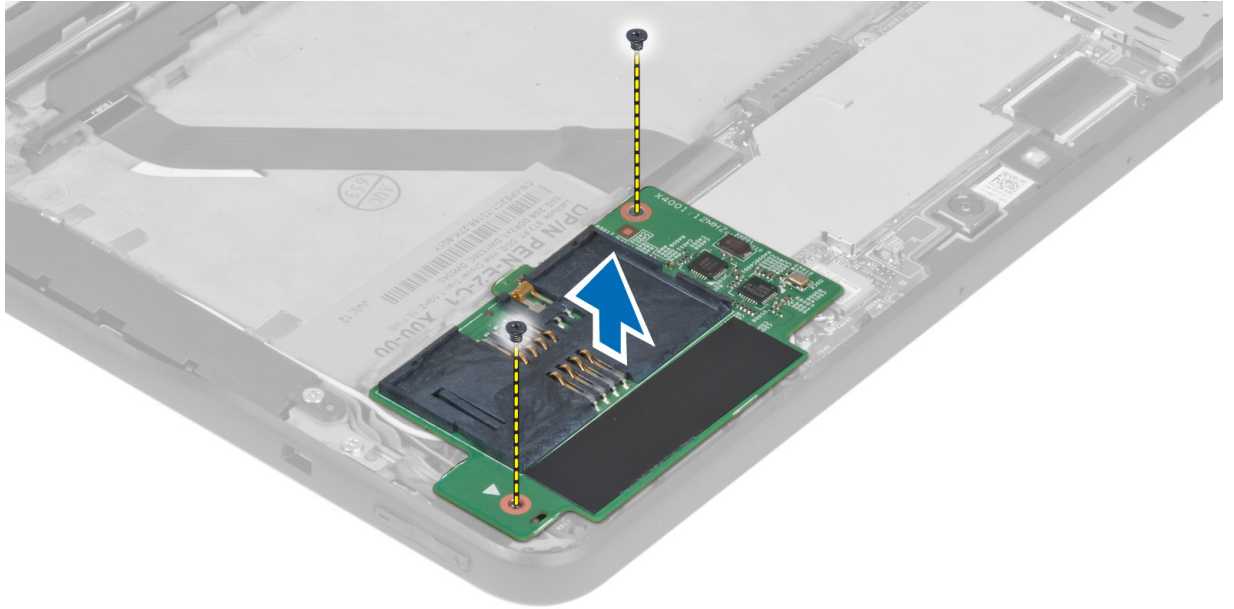
## Installing the Speakers

1. Place the right and the left speakers in their slot.
2. Route the speaker cables on the chassis.
3. Tighten the screws to secure the speakers to the chassis.
4. Place the coin-cell battery in its slot and route the cables.
5. Connect the speaker connector cable to its port on the system board.
6. Install the :
  - a) base cover
  - b) battery
7. Follow the procedures in *After Working Inside Your Computer*.

## Removing the SmartCard Reader

 **NOTE:** The SmartCard reader is an optional component.


1. Follow the procedures in *Before Working Inside Your Computer*.
2. Remove the :
  - a) battery
  - b) base cover
3. Remove the screws that secure the SmartCard reader to the system board and lift in an upward direction to remove it from the computer.



## Installing the SmartCard Reader

1. Place the SmartCard reader into its slot.
2. Tighten the screws to secure the SmartCard reader to the system board.
3. Install the :
  - a) base cover
  - b) battery
4. Follow the procedures in *After Working Inside Your Computer*.

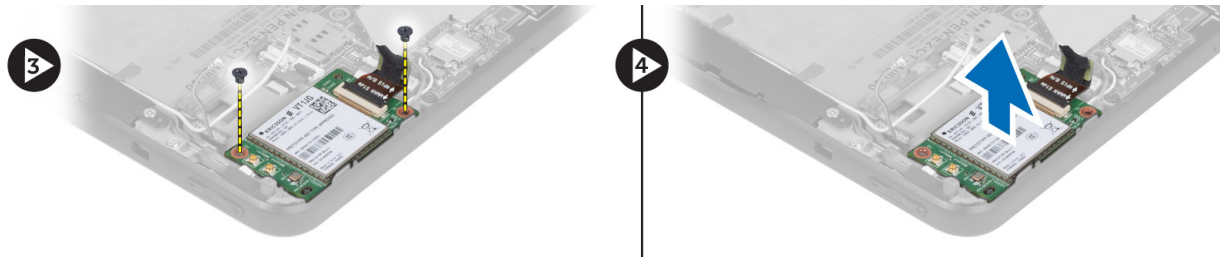
## Removing the Wireless Wide Area Network (WWAN) Card

 **NOTE:** The WWAN Card is an optional component.

1. Follow the procedures in *Before Working Inside Your Computer*.
2. Remove the :
  - a) battery
  - b) base cover
  - c) SmartCard reader
3. Disconnect antennae connected to the WWAN card. Lift up the system board connector to release the WWAN card.



