

Dell 27 All-in-One

EC27260

Service Manual

Notes, cautions, and warnings

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

 **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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Working inside your computer

Safety instructions

Use the following safety guidelines to protect your computer from potential damage and to ensure your personal safety. Unless otherwise noted, each procedure in this document assumes that you have read the safety information that shipped with your computer.

 **WARNING:** Before working inside your computer, read the safety information that is shipped with your computer. For more safety best practices, see [Dell Regulatory Compliance Home Page](#).

 **WARNING:** Disconnect your computer from all power sources before opening the computer cover or panels. After you finish working inside the computer, replace all covers, panels, and screws before connecting your computer to an electrical outlet.

 **CAUTION:** To avoid damaging the computer, ensure that the work surface is flat, dry, and clean.

 **CAUTION:** You should only perform troubleshooting and repairs as authorized or directed by the Dell technical support team. Damage due to servicing that is not authorized by Dell is not covered by your warranty.

 **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.

 **CAUTION:** To avoid damaging the components and cards, handle them by their edges, and avoid touching the pins and the contacts.

 **CAUTION:** When you disconnect a cable, pull it by its connector or its pull tab, not the cable itself. Some cables have connectors with locking tabs or thumbscrews that you must disengage before disconnecting the cable. When disconnecting cables, keep them evenly aligned to avoid bending the connector pins. When connecting cables, ensure that the connector on the cable is correctly oriented and aligned with the port.

 **CAUTION:** Press and eject any installed card from the media-card reader.

Before working inside your computer

About this task

 **NOTE:** The images in this document may differ from your computer depending on the configuration you ordered.

Steps

1. Save and close all open files and exit all open applications.

2. Shut down your computer. For Windows operating system, click **Start** >  **Power** > **Shut down**.

 **NOTE:** If you are using a different operating system, see the documentation of your operating system for shut-down instructions.

3. Turn off all the attached peripherals.

4. Disconnect your computer from the electrical outlet.

5. Disconnect all attached network devices and peripherals, such as keyboard, mouse, and monitor from your computer.

 **CAUTION:** To disconnect a network cable, unplug the cable from your computer.

6. Remove any media card and optical disc from your computer, if applicable.

Safety precautions

This section details the primary steps to be followed before disassembling any device or component.

Observe the following safety precautions before any installation or break-fix procedures involving disassembly or reassembly:

- Turn off the computer and all attached peripherals.
- Disconnect the computer from AC power.
- Disconnect all network cables and peripherals from the computer.
- Use an ESD field service kit when working inside your computer to avoid electrostatic discharge (ESD) damage.
- Place the removed component on an anti-static mat after removing it from the computer.
- Press and hold the power button for 15 seconds to discharge the residual power in the system board.

Bonding

Bonding is a method for connecting two or more grounding conductors to the same electrical potential. This is done by using a field service electrostatic discharge (ESD) kit. When connecting a bonding wire, ensure that it is connected to bare metal and never to a painted or nonmetal surface. Ensure that the wrist strap is secure and in full contact with your skin. Remove all jewelry, watches, bracelets, or rings before grounding yourself and the equipment.

Electrostatic discharge—ESD protection

ESD is a major concern when you handle electronic components, especially sensitive components such as expansion cards, processors, memory modules, and system boards. A slight charge can damage circuits in ways that may not be obvious, such as intermittent problems or a shortened product life span. As the industry pushes for lower power requirements and increased density, ESD protection is an increasing concern.

Two recognized types of ESD damage are catastrophic and intermittent failures.

- **Catastrophic** – Catastrophic failures represent approximately 20 percent of ESD-related failures. The damage causes an immediate and complete loss of device functionality. An example of catastrophic failure is a memory module that has received a static shock and immediately generates a "No POST/No Video" symptom with a beep code that is emitted for missing or nonfunctional memory.
- **Intermittent** – Intermittent failures represent approximately 80 percent of ESD-related failures. The high rate of intermittent failures means that most of the time when damage occurs, it is not immediately recognizable. The memory module receives a static shock, but the tracing is merely weakened and does not immediately produce outward symptoms that are related to the damage. The weakened trace may take weeks or months to melt, and in the meantime may cause degradation of memory integrity, intermittent memory errors, and so on.

Intermittent failures that are also called latent or "walking wounded" are difficult to detect and troubleshoot.

Perform the following steps to prevent ESD damage:

- Use a wired ESD wrist strap that is properly grounded. Wireless anti-static straps do not provide adequate protection. Touching the chassis before handling parts does not ensure adequate ESD protection on parts with increased sensitivity to ESD damage.
- Handle all static-sensitive components in a static-safe area. If possible, use anti-static floor pads and workbench pads.
- When unpacking a static-sensitive component from its shipping carton, do not remove the component from the anti-static packing material until you are ready to install the component. Before unwrapping the anti-static packaging, use the anti-static wrist strap to discharge the static electricity from your body.

 **NOTE:** You can protect against ESD and discharge static electricity from your body by touching a metal-grounded object before you interact with anything electronic, for example, an unpainted metal surface on your computer's I/O panel. When connecting a peripheral (including handheld digital assistants) to your computer, you should always ground both yourself and the peripheral before connecting it to the computer. In addition, as you work inside the computer, periodically touch a metal-grounded object to remove any static charge that your body may have accumulated.

For more information about the wrist strap and ESD wrist strap tester, see [Components of an ESD Field Service Kit](#).

- Before transporting a static-sensitive component, place it in an anti-static container or packaging.

ESD Field Service kit

The unmonitored field service kit is the most commonly used service kit. Each Field Service kit includes three main components: anti-static mat, wrist strap, and bonding wire.

 **CAUTION:** It is critical to keep ESD-sensitive devices away from internal parts that are insulated and often highly charged, such as plastic heat sink casings.

Working environment

Before the ESD Field Service kit is deployed, conduct an evaluation of the site to ensure proper setup and readiness. For example, deploying the kit for a server environment is different than for a desktop or laptop environment. Servers are typically installed in a rack within a data center; desktops or laptops are typically placed on office desks or cubicles. Always look for a large open flat work area that is free of clutter and large enough to deploy the ESD kit with additional space to accommodate the type of computer that is being repaired. The workspace should also be free of insulators that can cause an ESD event. On the work area, insulators such as styrofoam and other plastics should always be moved at least 12 inches or 30 centimeters away from sensitive parts before physically handling any hardware components.

ESD packaging

All ESD-sensitive devices must be shipped and received in static-safe packaging. Metal, static-shielded bags are preferred. However, you should always return the damaged component using the same ESD bag and packaging that the new part arrived in. The ESD bag should be folded over and taped shut and all the same foam packing material should be used in the original box that the new part arrived in. ESD-sensitive devices should be removed from packaging only at an ESD-protected work surface, and parts should never be placed on top of the ESD bag because only the inside of the bag is shielded. Always place parts in your hand, on the anti-static mat, in the computer, or inside an ESD bag.

Components of an ESD Field Service kit

The components of an ESD Field Service kit are:

- **Anti-Static Mat** – The anti-static mat is dissipative and parts can be placed on it during service procedures. When using an anti-static mat, your wrist strap should be snug and the bonding wire should be connected to the anti-static mat and to any bare metal on the computer being worked on. Once deployed properly, service parts can be removed from the ESD bag and placed directly on the anti-static mat. ESD-sensitive items are safe in your hand, on the anti-static mat, in the computer, or inside an ESD bag.
- **Wrist Strap and Bonding Wire** – If an anti-static mat is not being used, the wrist strap and bonding wire should be connected directly between your wrist and an exposed metal part of the hardware. If you are using an anti-static mat, connect the wrist strap and bonding wire to the anti-static mat to ensure protection for any hardware placed on the mat. The physical connection of the wrist strap and bonding wire between your skin, the anti-static mat, and the hardware is known as bonding. Use only Field Service kits with a wrist strap, anti-static mat, and bonding wire. Never use wireless wrist straps. Always be cautious that the internal wires of a wrist strap are prone to damage from normal wear and tear, and must be checked regularly with a wrist strap tester in order to avoid accidental ESD hardware damage. It is recommended to test the wrist strap and bonding wire at least once per week.
- **ESD Wrist Strap Tester** – The wires inside an ESD strap are prone to damage over time. When using an unmonitored ESD kit, it is recommended to test the wrist strap regularly—ideally before each service session, and at a minimum, once per week. The most reliable method for testing is with a wrist strap tester. To perform the test, connect the bonding wire of the wrist strap to the tester while wearing the strap. Press the test button to initiate the check. A green LED indicates a successful test, while a red LED and audible alarm signal a failure.

 **NOTE:** It is recommended to always use the traditional wired ESD grounding wrist strap and protective anti-static mat when servicing Dell products. In addition, it is critical to keep sensitive parts separate from all insulator parts while servicing the computer.

After working inside your computer

About this task

 **CAUTION:** Leaving stray or loose screws inside your computer may severely damage your computer.

Steps

1. Replace all screws and ensure that no stray screws remain inside your computer.
2. Connect any external devices, peripherals, or cables you removed before working on your computer.
3. Replace any media cards, discs, or any other components that you removed before working on your computer.
4. Connect your computer and all attached devices to their electrical outlets.
5. Turn on your computer.

Information on repairability for Québec - From Dell Canada Inc. - to Quebec consumers

Dell does not guarantee the availability of replacement parts, repair services, or information necessary for maintenance or repair.

BitLocker

When updating the BIOS on a computer with BitLocker enabled, consider the following precautions.

CAUTION: If BitLocker is not suspended before updating the BIOS, the BitLocker key is not recognized the next time you reboot the computer. You will then be prompted to enter the recovery key to proceed, and the computer displays a prompt for the recovery key on each reboot. Failure to provide the recovery key can result in data loss or an operating system reinstall. For more information, refer [Updating the BIOS on Dell systems with BitLocker enabled](#).

The installation of the following components triggers BitLocker:

- Hard disk drive or solid state drive
- System board

Recommended tools

The procedures in this document may require the following tools:

- Phillips screwdriver #0
- Phillips screwdriver #1
- Plastic scribe

Screw list

NOTE: When removing screws from a component, it is recommended to note the screw type and the quantity of screws, and then place them in a screw storage box. This is to ensure that the correct number of screws and correct screw type is restored when the component is replaced.

NOTE: Some computers have magnetic surfaces. Ensure that the screws are not left attached to such surfaces when replacing a component.

NOTE: Screw color may vary depending on the configuration ordered.

Table 1. Screw list

Component	Screw type	Quantity	Screw image
Bottom cover	M3x5	4	

Table 1. Screw list (continued)

Component	Screw type	Quantity	Screw image
System board shield	M3x5	7	
Solid state drive	M2x3.5	1	
Fan	M3x5	3	
WLAN bracket	M3x5	1	
Camera module	M3x5 M2x3.5	1 2	 
Rear I/O cover	M3x5	4	
Rear I/O bracket	M3x5	3	
System board	M3x5	5	
Side I/O board	M3x5	2	
Camera bracket	M3x5	2	

Major components of Dell 27 All-in-One EC27260

The following image shows the major components of the Dell 27 All-in-One EC27260.

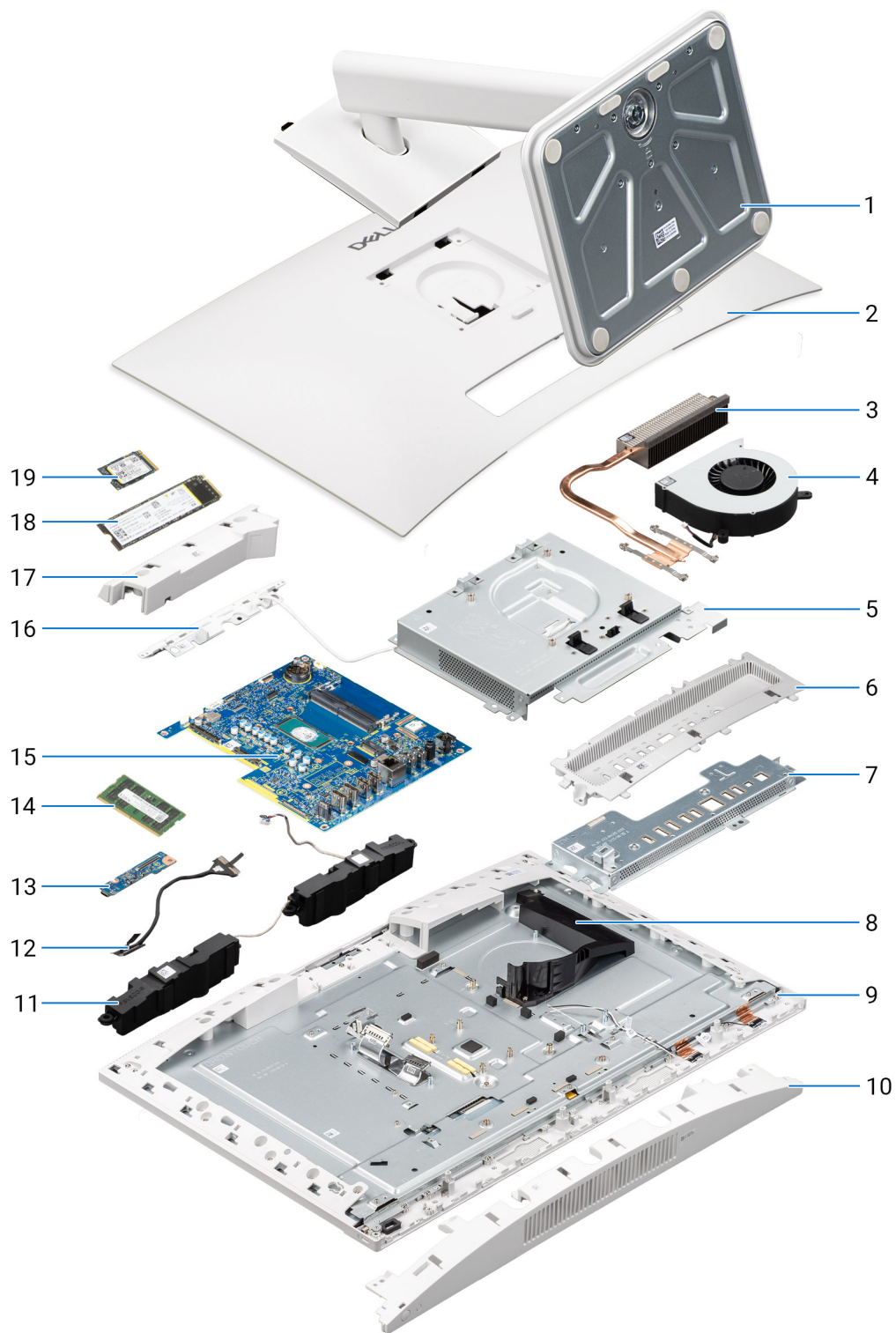


Figure 1. Major components of Dell 27 All-in-One EC27260

1. Stand
2. Back cover
3. Heat sink
4. Fan
5. System-board shield
6. Rear I/O cover
7. Rear I/O bracket

8. Fan duct
9. Display assembly
10. Bottom cover
11. Speaker
12. Side I/O board cable
13. Side I/O board
14. Memory module
15. System board
16. Camera
17. Camera bracket
18. M.2 2280 SSD
19. M.2 2230 SSD

NOTE: Dell provides a list of components and their part numbers for the original computer configuration purchased. These parts are available depending on the warranty coverage that is selected at the time of purchase. Components from upsell or upgraded variants may not be covered under the standard system warranty. For more details or to explore purchase options, contact your Dell sales representative.

Customer Replaceable Units (CRUs) and Field Replaceable Units (FRUs) list

The replaceable components in Dell 27 All-in-One EC27260 are either Customer Replaceable Units (CRUs) or Field Replaceable Units (FRUs).

CAUTION: To avoid any potential damage to the component or loss of data, ensure that an authorized service technician replaces the Field Replaceable Units (FRUs). Customers can replace only the Customer Replaceable Units (CRUs) following the safety precautions and replacement procedures.

Table 2. CRU and FRU list

Customer Replaceable Unit (CRU)	Field Replaceable Unit (FRU)
Back cover	Side I/O cable
Stand	Side I/O board
Cable clip	Speakers
System-board shield	System board
Memory module	Heatsink
Solid state drive	Display assembly
Coin cell battery	
Onboard Wireless module bracket and Antenna	
Fan	
Camera	
Camera bracket	
Bottom cover	
Rear I/O Cover	
Rear I/O bracket	

Removing and installing Customer Replaceable Units (CRUs)

The replaceable components in this chapter are Customer Replaceable Units (CRUs).

 **CAUTION:** CRUs may be replaced by the customer, following the safety precautions and replacement procedures.

 **NOTE:** The images in this document may differ from your computer depending on the configuration you ordered.

Stand

Removing the stand

Prerequisites

Follow the procedure in [Before working inside your computer](#).

 **CAUTION:** When servicing the computer, place it on an elevated, clean, and flat surface. Place the display flat on the surface with the stand over the edge of the surface. It is recommended to remove the stand to avoid accidental damage to the computer display when servicing.

About this task

The following video provides an overview of this task.



[Watch video: Removing the stand](#)

The following image indicates the location of the stand and provides a visual representation of the removal procedure.

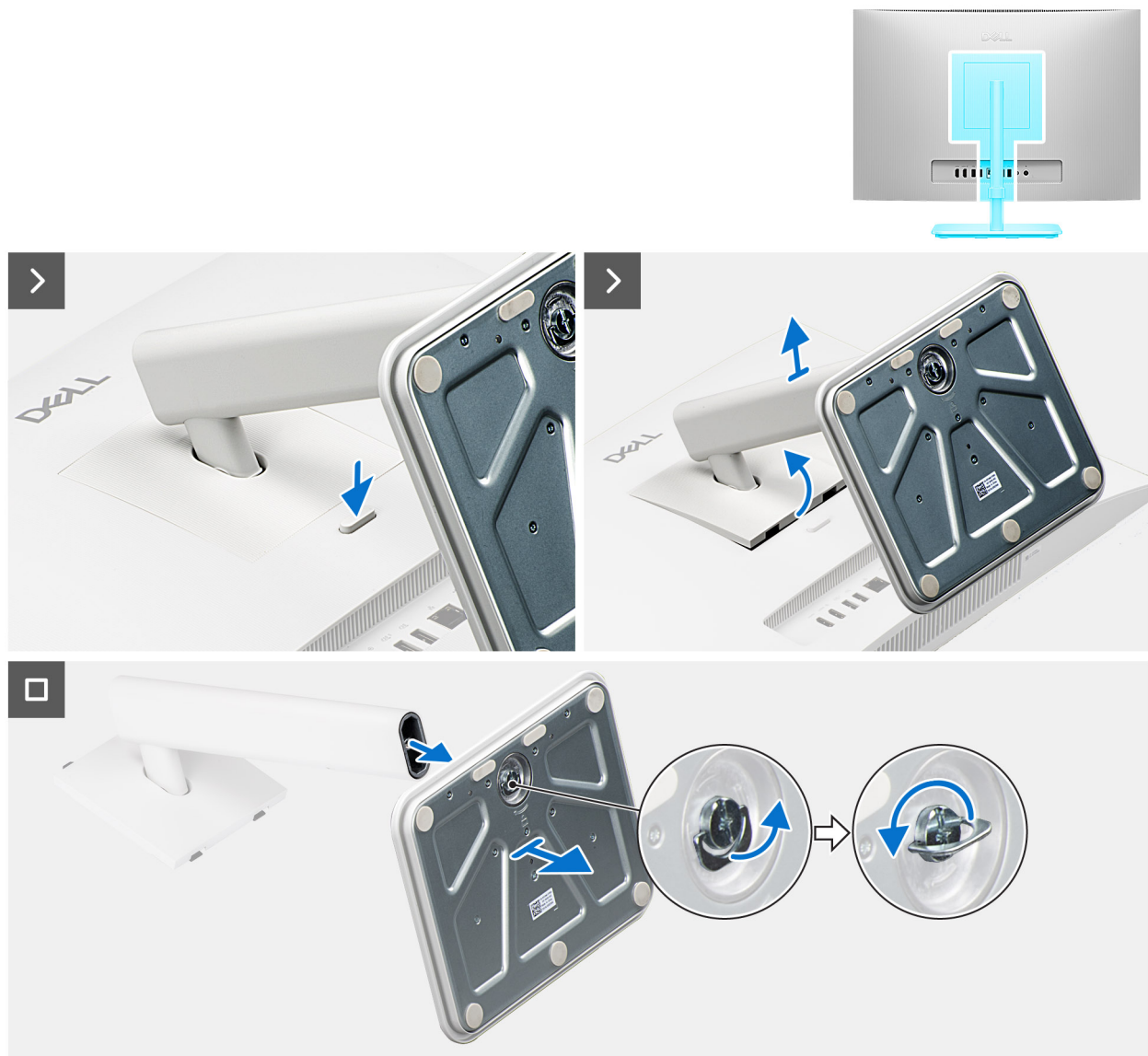


Figure 2. Removing the stand

Steps

1. Place the display panel facing down on a clean, soft surface.
2. Push the release button located at the back of the monitor to disengage the stand.
3. While holding the release button, pull the stand assembly up and away from the monitor until it detaches from the mounting slot.
4. Locate the thumbscrew securing the stand base to the stand riser.
5. Rotate the thumbscrew counterclockwise to loosen it.
6. Pull the stand base away from the riser to separate the stand base and stand riser.

Installing the stand

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

NOTE: For replacement of stand or stand hinges, the replacement kit is shipped with both stand and stand hinges. Both components are replaced together.

About this task

The following video provides an overview of this task.



[Watch video: Installing the stand](#)

The following image indicates the location of the stand and provides a visual representation of the installation procedure.

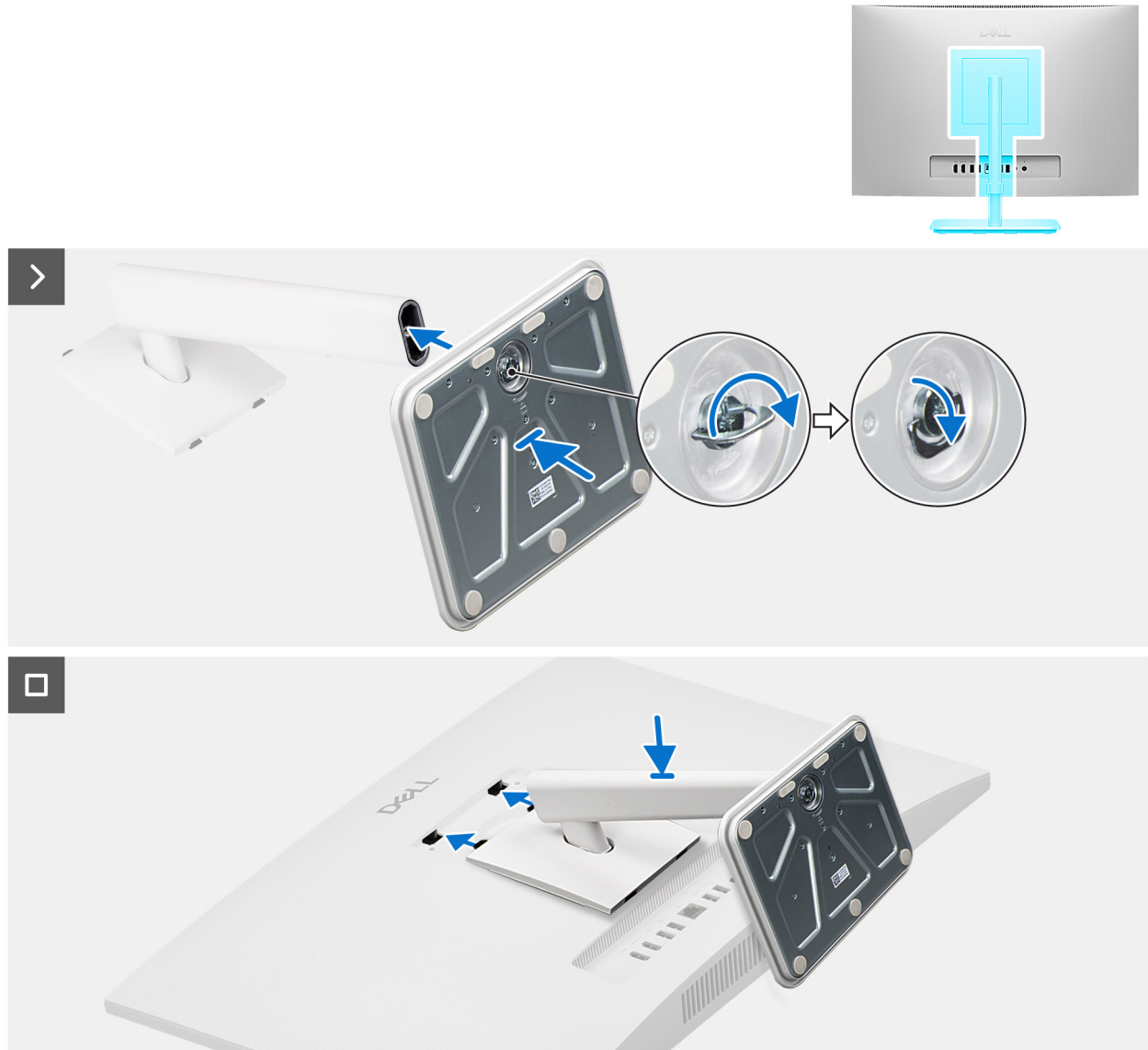


Figure 3. Installing the stand

Steps

1. Place the display panel facing down on a clean, soft surface.
2. Align the stand base with the riser by Inserting the riser into the base.
3. Lift the thumbscrew upwards and Tighten the thumbscrew by rotating it clockwise until it is fully secured and push is downwards to have a flat surface.
4. Position the stand riser so that the mounting tabs on the riser line up with the mounting slot on the back of the monitor.
5. Slide the riser downward into the slot until it clicks into place.
6. Gently pull upward on the stand to confirm it is properly locked and fully engaged.

