



## Hardware Reference Guide

HP EliteDesk 800 G2 Desktop Mini  
HP EliteDesk 705 G2 Desktop Mini  
HP ProDesk 600 G2 Desktop Mini  
HP ProDesk 400 G2 Desktop Mini

© Copyright 2015 Hewlett-Packard Development Company, L.P.

Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

First Edition: July 2015

Document part number: 822839-001

### **Product Notice**

This guide describes features that are common to most models. Some features may not be available on your computer.

Not all features are available in all editions of Windows® 8. This computer may require upgraded and/or separately purchased hardware, drivers and/or software to take full advantage of Windows 8 functionality. Go to <http://www.microsoft.com> for details.

This computer may require upgraded and/or separately purchased hardware and/or a DVD drive to install the Windows 7 software and take full advantage of Windows 7 functionality. Go to <http://windows.microsoft.com/en-us/windows7/get-know-windows-7> for details.

### **Software terms**

By installing, copying, downloading, or otherwise using any software product preinstalled on this computer, you agree to be bound by the terms of the HP End User License Agreement (EULA). If you do not accept these license terms, your sole remedy is to return the entire unused product (hardware and software) within 14 days for a refund subject to the refund policy of your place of purchase.

For any further information or to request a full refund of the computer, please contact your local point of sale (the seller).

## About This Book

This guide provides basic information for upgrading the HP Desktop Mini Business PC.

---

 **WARNING!** Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.

 **CAUTION:** Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.

 **NOTE:** Text set off in this manner provides important supplemental information.

---



---

# Table of contents

<b>1 Product features</b>	<b>1</b>
Standard configuration features	1
Front panel components (EliteDesk 800 and ProDesk 600)	2
Front panel components (EliteDesk 705)	3
Front panel components (ProDesk 400)	4
Rear panel components (EliteDesk 800, EliteDesk 705, and ProDesk 600)	5
Rear panel components (ProDesk 400)	6
Serial number location	7
<b>2 Hardware upgrades</b>	<b>8</b>
Serviceability features	8
Warnings and cautions	8
Connecting the AC power cord	9
Removing the computer access panel	10
Replacing the computer access panel	11
Changing from desktop to tower configuration	12
Installing additional memory	13
SODIMMs	13
SODIMM specifications	13
Populating SODIMM sockets	14
Installing SODIMMs	15
Removing and replacing a hard disk drive (HDD)	18
Replacing an M.2 PCIe solid state drive (SSD)	20
Replacing the WLAN module	25
Installing an external antenna	30
Replacing the battery	35
Installing a security lock	39
Attaching the computer to a mounting fixture	40
Synchronizing the optional wireless keyboard and mouse	41

<b>Appendix A Electrostatic discharge .....</b>	<b>43</b>
Preventing electrostatic damage .....	43
Grounding methods .....	43
<b>Appendix B Computer operating guidelines, routine care and shipping preparation .....</b>	<b>44</b>
Computer operating guidelines and routine care .....	44
Shipping preparation .....	45
<b>Index .....</b>	<b>46</b>

---

# 1 Product features

## Standard configuration features

Features may vary depending on the model. For a complete listing of the hardware and software installed in the computer, run the diagnostic utility (included on some computer models only).

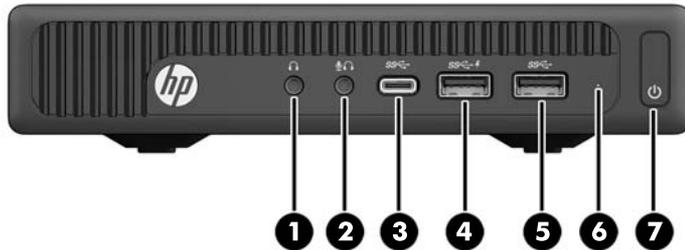


---

**NOTE:** This computer model can be used in a tower orientation or a desktop orientation. The tower stand is sold separately.