4. Disconnect the screws that secure the WWAN card to the system board and lift it up to remove it from the computer.

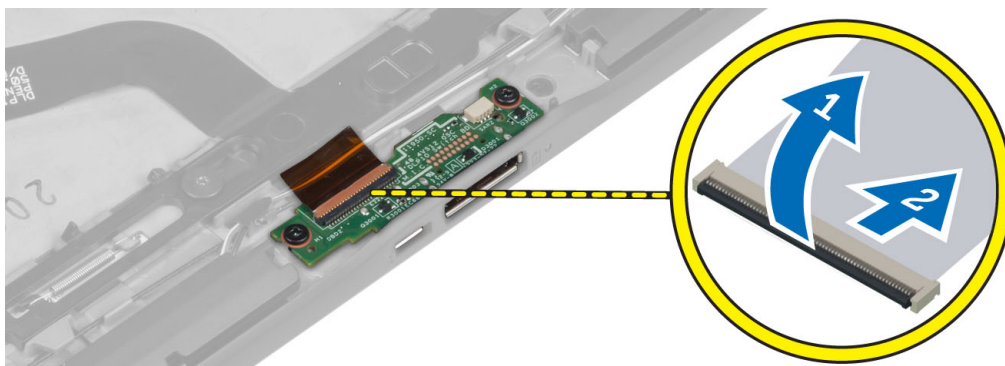


## Installing the Wireless Wide Area Network (WWAN) Card

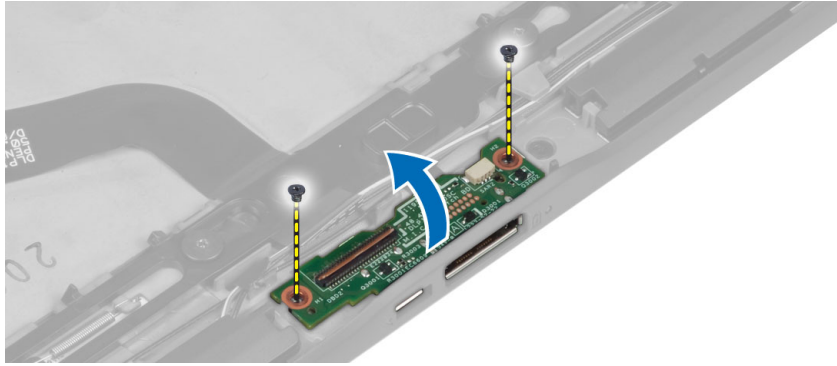
1. Slide the WWAN card into the slot.
2. Tighten the screws to secure the WWAN card to the computer.
3. Connect the system board side data cable to the WWAN card.
4. Connect the antennae according to the color code on the WWAN card.
5. Install the :
  - a) SmartCard reader
  - b) base cover
  - c) battery
6. Follow the procedures in *After Working Inside Your Computer*.

## Removing the Docking Board

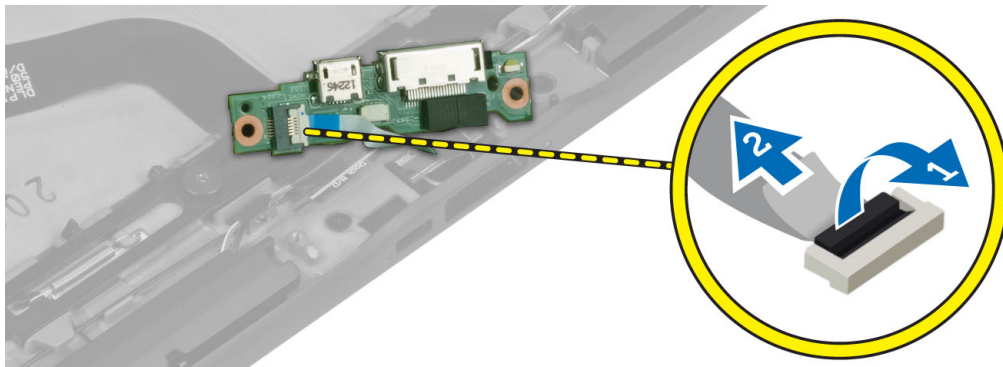
1. Follow the procedures in *Before Working Inside Your Computer*.
2. Remove the:
  - a) battery
  - b) base cover
  - c) SmartCard reader
  - d) WWAN Card
  - e) speaker
  - f) front camera
3. Lift up the connector latch and disconnect the docking board power flex cable from the connector.



4. Remove the screws that secure the docking board to the computer.



5. Remove the docking board from the computer and disconnect the home-button board cable.



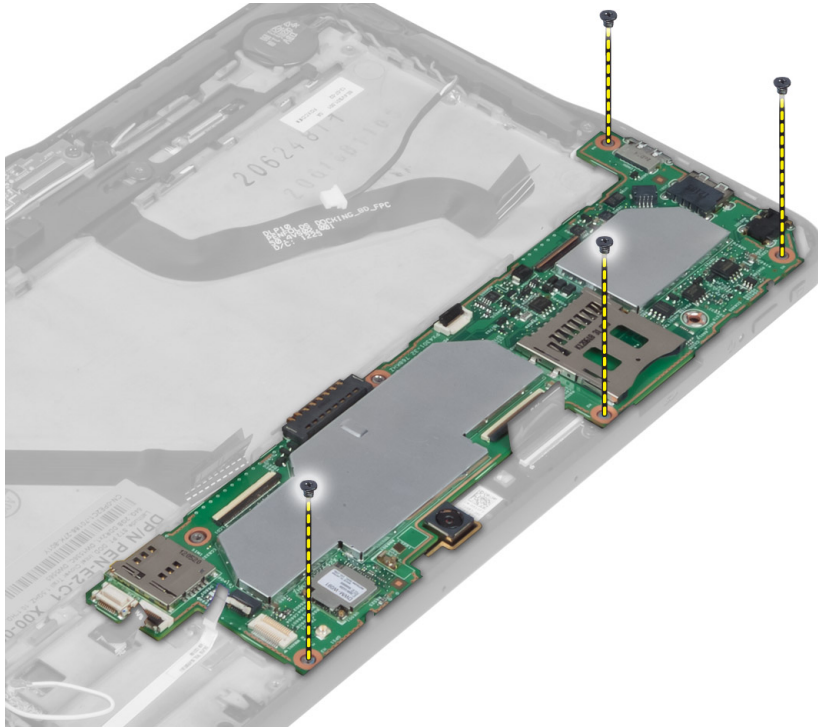
## Installing the Docking Board

1. Connect the home-button board cable to the docking board and place the docking board in its slot in the computer.
2. Tighten the screws to secure the docking board to the computer.
3. Connect the docking board power flex cable to the connector.
4. Install the:
  - a) front camera
  - b) speaker
  - c) WWAN Card
  - d) SmartCard reader
  - e) base cover
  - f) battery
5. Follow the procedures in *After Working Inside Your Computer*.