Next steps

Follow the procedure in [After working inside your computer](#).

Cable Clip

Removing the Cable clip

Prerequisites

Follow the procedure in [Before working inside your computer](#).

About this task

The following image indicates the location of the cable clip and provides a visual representation of the removal procedure.

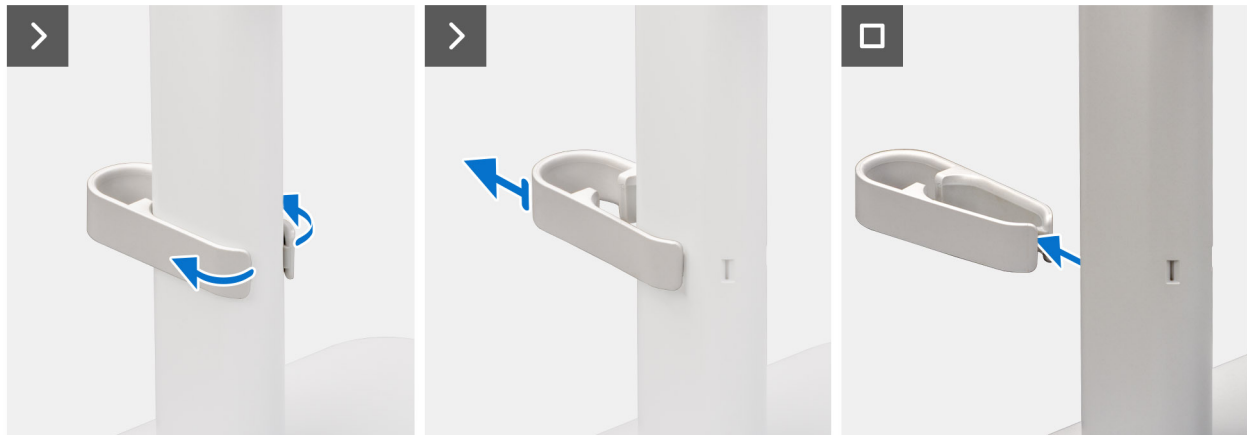


Figure 4. Removing the cable clip

Steps

1. Pry the clips away from the attached ends and released from the stand.
2. Pull the cable clip straight outward to release it from the stand.
3. Slide the cable clip out of the stand.

Installing the Cable clip

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following image indicates the location of the Cable clip and provides a visual representation of the installation procedure.

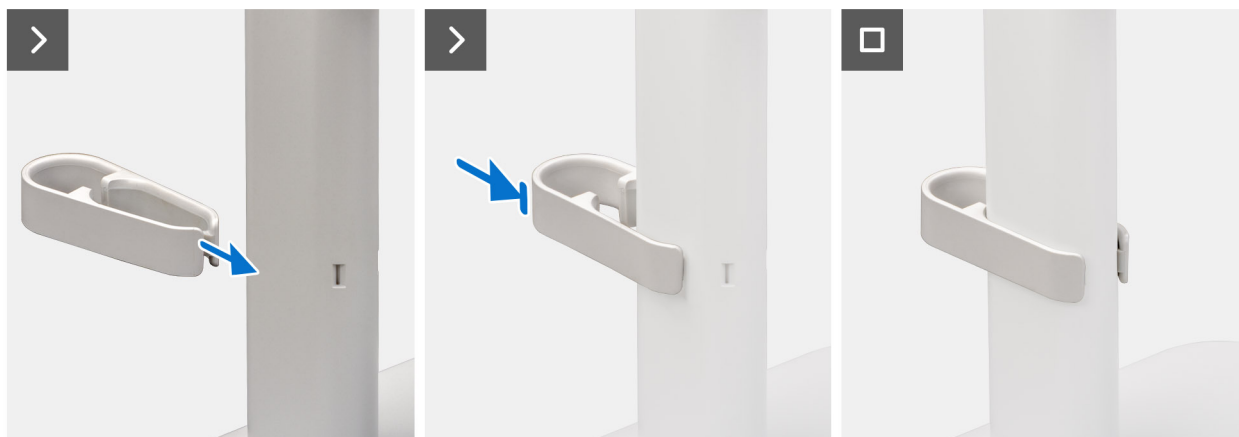


Figure 5. Installing the Cable clip

Steps

1. Position the clip so that the inner tabs align with the slot on the stand.
2. Slide the clip toward the column until it sits flush with the mounting point.
3. Slide the cable clip into the slot on the stand.

Next steps

Follow the procedure in [After working inside your computer](#).

Back cover

Removing the back cover

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).

About this task

The following video provides an overview of this task.



[Watch video: Remove the back cover](#)

The following image indicates the location of the back cover and provides a visual representation of the removal procedure.



Figure 6. Removing back cover

Steps

1. Press the release tab and slide the back cover upwards.
2. Slide the back cover upwards and lift the back cover.
3. Remove the back cover from the display-assembly base.

Installing the back cover

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



[Watch video: Installing the back cover](#)

The following image indicates the location of the back cover and provides a visual representation of the installation procedure.



Figure 7. Installing the back cover

Steps

1. Align the slots on the back cover with the slots on the computer.
2. Slide the back cover downward until the tab locks into place.

Next steps

1. Install the [stand](#).
2. Follow the procedure in [After working inside your computer](#).

System-board shield

Removing the system board shield

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).

NOTE: The etchings on the system board shield do not represent the components that are supported by this computer.

About this task

The following video provides an overview of this task.

Watch video: [Removing the system board shield](#)



The following image indicates the location of the system board shield and provides a visual representation of the removal procedure.



7x
M3x5

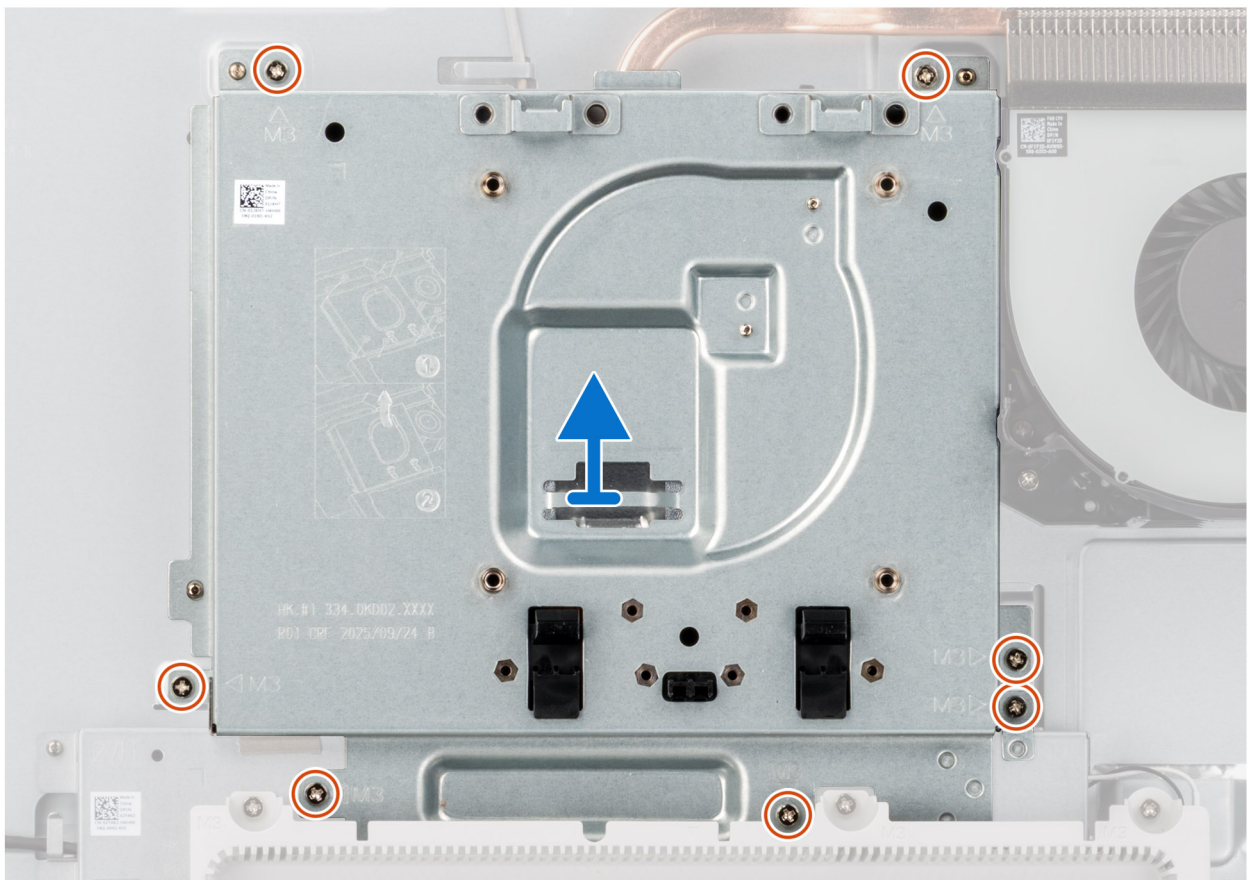
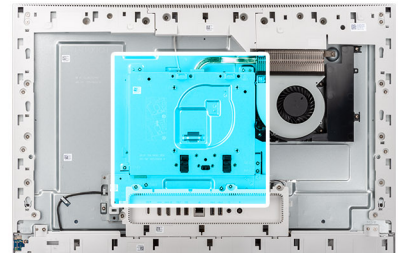


Figure 8. Removing the system board shield

Steps

1. Remove the seven screws (M3x5) that secure the system board shield to the display-assembly base.
2. Gently lift the shield, tilt it upward, and slide it out without touching the I/O cover.

Installing the system board shield

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

NOTE: The etchings on the system board shield do not represent the components that are supported by this computer.

About this task

The following video provides an overview of this task.



[Watch video: Installing the system board shield](#)

The following image indicates the location of the system board shield and provides a visual representation of the installation procedure.

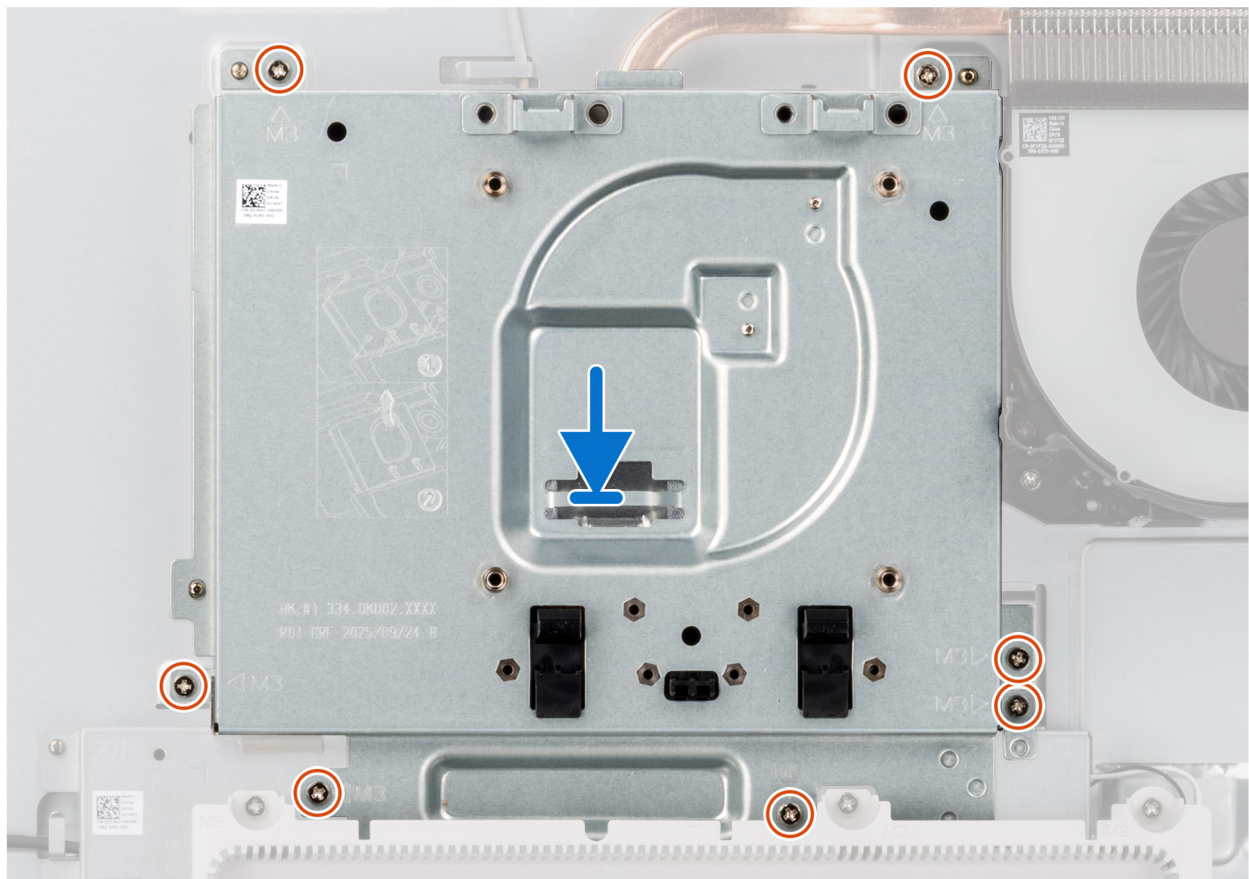
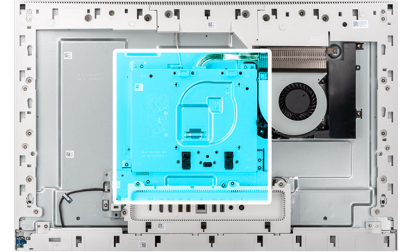


Figure 9. Installing the system board shield

Steps

1. Place system-board shield above the I/O cover and place it down, tilting it into position.
2. Align the screw holes on the system-board shield with the slots on the display-assembly base.
3. Replace the seven screws (M3x5) that secure the system-board shield to the display-assembly base.

Next steps

1. Install the [back cover](#).
2. Install the [stand](#).
3. Follow the procedure in [After working inside your computer](#).

Memory module

Removing the memory module

Prerequisites

CAUTION: To prevent damage to the memory module, hold the memory module by the edges. Do not touch the components or metallic contacts on the memory module as electrostatic discharge (ESD) can inflict severe damage on the components. To read more about ESD protection, see [ESD protection](#).

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [system-board shield](#).

About this task

The following video provides an overview of this task.



Watch video: [Removing the memory module](#)

The following images indicate the location of the memory module and provide a visual representation of the removal procedure.

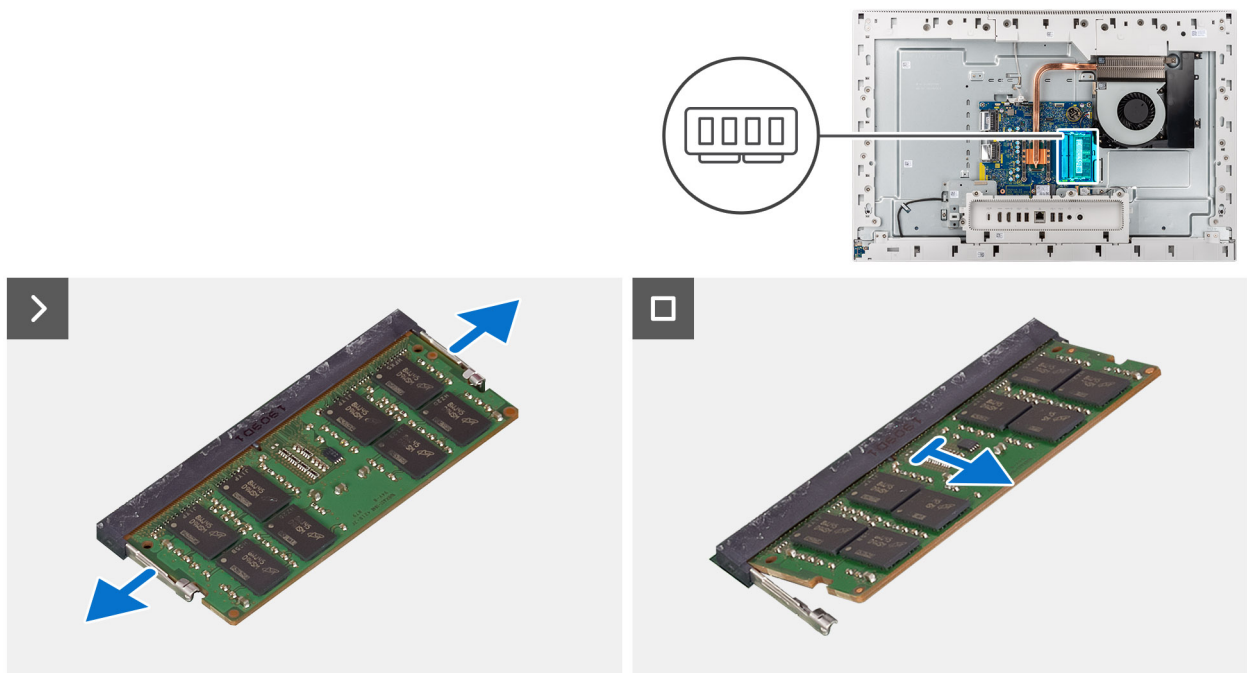


Figure 10. Removing the memory module

Steps

1. Carefully spread apart the securing-clips on each end of the memory-module slot until the memory module is released.
2. Slide and remove the memory module from the memory-module slot.

NOTE: Repeat steps 1 and 2 if you want to remove the other memory module.

Installing the memory module

Prerequisites

CAUTION: To prevent damage to the memory module, hold the memory module by the edges. Do not touch the components or metallic contacts on the memory module as electrostatic discharge (ESD) can inflict severe damage on the components. To read more about ESD protection, see [ESD protection](#).

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



Watch video: [Installing the memory module](#)

The following image indicates the location of the memory module and provides a visual representation of the installation procedure.

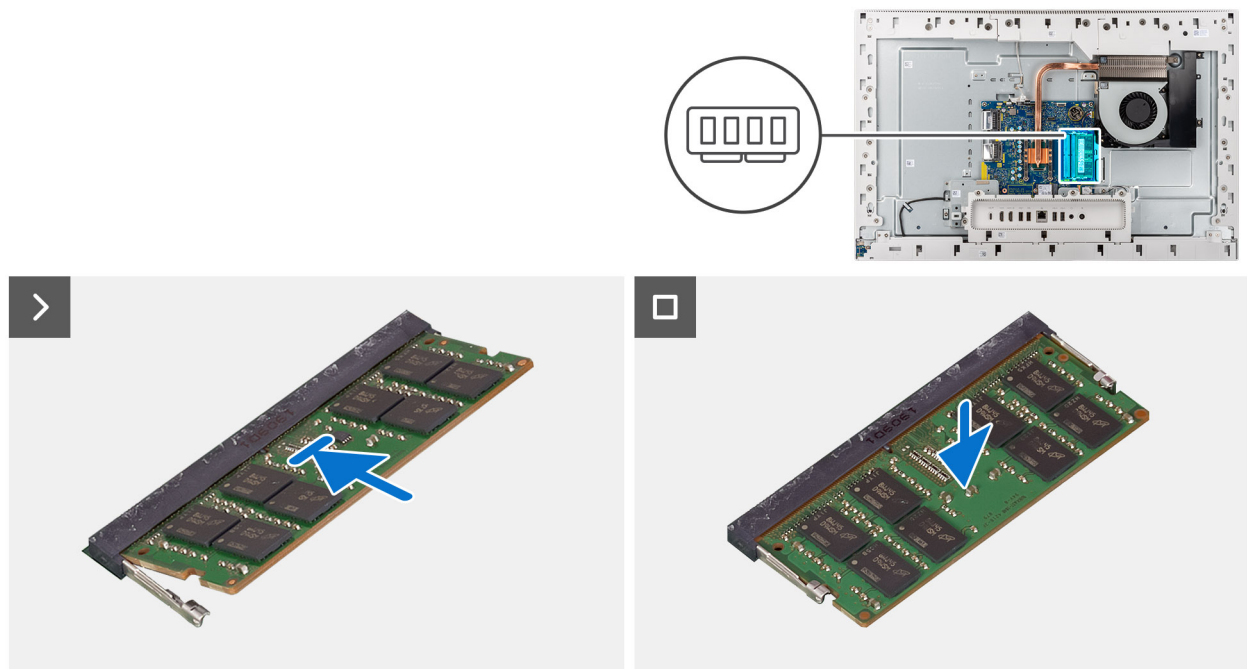


Figure 11. Installing the memory module

Steps

1. Align the notch on the memory module with the tab on the memory-module slot.
2. Slide the memory module firmly into the slot at an angle and press the memory module down until it clicks into place.

NOTE: If you do not hear the click, remove the memory module and reinstall it.

NOTE: Repeat steps 1 and 2 if you want to install the other memory module.

Next steps

1. Install the [system board shield](#).
2. Install the [back cover](#).
3. Install the [stand](#).
4. Follow the procedure in [After working inside your computer](#).

Solid-state drive

Removing the M.2 2230 solid state drive

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [rear I/O cover](#).
5. Remove the [system-board shield](#).

About this task

The following video provides an overview of this task.



Watch video: [Removing the M.2 2230 solid state drive](#)

The following image indicates the location of the solid state drive and provides a visual representation of the removal procedure.

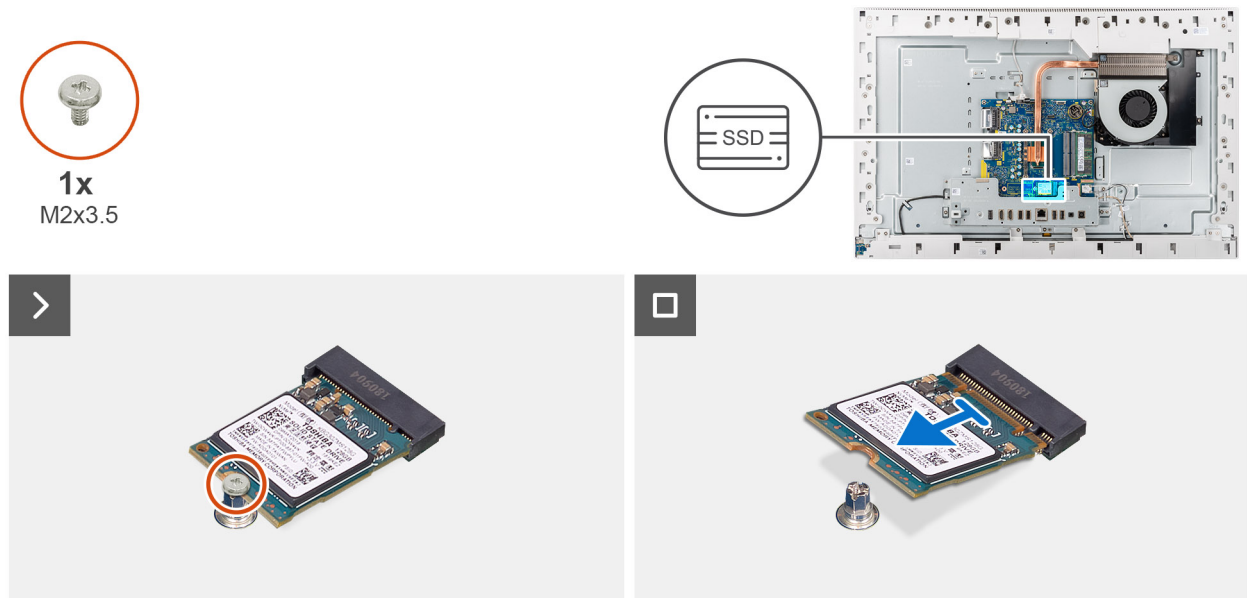


Figure 12. Removing the M.2 2230 solid state drive

Steps

1. Remove the screw (M2x3.5) that secures the solid state drive to the system board.
2. Slide and remove the solid state drive from the M.2 card slot on the system board.