---

## Front panel components (EliteDesk 800 and ProDesk 600)



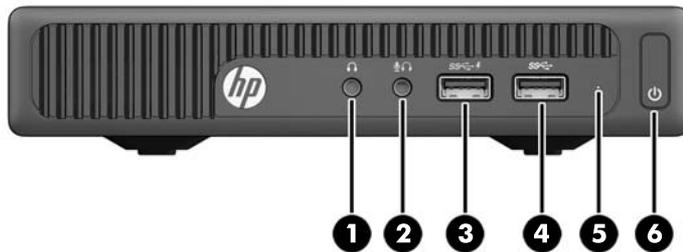
 **NOTE:** Your computer model may look slightly different from the illustration in this section.

1	 Headphone Connector	5	 USB 3.0 Port
2	 Microphone or Headphone Connector (software selectable, default mode is microphone)	6	HDD Activity LED
3	 USB 3.0 Type C Port	7	 Dual-State Power Button
4	 USB 3.0 Port-Charging		

**NOTE:** The USB 3.0 Port-Charging also provides current to charge a device such as a Smart Phone. The charging current is available whenever the AC power cord is connected to the system, even when the system is off.

**NOTE:** The Power On Light is normally white when the power is on. If it is flashing red, there is a problem with the computer and it is displaying a diagnostic code. Refer to the *Maintenance and Service Guide* to interpret the code.

## Front panel components (EliteDesk 705)



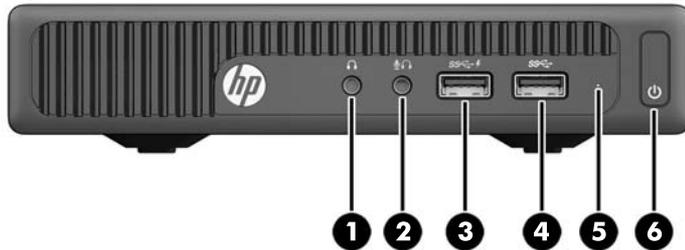
 **NOTE:** Your computer model may look slightly different from the illustration in this section.

1		Headphone Connector	4		USB 3.0 Port
2		Microphone Connector	5		HDD Activity LED
3		USB 3.0 Port-Charging	6		Dual-State Power Button

**NOTE:** The USB 3.0 Port-Charging also provides current to charge a device such as a Smart Phone. The charging current is available whenever the AC power cord is connected to the system, even when the system is off.

**NOTE:** The Power On Light is normally white when the power is on. If it is flashing red, there is a problem with the computer and it is displaying a diagnostic code. Refer to the *Maintenance and Service Guide* to interpret the code.

## Front panel components (ProDesk 400)



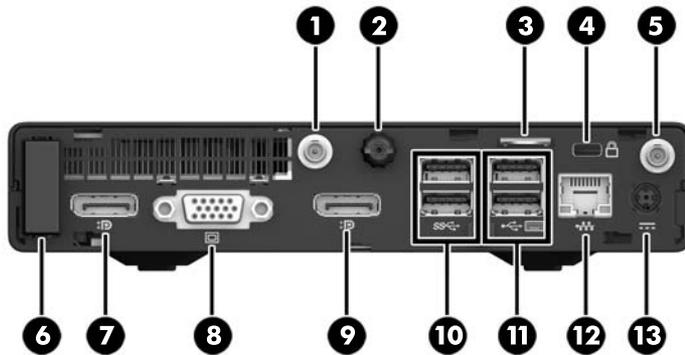
**NOTE:** Your computer model may look slightly different from the illustration in this section.

1	 Headphone Connector	4	 USB 3.0 Port
2	 Microphone Connector	5	HDD Activity LED
3	 USB 3.0 Port–Charging	6	 Dual-State Power Button

**NOTE:** The USB 3.0 Port–Charging also provides current to charge a device such as a Smart Phone. The charging current is available whenever the AC power cord is connected to the system, even when the system is off.

**NOTE:** The Power On Light is normally white when the power is on. If it is flashing red, there is a problem with the computer and it is displaying a diagnostic code. Refer to the *Maintenance and Service Guide* to interpret the code.