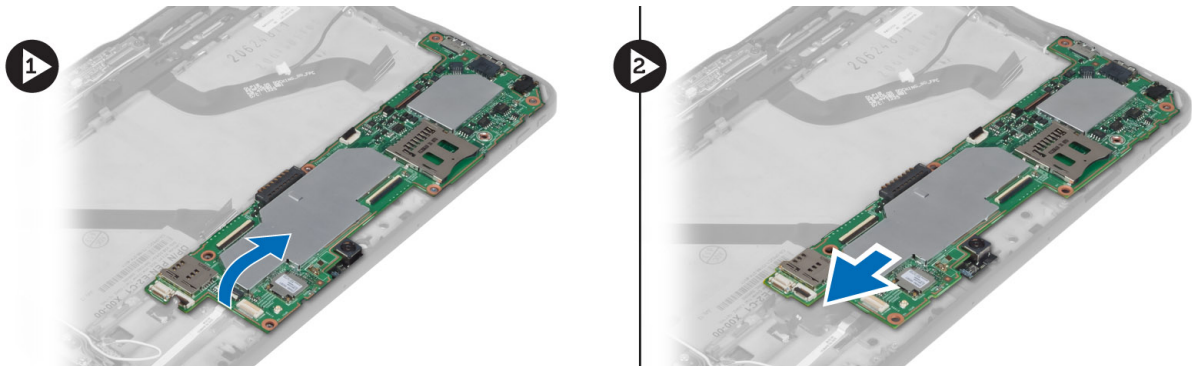
## Removing the System Board

1. Follow the procedures in *Before Working Inside Your Computer*.
2. Remove the:
  - a) battery
  - b) base cover
  - c) SmartCard reader
  - d) WWAN card
  - e) speaker

- f) front camera
- g) docking board
- 3. Disconnect the LVDS and docking board flex cables.
- 4. Remove the screws that secure the system board to the computer.



- 5. Lift up the system board at a 45° angle and pull it away from the computer.



## Installing the System Board

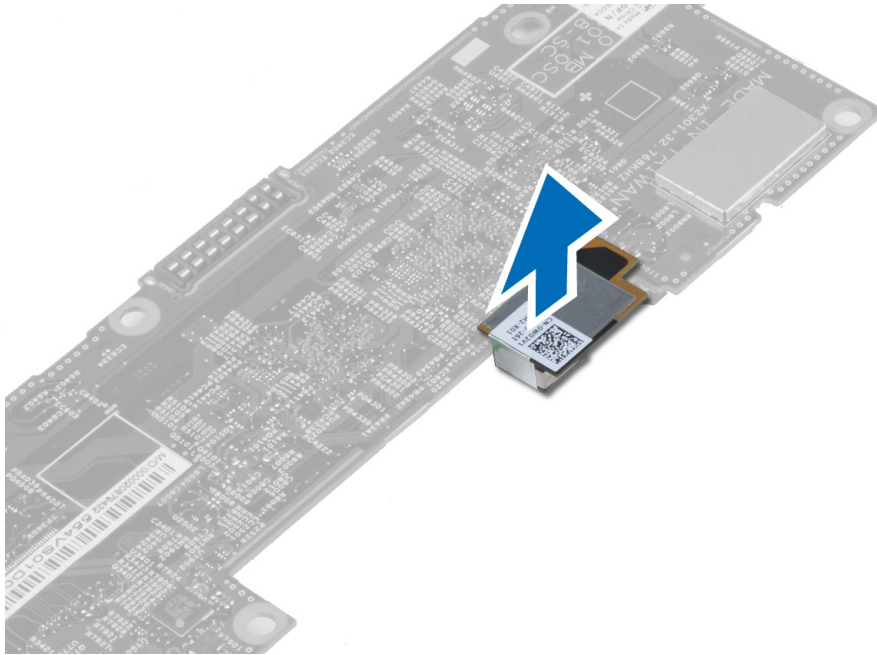
- 1. Place the system board in its compartment on the computer.
- 2. Tighten the screws to secure the system board to the computer.
- 3. Install the:
  - a) docking board
  - b) front camera
  - c) speaker
  - d) WWAN card



- e) SmartCard reader
  - f) base cover
  - g) battery
4. Follow the procedures in *After Working Inside Your Computer*.

## Removing the Rear Camera

1. Follow the procedures in *Before Working Inside Your Computer*.
2. Remove the:
  - a) battery
  - b) base cover
  - c) SmartCard reader
  - d) WWAN Card
  - e) speaker
  - f) front camera
  - g) system board
3. Remove the camera module from the system board.



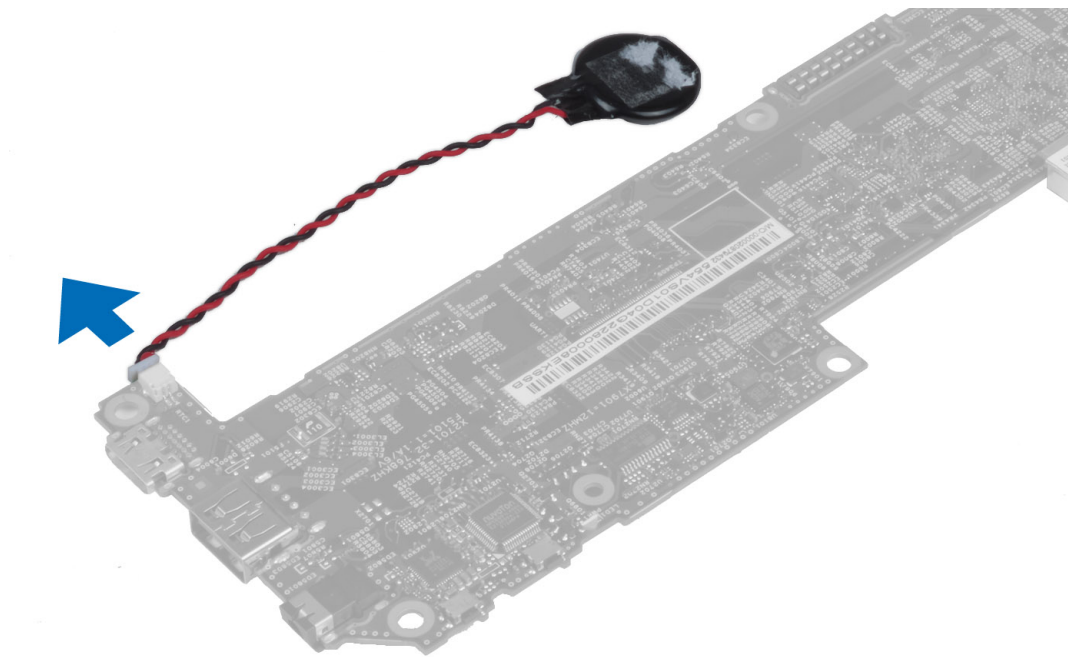
## Installing the Rear Camera

1. Place the camera module in its slot on the system board.
2. Install the:
  - a) system board
  - b) front camera
  - c) speaker
  - d) WWAN Card
  - e) SmartCard reader
  - f) base cover
  - g) battery

3. 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 the:
  - a) battery
  - b) base cover
  - c) SmartCard reader
  - d) WWAN Card
  - e) speaker
  - f) front camera
  - g) system board
3. Disconnect the coin-cell battery cable and remove it from the system board.