Installing the M.2 2230 solid state drive

Prerequisites

CAUTION: Solid state drives are fragile. Exercise care when handling the solid state drive.

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



Watch video: [Installing the M.2 2230 solid state drive](#)

The following image indicates the location of the solid state drive and provides a visual representation of the installation procedure.

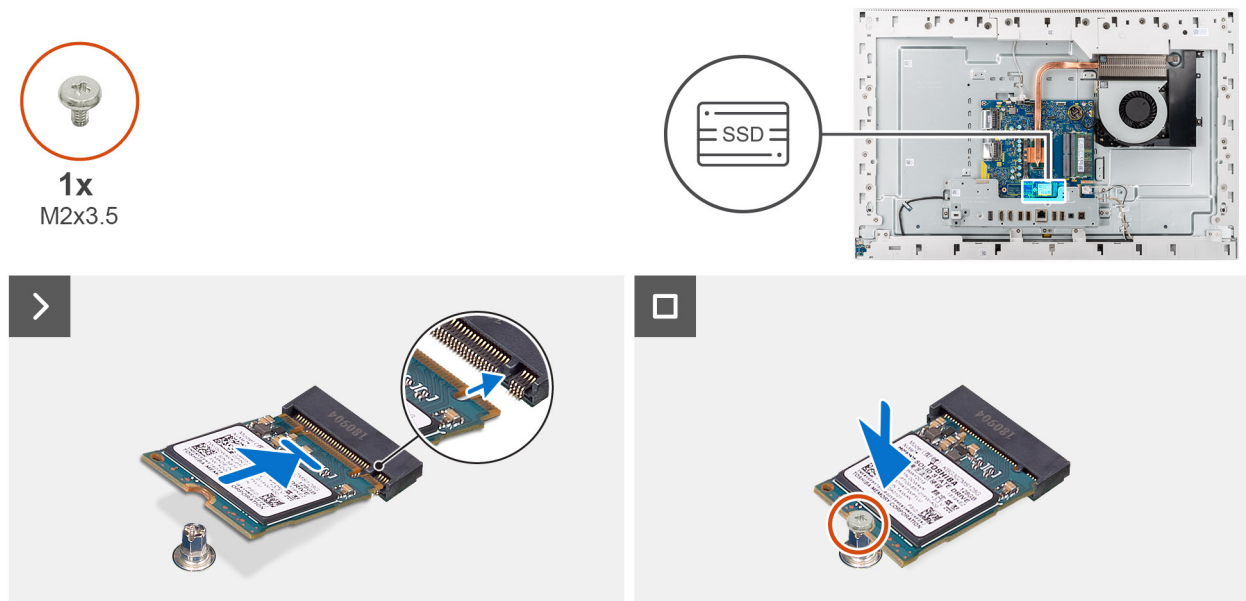


Figure 13. Installing the M.2 2230 solid state drive

Steps

1. Align the notch on the solid state drive with the tab on the M.2 card slot.
2. Slide the solid state drive into the M.2 card slot on the system board.
3. Replace the screw (M2x3.5) that secures the solid state drive to the system board.

Next steps

1. Install the [system board shield](#).
2. Install the [rear I/O cover](#).
3. Install the [back cover](#).
4. Install the [stand](#).
5. Follow the procedure in [After working inside your computer](#).

Removing the M.2 2280 solid state drive

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [rear I/O cover](#).
5. Remove the [system-board shield](#).

About this task

The following video provides an overview of this task.



Watch video: [Removing the M.2 2280 solid state drive](#)

The following image indicates the location of the solid state drive and provides a visual representation of the removal procedure.

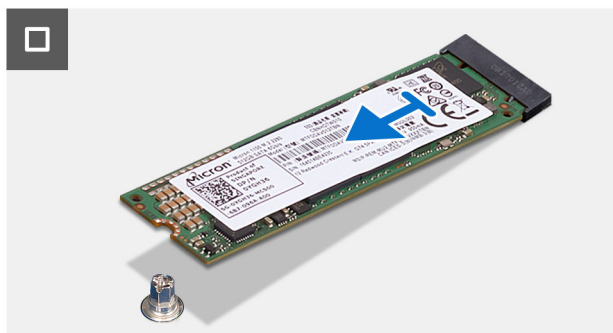
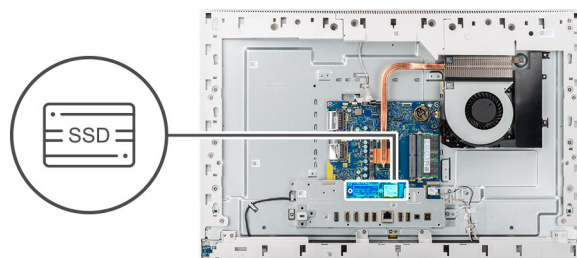


Figure 14. Removing the M.2 2280 solid state drive

Steps

1. Remove the screw (M2x3.5) that secures the solid state drive to the system board.
2. Slide and remove the solid state drive from the M.2 card slot on the system board.

Installing the M.2 2280 solid state drive

Prerequisites

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

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



[Watch video: Installing the M.2 2280 solid state drive](#)

The following image indicates the location of the solid state drive and provides a visual representation of the installation procedure.

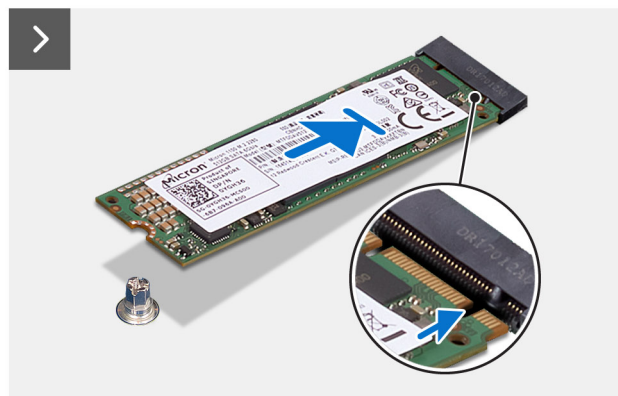
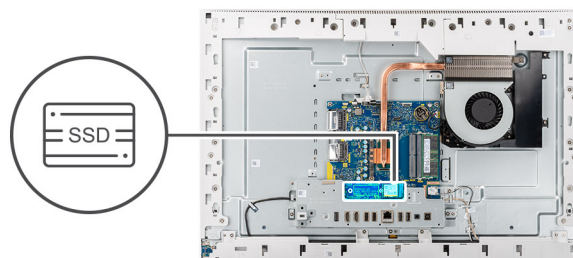


Figure 15. Installing the M.2 2280 solid state drive

Steps

1. Align the notch on the solid state drive with the tab on the M.2 card slot.
2. Slide the solid state drive into the M.2 card slot on the system board.
3. Replace the screw (M2x3.5) that secures the solid state drive to the system board.

Next steps

1. Install the [system board shield](#).
2. Install the [rear I/O cover](#).
3. Install the [back cover](#).
4. Install the [stand](#).
5. Follow the procedure in [After working inside your computer](#).

Fan

Removing the fan

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [system-board shield](#).

About this task

The following video provides an overview of this task.



[Watch video: Removing the fan](#)

The following image indicates the location of the fan and provides a visual representation of the removal procedure.



3x
M3x5

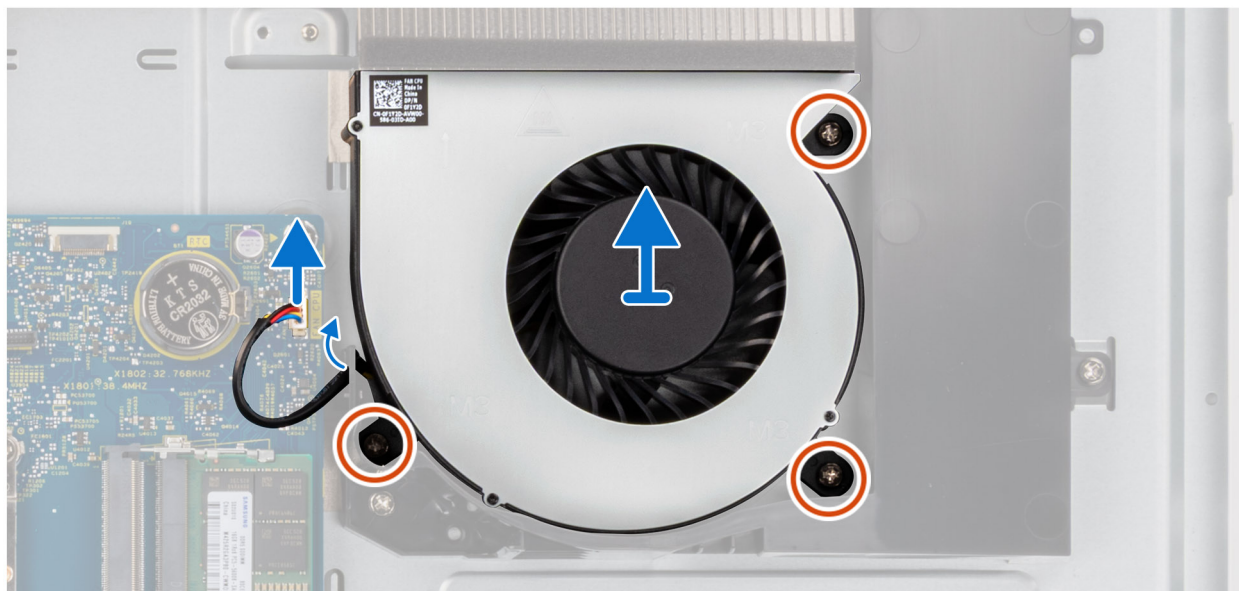
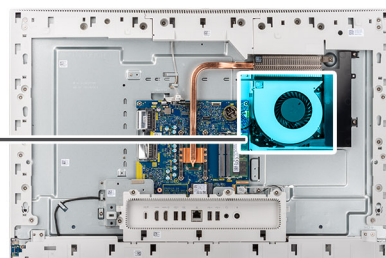
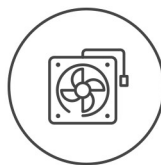


Figure 16. Removing the fan

Steps

1. Disconnect the fan cable from its connector (FAN1) on the system board.
2. Unroute the fan cable from the routing post on the display-assembly base.
3. Remove the three screws (M3x5) that secure the fan to the display-assembly base.
4. Lift the fan, along with its cable, off the display-assembly base.

Installing the fan

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



[Watch video: Installing the fan](#)

The following image indicates the location of the fan and provides a visual representation of the installation procedure.



3x
M3x5

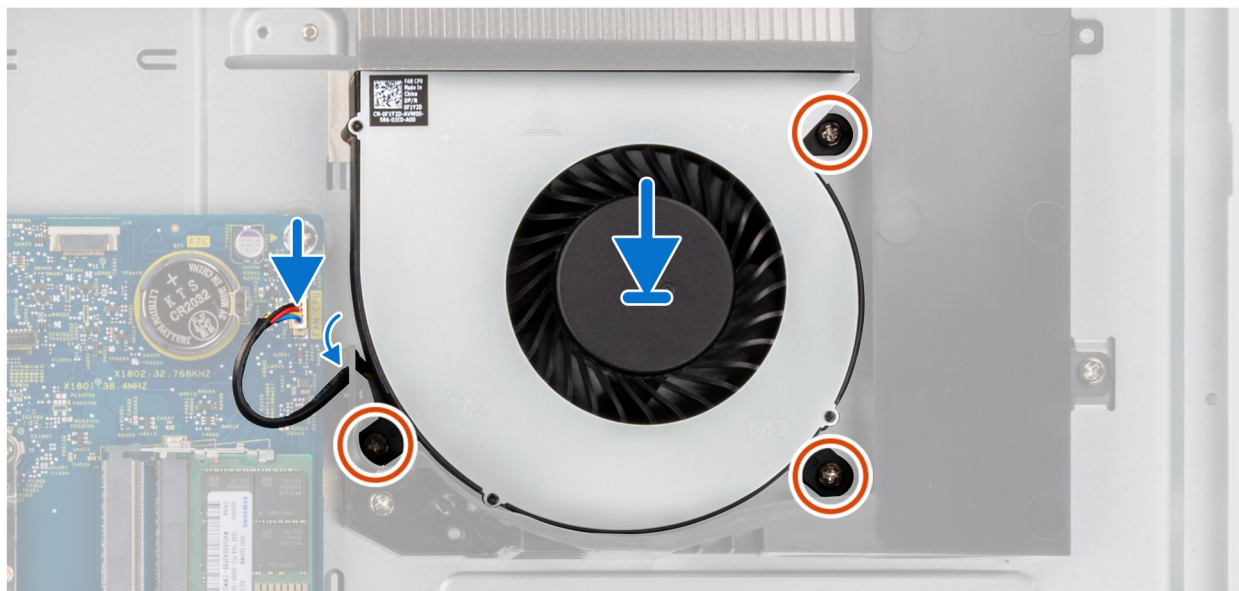
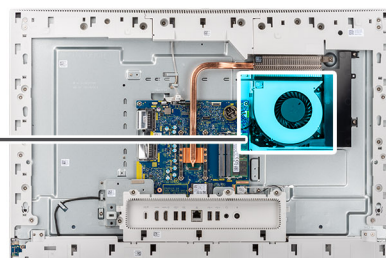
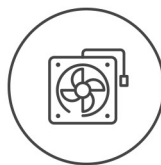


Figure 17. Installing the fan

Steps

1. Place the fan on the display-assembly base.
2. Align the screw holes on the fan with the screw holes on the display-assembly base.
3. Replace the three screws (M3x5) that secure the fan to the display-assembly base.
4. Route the fan cable through the routing post on the display-assembly base.
5. Connect the fan cable to its connector (FAN1) on the system board.

Next steps

1. Install the [system board shield](#).
2. Install the [back cover](#).
3. Install the [stand](#).
4. Follow the procedure in [After working inside your computer](#).

Coin-cell battery

Removing the coin-cell battery

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [system-board shield](#).

About this task

The following video provides an overview of this task.



[Watch video: Removing the coin-cell battery](#)

The following image indicates the location of the coin-cell battery and provides a visual representation of the removal procedure.

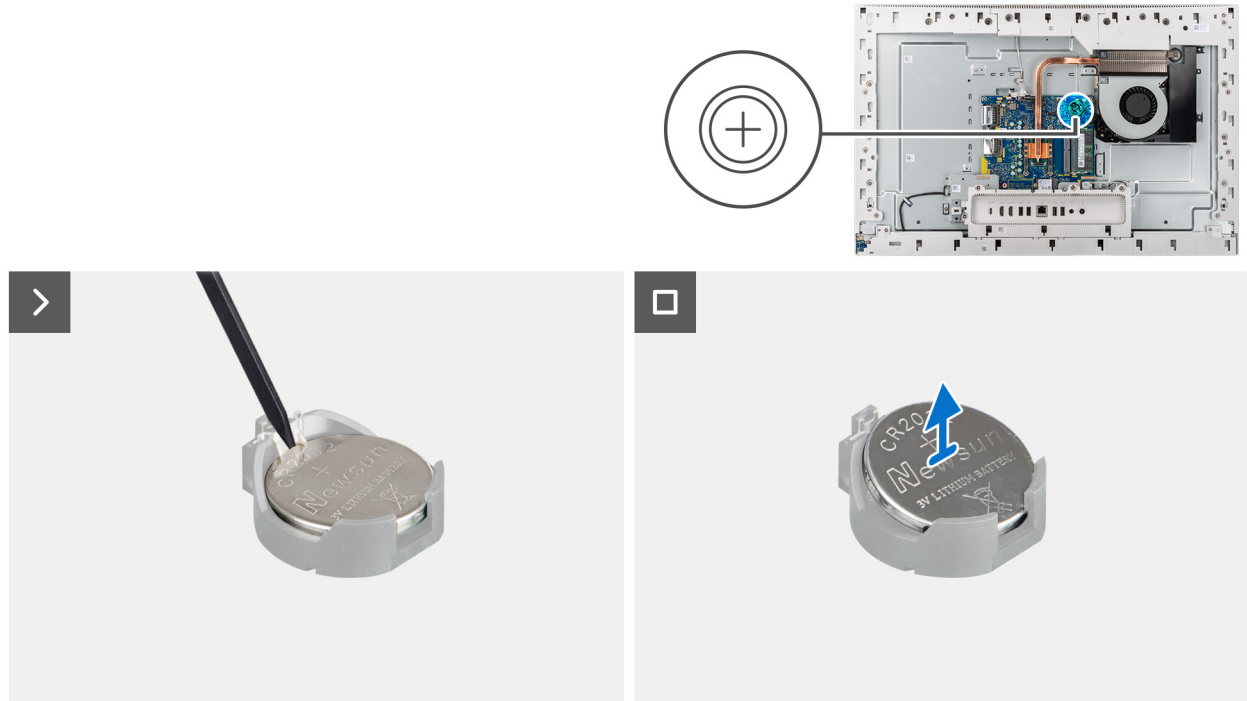


Figure 18. Removing the coin-cell battery

Steps

1. Press the metal tab using the scribe to release the coin-cell battery from the coin-cell battery socket.
2. Lift the coin-cell battery from the coin-cell battery socket.

Installing the coin-cell battery

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



[Watch video: Installing the coin-cell battery](#)

The following image indicates the location of the coin-cell battery and provides a visual representation of the installation procedure.

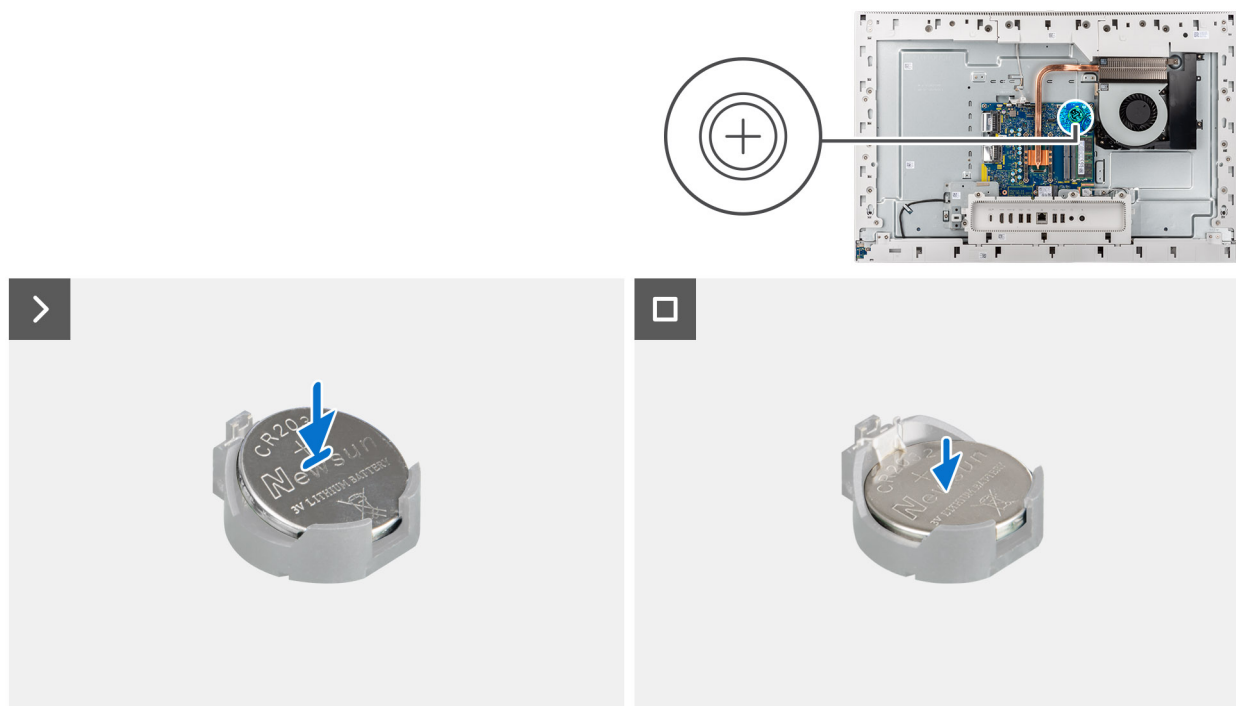


Figure 19. Installing the coin-cell battery

Steps

1. With the positive-side facing up, insert the coin-cell battery into the battery socket on the system board.
2. Snap the battery into place.

Next steps

1. Install the [system board shield](#).
2. Install the [back cover](#).
3. Install the [stand](#).
4. Follow the procedure in [After working inside your computer](#).

Onboard Wireless module bracket and Antenna

Removing the onboard wireless module bracket and antenna

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [rear I/O cover](#).
5. Remove the [system-board shield](#).

About this task

The following video provides an overview of this task.



[Watch video: Removing the onboard wireless module bracket and antenna](#)

The following image indicates the location of the onboard wireless module bracket and antenna and provides a visual representation of the removal procedure.



1x
M3x5

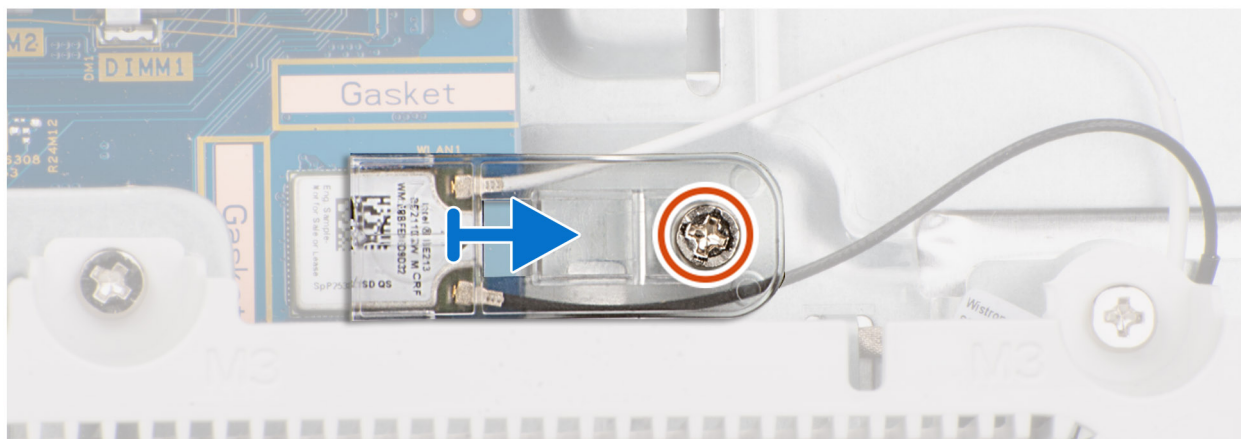
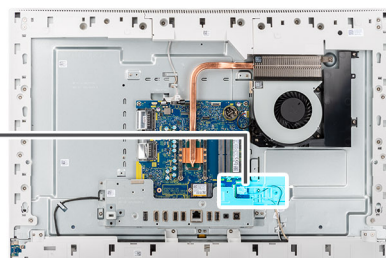


Figure 20. Removing the onboard wireless module bracket and antenna

Steps

1. Remove the screw (M3x5) that secures the wireless-card bracket to the onboard wireless module.
2. Slide and lift the wireless-card bracket off the onboard wireless module.
3. Disconnect the antenna cables from the onboard wireless module.

Installing the onboard wireless module bracket and antenna

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



[Watch video: Installing the onboard wireless module bracket and antenna](#)

The following image indicates the location of the onboard wireless module bracket and antenna and provides a visual representation of the installation procedure.