# Rear panel components (EliteDesk 800, EliteDesk 705, and ProDesk 600)

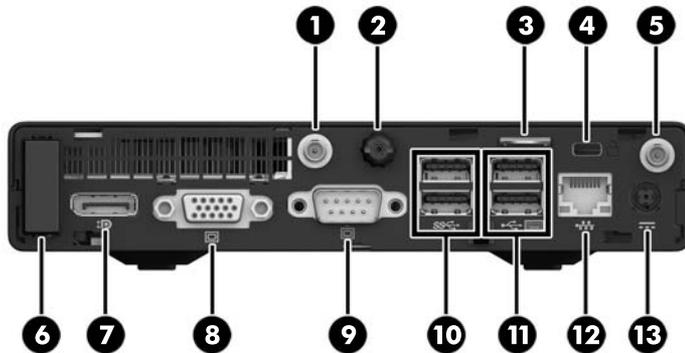


 **NOTE:** Your computer model may look slightly different from the illustration in this section.

1	External Antenna Connector	8		VGA Monitor Connector
2	Thumbscrew	9		DisplayPort (default, shown), HDMI, or Serial Connector
3	Padlock Loop	10		USB 3.0 Ports (2) (blue)
4	 Cable Lock Slot	11		USB 2.0 Connectors (2) (black)
5	External Antenna Connector	12		RJ-45 Network Connector
6	Antenna Cover	13		Power Connector
7	 DisplayPort Monitor Connector			

## Rear panel components (ProDesk 400)

 **NOTE:** Your computer model may look slightly different from the illustration in this section.



1	External Antenna Connector	8	 VGA Monitor Connector
2	Thumbscrew	9	 Serial Port
3	Padlock Loop	10	 USB 3.0 Ports (2) (blue)
4	 Cable Lock Slot	11	 USB 2.0 Connectors (2) (black)
5	External Antenna Connector	12	 RJ-45 Network Connector
6	Antenna Cover	13	 Power Connector
7	 DisplayPort Monitor Connector		

## Serial number location

Each computer has a unique serial number and a product ID number that are located on the exterior of the computer. Keep these numbers available for use when contacting customer service for assistance.



---

## 2 Hardware upgrades

### Serviceability features

The computer includes features that make it easy to upgrade and service. No tools are needed for most of the installation procedures described in this chapter.

### Warnings and cautions

Before performing upgrades be sure to carefully read all of the applicable instructions, cautions, and warnings in this guide.

---

 **WARNING!** To reduce the risk of personal injury from electrical shock, hot surfaces, or fire:

Disconnect the AC power cord from the AC outlet and allow the internal system components to cool before touching.

Do not connect telecommunications or telephone connectors to the network interface controller (NIC) receptacles.

Do not disable the AC power cord grounding plug. The grounding plug is an important safety feature.

Plug the AC power cord in a grounded (earthed) AC outlet that is easily accessible at all times.

To reduce the risk of serious injury, read the *Safety & Comfort Guide*. It describes proper workstation, setup, posture, and health and work habits for computer users, and provides important electrical and mechanical safety information. This guide is located on the web at <http://www.hp.com/ergo>.

 **WARNING!** Energized and moving parts inside.

Disconnect power to the equipment before removing the enclosure.

Replace and secure the enclosure before re-energizing the equipment.

 **CAUTION:** Static electricity can damage the electrical components of the computer or optional equipment. Before beginning these procedures, ensure that you are discharged of static electricity by briefly touching a grounded metal object. See [Electrostatic discharge on page 43](#) for more information.

When the computer is plugged into an AC power source, voltage is always applied to the system board. You must disconnect the AC power cord from the power source before opening the computer to prevent damage to internal components.

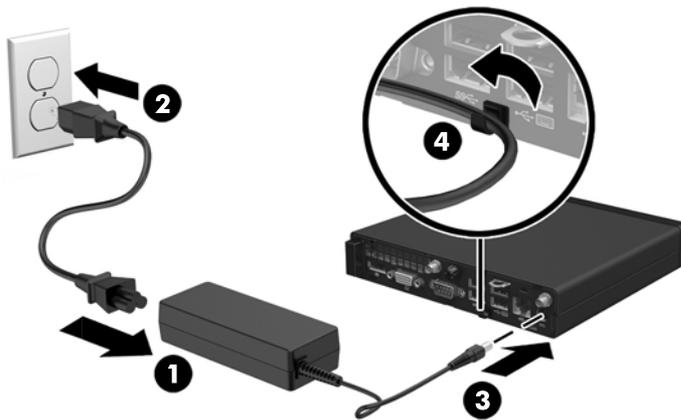
 **NOTE:** Your computer model may look slightly different from the illustrations in this chapter.