## Installing the Coin-Cell Battery

1. Connect the coin-cell battery cable to the system board.
2. Install the:
  - a) system board
  - b) front camera
  - c) WWAN Card
  - d) SmartCard reader
  - e) speaker
3. Replace the coin-cell battery in its slot on the computer.
4. Install the:
  - a) battery
  - b) base cover

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




## System Setup (การตั้งค่าระบบ)


System Setup (การตั้งค่าระบบ) ใช้เพื่อจัดการฮาร์ดแวร์คอมพิวเตอร์และระบบค่าต่าง ๆ ใน BIOS จาก System Setup คุณสามารถ:

- แก้ไขค่า NVRAM หลังจากใส่หรือถอดฮาร์ดแวร์
- ดูโครงสร้างฮาร์ดแวร์ของเครื่อง
- เปิดหรือปิดอุปกรณ์ในตัวต่าง ๆ
- กำหนดค่าประสิทธิภาพในการทำงานและการจัดการพลังงาน
- กำหนดค่าระบบความปลอดภัยสำหรับคอมพิวเตอร์

### Entering System Setup (BIOS)

 **NOTE:** Before entering the System Setup, you must connect a USB Keyboard to the USB port located on the right side of the computer or on the rear of the docking station if your computer is docked.

1. Turn on (or restart) your computer.
2. When the blue DELL logo is displayed, you must watch for the F2 prompt to appear.
3. Once the F2 prompt appears, press <F2> immediately.

 **NOTE:** The F2 prompt indicates that the keyboard has initialized. This prompt can appear very quickly, so you must watch for it to display, and then press <F2> . If you press <F2> before you are prompted, this keystroke will be lost.

4. The System Setup screen is displayed.
5. If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft Windows desktop. Then, shut down your computer and try again.

### System Setup Navigation

Use the following options to navigate through the System Setup screens:

Keystroke	Action
< Esc >	Exit from current view or switch the current view to the <b>Exit</b> page in the System Setup.
<On Screen Keyboard Icon>	Select this option to navigate the system setup using the on screen keyboard built into the tablet.
< Up Arrow > or < Down Arrow > ( when connected to an optional external USB keyboard)	Select an item to display.
< Left Arrow > or < Right Arrow > ( when connected to an	Select a menu to display.

Keystroke	Action
optional external USB keyboard)	
<b>On Screen Mouse Pointer</b>	Use this to navigate the System Setup by using your finger or an interactive pen.
<b>Apply Icon</b>	Save current configuration.
<b>Defaults Icon</b>	Load setup defaults.
<b>Exit Icon</b>	Exits System Setup.

## เมนูบู๊ต

กด <F12> เมื่อโลโก้ Dell ปรากฏขึ้นเมื่อเริ่มเข้าสู่เมนูบู๊ตที่จะปรากฏขึ้นหนึ่งครั้งพร้อมแสดงรายการอุปกรณ์สำหรับบู๊ตเครื่อง มีตัวเลือก **Hard Drive Network Diagnostics** และ **Enter Setup** (ฮาร์ดไดรฟ์ เครื่องข่าย การวินิจฉัย และ เข้าสู่ส่วนตั้งค่า) อยู่ในเมนูนี้ เมนูนี้เป็นประโยชน์ในกรณีที่พยายามบู๊ตไปยังอุปกรณ์ที่ต้องการ หรือเพื่อเรียกใช้ระบบวินิจฉัยเครื่อง เมนูบู๊ตจะไม่เปลี่ยนแปลงลำดับการบู๊ตที่กำหนดไว้ใน BIOS แต่อย่างไร

## System Setup (BIOS) Options

Table 3. System Information

Option	Function
<b>BIOS Version</b>	Displays the BIOS revision.
<b>Service Tag</b>	Displays the service tag of your tablet.
<b>Asset Tag</b>	Displays the asset tag of your computer.
<b>Ownership Tag</b>	Displays the ownership information.
<b>Manufacture Date</b>	Displays the date of manufacture.
<b>Ownership Date</b>	Displays the ownership date.
<b>Memory Installed</b>	Displays the memory installed on the computer.
<b>Memory Available</b>	Displays the memory available on the computer.
<b>Memory Speed</b>	Displays the memory speed.

Table 4. Battery Information

Option	Function
<b>AC Adapter</b>	Displays the AC Adapter information.
<b>Battery Status</b>	Displays the current battery status.
<b>Battery Charge State</b>	Displays if the battery is charging/discharging.
<b>Battery Health</b>	Displays the battery health.

**Table 5. Boot Sequence**

Option	Function
<b>File Browser Add Boot Option</b>	Displays the order that the BIOS searches devices when trying to find an operating system to boot. A new device can be added here.
<b>File Browser Del Boot Option</b>	A displayed boot device can be removed from the boot order.

**Table 6. Date/Time**

Option	Function
<b>System Date</b>	Displays the system date.
<b>System Time</b>	Displays the system time.

**Table 7. System Configuration**


Option	Function
<b>USB Configuration</b>	Enables or Disables boot from a USB mass storage device. Default : <b>Enabled</b>
<b>Miscellaneous Devices</b>	Allows you to enable or disable various on-board devices. <ul style="list-style-type: none"> <li>• Enable/Disable Front Camera Device</li> <li>• Enable/Disable Rear Camera Device</li> <li>• Enable/Disable Media Card Device</li> <li>• Enable/Disable GPS</li> </ul>

**Table 8. Video**

Option	Function
<b>LCD Brightness</b>	Displays the panel brightness when the ambient light sensor is off. <ul style="list-style-type: none"> <li>• Brightness on Battery</li> <li>• Brightness on AC</li> </ul>

**Table 9. Security**

Option	Description
<b>Admin Password</b>	This field lets you set, change, or delete the administrator (admin) password (also known as the setup password). The admin password enables several security features. The drive does not have a password set by default. To add a new password: <ul style="list-style-type: none"> <li>• Enter the old password</li> <li>• Enter the new password</li> <li>• Confirm the new password</li> </ul>