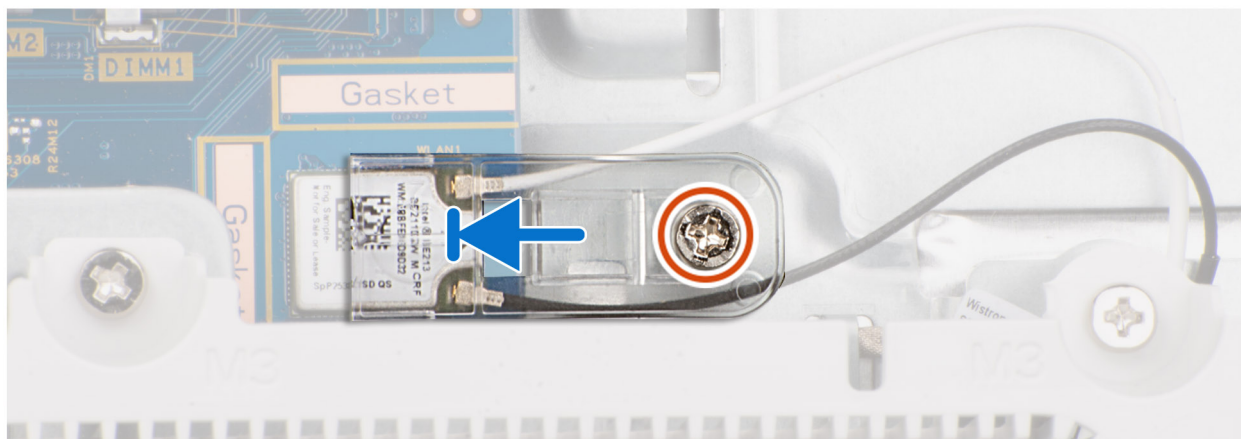
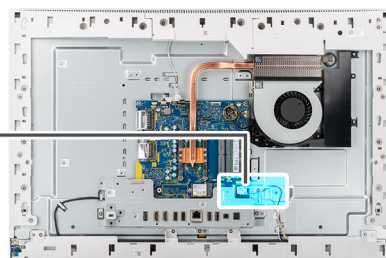


Figure 21. Installing the onboard wireless module bracket and antenna

Steps

1. Connect the antenna cables to the embedded Wireless Module.

The following table provides the antenna-cable color scheme for the embedded wireless module bracket that is supported by your computer.

Table 3. Antenna-cable color scheme

Connectors on the embedded wireless-card bracket	Antenna-cable color
Main (white triangle)	White
Auxiliary (black triangle)	Black

2. Place the wireless-card bracket on the embedded Wireless Module.
3. Replace the screw (M3x5) that secures the wireless-card bracket to the embedded Wireless Module.

Next steps

1. Install the [system board shield](#).
2. Install the [rear I/O cover](#).
3. Install the [back cover](#).
4. Install the [stand](#).
5. Follow the procedure in [After working inside your computer](#).

Camera assembly

Removing the camera assembly

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).

4. Remove the [system-board shield](#).

About this task

The following video provides an overview of this task.



[Watch video: Removing the camera assembly](#)

The following image indicates the location of the camera assembly and provides a visual representation of the removal procedure.

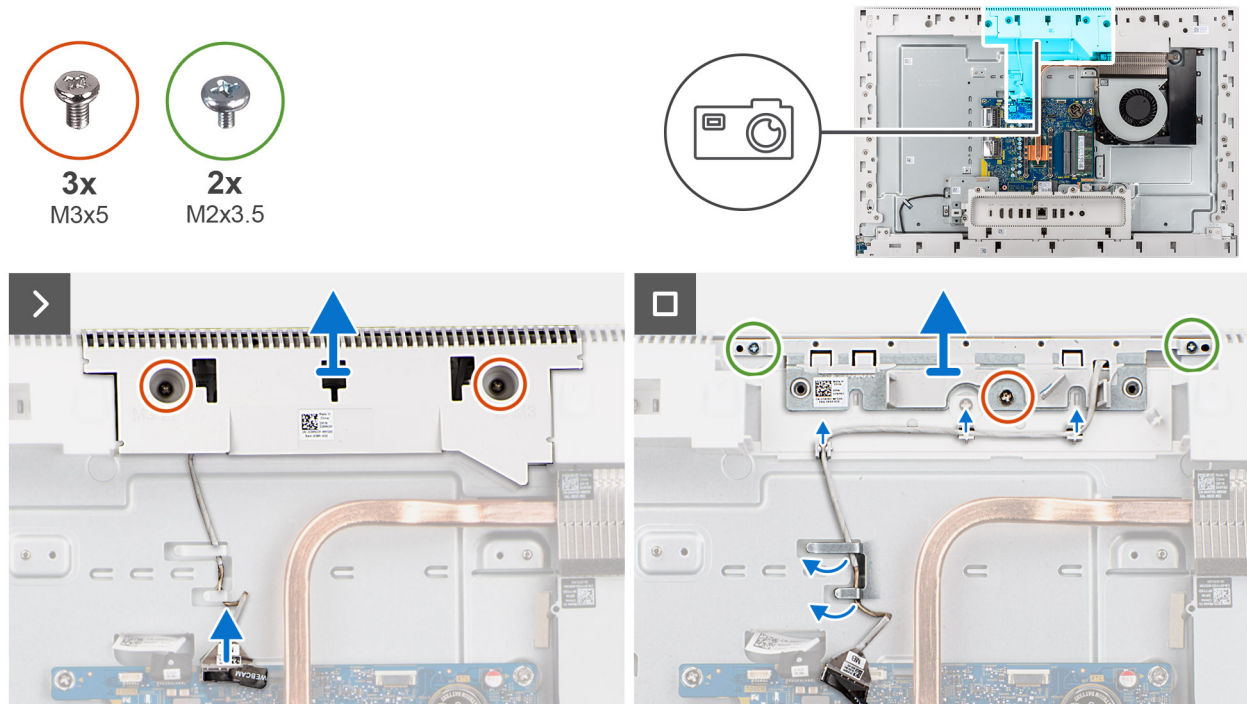


Figure 22. Removing the camera

Steps

1. Disconnect the camera cable from its connector (WEBCAM) on the system board.
2. Remove the two screws (M3x5) that secure the camera bracket to the display-assembly base.
3. Remove the camera cable from the routing guides that secures the camera cable to the display-assembly base.
4. Remove the two screws (M2x3.5) and one screw (M3x5) that secure the camera assembly to the display-assembly base.
5. Remove the camera assembly off the display-assembly base.

Installing the camera assembly

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



[Watch video: Installing the Camera assembly](#)

The following image indicates the location of the camera assembly and provides a visual representation of the installation procedure.

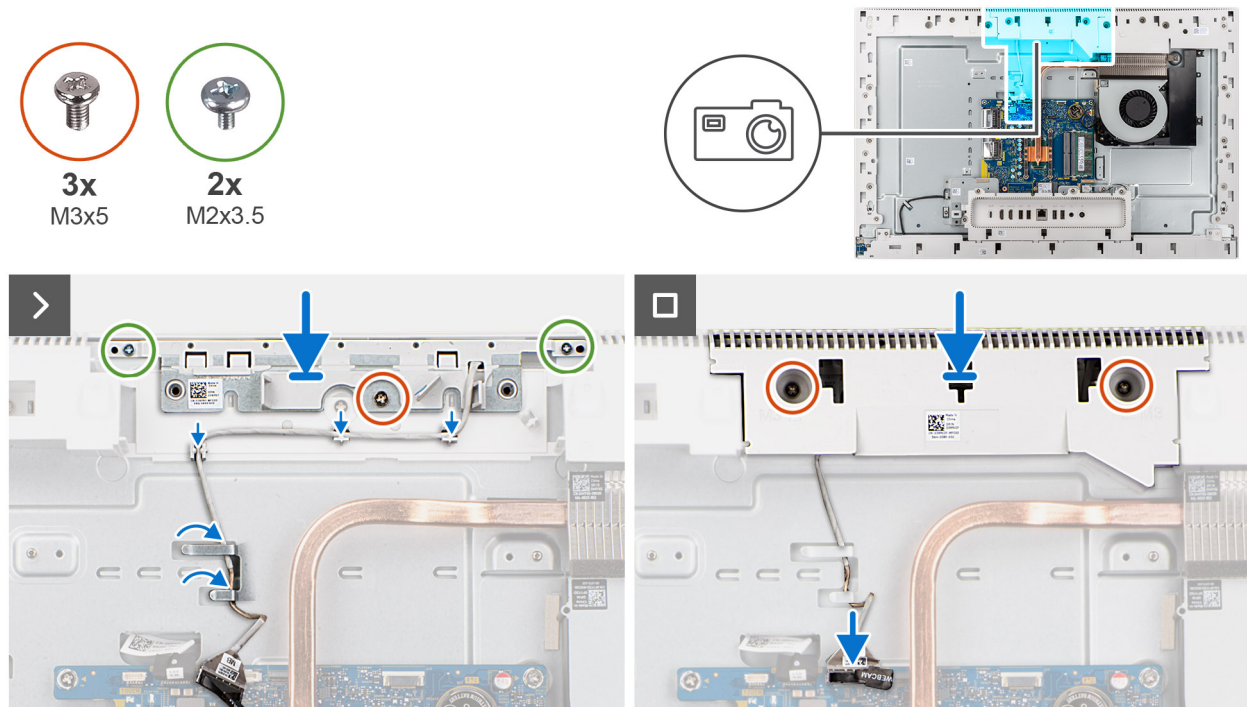


Figure 23. Installing the camera

Steps

1. Align and place the camera assembly on the display-assembly base.
2. Replace the two screws (M2x3.5) and one screw (M3x5) that secure the camera assembly to the display-assembly base.
3. Adhere the cable by following the routing guide that secures the camera cable to the display-assembly base.
4. Replace the two screws (M3x5) that secure the camera bracket to the display-assembly base.
5. Connect the camera cable to its connector (WEBCAM) on the system board.

Next steps

1. Install the [system-board shield](#).
2. Install the [back cover](#).
3. Install the [stand](#).
4. Follow the procedure in [After working inside your computer](#).

Rear I/O cover

Removing the rear I/O cover

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).

About this task

The following video provides an overview of this task.

Watch video: [Removing the rear I/O cover](#) 

The following image indicates the location of the rear I/O cover and provides a visual representation of the removal procedure.



4x
M3x5

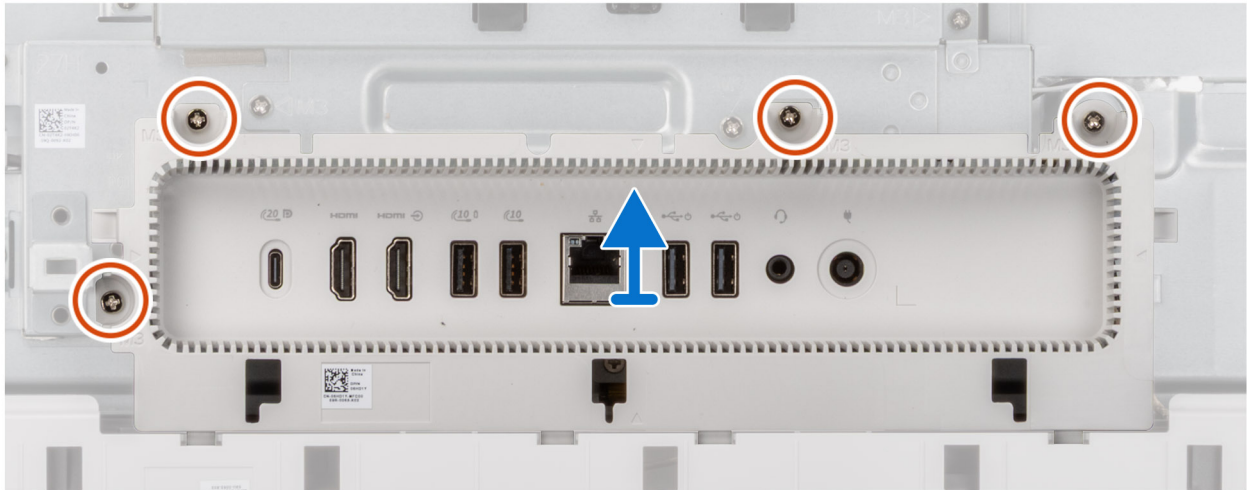
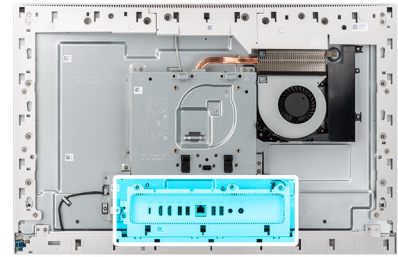


Figure 24. Removing rear I/O cover

Steps

1. Remove the four screws (M3x5) that secure the rear I/O cover to the display-assembly base.
2. Lift the rear I/O cover off the display-assembly base.

Installing the rear I/O cover

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



[Watch video: Installing the rear I/O cover](#)

The following image indicates the location of the rear I/O cover and provides a visual representation of the installation procedure.



4x
M3x5

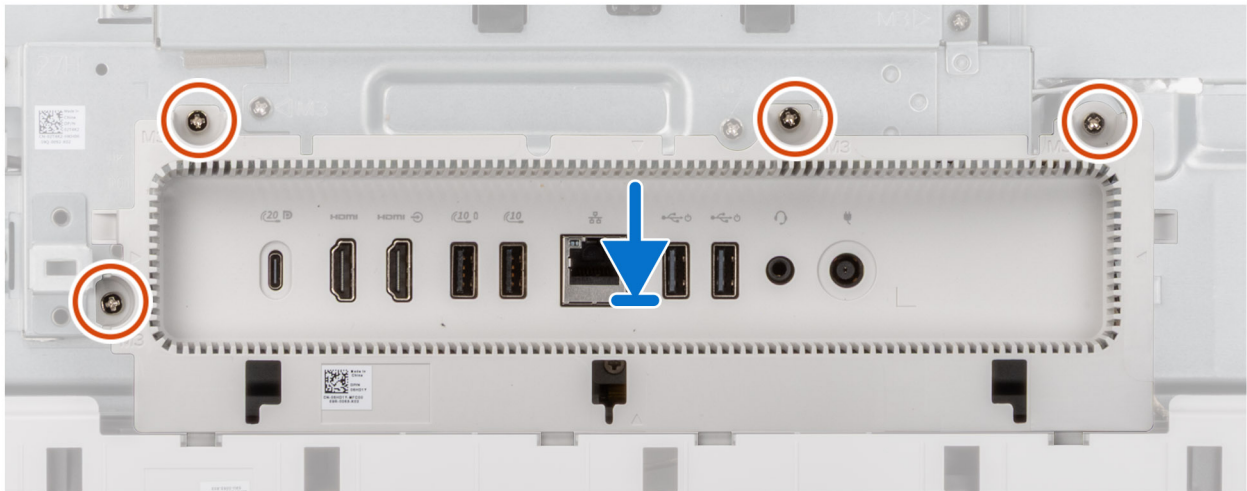
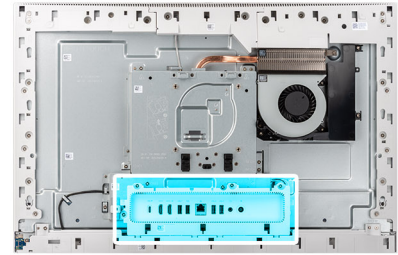


Figure 25. Installing rear I/O cover

Steps

1. Align the slots on the cover with the rear I/O ports. The screw holes self-align.
2. Place the rear I/O cover on the display-assembly base.
3. Replace the four screws (M3x5) that secure the rear I/O cover to the display-assembly base and secure the rear I/O cover back into place.

Next steps

1. Install the [back cover](#).
2. Install the [stand](#).
3. Follow the procedure in [After working inside your computer](#).

Rear I/O Bracket

Removing the rear I/O bracket

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [rear I/O cover](#).
5. Remove the [system-board shield](#).

About this task

The following video provides an overview of this task.



[Watch video: Removing the rear I/O bracket](#)

The following image indicates the location of the rear I/O bracket and provides a visual representation of the removal procedure.



3x
M3x5

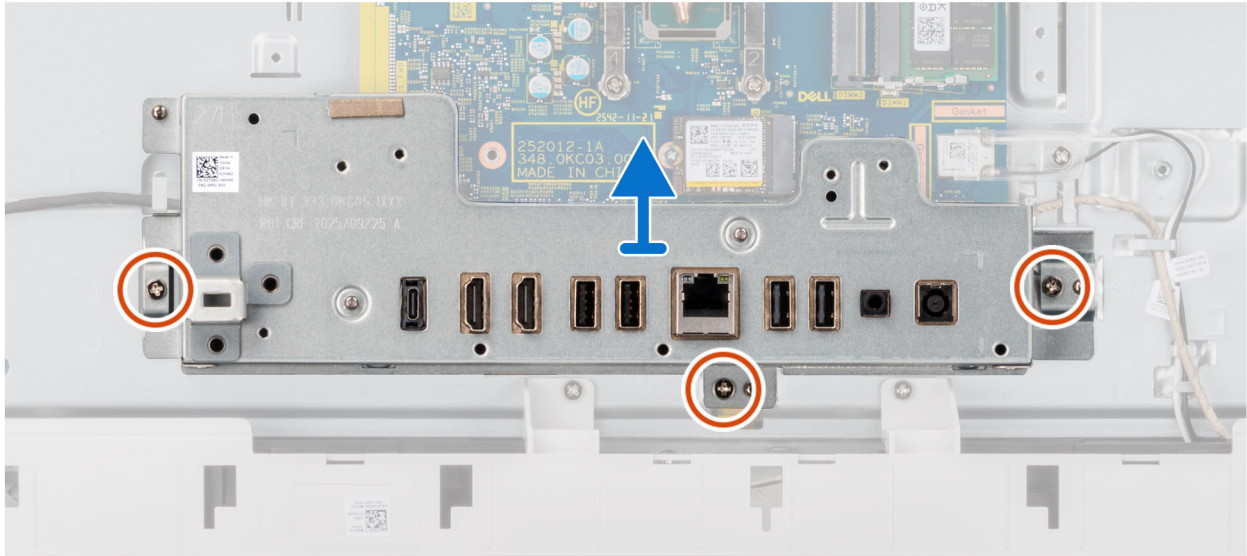
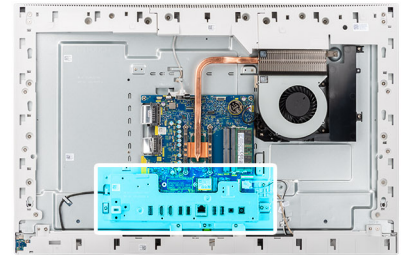


Figure 26. Removing rear I/O bracket

Steps

1. Remove the three screws (M3x5) that secure the rear I/O bracket to the display-assembly base.
2. Lift the rear I/O bracket off the display-assembly base.

Installing the rear I/O bracket

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



[Watch video: Installing the rear I/O bracket](#)

The following image indicates the location of the rear I/O bracket and provides a visual representation of the installation procedure.



3x
M3x5

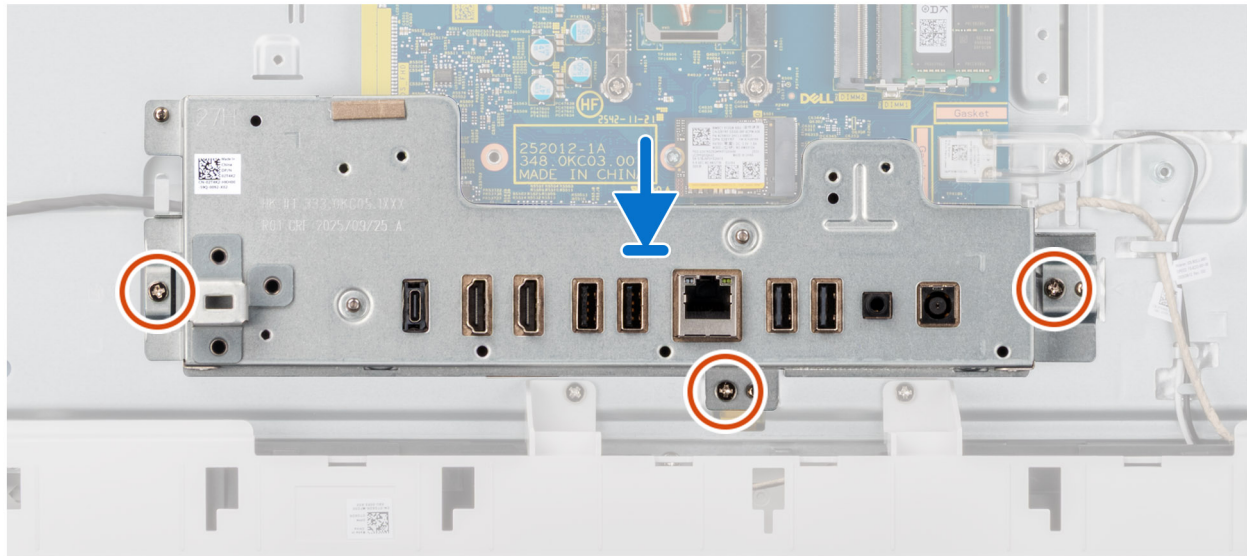
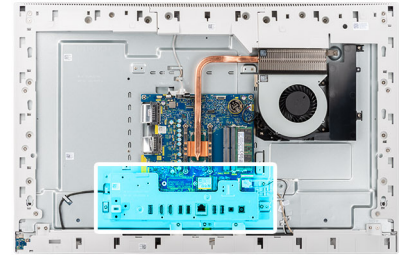


Figure 27. Installing rear I/O bracket

Steps

1. Place the rear I/O bracket on the display-assembly base.
2. Align the screw holes on the rear I/O bracket with the screw holes on the display-assembly base.
3. Replace the three screws (M3x5) that secure the rear I/O bracket to the display-assembly base.

Next steps

1. Install the [system-board shield](#).
2. Install the [Rear I/O cover](#).
3. Install the [back cover](#).
4. Install the [stand](#).
5. Follow the procedure in [After working inside your computer](#).

Bottom Cover

Removing the bottom cover

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).

About this task

The following video provides an overview of this task.



Watch video: [Removing the bottom cover](#)

The following image indicates the location of the bottom cover and provides a visual representation of the removal procedure.



4x
M3x5

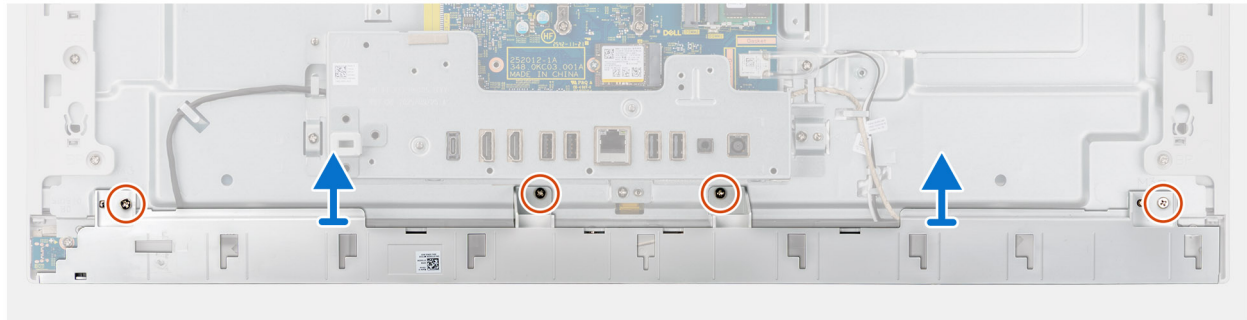
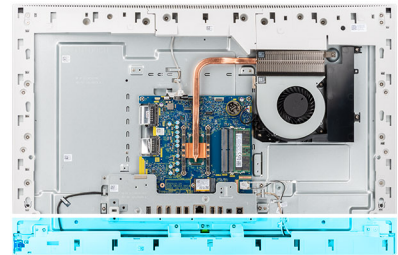


Figure 28. Removing bottom cover

Steps

1. Remove the four screws (M3x5) that secure the bottom cover to the display-assembly base.
2. Lift the bottom cover off the display-assembly base.

Installing the bottom cover

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



Watch video: [Installing the bottom cover](#)

The following image indicates the location of the bottom cover and provides a visual representation of the installation procedure.