---

## Connecting the AC power cord

When connecting the AC adapter, it is important to follow the steps below to ensure the power cord does not pull free from the computer.

1. Connect the female end of the AC power cord to the AC adapter (1).
2. Plug the other end of the AC power cord into an AC outlet (2).
3. Connect the round end of the AC adapter cord to the power connector on the rear of the computer (3).
4. Route the AC adapter cord through the retainer clip to prevent the AC adapter cord from becoming disconnected from the computer (4).



---

**⚠ CAUTION:** Failure to secure the AC adapter cord with the retainer clip may result in the adapter cord becoming disconnected and loss of data.

---

## Removing the computer access panel

To access internal components, you must remove the access panel:

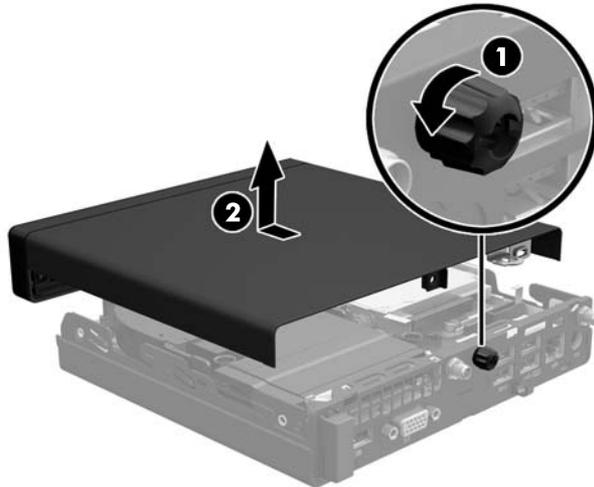
1. Remove/disengage any security devices that prohibit opening the computer.
2. Remove all removable media, such as a USB flash drive, from the computer.
3. Turn off the computer properly through the operating system, then turn off any external devices.
4. Disconnect the AC power cord from the AC outlet and disconnect any external devices.

---

**CAUTION:** Regardless of the power-on state, voltage is always present on the system board as long as the system is plugged into an active AC outlet. You must disconnect the AC power cord to avoid damage to the internal components of the computer.

---

5. If the computer is on a stand, remove the computer from the stand and lay the computer down.
6. Loosen the thumbscrew on the rear of the computer (1).
7. Slide the panel forward and lift it off the computer (2).



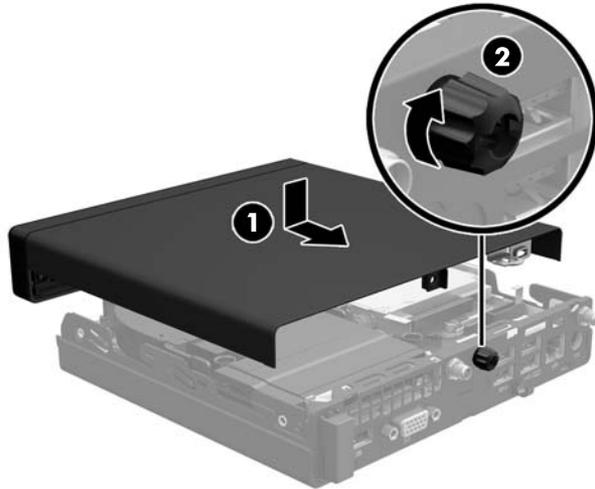
---

**NOTE:** Your computer model may look slightly different from the illustration in this section.

---

## Replacing the computer access panel

1. Place the panel on the computer and slide it back (1).
2. Tighten the thumbscrew (2) to secure the panel in place.



 **NOTE:** Your computer model may look slightly different from the illustration in this section.

## Changing from desktop to tower configuration

The computer can be used in a tower orientation with an optional tower stand that can be purchased from HP.