Option	Description
<b>System Password</b>	<p>Click <b>OK</b> after entering the password details.</p> <p>Allows you to set, change, or delete the computer password (previously called the primary password).</p> <p>The drive does not have a password set by default.</p> <p>To add a new password:</p> <ul style="list-style-type: none"> <li>• Enter the old password</li> <li>• Enter the new password</li> <li>• Confirm the new password</li> </ul>
<b>Strong Password</b>	<p>Click <b>OK</b> after entering the password details.</p> <p>Enable strong password - This option is disabled by default.</p>
<b>Password Configuration</b>	<p>This field controls the minimum and maximum number of characters allowed for the admin and system passwords. Changes to these fields are not active until they are committed via the apply button or saving changes before exiting setup.</p> <ul style="list-style-type: none"> <li>• Admin Password Min</li> <li>• Admin Password Max</li> <li>• System Password Min</li> <li>• System Password Max</li> </ul>
<b>Password Change</b>	<p>Allows you to determine whether changes to the system and hard disk passwords are permitted when an administrator password is set.</p> <ul style="list-style-type: none"> <li>• Allow Non-Admin Password Changes (Default)</li> </ul>
<b>Non-Admin Setup Changes</b>	<p>This option lets you determine whether changes to the setup options are permitted when an administrator password is set.</p> <ul style="list-style-type: none"> <li>• Allow Wireless Switch Changes (Default)</li> </ul>
<b>TPM Security</b>	<p>This option lets you control whether the Trusted Platform Module (TPM) in the system is enabled and visible to the operating system.</p> <p>TPM Security (Default)</p> <p> <b>NOTE:</b> Activation, deactivation, and clear options are not affected if you load the setup program's default values. Changes to this option take effect immediately.</p>
<b>PTT</b>	<p>Allows you to enable or disable PTT Support.</p> <ul style="list-style-type: none"> <li>• PTT Security (Default)</li> <li>• Revoke Trust (Default)</li> </ul>
<b>Computrace (R)</b>	<p>This field lets you activate or disable the BIOS module interface of the optional <i>Computrace Service</i> from <i>Absolute Software</i>.</p> <ul style="list-style-type: none"> <li>• Deactivate (Default)</li> <li>• Disable</li> <li>• Activate</li> </ul>



Option	Description
<b>Admin Setup Lockout</b>	Allows you to enable or disable the option to enter setup when an admin password is set. <ul style="list-style-type: none"> <li>• Enable Admin Setup Lockout (Default)</li> </ul>

**Table 10. Secure Boot**

Option	Function
<b>Secure Boot</b>	Enables or Disables the secure boot feature. Default : Disabled
<b>Expert Key Management</b>	Allows you to manage all secure boot keys.

**Table 11. Performance**

Option	Description
<b>Multi Core Support</b>	Specifies whether the process will have one or all cores enabled. The performance of some applications will improve with the additional cores. <ul style="list-style-type: none"> <li>• All (Default)</li> <li>• 1</li> <li>• 2</li> </ul>
<b>Intel SpeedStep</b>	Allows you to enable or disable the Intel SpeedStep mode of the processor. <ul style="list-style-type: none"> <li>• Enable Intel(R) SpeedStep (Default)</li> </ul>
<b>C States Control</b>	Allows you to enable or disable the additional processor sleep states. <ul style="list-style-type: none"> <li>• C states (Default)</li> </ul>
<b>Intel TurboBoost</b>	Allows you to enable or disable Intel TurboBoost mode of the processor. <ul style="list-style-type: none"> <li>• Enable Intel TurboBoost (Default) — Allows the Intel TurboBoost driver to increase the performance of the CPU or graphics processor.</li> </ul>
<b>Hyperthread Control</b>	This options allows users to enable and disable the Hyperthread Control. <ul style="list-style-type: none"> <li>• Hyperthread Control (selected by default)</li> </ul>

**Table 12. Power Management**

Option	Description
<b>AC Behavior</b>	Allows the computer to power-uon automatically, when AC adapter is plugged. The option is disabled. <ul style="list-style-type: none"> <li>• Wake on AC</li> </ul>
<b>Wake on LAN</b>	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
	<ul style="list-style-type: none"> <li>• <b>Disabled</b> - 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 )</li> <li>• LAN Only - Allows the system to be powered on by special LAN signals.</li> </ul>

**Table 13. POST Behaviour**

Option	Description
<b>Adapter Warnings</b>	<p>Allows you to activate the adapter warning messages when certain power adapters are used. The option is enabled by default.</p> <ul style="list-style-type: none"> <li>• Enable Adapter Warnings</li> </ul>
<b>POST Hotkeys</b>	<p>Specifies whether the sign-on screen displays a message, that displays the keystroke sequence required to enter the BIOS Boot Option Menu.</p> <ul style="list-style-type: none"> <li>• <b>Enable F12 Boot Option menu</b> (Default).</li> </ul>

**Table 14. Virtualization Support**

Option	Description
<b>Virtualization</b>	<p>This option specifies whether a Virtual Machine Monitor (VMM) can utilize the additional hardware capabilities provided by Intel Virtualization technology.</p> <ul style="list-style-type: none"> <li>• <b>Enable Intel Virtualization Technology</b> (Default)</li> </ul>

**Table 15. Wireless**

Option	Description
<b>Wireless Device Enable</b>	<p>Allows you to enable or disable the wireless devices</p> <ul style="list-style-type: none"> <li>• WLAN</li> <li>• Bluetooth</li> </ul> <p>All options are enabled by default.</p>

**Table 16. Maintenance**

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

**Table 17. System Logs**

Option	Description
<b>BIOS events</b>	<p>Displays the system event log and allows you to clear the log.</p> <ul style="list-style-type: none"> <li>• Clear Log</li> </ul>

## การแก้ไขปัญหาคอมพิวเตอร์

สามารถแก้ไขปัญหาคอมพิวเตอร์ได้โดยสังเกตสัญลักษณ์ต่าง ๆ เช่น ไฟวินิจฉัยระบบ เสียงรหัสแจ้งเตือน ข้อความแจ้งข้อผิดพลาด ระหว่างที่คอมพิวเตอร์ทำงาน


### Enhanced Pre-boot System Assessment (ePSA)

The ePSA is a diagnostic utility available on your computer. This utility includes a series of tests for a computer's hardware. You can run these tests even if the computer lacks any media (hard drive, optical drive, etc.). If a ePSA-tested component fails, the system displays an error code and generates a beep code.