4x
M3x5

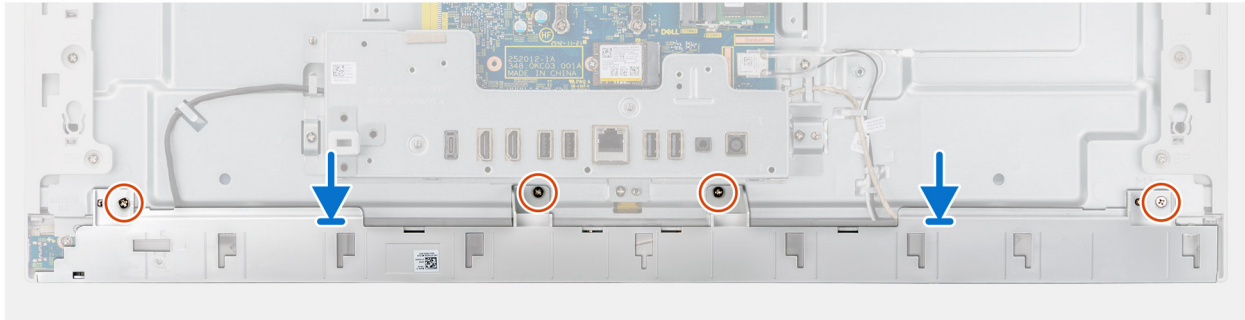
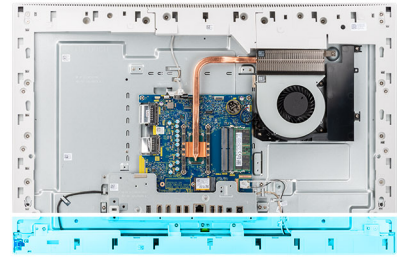


Figure 29. Installing bottom cover

Steps

1. Place the bottom cover on the display-assembly base.
2. Align the screw holes on the bottom cover with the screw holes on the display-assembly base.
3. Replace the four screws (M3x5) that secure the bottom cover to the display-assembly base.

Next steps

1. Install the [back cover](#).
2. Install the [stand](#).
3. Follow the procedure in [After working inside your computer](#).

Removing and installing Field Replaceable Units (FRUs)

The replaceable components in this chapter are Field Replaceable Units (FRUs).

 **CAUTION:** FRUs should be replaced by an authorized service technician, who is a trained technical repair specialist.

 **NOTE:** Damages resulting from improper replacement or from failure to follow instructions are not covered by your warranty. Consider having a trained technical repair specialist perform replacements of FRU components.

 **NOTE:** The images in this document may differ from your computer depending on the configuration you ordered.

Speakers

Removing the speakers

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [rear I/O cover](#).
5. Remove the [system-board shield](#).
6. Remove the [bottom cover](#).
7. Remove the [rear I/O bracket](#).

About this task

The following video provides an overview of this task.



[Watch video: Removing the speakers](#)

The following image indicates the location of the speakers and provides a visual representation of the removal procedure.

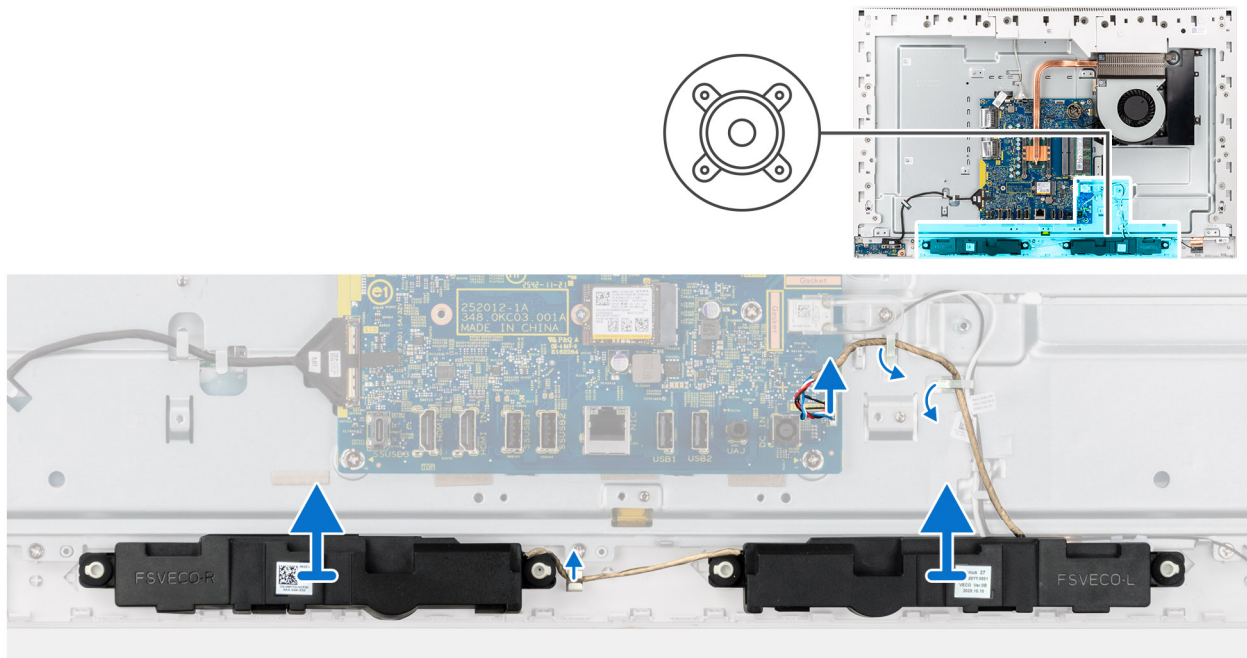


Figure 30. Removing the speakers

Steps

1. Disconnect the speaker cable (INT_SPKR) from its connector on the system board.
2. Remove the speaker cable from the routing guides on the display-assembly base.
3. Lift the speakers along with the cable off the display-assembly base.

Installing the speakers

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



[Watch video: Installing the speakers](#)

The following image indicates the location of the speakers and provides a visual representation of the installation procedure.

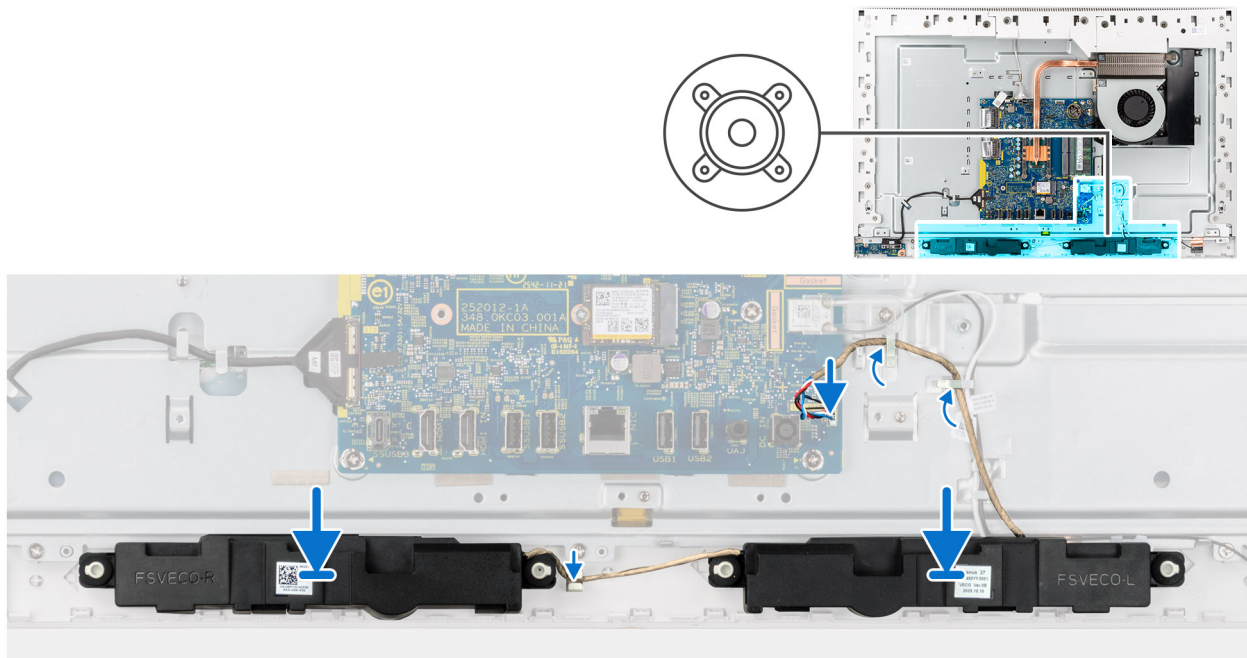


Figure 31. Installing the speakers

Steps

1. Using the alignment posts and rubber grommets, place the speakers on the slots on the display-assembly base.
2. Route the speaker cable through the routing guide on the display-assembly base.
3. Connect the speaker cable (INT_SPKR) to its connector on the system board.

Next steps

1. Install the [rear I/O bracket](#).
2. Install the [bottom cover](#).
3. Install the [system-board shield](#).
4. Install the [rear I/O cover](#).
5. Install the [back cover](#).
6. Install the [stand](#).
7. Follow the procedure in [After working inside your computer](#).

Side I/O board

Removing the side I/O board

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [rear I/O cover](#).
5. Remove the [bottom cover](#).

About this task

The following video provides an overview of this task.



[Watch video: Removing the side I/O cable](#)



Watch video: [Removing the side I/O board](#)

The following image indicates the location of the side I/O board and provides a visual representation of the removal procedure.

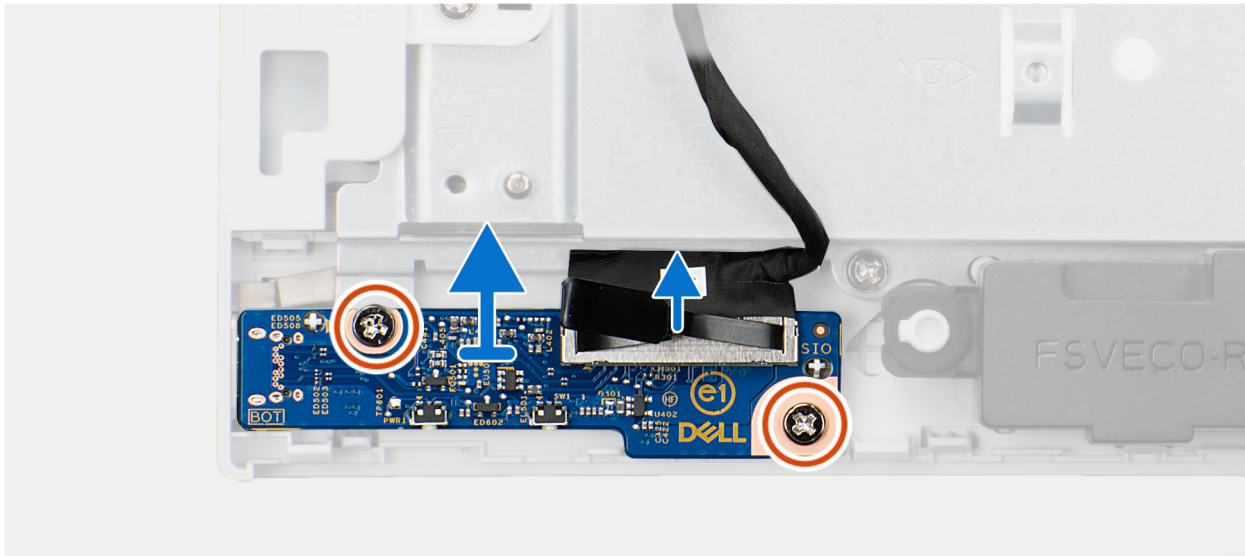
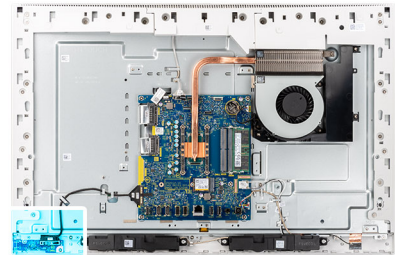


Figure 32. Removing side I/O board

Steps

1. Remove the two screws (M3x5) that secure the side I/O board to the display-assembly base.
2. Disconnect the side I/O board cable off the I/O board.
3. Lift the side I/O board off the display-assembly base.

Installing the side I/O board

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



Watch video: [Installing the side I/O board cable](#)



Watch video: [Installing the side I/O board](#)

The following image indicates the location of the side I/O board and provides a visual representation of the installation procedure.

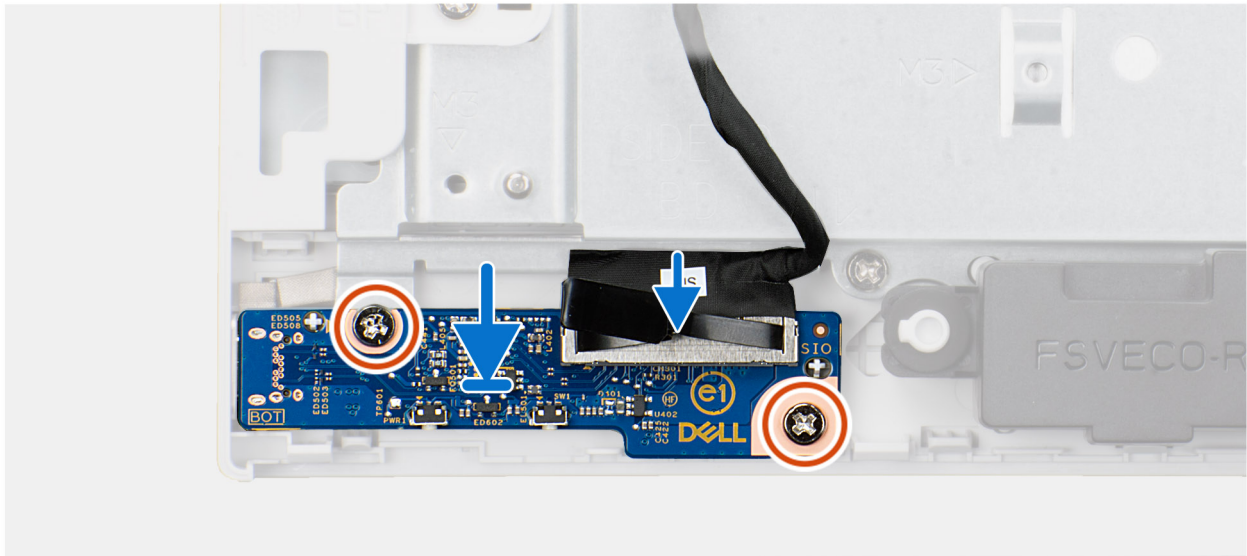
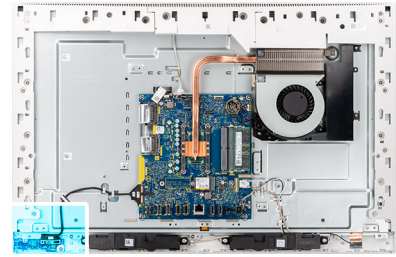


Figure 33. Installing side I/O board

Steps

1. Place the side I/O board on the display-assembly base.
2. Align the screw holes on the side I/O board with the screw holes on the display-assembly base.
3. Connect the side I/O board cable on the I/O board.
4. Replace the two screws (M3x5) that secure the side I/O board to the display-assembly base.

Next steps

1. Install the [bottom cover](#).
2. Install the [rear I/O cover](#).
3. Install the [back cover](#).
4. Install the [stand](#).
5. Follow the procedure in [After working inside your computer](#).

Heat sink

Removing the heat sink

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [system-board shield](#).

About this task

The following video provides an overview of this task.



Watch video: [Removing the heat sink](#)

The following image indicates the location of the heat sink and provides a visual representation of the removal procedure.

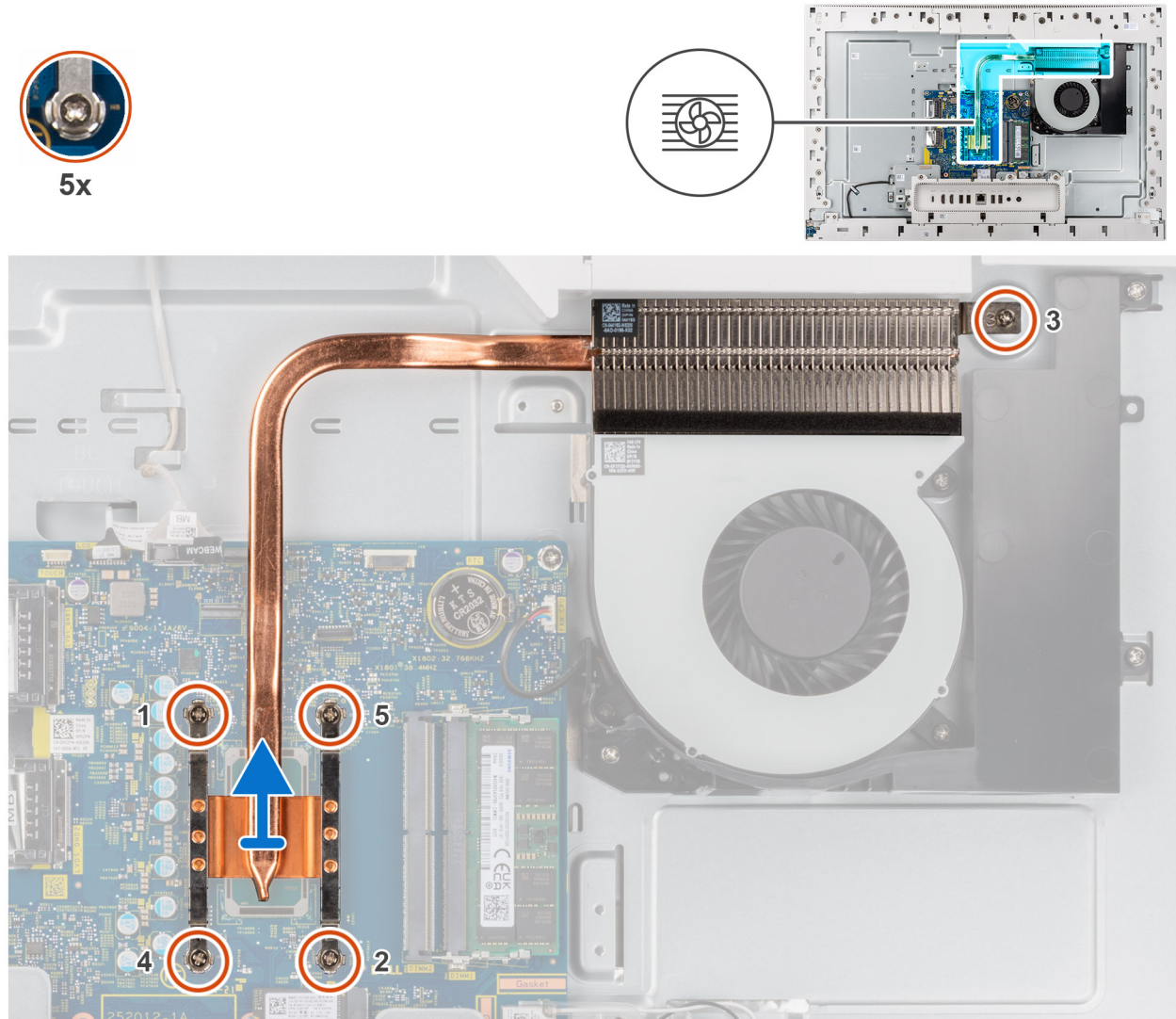


Figure 34. Removing the heat sink

Steps

1. In reverse sequential order (5>4>3>2>1), loosen the five captive screws that secure the heat sink to the system board.
2. Lift the heat sink off the system board.

Installing the heat sink

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

NOTE: If either the system board or the heat sink is replaced, use the thermal pad or paste provided in the service kit. The thermal pad or paste ensures that the thermal conductivity is achieved for more information on replacing the thermal pad.

About this task

The following video provides an overview of this task.



[Watch video: Installing the heat sink](#)

The following image indicates the location of the heat sink and provides a visual representation of the installation procedure.

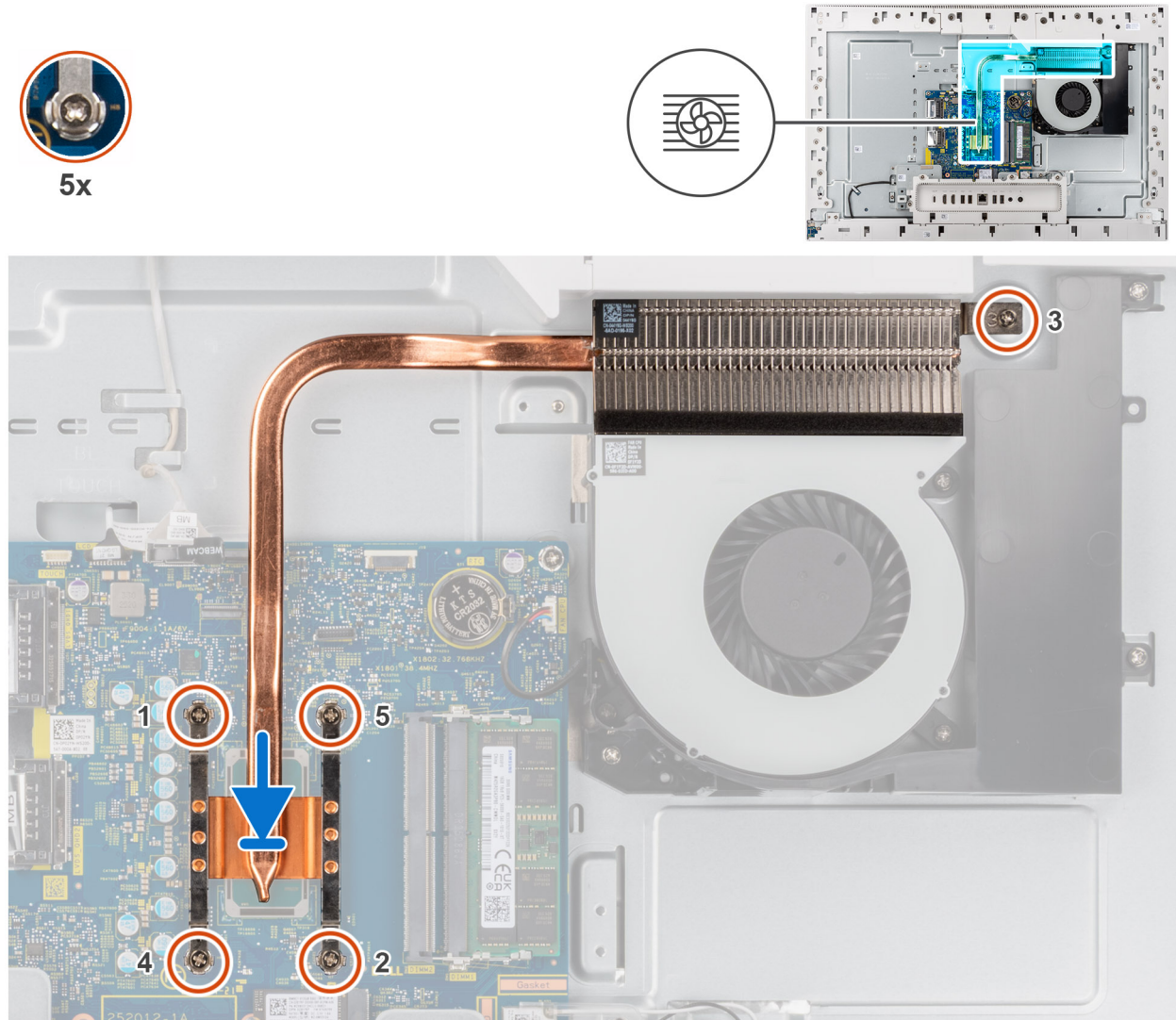


Figure 35. Installing the heat sink

Steps

1. Align the screw holes on the heat sink with the screw holes on the system board.
2. In sequential order (1>2>3>4>5), tighten the five captive screws that secure the heat sink to the system board.

Next steps

1. Install the [system-board shield](#).
2. Install the [back cover](#).
3. Install the [stand](#).
4. Follow the procedure in [After working inside your computer](#).