1. Remove/disengage any security devices that prohibit opening the computer.
2. Remove all removable media, such as a USB flash drive, from the computer.
3. Turn off the computer properly through the operating system, then turn off any external devices.
4. Disconnect the AC power cord from the AC outlet and disconnect any external devices.

---

**CAUTION:** Regardless of the power-on state, voltage is always present on the system board as long as the system is plugged into an active AC outlet. You must disconnect the AC power cord to avoid damage to the internal components of the computer.

---

5. Orient the computer so that its right side is facing up and place the computer in the optional stand.



---

**NOTE:** To stabilize the computer in a tower orientation, HP recommends the use of the optional tower stand.

---

6. Reconnect the AC power cord and any external devices, then turn on the computer.

---

**NOTE:** Ensure at least 10.2 centimeters (4 inches) of space on all sides of the computer remains clear and free of obstructions.

---

7. Lock any security devices that were disengaged when the access panel was removed.

# Installing additional memory

The computer comes with small outline, dual inline memory modules (SODIMMs).

## SODIMMs

The memory sockets on the system board can be populated with up to two industry-standard SODIMMs. These memory sockets are populated with at least one preinstalled SODIMM. To achieve the maximum memory support, you can populate the system board with up to 32 GB (EliteDesk 800 and ProDesk 600) or 16 GB (EliteDesk 705 and ProDesk 400) of memory.

## SODIMM specifications

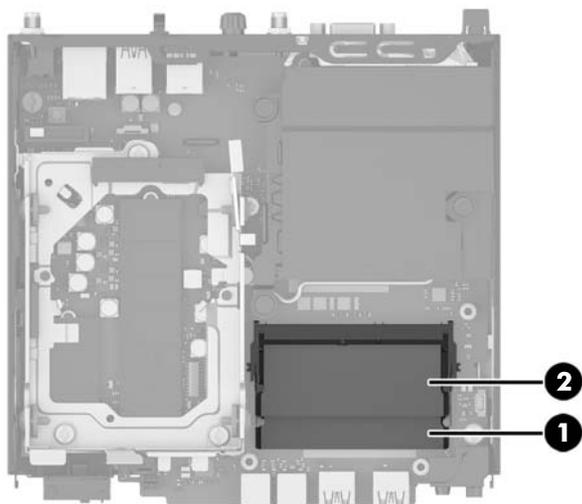
For proper system operation, the SODIMMs must meet the following qualifications:

	EliteDesk 800 and ProDesk 600	EliteDesk 705	ProDesk 400
<b>SODIMM</b>	1.2 volt DDR4-SDRAM DIMMs	1.5 volt DDR3-SDRAM DIMMs or 1.35 volt DDR3L-SDRAM (Low Power) DIMMs	1.2 volt DDR4-SDRAM DIMMs
<b>Compliance</b>	unbuffered non-ECC PC4-17000 DDR4-2133 MHz-compliant	unbuffered non-ECC PC3-12800 DDR3/DDR3L-1600 MHz-compliant	unbuffered non-ECC PC4-17000 DDR4-2133 MHz-compliant
<b>Pins</b>	industry-standard 288-pin containing the mandatory Joint Electronic Device Engineering Council (JEDEC) specification	industry-standard 240-pin containing the mandatory Joint Electronic Device Engineering Council (JEDEC) specification	industry-standard 288-pin containing the mandatory Joint Electronic Device Engineering Council (JEDEC) specification
<b>Support</b>	support CAS latency 15 DDR4 2133 MHz (15-15-15 timing)	support CAS latency 11 DDR3/DDR3L 1600 MHz (11-11-11 timing)	support CAS latency 15 DDR4 2133 MHz (15-15-15 timing)
<b>Slots</b>	2	2	2
<b>Maximum Memory</b>	32 GB	16 GB	32 GB
<b>Supported</b>	512 Mbit, 1 Gbit, and 2 Gbit non-ECC memory technologies single-sided and double-sided DIMMs		
<b>Note</b>	The system will not operate properly if you install unsupported DIMM memory. DIMMs constructed with x8 and x16 DDR devices are supported; DIMMs constructed with x4 SDRAM are not supported.		