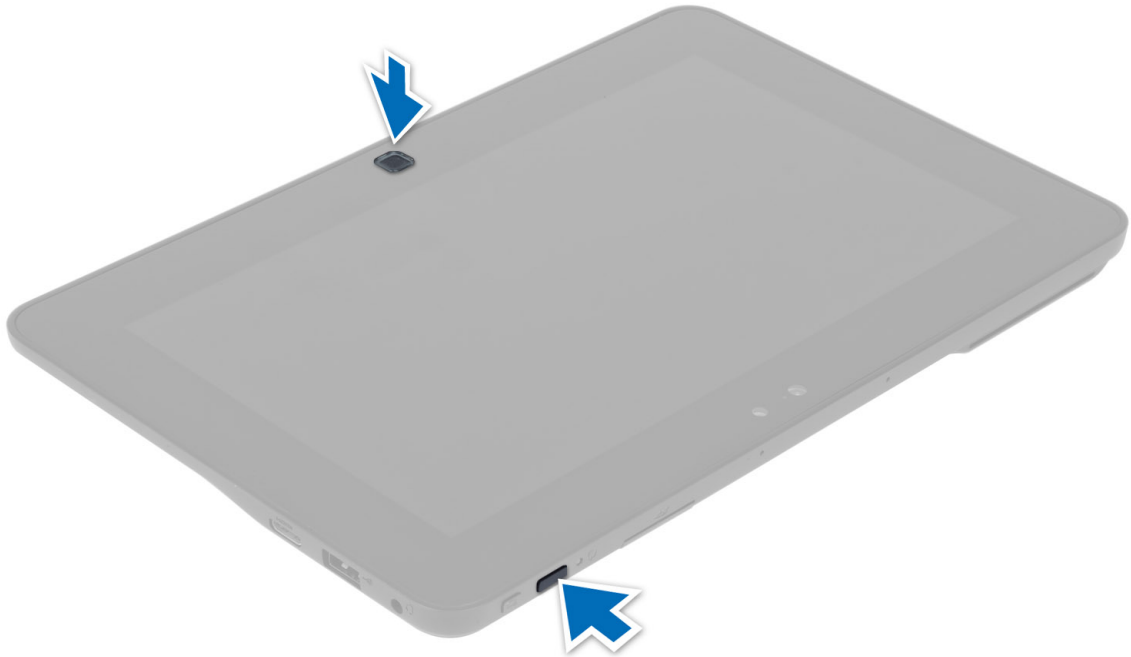
#### Features

- Graphical User Interface
- Automatic Default Operation- runs test on all devices, allowing a user to interrupt and select any device
- Checks the Master Boot Record for readiness to boot into a full OS environment
- Tablet panel test
- Video memory test
- Battery test
- Charger test
- Event log scan
- Multiprocessor cache test

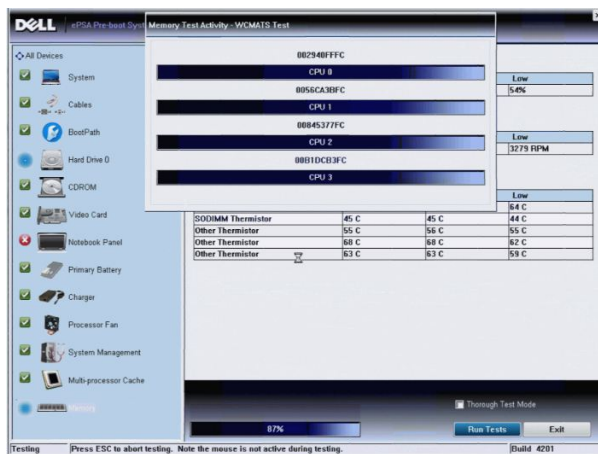
### Running the ePSA Diagnostic Utility

 **NOTE:** The following steps can be used to run the ePSA diagnostic utility in DOS mode without using an external keyboard.

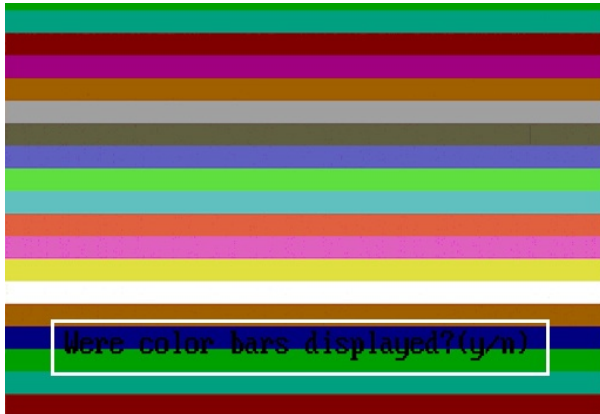
1. Power on the system and immediately press the <Power> + <Start> buttons simultaneously for a second.



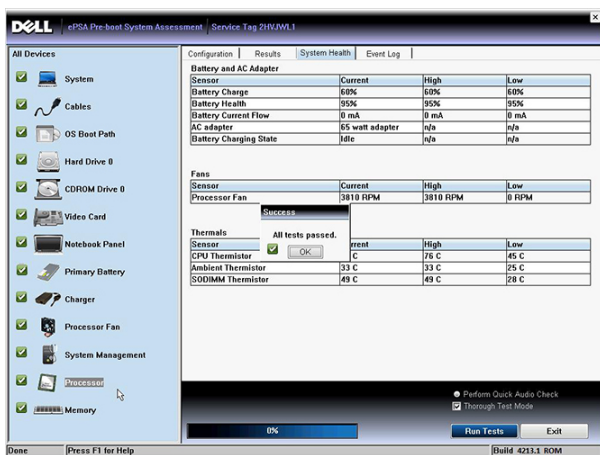
- The computer will start up and begin running the ePSA utility automatically.



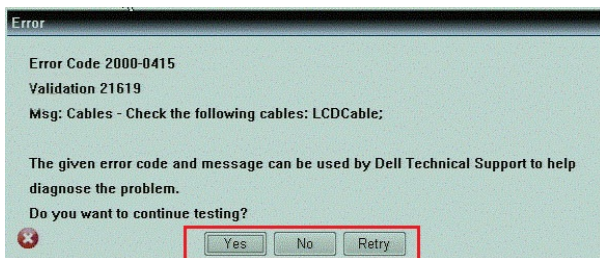
- During the testing process, you will be prompted to answer a YES or NO question. To respond, press Volume Up = YES or Volume Down = NO.