System board

Removing the system board

 **CAUTION:** The information in this section is intended for authorized service technicians only.

Prerequisites

-  **NOTE:** Your computer's Service Tag is stored in the system board. You must enter the Service Tag in the BIOS setup program after you replace the system board.
-  **NOTE:** Replacing the system board removes any changes that you have made to the BIOS using the BIOS setup program. You must make the appropriate changes again after you replace the system board.
-  **NOTE:** Before disconnecting the cables from the system board, note the location of the connectors so that you can reconnect the cables correctly after you replace the system board.

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [system-board shield](#).
5. Remove the [coin-cell battery](#).
6. Remove the [memory module](#).
7. Remove the [M.2 2230 SSD](#) or [M.2 2280 SSD](#), as applicable.
8. Remove the [onboard wireless module bracket and antenna](#).
9. Remove the [heat sink](#).
10. Remove the [rear I/O cover](#).
11. Remove the [rear I/O bracket](#).
12. Remove the [bottom cover](#).
13. Remove the [speaker](#).
14. Remove the [side I/O board](#).

About this task

The following video provides an overview of this task.



Watch video: [Removing the system board](#)

The following image indicates the connectors on your system board.

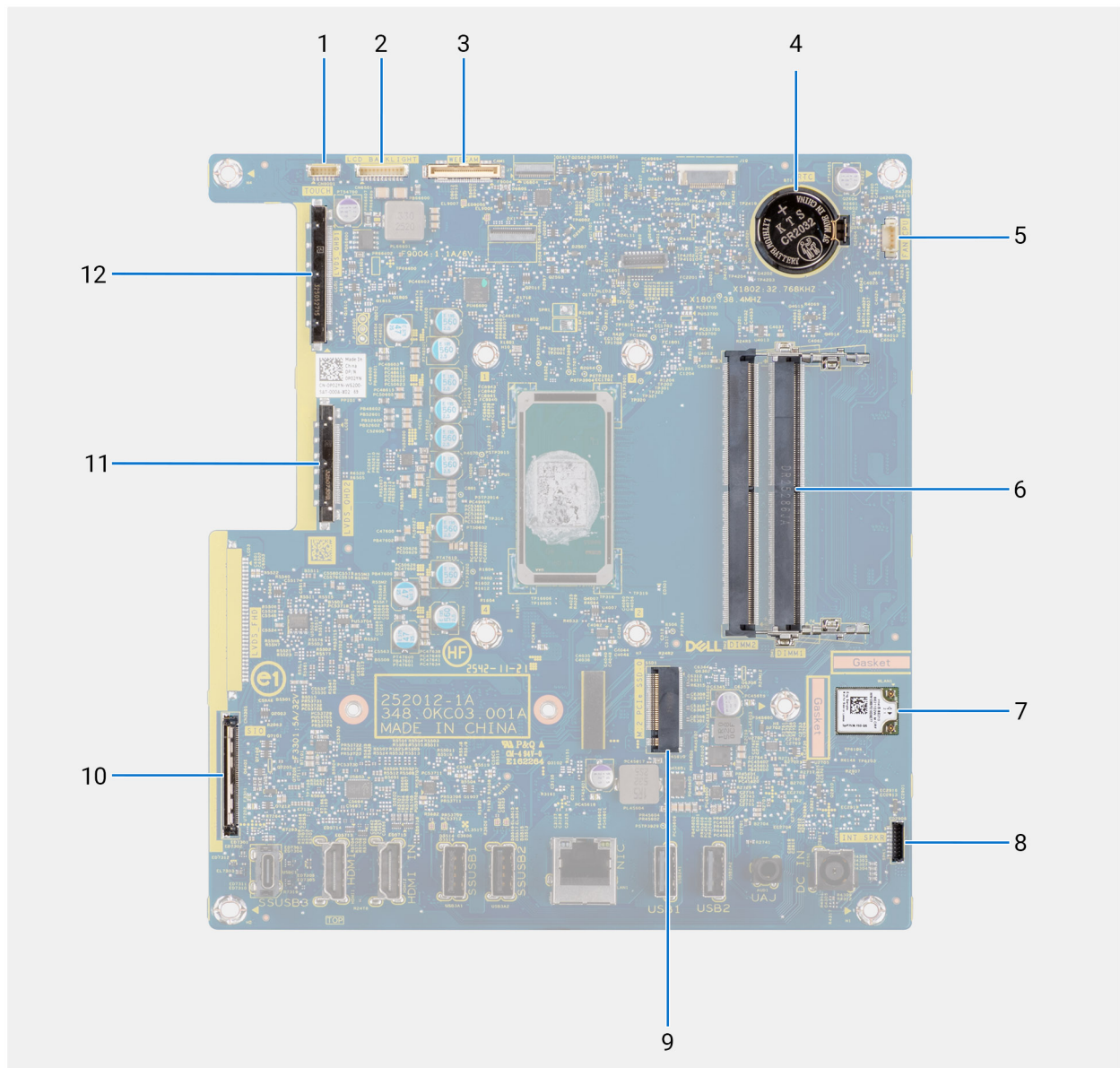


Figure 36. System-board connectors

1. Touchscreen-cable connector (optional) (TOUCH)
2. LCD Backlight-cable connector (LCD BL)
3. Camera-cable connector (WEBCAM)
4. Coin-cell battery (RTC)
5. Fan cable connector (FAN CPU)
6. Memory-module slots (DIMM2, DIMM1)
7. Onboard Wireless module bracket and Antenna
8. Speaker-cable connector (INT_SPKR)
9. M.2 2230/2280 SSD slot
10. Side I/O board connector (SIO)
11. Display-cable connector (LVDS_QHD2)
12. Display-cable connector (LCDS_QHD1)

The following image indicates the location of the system board and provides a visual representation of the removal procedure.



6x
M3x5

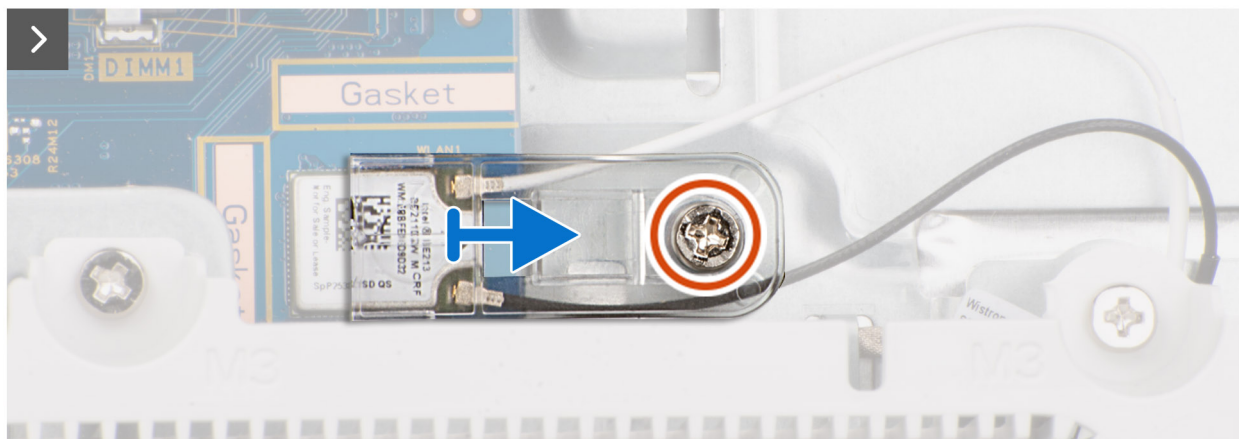
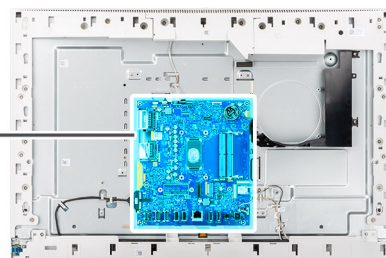


Figure 37. Removing the system board

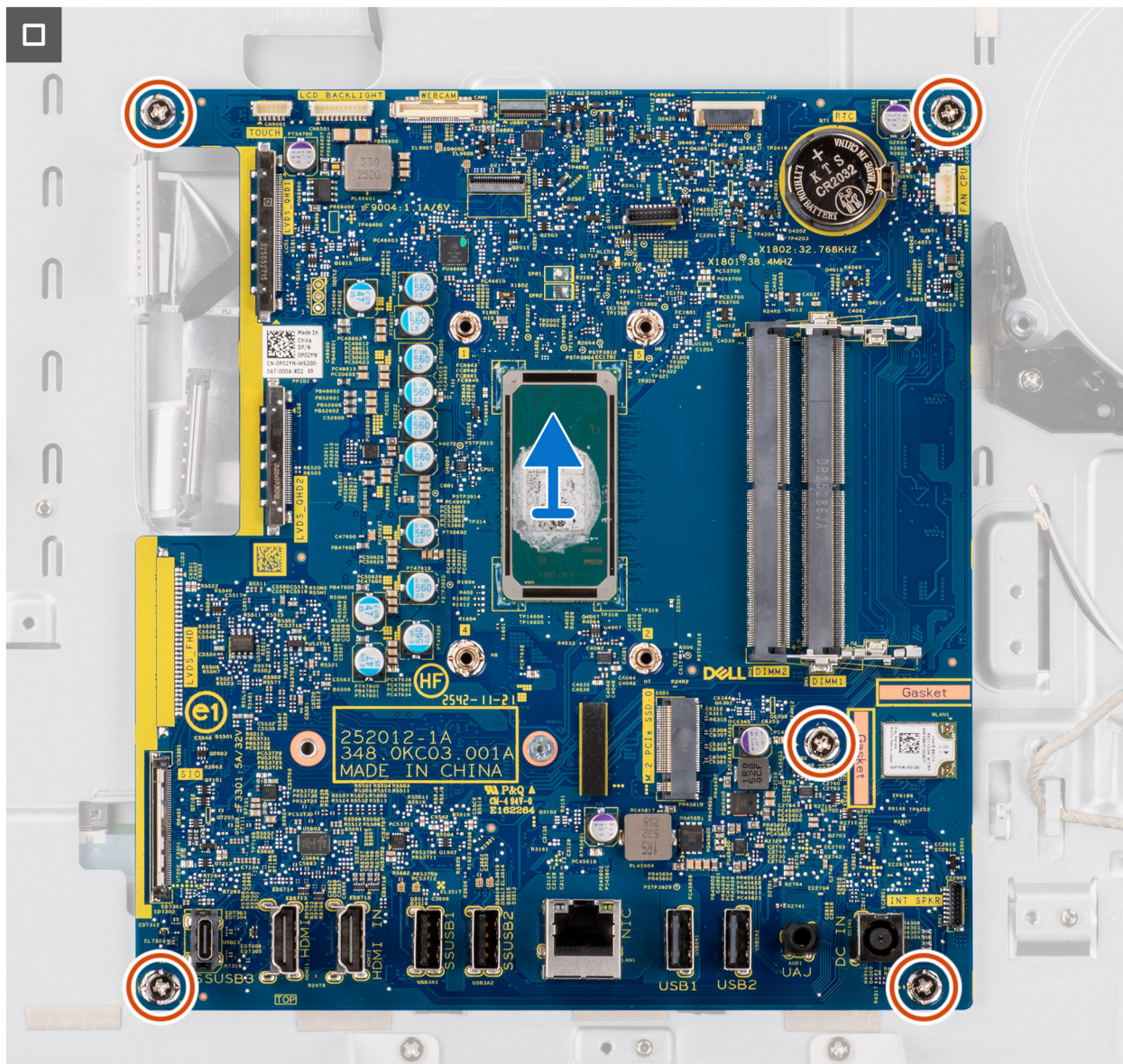


Figure 39. Removing the system board

Steps

1. Remove the screw (M3x5) that secures the wireless-card bracket to the wireless card.
2. Slide and lift the wireless-card bracket off the wireless card.
3. Disconnect the antenna cables from the wireless card.
4. Disconnect the touchscreen cable from its connector (TOUCH) on the system board.
NOTE: This cable is only available on computers that support the touch option.
5. Disconnect the camera cable from its connector (WEBCAM) on the system board.
6. Disconnect the backlight cable from its connector (BL) on the system board.
7. Disconnect the fan cable from its connector (FAN1) on the system board.
8. Disconnect the speaker cable from its connector (SPK1) on the system board.
9. Open the latch and disconnect the side I/O board cable from its connector on the system board.
10. Open the latch and disconnect the two display cables from its connector (LVDS) on the system board.
11. Remove the five screws (M3x5) that secure the system board to the display assembly.
12. Lift the system board off the display assembly.

Installing the system board

CAUTION: The information in this section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following video provides an overview of this task.



Watch video: [Installing the system board](#)

The following image indicates its connectors on your system board.

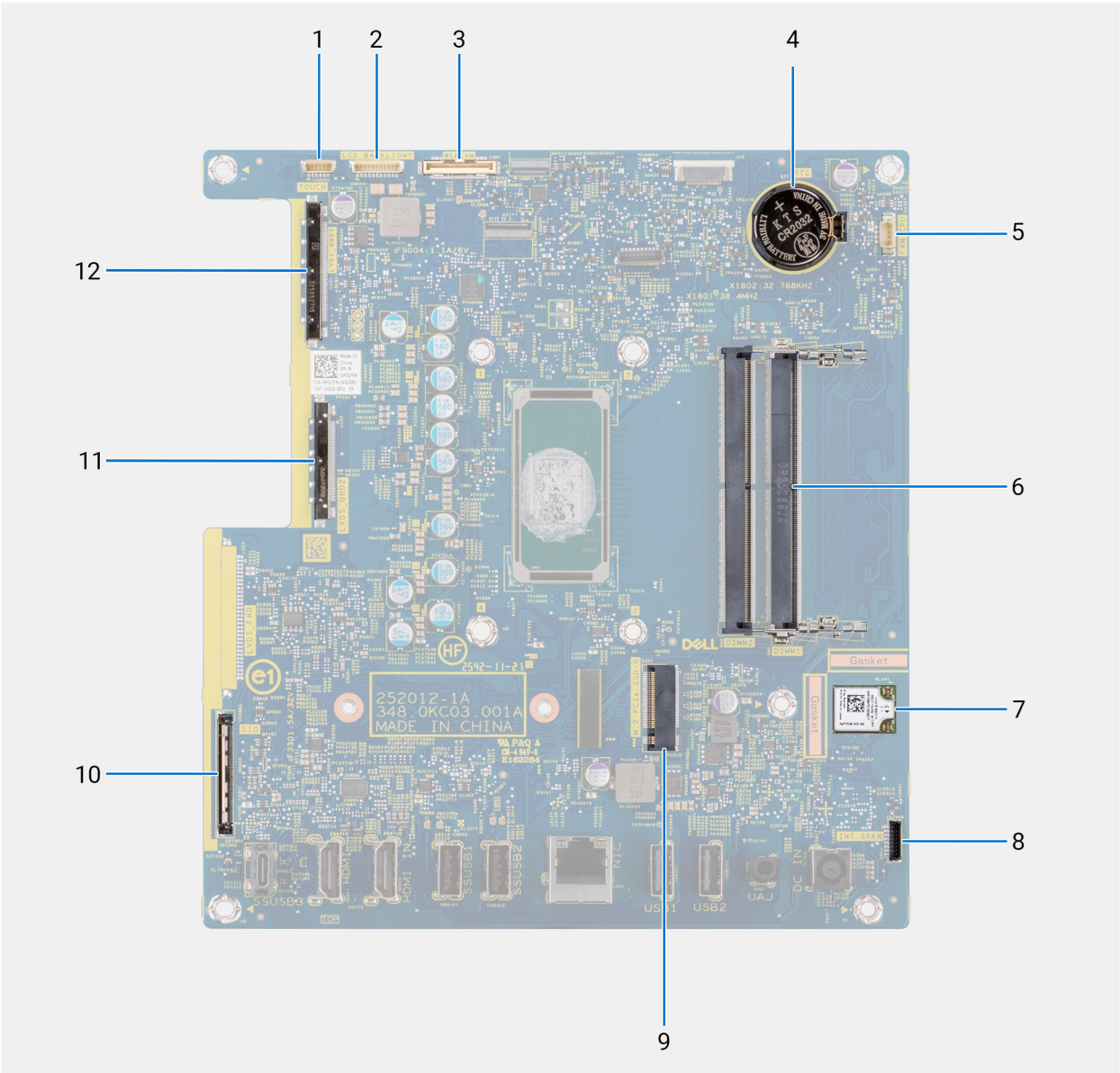


Figure 40. System-board connectors

- | | |
|---|---|
| 1. Touchscreen-cable connector (optional) (TOUCH) | 2. LCD Backlight-cable connector (LCD BL) |
| 3. Camera-cable connector (WEBCAM) | 4. Coin-cell battery (RTC) |

5. Fan cable connector (FAN_CPU)
7. Onboard Wireless module bracket and Antenna
9. M.2 2230/2280 SSD slot
11. Display-cable connector (LVDS_QHD2)
6. Memory-module slots (DIMM2, DIMM1)
8. Speaker-cable connector (INT_SPKR)
10. Side I/O board connector (SIO)
12. Display-cable connector (LCDS_QHD1)

The following image indicates the location of the system board and provides a visual representation of the installation procedure.

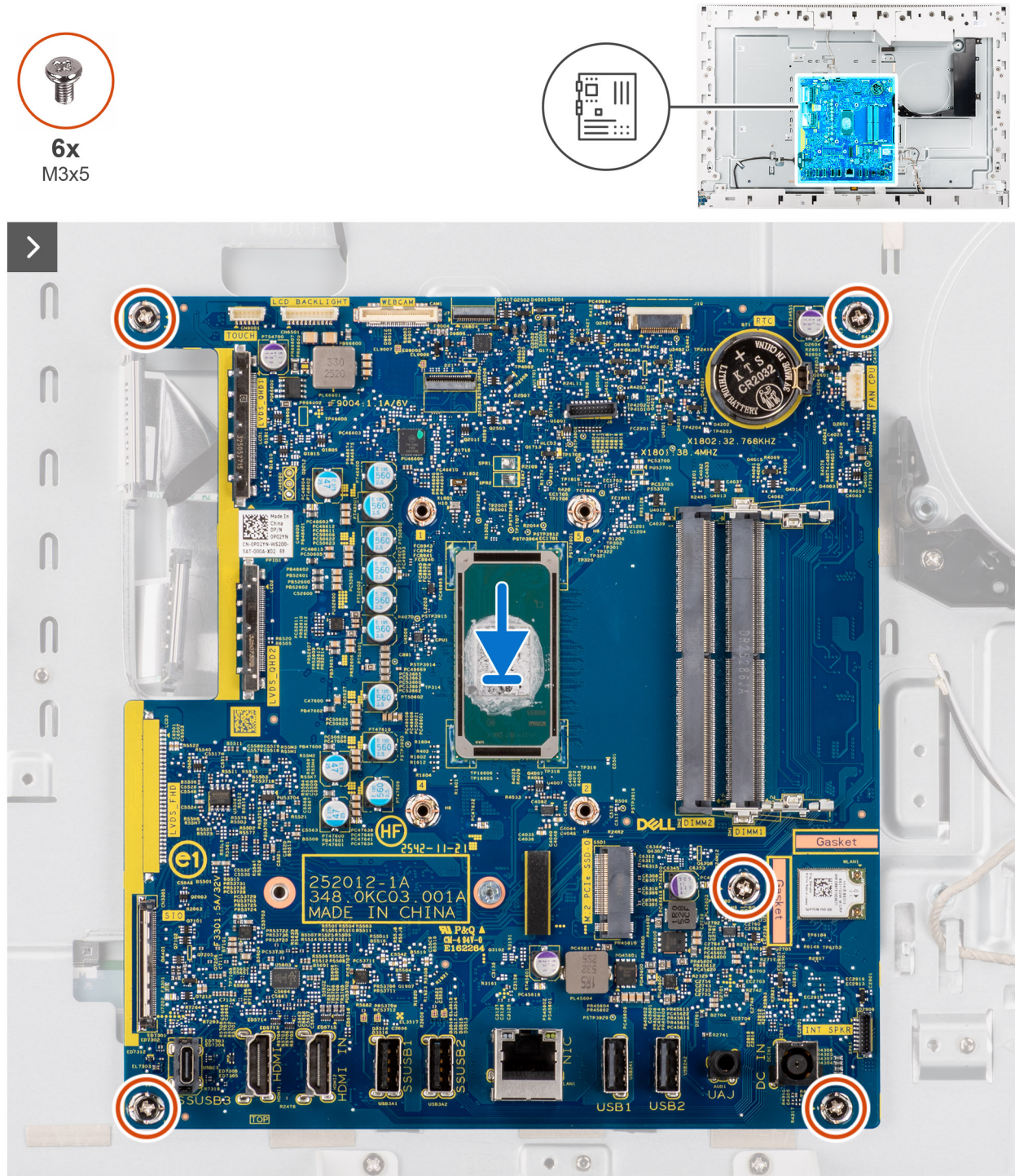


Figure 41. Placing the system board in the chassis

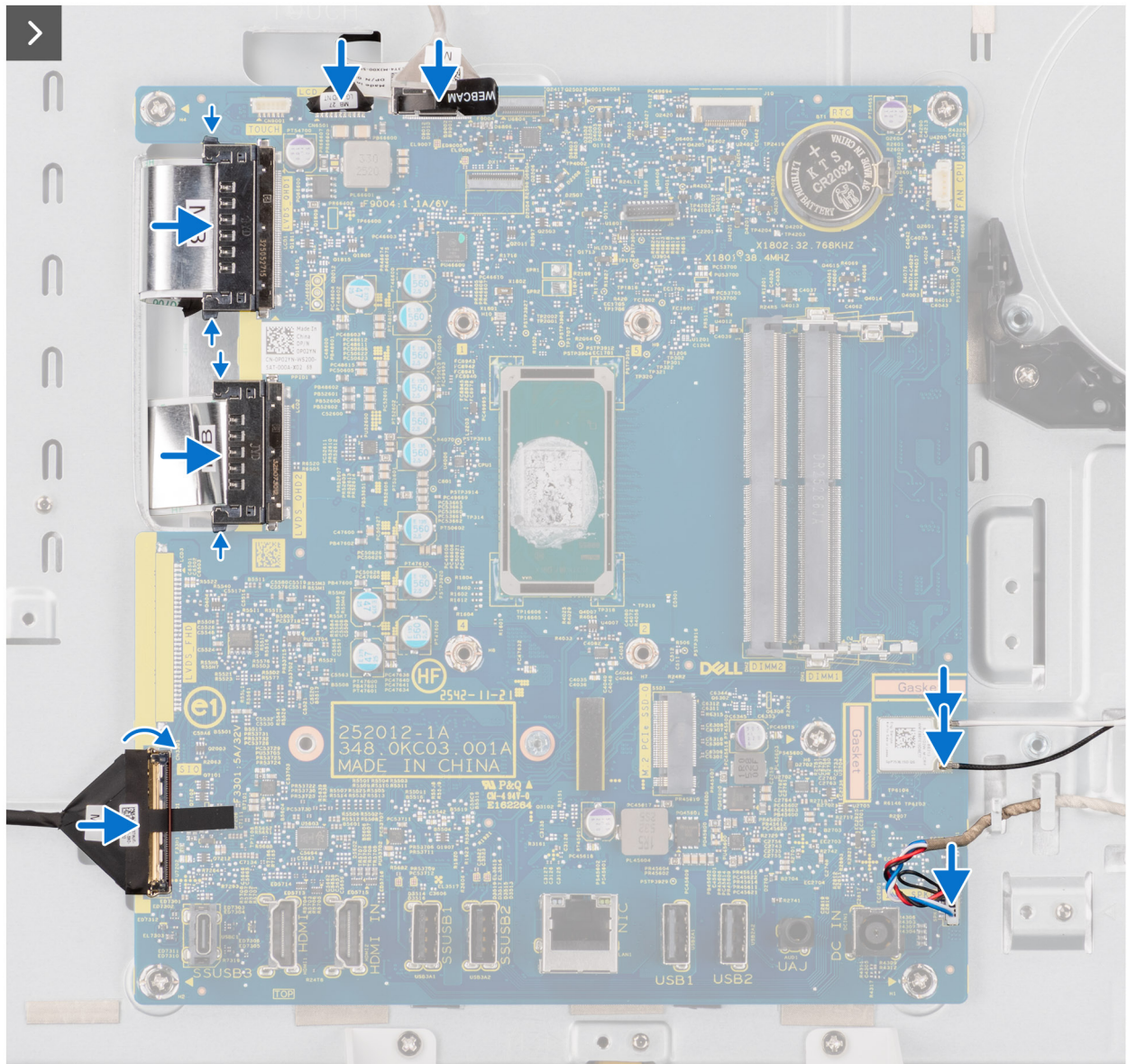


Figure 42. Installing the system board

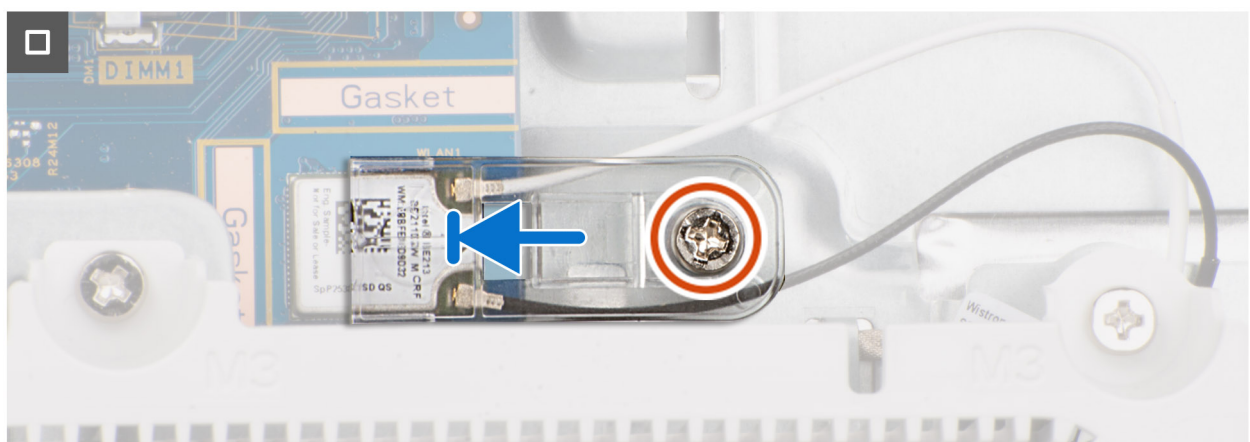


Figure 43. Installing the system board

Steps

1. Place the system board on the display assembly.
2. Align the screw holes on the system board with the screw holes on the display assembly.
3. Replace the five screws (M3x5) that secure the system board to the display assembly.
4. Connect the two display cables to its connector (LVDS) on the system board and close the latch to secure the cable.
5. Connect the side I/O board cable to its connector on the system board and close the latch to secure the cable.
6. Connect the speaker cable to its connector (SPK1) on the system board.
7. Connect the fan cable to its connector (FAN1) on the system board.
8. Connect the backlight cable to its connector (BL) on the system board.
9. Connect the camera cable to its connector (WEBCAM) on the system board.
10. Connect the touchscreen cable to its connector (TOUCH) on the system board.