4. Press the Security Button (<Ctrl> + <Alt> + <Del>) to click **OK** once the tests are completed.



5. The volume up and down buttons can also be used as the <Tab> key when switching between options.



## รหัสเสียงเตือน

คอมพิวเตอร์อาจส่งเสียงดังระหว่างการเริ่มการทำงาน หากหน้าจอไม่สามารถแสดงข้อผิดพลาดหรือปัญหาได้ เสียงหรือรหัสเสียงวินิจฉัยระบบนี้ใช้ระบุปัญหาต่าง ๆ ระหว่างสัญญาณเสียงคือ 300ms ระยะห่างระหว่างชุดรหัสเสียงคือ 3 วินาที และเสียงสัญญาณจะดังเป็นเวลา 300 ms หลังจากเสียงสัญญาณแต่ละครั้งและแต่ละรูปแบบ BIOS จะตรวจหาว่าผู้ใช้กดปุ่มเปิดปิดเครื่องหรือไม่ หากมีการกดปุ่ม BIOS จะออกจากเมนูและสั่งการปิดระบบและตัดไฟตามปกติ

รหัส	สาเหตุและขั้นตอนในการแก้ไขปัญหา
1	BIOS ROM เช็คว่ากำลังดำเนินการหรือล้มเหลว ข้อผิดพลาดเมนบอร์ด ครอบคลุมปัญหาเกี่ยวกับ BIOS หรือ ROM

รหัส	สาเหตุและขั้นตอนในการแก้ไขปัญหา
2	ไม่พบ RAM ไม่พบหน่วยความจำ
3	ข้อผิดพลาดของชิปเซ็ต (ข้อผิดพลาดชิปเซ็ต North และ South Bridge, DMA/IMR/ ระบบตั้งเวลา) ข้อผิดพลาดระบบตรวจสอบเวลาระหว่างวัน ข้อผิดพลาด Gate A20 ข้อผิดพลาดชิป Super I/O ข้อผิดพลาดการทดสอบส่วนควบคุมเป็นพิมพ์ ข้อผิดพลาดเมนบอร์ด
4	อ่าน/เขียน RAM ไม่ได้ ข้อผิดพลาดหน่วยความจำ
5	ข้อผิดพลาดระบบจ่ายไฟนาฬิกาเรียลไทม์ ข้อผิดพลาดแบตเตอรี่ CMOS
6	ข้อผิดพลาดการทดสอบ BIOD วิดีโอ ข้อผิดพลาดการ์ดแสดงผล
7	CPU - ทดสอบแชนด์สแลว โปรเซสเซอร์มีปัญหา
8	จอแสดงผล ข้อผิดพลาดจอแสดงผล

## รหัสข้อผิดพลาด LED

รหัส LED แจ้งข้อผิดพลาดจะแจ้งผ่าน LED ปุ่มเปิดปิดเครื่อง LED ปุ่มเปิดปิดจะกะพริบตามรหัส LED ที่เกี่ยวข้องเพื่อแจ้งข้อผิดพลาด เช่น หากไม่พบหน่วยความจำ (รหัส LED 2) LED ปุ่มเปิดปิดจะกะพริบสองครั้งแล้วหยุด จากนั้นกะพริบสองครั้งแล้วหยุด ฯลฯ รูปแบบการแสดงผลนี้จะเกิดขึ้นต่อเนื่องจากว่าจะปิดเครื่อง

รหัส	สาเหตุและขั้นตอนในการแก้ไขปัญหา
1	เมนบอร์ด: BIOS ROM คืดพลาด ข้อผิดพลาดเมนบอร์ด ครอบคลุมปัญหาเกี่ยวกับ BIOS หรือ ROM
2	หน่วยความจำ ไม่พบหน่วยความจำ/RAM
3	ข้อผิดพลาดของชิปเซ็ต (ข้อผิดพลาดชิปเซ็ต North และ South Bridge, DMA/IMR/ ระบบตั้งเวลา) ข้อผิดพลาดระบบตรวจสอบเวลาระหว่างวัน ข้อผิดพลาด Gate A20 ข้อผิดพลาดชิป Super I/O ข้อผิดพลาดการทดสอบส่วนควบคุมเป็นพิมพ์ ข้อผิดพลาดเมนบอร์ด
4	อ่าน/เขียน RAM ไม่ได้ ข้อผิดพลาดหน่วยความจำ
5	ข้อผิดพลาดระบบจ่ายไฟนาฬิกาเรียลไทม์ ข้อผิดพลาดแบตเตอรี่ CMOS
6	ข้อผิดพลาดการทดสอบ BIOD วิดีโอ ข้อผิดพลาดการ์ดแสดงผล
7	CPU - ทดสอบแชนด์สแลว โปรเซสเซอร์มีปัญหา

## Troubleshooting the Wacom Digitizer

The Wacom Tablet Settings applet is used to adjust several settings for the digitizer. Once the Wacom drivers are loaded, an icon appears in the system tray.

The following section provides troubleshooting steps to resolve installation and performance issues.

### Installation Issues

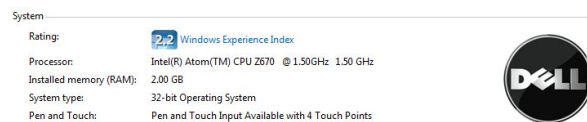
Error message : **Hardware is not adequate for running this software**

1. Check if the bundle you are trying to run is for the right operating system (Windows 8)
2. Check if the bundle you are trying to run is for the right type (32 bit)

### Performance issues

**No multi touch functionality: Wacom Software Bundle Not Installed**

1. Check if the Wacom software bundle is installed. Open **Control Panel** → **Wacom Digitizer Settings**. If the bundle is not installed, Install the correct bundle for the operating system.
2. Check the system information to see how many touch points are detected.
  - Right click **Computer** and select **Properties** from the menu.
  - Number of touch points will appear in the information window.



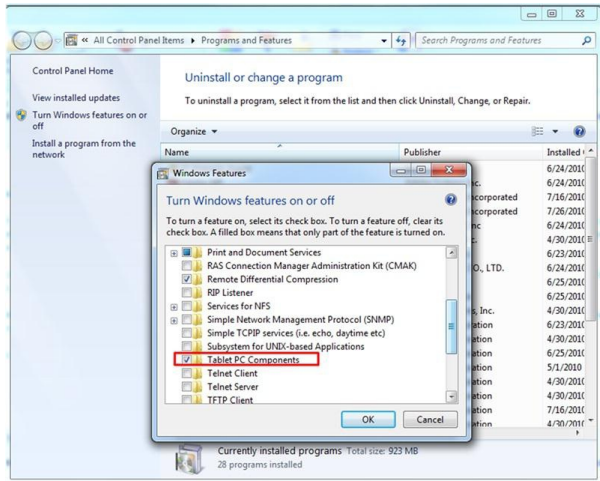
### Performance issues

**No multi touch functionality: Wacom Software Bundle Is Installed**

- Open the Device Manager and check that the Digitizer is recognized by the tablet .
- If the device is recognized, uninstall the Wacom bundle and reinstall it.
- If the device is not recognized, check it is displayed under **Unknown Devices** and update the driver for the unknown device.

In Windows 8, verify if the Tablet PC Components check box (in Windows Features) is selected after successfully installing the Wacom software bundle.

In order to verify this, navigate to **Control Panel** → **Programs and Features** . In the **Programs and Features** window, click the **Turn Windows Features On/Off** link, located in the left sidebar, as displayed in the image below.





## รายละเอียดทางเทคนิค

### Specifications

 **NOTE:** อุปกรณ์ที่ให้มาด้วยอาจแตกต่างกันในแต่ละพื้นที่ รายละเอียดทางเทคนิคต่อไปนี้เป็นส่วนที่อยู่ภายใต้เงื่อนไขของกฎหมายสำหรับจัดส่งคอมพิวเตอร์ของคุณ กรุณาดูรายละเอียดเพิ่มเติมเกี่ยวกับคอมพิวเตอร์ของคุณ โดยคลิก **Start** → **Help and Support** จากนั้นเลือกตัวเลือกเพื่อดูข้อมูลเกี่ยวกับคอมพิวเตอร์ของคุณ

<b>System Information</b>	
Chipset	Intel Atom Z2760
DRAM bus width	32-bit
Flash EPROM	SPI 4M bits
<b>Processor</b>	
Type	Intel Atom Z2760
External bus frequency	800 MHz
<b>Memory</b>	
Memory capacity	2 GB
Memory type	LPDDR2
<b>Audio</b>	
Type	Dual channel I2S codec
Controller	Realtek ALC3261
Stereo conversion	24-bit
Interface:	
Internal	I2 S audio interface
External	microphone-in and stereo headphones/speakers combo connector
Speakers	2 x 1 W stereo speakers
Internal speaker amplifier	1 W per channel
<b>Video</b>	
Video type	integrated
Data bus	internal

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<b>Video</b>	
Video controller	Intel Graphics Media Accelerator

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<b>Communications</b>	
Network adapter	USB 2.0 based Gigabit LAN via dock
Wireless	mobile broadband card (optional)

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<b>Ports and Connectors</b>	
Audio	one microphone-in and stereo headphones/speakers combo connector
Video	one mini HDMI connector
USB	one USB 2.0 connector
Memory card reader	one 3-in-1 memory card reader

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<b>Display</b>	
Type	HD IPS LED
Size	10.1 inches high definition (HD)
Dimensions:	
Height	125.11 mm (4.93 inches)
Width	222.52 mm (8.76 inches)
Diagonal	255.28 mm (10.05 inches)
Active area (X/Y)	222.52 mm / 125.11 mm
Maximum resolution	1366 x 768 pixels
Maximum brightness	450 nits
Refresh rate	60 Hz
Minimum viewing angles:	
Horizontal	80/80
Vertical	80/80
Pixel pitch	0.1629 x 0.1629

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<b>Battery</b>		
Type	2-cell lithium ion (30 WHr)	4-cell lithium ion (60 WHr)
Dimensions		
Length	238.30 mm (9.38 inches)	238.30 mm (9.38 inches)
Height	5.48 mm (0.22 inch)	10.03 mm (0.39 inch)
Width	86.50 mm (3.40 inches)	86.50 mm (3.40 inches)

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<b>Battery</b>		
Weight	220.00 g (0.49 lb)	373.00 g (0.82 lb)
Voltage	7.4 VDC	7.4 VDC
Temperature range		
Operating	0 °C to 50 °C (32° F to 158 °F)	0 °C to 50 °C (32 °F to 158 °F)
Non-Operating	-20 °C to 65 °C ( -4 °F to 149 °F)	-20 °C to 65 °C ( -4 °F to 149 °F)
Coin-cell battery	3 V CR2025 lithium ion	

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<b>AC Adapter</b>	
Type	
Input voltage	100 VAC to 240 VAC
Input current (maximum)	0.87 A
Input frequency	50 Hz to 60 Hz
Output power	30 W
Output current (30 W)	1.54 A
Rated output voltage	
Temperature range:	
Operating	0 °C to 35 °C (32 °F to 95 °F)
Non-operating	-40 °C to 65 °C (-40 °F to 149 °F)

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<b>Physical</b>	
Height (with security)	10.50 mm to 13.40 mm (0.41 inch to 0.53 inch)
Width	274 mm (10.79 inches)
Depth	176.60 mm (6.95 inches)
Weight (minimum)	658 grams (1.51 lb)

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<b>Environmental</b>	
Temperature:	
Operating	-25 °C to 85 °C
Storage	-40 °C to 85 °C
Relative humidity (maximum):	
Operating	Operating 10% to 90% (noncondensing)
Storage	Storage 5% to 95% (noncondensing)
Altitude (maximum):	
Operating	-16 m to m (-50 to ft)

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**Environmental**

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Non-operating	-15.2 m to 10,668 m (-50 ft to 35,000 ft)
Airborne contaminant level	G1 as defined by ISA-71.04-1985

## การติดต่อกับ Dell

### Contacting Dell

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

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

1. Visit [www.dell.com/support](http://www.dell.com/support).
2. Select your support category.
3. Verify your country or region in the Choose a Country/Region drop-down menu at the top of page.
4. Select the appropriate service or support link based on your need.