 **NOTE:** This cable is only available on computers that support the touch option.

11. Connect the antenna cables to the wireless card.
12. Place the wireless-card bracket on the wireless card.
13. Replace the screw (M3x5) that secures the wireless-card bracket to the wireless card.

Next steps

1. Install the [side I/O board](#).
2. Install the [speaker](#).
3. Install the [rear I/O bracket](#).
4. Install the [bottom cover](#).
5. Install the [rear I/O cover](#).
6. Install the [heat sink](#).
7. Install the [onboard wireless module bracket and antenna](#).
8. Install the [M.2 2230 SSD](#) or [M.2 2280 SSD](#), as applicable.
9. Install the [memory module](#).
10. Install the [coin-cell battery](#).
11. Install the [system board shield](#).
12. Install the [back cover](#).
13. Install the [stand](#).
14. Follow the procedure in [After working inside your computer](#).

 **NOTE:** Your computer's Service Tag is stored in the system board. You must enter the Service Tag in the BIOS setup program after you replace the system board.

 **NOTE:** Replacing the system board removes any changes that you have made to the BIOS using the BIOS setup program. You must make the appropriate changes again after you replace the system board.

Display assembly

Removing the display assembly

 **CAUTION:** The information in this section is intended for authorized service technicians only.

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [stand](#).
3. Remove the [back cover](#).
4. Remove the [system-board shield](#).
5. Remove the [memory module](#).
6. Remove the [M.2 2230 SSD](#) or [M.2 2280 SSD](#), as applicable.

7. Remove the [fan](#).
8. Remove the [camera](#).
9. Remove the [rear I/O cover](#).
10. Remove the [bottom cover](#).
11. Remove the [rear I/O bracket](#).
12. Remove the [speaker](#).
13. Remove the [side I/O board](#).
14. Remove the [system board](#).

About this task

The following image indicates the location of the display assembly and provides a visual representation of the removal procedure.

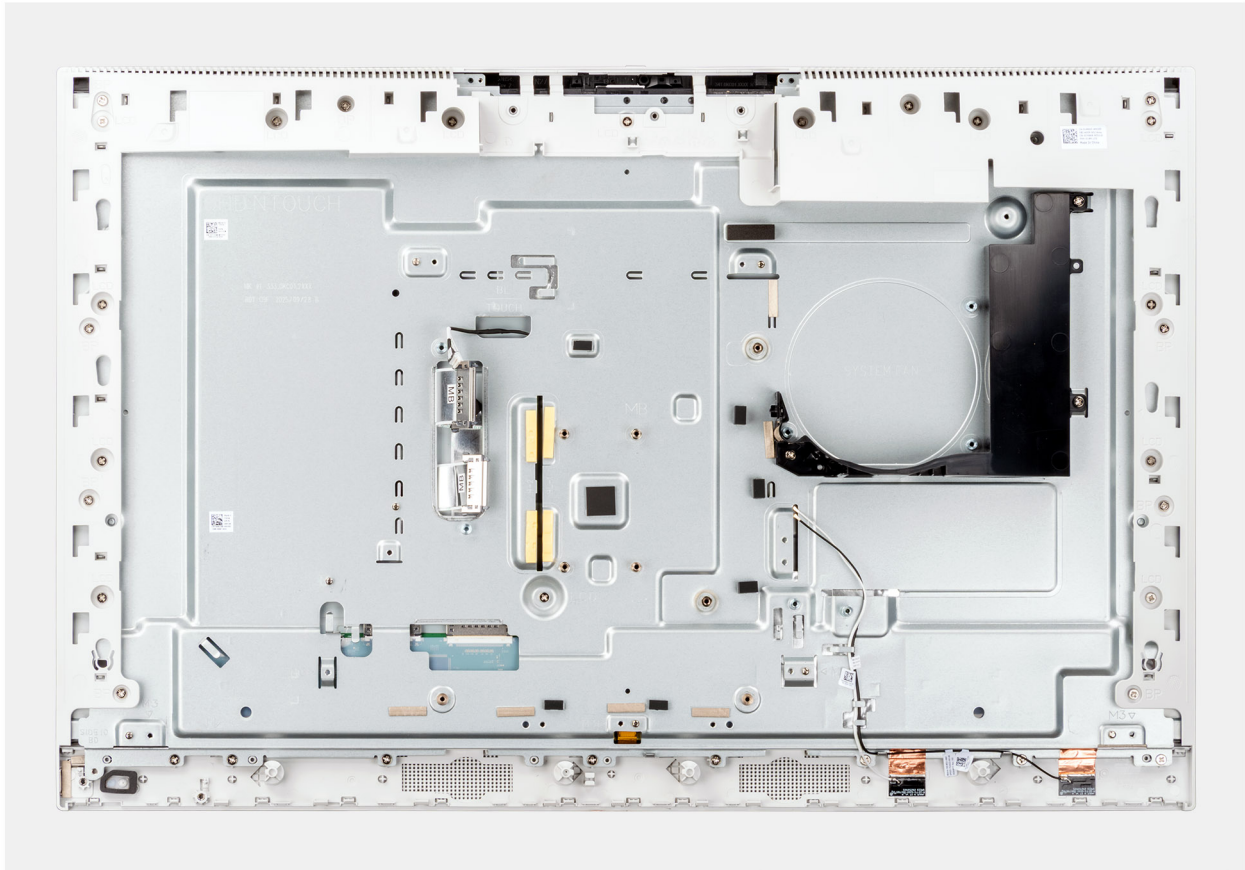


Figure 44. Display Assembly

The LCD assembly after the system board is removed.

Software

This chapter details the supported operating systems along with instructions on how to install the drivers.

Operating system

Your Dell 27 All-in-One EC27260 supports the following operating systems:

- Windows 11 Pro
- Windows 11 Home

Drivers and downloads

When troubleshooting, downloading, or installing drivers, it is recommended that you read the Dell Knowledge Base article [Drivers and Downloads FAQs](#).

BIOS Setup

CAUTION: Certain changes can make your computer work incorrectly. Before you change the settings in BIOS Setup, it is recommended that you note down the original settings for future reference.

NOTE: Depending on the computer and the installed devices, the options that are listed in below may differ.

Use BIOS Setup for the following purposes:

- Get information about the hardware installed in your computer, such as the amount of RAM and the capacity of the storage device.
- Change the system configuration information.
- Set or change user-selectable options such as the user password, enabling or disabling base devices, and configuring hard drive settings.

Entering BIOS Setup program

Turn on or restart your computer and press F2 immediately.

Navigation keys

NOTE: For most of the BIOS Setup options, changes that you make are recorded but do not take effect until you restart the computer.

Table 4. Navigation keys

Keys	Navigation
Up arrow	Moves to the previous field.
Down arrow	Moves to the next field.
Enter	Selects a value in the selected field (if applicable) or follows the link in the field.
Spacebar	Expands or collapses a drop-down list, if applicable.
Tab	Moves to the next focus area.
Esc	Moves to the previous page until you view the main screen. Pressing Esc in the main screen displays a message that prompts you to save any unsaved changes and restart the computer.

F12 One Time Boot menu

To enter the One Time Boot menu, turn on or restart your computer, and then press F12 immediately.

NOTE: If you are unable to enter the One Time Boot menu, repeat the above action.

The One Time Boot menu displays the devices that you can boot from and also display the options to start diagnostics. The boot menu options are:

- Removable Drive (if available)
- STXXXX Drive (if available)

 **NOTE:** XXX denotes the SATA drive number.

- Optical Drive (if available)
- SATA Hard Drive (if available)
- Diagnostics

The One Time Boot menu screen also displays the option to access BIOS Setup.

BIOS Setup options

 **NOTE:** Depending on your computer and its installed devices, the items that are listed in this section may or may not be displayed.

Table 5. BIOS Setup options—Overview menu

Overview	Description
Dell 27 All-in-One EC27260	
BIOS Version	Displays the BIOS version number.
Service Tag	Displays the Service Tag of the computer.
Asset Tag	Displays the Asset Tag of the computer.
Manufacture Date	Displays the manufacture date of the computer.
Ownership Date	Displays the ownership date of the computer.
Express Service Code	Displays the Express Service Code of the computer.
Ownership Tag	Displays the Ownership Tag of the computer.
System UUID	Displays the System UUID of the computer.
Processor Information	
Processor Type	Displays the processor type.
Maximum Clock Speed	Displays the maximum processor clock speed.
Core Count	Displays the number of cores on the processor.
Processor ID	Displays the processor identification code.
Processor L2 Cache	Displays the processor L2 cache size.
Processor L3 Cache	Displays the processor L3 cache size.
Microcode Version	Displays the microcode version.
Intel Hyper-Threading Capable	Displays whether the processor is Hyper-Threading (HT) capable.
Intel vPro Technology	Displays the technology of the processor.
Memory Information	
Memory Installed	Displays the total memory that is installed on the computer.
Memory Available	Displays the total memory available on the computer.
Memory Speed	Displays the memory speed.
Memory Technology	Displays the technology that is used for the memory.
DIMM size 1	Displays the DIMM size 1.
DIMM size 2	Displays the DIMM size 2.
Devices Information	
Panel Type	Displays the type of display panel available on the computer.

Table 5. BIOS Setup options—Overview menu (continued)

Overview	Description
Video Controller	Displays the type of video controller available on the computer.
Video Memory	Displays the video memory information of the computer.
Wi-Fi Device	Displays the wireless device information of the computer.
Native Resolution	Displays the native resolution of the computer.
Video BIOS Version	Displays the video BIOS version of the computer.
Audio Controller	Displays the audio controller information of the computer.
Bluetooth Device	Displays the Bluetooth device information of the computer.

Table 6. BIOS Setup options—Boot Configuration menu

Boot Configuration	Description
Boot Sequence	
Boot Mode: UEFI only	Set the order BIOS searches devices when finding an operating system to boot
Boot Sequence	Displays the boot sequence.
Enable PXE Boot Priority	When enabled, if a new PXE boot option is detected, it will be added to the top of the Boot Sequence.
Enable Secure Boot	Enables the computer to boot using only validated boot software. By default, the Enable Secure Boot option is enabled. For additional security, Dell Technologies recommends keeping the Secure Boot option enabled to ensure that the UEFI firmware validates the operating system during the boot process.  NOTE: For Secure Boot to be enabled, the computer must be in UEFI boot mode and the Enable Legacy Option ROMs option must be turned off.
Secure Boot Mode	Enables or disables the Secure Boot operation mode. By default, the Deployed Mode is selected.  NOTE: Deployed Mode should be selected for normal operation of Secure Boot.

Table 7. BIOS Setup options—Integrated Devices menu

Integrated Devices	Description
Date/Time	
Date	Sets the computer date in MM/DD/YYYY format. Changes to the date format take effect immediately.
Time	Sets the computer time in HH/MM/SS 24-hour format. You can select between a 12-hour and 24-hour clock. Changes to the time format take effect immediately.
Camera	
Enable Camera	Enables the camera. By default, the Enable Camera option is enabled.  NOTE: Depending on the configuration ordered, the camera setup option may not be available.
Audio	
Enable Audio	Enables all integrated audio controller.

Table 7. BIOS Setup options—Integrated Devices menu (continued)

Integrated Devices	Description
	By default, all the options are enabled.
Enable Microphone	Enables the microphone. By default, the Enable Microphone option is enabled.  NOTE: Depending on the configuration ordered, the microphone setup option may not be available.
Enable Internal Speaker	Enables the internal speaker. By default, the Enable Internal Speaker option is enabled.
USB Configuration	
Enable USB Boot Support	Enables booting from USB mass storage devices that are connected to external USB ports. By default, the Enable USB Boot Support option is enabled.

Table 8. BIOS Setup options—Connection menu

Connection	Description
Wireless Device Enable	
WLAN	Enables or disables the internal WLAN device. By default, the WLAN option enabled.

Table 9. BIOS Setup options—Security menu

Security	Description
Absolute	Absolute Software provides various cyber security solutions, some requiring software preloaded on Dell computers and integrated into the BIOS. To use these features, you must enable the Absolute BIOS setting and contact Absolute for configuration and activation. By default, the Absolute option is enabled. For additional security, Dell Technologies recommends keeping the Absolute option enabled.  NOTE: When the Absolute features are activated, the Absolute integration cannot be disabled from the BIOS setup screen.
Firmware Device Tamper Detection	Allows you to control the firmware device tamper detection feature. This feature notifies the user when the firmware device is tampered. When enabled, a screen warning messages are displayed on the computer and a tamper detection event is logged in the BIOS Events log. The computer fails to reboot until the event is cleared. By default, the Firmware Device Tamper Detection option is enabled. For additional security, Dell Technologies recommends keeping the Firmware Device Tamper Detection option enabled.
Clear Firmware Device Tamper Detection	When enabled, the Clear option clears information that is stored in the TPM after exiting the BIOS setup of your computer. This option returns to the disabled state when the computer restarts. By default, the Clear option is disabled. Dell Technologies recommends enabling the Clear option only when TPM data is required to be cleared.

Table 10. BIOS Setup options—Update, Recovery menu

Update, Recovery	
SupportAssist OS Recovery	Enables or disables the boot flow for SupportAssist OS Recovery tool in the event of certain computer errors. By default, the SupportAssist OS Recovery option is enabled.
BIOSConnect	Enables or disables cloud Service operating system recovery if the main operating system fails to boot with the number of failures equal to or greater than the value specified by the Auto OS Recovery Threshold setup option and local Service operating system does not boot or is not installed. By default, the BIOSConnect option is enabled.
Dell Auto OS Recovery Threshold	Allows you to control the automatic boot flow for SupportAssist System Resolution Console and for Dell OS Recovery Tool. By default, the Dell Auto OS Recovery Threshold value is set to 2.
Connected Service Delivery	Maintains support and service resources on this PC. By default, the ON

Table 11. BIOS Setup options—System Management menu

System Management	
Service Tag	Displays the Service Tag of the computer.
Asset Tag	Creates a computer Asset Tag that can be used by an IT administrator to uniquely identify a particular computer.  NOTE: Once set in BIOS, the Asset Tag cannot be changed.
First Power On Date	This option lets you set Ownership date By default, the OFF

Table 12. BIOS Setup options—Keyboard menu

Keyboard	
Numlock LED	Enables or disables the Numlock option. By default, the NumLock option is enabled.

Table 13. BIOS Setup options—Pre-boot Behavior menu

Preboot Behavior	
Adapter Warnings	
Enable Adaptor Warning Messages	Enables the adaptor warning messages during boot when the adapters with less power capacity are detected. By default, the Enable Adaptor Warning option is enabled.
Warnings and Errors	Enables or disables the action to be taken when a warning or error is encountered. By default, the Prompt on Warnings and Errors option is selected.  NOTE: Errors deemed critical to the operation of the computer hardware stop the functioning of the computer.

Table 14. BIOS Setup options—System Logs menu

System Logs	
BIOS Event Log	

Table 14. BIOS Setup options—System Logs menu (continued)

System Logs	
Clear BIOS Event Log	Allows you to select option to keep or clear BIOS events logs. By default, the Keep Log option is selected.
Power Event Log	
Clear Power Event Log	Allows you to select option to keep or clear power events logs. By default, the Keep Log option is selected.

BIOS Setup options

 **NOTE:** For most of the System Setup options, changes that you make are recorded but do not take effect until you restart the computer.

 **NOTE:** Depending on your computer and its installed devices, the items that are listed in this section may differ.

Table 15. BIOS Setup options—Overview menu

Overview	Description
Dell 27 All-in-One EC27260	
BIOS Version	Displays the BIOS version number.
Service Tag	Displays the Service Tag of the computer.
Asset Tag	Displays the Asset Tag of the computer.
Manufacture Date	Displays the manufacture date of the computer.
Ownership Date	Displays the ownership date of the computer.
Express Service Code	Displays the Express Service Code of the computer.
Ownership Tag	Displays the Ownership Tag of the computer.
System UUID	Displays the System UUID of the computer.
Processor Information	
Processor Type	Displays the processor type.
Maximum Clock Speed	Displays the maximum processor clock speed.
Core Count	Displays the number of cores on the processor.
Processor ID	Displays the processor identification code.
Processor L2 Cache	Displays the processor L2 cache size.
Processor L3 Cache	Displays the processor L3 cache size.
Microcode Version	Displays the microcode version.
Intel Hyper-Threading Capable	Displays whether the processor is Hyper-Threading (HT) capable.
Intel vPro Technology	Displays the technology of the processor.
Memory Information	
Memory Installed	Displays the total memory that is installed on the computer.
Memory Available	Displays the total memory available on the computer.
Memory Speed	Displays the memory speed.
Memory Technology	Displays the technology that is used for the memory.

Table 15. BIOS Setup options—Overview menu (continued)

Overview	Description
DIMM size 1	Displays the DIMM size 1.
DIMM size 2	Displays the DIMM size 2.
Devices Information	
Panel Type	Displays the type of display panel available on the computer.
Video Controller	Displays the type of video controller available on the computer.
Video Memory	Displays the video memory information of the computer.
Wi-Fi Device	Displays the wireless device information of the computer.
Native Resolution	Displays the native resolution of the computer.
Video BIOS Version	Displays the video BIOS version of the computer.
Audio Controller	Displays the audio controller information of the computer.
Bluetooth Device	Displays the Bluetooth device information of the computer.

Table 16. BIOS Setup options—Boot Configuration menu

Boot Configuration	Description
Boot Sequence	
Boot Mode: UEFI only	Set the order BIOS searches devices when finding an operating system to boot
Boot Sequence	Displays the boot sequence.
Enable PXE Boot Priority	When enabled, if a new PXE boot option is detected, it will be added to the top of the Boot Sequence.
UEFI Network Boot Order	This option is used to select the IPv6 option boot order.
Force PXE On Next Boot	Enables Force PXE On next boot.
Enable Microsoft UEFI CA	When disabled, the UEFI CA is removed from the BIOS UEFI Secure Boot database.  CAUTION: If you disable Microsoft UEFI CA, the computer may not boot, computer graphics may not function, some devices may not function properly, and the computer could become unrecoverable. By default, the Enable Microsoft UEFI CA option is enabled. For additional security, Dell Technologies recommends keeping the Enable Microsoft UEFI CA option enabled to ensure the broadest compatibility with devices and operating systems.
Expert Key Management	Enable Custom Mode.
Enable Secure Boot	Enables the computer to boot using only validated boot software. By default, the Enable Secure Boot option is enabled. For additional security, Dell Technologies recommends keeping the Secure Boot option enabled to ensure that the UEFI firmware validates the operating system during the boot process.  NOTE: For Secure Boot to be enabled, the computer must be in UEFI boot mode and the Enable Legacy Option ROMs option must be turned off.
Secure Boot Mode	Enables or disables the Secure Boot operation mode. By default, the Deployed Mode is selected.  NOTE: Deployed Mode should be selected for normal operation of Secure Boot.

Table 17. System Setup options—Integrated Devices menu

Integrated Devices	
Date/Time	
Date	Sets the computer date in MM/DD/YYYY format. Changes to the date format take effect immediately.
Time	Sets the computer time in HH/MM/SS 24-hour format. You can select between a 12-hour or 24-hour clock. Changes to the time format take effect immediately.
Camera	
Enable Camera	Enables the camera. By default, the Enable Camera option is enabled.  NOTE: Depending on the configuration ordered, the camera setup option may not be available.
Audio	
Enable Audio	Enables all integrated audio controller. By default, all the options are enabled.
Enable Microphone	Enables the microphone. By default, the Enable Microphone option is enabled.  NOTE: Depending on the configuration ordered, the microphone setup option may not be available.
Enable Internal Speaker	Enables the internal speaker. By default, the Enable Internal Speaker option is enabled.
USB Configuration	
Enable USB Boot Support	Enables booting from USB mass storage devices that are connected to external USB ports. By default, the Enable USB Boot Support option is enabled.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
Side USB Configurations	Enables the side USB port By default, the Side USB Port 1 (Type-C) option is enabled.
Rear USB Configurations	Enables the rear USB port By default, the Rear Port 1 (Right) Rear Port 2 (Center Right) Rear Port 3 (Center Left) Rear Port 4 (Left) option is enabled.

Table 18. System Setup options—Storage menu

Storage	
SATA/NVMe Operation	
SATA/NVMe Operation	Sets the operating mode of the integrated SATA hard drive controller. By default, the Raid On option is selected.
Storage Interface	
Port Enablement	Enables or disables the M.2 PCIe SSD option. By default, the M.2 PCIe SSD option is enabled.
Drive Information	
	Displays the information of onboard drives.

Table 19. System Setup options—Storage menu

Storage	
SATA/NVMe Operation	
SATA/NVMe Operation	Sets the operating mode of the integrated SATA hard drive controller. By default, the Raid On option is selected.
Storage Interface	
Port Enablement	Enables or disables the M.2 PCIe SSD option. By default, the M.2 PCIe SSD option is enabled.
Drive Information	Displays the information of onboard drives.

Table 20. System Setup options—Connection menu

Connection	
Network Controller Configuration	
Integrated NIC	This option controls the on-board LAN Controller.
Wireless Device Enables	This field enables or disables the WLAN and Bluetooth.
HTTP Boot Feature	This field displays the http boot features.

Table 21. System Setup options—Power menu

Power	
Enable USB PowerShare	Enables or disables the USB PowerShare on the computer. By default, the USB Powershare option is disabled.
USB Wake Support	
Enable USB Wake Support	When enabled, the USB devices like a mouse or keyboard can be used to wake the system from Standby, Hibernate, and Power Off.  NOTE: This feature requires Deep Sleep Control to be disabled.
AC behavior	This field determines what the system will do after the unexpected power loss.
Deep Sleep Control	This field determines how aggressive the system is while conserving power while shut down.

Table 22. System Setup options—Security menu

Security	
Intel Platform Trust Technology	This option lets you control whether the Intel platform trust technology will be visible to the operating system.
Physical Presence Interface (PPI) Bypass for Clear Commands	The PPI Bypass for Clear Commands option allows the operating system to manage certain aspects of PTT. When enabled, you are not prompted to confirm changes to the PTT configuration. By default, the PPI Bypass for Clear Commands option is disabled. For additional security, Dell Technologies recommends keeping the PPI Bypass for Clear Commands option disabled.
Clear	When enabled, the Clear option clears information that is stored in the TPM after exiting the system's BIOS. This option returns to the disabled state when the computer restarts. By default, the Clear option is disabled. Dell Technologies recommends enabling the Clear option only when TPM data is required to be cleared.

Table 22. System Setup options—Security menu (continued)

Security	
	 NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
Data Wipe on Next Boot	Data Wipe is a secure wipe operation that deletes information from a storage device.  CAUTION: The secure Data Wipe operation deletes information in a way that it cannot be reconstructed. Commands such as delete and format in the operating system may remove files from showing up in the file system. However, they can be reconstructed through forensic means as they are still represented on the physical media. Data Wipe prevents this reconstruction and the data can no longer be recovered. When enabled, the data wipe option provides prompts to wipe any storage devices that are connected to the computer on the next boot. By default, the Start Data Wipe option is disabled.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
HDD Security	
SED BLock SID Authentication	This field controls a mechanism used by the BIOS to block entities from taking ownership of the self-encrypting drive (SED).
PPI Bypass for SED Block SID Command	This field controls the SED block SID physical presence interface (PPI).
Absolute	Absolute Software provides various cyber security solutions, some requiring software preloaded on Dell computers and integrated into the BIOS. To use these features, you must enable the Absolute BIOS setting and contact Absolute for configuration and activation. By default, the Absolute option is enabled. For additional security, Dell Technologies recommends keeping the Absolute option enabled.  WARNING: The Permanently Disabled option can only be selected once. When Permanently Disabled is selected, Absolute Persistence cannot be reenabled. No further changes to the Enable/Disable states are allowed.  NOTE: The Enable/Disable options are unavailable while the computer is in the activated state.  NOTE: When the Absolute features are activated, the Absolute integration cannot be disabled from the BIOS Setup screen.
UEFI Boot Path Security	Enables or disables the computer to prompt the user to enter the Administrator password (if set) when booting to a UEFI boot path device from the F12 boot menu. By default, the Always Except Internal HDD option is enabled.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
Authenticated BIOS Interface	Enables authenticated BIOS interface.
Legacy Manageability Interface Access	This field allow the platform interface to access the Legacy Manageability Interface Access.
Firmware Device Tamper Detection	Allows you to control the firmware device tamper detection feature. This feature notifies the user when the firmware device is tampered. When enabled, a screen warning message is displayed on the computer and a tamper detection event is

Table 22. System Setup options—Security menu (continued)

Security	
	logged in the BIOS Events log. The computer fails to reboot until the event is cleared. By default, the Firmware Device Tamper Detection option is enabled. For additional security, Dell Technologies recommends keeping the Firmware Device Tamper Detection option enabled. i NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
Clear Firmware Device Tamper Detection	Allows you to clear the events that are logged when tampering of firmware device is detected. By default, the Clear Firmware Device Tamper Detection option is disabled. i NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.

Table 23. System Setup options—Update, Recovery menu

Update, Recovery	
Connected Service Delivery	When this connected service is enabled, Dell maintains support and service resources on this PC.
BIOS Recovery from Hard Drive	Enables or disables the user to recover from certain corrupted BIOS conditions from a recovery file on the user primary hard drive or an external USB drive. By default, the BIOS Recovery from Hard Drive option is enabled. i NOTE: BIOS Recovery from Hard Drive is not available for self-encrypting drives (SED). i NOTE: BIOS recovery is designed to fix the main BIOS block and cannot work if the Boot Block is damaged. In addition, this feature cannot work in the event of EC corruption, ME corruption, or a hardware issue. The recovery image must exist on an unencrypted partition on the drive. i NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
BIOS Downgrade	
Allow BIOS Downgrade	Allows downgrading of the system firmware to previous revisions. By default, the Allow BIOS Downgrade option is enabled.
SupportAssist OS Recovery	Enables or disables the boot flow for SupportAssist OS Recovery tool if certain system errors occur. By default, the SupportAssist OS Recovery option is enabled.
BIOSConnect	Enables or disables cloud service operating system recovery if the main operating system fails to boot with the number of failures equal to or greater than the value specified by the Auto OS Recovery Threshold setup option and local service operating system does not boot or is not installed. By default, the BIOSConnect option is enabled.
Dell Auto OS Recovery Threshold	Allows the control of the automatic boot flow for the SupportAssist System Resolution Console and the Dell OS Recovery Tool. By default, the Dell Auto OS Recovery Threshold value is set to 2. i NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.

Table 24. System Setup options—System Management menu

System Management	
Service Tag	Displays the Service Tag of the computer.
Asset Tag	Creates a computer Asset Tag that an IT administrator can use to uniquely identify a particular computer.  NOTE: Once set in the BIOS, the Asset Tag cannot be changed.
Wake on AC	Enables or disables the computer to turn on and go to boot when AC power is supplied to the computer. By default, the Wake on AC option is disabled.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
Wake on LAN	Enables or disables the computer to turn on by a special LAN signal. By default, the Wake on LAN option is disabled.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
Auto On Time	Enable to set the computer to turn on automatically every day or on a preselected date and time. This option can be configured only if the Auto On Time is set to Everyday, Weekdays, or Selected Days. By default, the Auto On Time option is disabled.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
SEER Messages	This field controls the SERR message mechanism
First Power On Date	This field lets you set ownership date.

Table 25. System Setup options—Keyboard menu

Keyboard	
Enable Keyboard Error Detection	Enables or disables this option will allow keyboard related errors when system boots. By default, the ON option is enabled.
Numlock LED	By default, the ON option is enabled.

Table 26. System Setup options—Pre-boot Behavior menu

Pre-boot Behavior	
Adapter Warnings	
Enable Dock Warning Messages	Enables the warning messages during boot when the adapters with less power capacity are detected. By default, the Enable Dock Warning Messages option is enabled.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
Warnings and Errors	Enables or disables the action to be taken when a warning or error is encountered. By default, the Prompt on Warnings and Errors option is selected.  NOTE: Errors deemed critical to the operation of the computer hardware stop the functioning of the computer.

Table 26. System Setup options—Pre-boot Behavior menu (continued)

Pre-boot Behavior	
	 NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
Extend BIOS POST Time	Sets the BIOS POST (Power-On Self-Test) load time. By default, the 0 seconds option is selected.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.

Table 27. System Setup options—Virtualization menu

Virtualization Support	
DMA Protection	
Enable Pre-Boot DMA Support	Allows you to control the Pre-Boot DMA protection for both internal and external ports. This option does not directly enable DMA protection in the operating system.  NOTE: This option is not available when the virtualization setting for IOMMU is disabled (VT-d/AMD Vi). By default, the Enable Pre-Boot DMA Support option is enabled. For additional security, Dell Technologies recommends keeping the Enable Pre-Boot DMA Support option enabled.  NOTE: This option is provided only for compatibility purposes, since some older hardware is not DMA capable.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
Enable OS Kernel DMA Support	Allows you to control the Kernel DMA protection for both internal and external ports. This option does not directly enable DMA protection in the operating system. For operating systems that support DMA protection, this setting indicates to the operating system that the BIOS supports the feature.  NOTE: This option is not available when the virtualization setting for IOMMU is disabled (VT-d/AMD Vi). By default, the Enable OS Kernel DMA Support option is enabled.  NOTE: This option is provided only for compatibility purposes, since some older hardware is not DMA capable.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
Internal Port DMA compatibility Mode	When Enabled, BIOS will notify the OS that the internal ports are not DMA capable.

Table 28. System Setup options—Performance menu

Performance	
Intel SpeedStep	
Enable Intel SpeedStep Technology	Enables the computer to dynamically adjust processor voltage and core frequency, decreasing average power consumption and heat production. By default, the Enable Intel SpeedStep Technology option is enabled.  NOTE: To view this option, enable Service options as described in View Service options.
PCIe Resizable Base Address Register (BAR)	

Table 28. System Setup options—Performance menu (continued)

Performance	
PCIe Resizable Base Address Register (BAR)	Enables or disables the ability of PCIe Resizable Base Address Register (BAR) By default, the ON option is enabled.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.

Table 29. System Setup options—System Logs menu

System Logs	
BIOS Event Log	
Clear BIOS Event Log	Select the option to keep or clear BIOS events logs. By default, the Keep Log option is selected.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.
Power Event Log	
Clear Power Event Log	Select the option to keep or clear power events logs. By default, the Keep Log option is selected.  NOTE: To view this option, enable Advanced Setup mode as described in View Advanced Setup options.

Updating the BIOS

Updating the BIOS in Windows

About this task

 **CAUTION:** If BitLocker is not suspended before updating the BIOS, the BitLocker key is not recognized the next time you reboot the computer. You will then be prompted to enter the recovery key to proceed, and the computer displays a prompt for the recovery key on each reboot. Failure to provide the recovery key can result in data loss or an operating system reinstall. For more information, refer [Updating the BIOS on Dell systems with BitLocker enabled](#).

 **CAUTION:** Do not turn off the computer during the BIOS flash update process. The computer may not boot if you turn off your computer.

Steps

1. Go to [Dell Support Site](#).
2. Go to **Identify your product or ask support**. In the box, enter the product identifier, model, service request or describe what you are looking for, and then click **Search**.

 **NOTE:** If you do not have the Service Tag, click **Detect This PC**. The site automatically detects your device, and you can then click **Explore Product Support** to go to the support page for your device. You can also use the product ID or manually browse for your computer model.
3. Click **Drivers & Downloads**.
4. Select the operating system installed on your computer.
5. In the **Category** drop-down list, select **BIOS**.
6. Select the latest version of BIOS, and click **Download** to download the BIOS file for your computer.
7. After the download is complete, navigate to the folder where the BIOS update file has been saved.

8. Double-click the BIOS update file and follow the on-screen instructions.
For more information, search [Dell Support Site](#).

Updating the BIOS using the USB drive in Windows

About this task

 **CAUTION:** If BitLocker is not suspended before updating the BIOS, the BitLocker key is not recognized the next time you reboot the computer. You will then be prompted to enter the recovery key to proceed, and the computer displays a prompt for the recovery key on each reboot. Failure to provide the recovery key can result in data loss or an operating system reinstall. For more information, refer [Updating the BIOS on Dell systems with BitLocker enabled](#).

 **CAUTION:** Do not turn off the computer during the BIOS flash update process. The computer may not boot if you turn off your computer.

Steps

1. Go to [Dell Support Site](#).
2. Go to **Identify your product or ask support**. In the box, enter the product identifier, model, service request or describe what you are looking for, and then click **Search**.
 **NOTE:** If you do not have the Service Tag, click **Detect This PC**. The site automatically detects your device, and you can then click **Explore Product Support** to go to the support page for your device. You can also use the product ID or manually browse for your computer model.
3. Click **Drivers & Downloads**.
4. Select the operating system installed on your computer.
5. In the **Category** drop-down list, select **BIOS**.
6. Select the latest version of BIOS, and click **Download** to download the BIOS file for your computer.
7. Create a bootable USB drive. For more information, search [Dell Support Site](#).
8. Copy the BIOS setup program file to the bootable USB drive.
9. Connect the bootable USB drive to the computer that needs the BIOS update.
10. Restart the computer and press **F12**.
11. Select the USB drive from the **One Time Boot Menu**.
12. Type the BIOS setup program filename and press **Enter**.
The **BIOS Update Utility** appears.
13. Follow the on-screen instructions to complete the BIOS update.

Updating the BIOS from the One-Time boot menu

To update the BIOS from the One-Time boot menu, see [Updating the BIOS from the One Time Boot Menu](#) at [Dell Support Site](#).

System and setup password

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

 **CAUTION:** Ensure that your computer is locked when it is not in use. Anyone can access the data that is stored on your computer, when left unattended.

Table 30. System and setup password

Password type	Description
System password	Password that you must enter to boot to your operating system.

Table 30. System and setup password (continued)

Password type	Description
Setup password	Password that you must enter to access and change the BIOS settings of your computer.

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

 **NOTE:** The System and setup password feature is disabled by default.

Assigning a System Setup password

Prerequisites

You can assign a new System or Admin Password only when the status is set to **Not Set**. To enter BIOS System Setup, press F2 immediately after a power-on or reboot.

Steps

1. To enter the **System Setup**, press **F2** immediately after a power-on or reboot.
2. In the **System BIOS** or **System Setup** screen, select **Security** and press Enter.
The **Security** screen is displayed.
3. Select **System/Admin Password** and create a password in the **Enter the new password** field.
Use the following guidelines to create the system password:
 - Password can be up to 32 characters.
 - Password must contain at least one special character: "(! " # \$ % & ' * + , - . / : ; < = > ? @ [\] ^ _ ` { | })")"
 - The password can contain numbers from 0 to 9.
 - The password can contain alphabets A to Z and a to z.
4. Type the system password that you entered earlier in the **Confirm new password** field and click **OK**.
5. Press Y to save the changes.
The computer restarts.

Deleting or changing an existing system password or setup password

Prerequisites

Ensure that the **Password Status** is Unlocked in the System Setup before attempting to delete or change the existing system password and/or setup password. You cannot delete or change an existing system password or setup password if the **Password Status** is Locked. To enter the System Setup, press F2 immediately after a power-on or reboot.

Steps

1. To enter the **System Setup**, press **F2** immediately after a power-on or reboot.
2. In the **System BIOS** or **System Setup** screen, select **System Security** and press Enter.
The **System Security** screen is displayed.
3. In the **System Security** screen, verify that the **Password Status** is Unlocked.
4. Select **System Password**. Update or delete the existing system password, and press Enter or Tab.
5. Select **Setup Password**. Update or delete the existing setup password, and press Enter or Tab.
 **NOTE:** If you change the system password and/or setup password, reenter the new password when prompted. If you delete the system password and/or setup password, confirm the deletion when prompted.
6. Press Esc. A message prompts you to save the changes.
7. Press Y to save the changes and exit from **System Setup**.
The computer restarts.

Clearing system and setup passwords

About this task

To clear the system or setup passwords, contact Dell technical support as described at [Contact Support](#).

 **NOTE:** For information about how to reset Windows or application passwords, see the documentation accompanying Windows or your application.

Clearing CMOS settings

About this task

 **CAUTION:** Clearing CMOS settings resets the BIOS settings on your computer.

Steps

1. Remove the [back cover](#).
2. Remove the [coin-cell battery](#).
3. Wait for one minute.
4. Replace the [coin-cell battery](#).
5. Replace the [back cover](#).

Troubleshooting

Switching Between PC Mode and TV Mode in input-source selection button when PC powered on

About this task

The following images indicate Switching Between PC Mode and TV Mode in input-source selection button when PC powered on and it provides a visual representation of the procedure.

PC Mode:

PC Mode allows the system to operate as a standard all in one computer.

1. The internal system and operating system control the display.
2. All Windows display features are available, including resolution and refresh rate adjustments.
3. Display configuration changes can only be made through the operating system.
4. The on screen display (OSD) provides access only to the Mode Switch (PC Mode / TV Mode).

TV Mode (HDMI In Mode):

TV Mode configures the AIO to function as a standalone monitor.

1. The display receives video from an external device (set top box, gaming console, laptop, etc.) through HDMI In.
2. The internal PC functions are paused while the system operates as a dedicated monitor.
3. Ideal for scenarios where the AIO is used as an entertainment or auxiliary display.

TV Mode only through HDMI-in when PC powered off

TV Mode (HDMI In Mode):TV Mode configures the AIO to function as a standalone monitor.

1. The display receives video from an external device (set top box, gaming console, laptop, etc.) through HDMI In.
2. Ideal for scenarios where the AIO is used as an entertainment or auxiliary display.
3. This Feature requires **Deep Sleep Control to be disabled**.

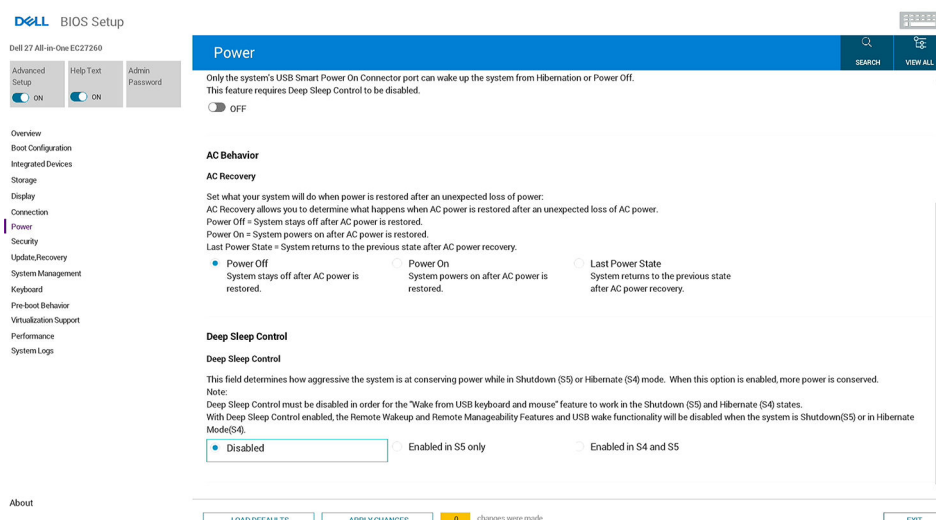


Figure 45. BIOS Setup

Table 31. When to Use Each Mode

Mode	Use Case	Behavior
PC Mode	Standard AIO computer use	OS manages display; full PC performance and features
TV Mode (HDMI-in)	External video source (console, set-top box, laptop)	AIO operates as a standalone monitor; PC functions paused

Dell SupportAssist Pre-boot System Performance Check diagnostics

About this task

SupportAssist diagnostics (also known as system diagnostics) performs a complete check of your hardware. The Dell SupportAssist Pre-boot System Performance Check diagnostics is embedded within the BIOS and launched by the BIOS internally. The embedded system diagnostics provides options for particular devices or device groups allowing you to:

- Run tests automatically or in an interactive mode.
- Repeat the tests.
- Display or save test results.
- Run thorough tests to add more options and obtain details about any failed devices.
- View status messages that inform you when the tests are completed successfully.
- View error messages that inform you of problems encountered during testing.

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

For more information, see [How to Run Dell Preboot Diagnostics and Hardware Tests on Your Dell Computer](#).

Running the SupportAssist Pre-Boot System Performance Check

Steps

1. Turn on your computer.
2. As the computer boots, press the F12 key.
3. On the boot menu screen, select **Diagnostics**.
The quick diagnostic test begins.

 **NOTE:** For more information about running the SupportAssist Pre-Boot System Performance Check on a specific device, see [Dell Support Site](#).

4. If there are any issues, error codes are displayed.
Note the error code and validation number and contact Dell.

Power-Supply Unit Built-in Self-Test

Built-in Self-Test (BIST) helps determine if the power-supply unit is working. To run self-test diagnostics on the power-supply unit of a desktop or all-in-one computer, search in the Knowledge Base Resource at [Dell Support Site](#).

System-diagnostic lights

This section lists the system-diagnostic lights of your Dell 27 All-in-One EC27260.

The following table shows different Service LED blinking patterns and associated problems. The diagnostic light codes consist of a two-digit number, and the digits are separated by a comma. The number stands for a blinking pattern; the first digit shows the number of blinks in amber color, and the second digit shows the number of blinks in white color. The Service LED blinks in the following manner:

- The Service LED blinks the number of times equal to the value of the first digit and turns off with a short pause.
- After that, the Service LED blinks the number of times equal to the value of the second digit.
- The Service LED turns off again with a longer pause.
- After the second pause, the blinking pattern will be repeated.

Table 32. Diagnostic light codes

Diagnostic light codes (Amber, White)	Problem description
1,1	TPM Detection Failure
1,2	Unrecoverable SPI Flash Failure
1,5	EC unable to program i-Fuse
1,6	Generic catch-all for ungraceful EC code flow errors
1,7	Non-RPMC Flash on Boot Guard fused system
1,8	Chipset "Catastrophic Error" signal has tripped
2,1	CPU configuration or CPU failure
2,2	System board: BIOS or Read-Only Memory (ROM) failure
2,3	No memory, or Random-Access Memory (RAM) detected
2,4	Memory, or Random-Access Memory (RAM) failure
2,5	Invalid memory module
2,6	System board/Chipset Error
2,7	LCD failure SBIOS message
2,8	Display power-rail failure on the system board
3,1	CMOS battery failure
3,2	PCI of Video card/chip failure
3,3	Recovery image not found
3,4	Recovery image found but invalid
3,5	EC power-rail error
3,6	Flash corruption detected by SBIOS
3,7	Timeout waiting on ME to reply to HECI message
4,1	Memory DIMM power rail failure
4,2	CPU Power cable connection issue

Recovering the operating system

When your computer is unable to boot to the operating system even after repeated attempts, it automatically starts Dell SupportAssist OS Recovery.

Dell SupportAssist OS Recovery is a standalone tool that is preinstalled on Dell computers running the Windows operating system. It consists of tools to diagnose and troubleshoot issues that may occur before your computer boots to the operating system. It enables you to diagnose hardware issues, repair your computer, back up your files, and restore your computer to its factory state.

You can also download it from the Dell Support website to troubleshoot and fix your computer when it fails to boot into the primary operating system due to software or hardware failures.

For more information about the Dell SupportAssist OS Recovery, see *Dell SupportAssist OS Recovery User's Guide* at [Serviceability Tools at the Dell Support Site](#). Click **SupportAssist** and then click **SupportAssist OS Recovery**.

 **NOTE:** Windows 11 IoT Enterprise LTSC 2024 and Dell ThinOS 10 do not support Dell SupportAssist. For more information about recovering ThinOS 10, see [Recovery mode using R-Key](#).

Real-Time Clock (RTC Reset)

The Real-Time Clock (RTC) reset function enables you or the service technician to recover Dell computers from No POST/No Power/No Boot situations.

Start the RTC reset with the computer powered off and connected to AC power. Press and hold the power button for twenty-five seconds. The computer RTC Reset occurs after you release the power button.

Backup media and recovery options

It is recommended to create a recovery drive to troubleshoot and fix problems that may occur with Windows. Dell provides multiple options for recovering the Windows operating system on your Dell computer. For more information, see [Dell Windows Backup Media and Recovery Options](#).

Network power cycle

About this task

If your computer is unable to access the Internet due to network connectivity issues, reset your network devices by performing the following steps:

Steps

1. Turn off the computer.
2. Turn off the modem.

 **NOTE:** Some Internet service providers (ISPs) provide a modem and router combo device.

3. Turn off the wireless router.
4. Wait for 30 seconds.
5. Turn on the wireless router.
6. Turn on the modem.
7. Turn on the computer.

Getting help and contacting Dell Technologies

Self-help resources

You can get information and help on Dell Technologies products and services using these self-help resources:

Table 33. Self-help resources

Self-help resources	Resource location
Information about Dell Technologies products and services	Dell Site
Contact Support	In Windows search, type <code>Contact Support</code> , and press Enter.
Online help for operating system	Windows Support Site
Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals, and documents.	Your Dell Technologies computer is uniquely identified using a Service Tag or Express Service Code. To view relevant support resources for your Dell Technologies computer, enter the Service Tag or Express Service Code at Dell Support Site. For more information about how to find the Service Tag for your computer, see Instructions on how to find your Service Tag or Serial Number.
Dell Technologies knowledge base articles	1. Go to Dell Support Site. 2. On the menu bar at the top of the Support page, select Support > Support Library. 3. In the Search field on the Support Library page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles.

Contacting Dell Technologies

To contact Dell Technologies for sales, technical support, or customer service issues, see [Contact Support at Dell Support Site](#).

 **NOTE:** Availability of the services may vary depending on the country or region, and product.

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

Revision history

Tracks all updates that are made to the document. It typically includes the date of change, version number, and a brief description of the modification. This log helps maintain transparency, accountability, and a clear timeline of progress.

Table 34. Revision history

Revision	Date	Description
A03	07-2026	Added CRU and FRU video links.
A02	05-2026	Updated CRU topic images.
A01	02-2026	Updated CRU topic images.
A00	02-2026	Original publish date.