HP offers upgrade memory for this computer and advises that the consumer purchase it to avoid compatibility issues with unsupported third-party memory.

## Populating SODIMM sockets

There are two SODIMM sockets on the system board, with one socket per channel. The sockets are labeled DIMM1 and DIMM3. The DIMM1 socket operates in memory channel B. The DIMM3 socket operates in memory channel A.



Item	Description	System Board Label	Socket Color
1	SODIMM1 socket, Channel B	DIMM1	Black
2	SODIMM3 socket, Channel A	DIMM3	Black

The system will automatically operate in single channel mode, dual channel mode, or flex mode, depending on how the SODIMMs are installed.

- The system will operate in single channel mode if the SODIMM sockets are populated in one channel only.
- The system will operate in a higher-performing dual channel mode if the memory capacity of the SODIMM in Channel A is equal to the memory capacity of the SODIMM in Channel B.
- The system will operate in flex mode if the memory capacity of the SODIMM in Channel A is not equal to the memory capacity of the SODIMM in Channel B. In flex mode, the channel populated with the least amount of memory describes the total amount of memory assigned to dual channel and the remainder is assigned to single channel. If one channel will have more memory than the other, the larger amount should be assigned to channel A.
- In any mode, the maximum operational speed is determined by the slowest SODIMM in the system.

## Installing SODIMMs

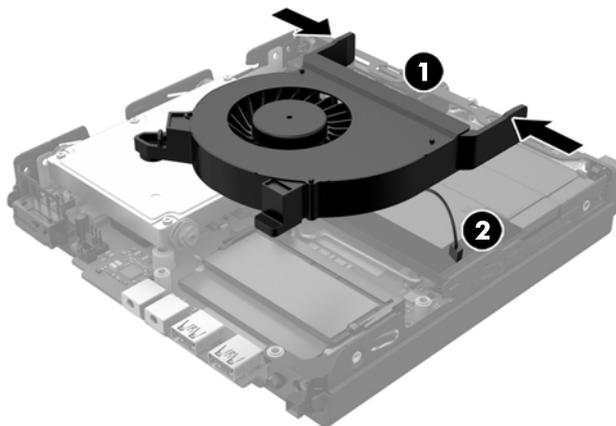
**⚠ CAUTION:** You must disconnect the AC power cord and wait approximately 30 seconds for the power to drain before adding or removing memory modules. Regardless of the power-on state, voltage is always supplied to the memory modules as long as the computer is plugged into an active AC outlet. Adding or removing memory modules while voltage is present may cause irreparable damage to the memory modules or system board.

The memory module sockets have gold-plated metal contacts. When upgrading the memory, it is important to use memory modules with gold-plated metal contacts to prevent corrosion and/or oxidation resulting from having incompatible metals in contact with each other.

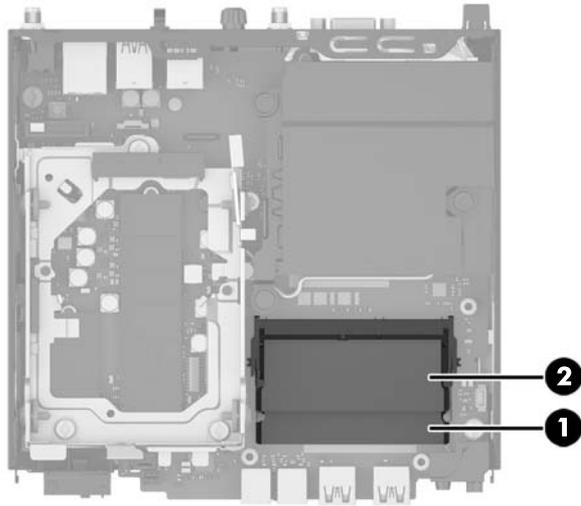
Static electricity can damage the electronic components of the computer or optional cards. Before beginning these procedures, ensure that you are discharged of static electricity by briefly touching a grounded metal object. For more information, refer to [Electrostatic discharge on page 43](#).

When handling a memory module, be careful not to touch any of the contacts. Doing so may damage the module.

1. Remove/disengage any security devices that prohibit opening the computer.
2. Remove all removable media, such as a USB flash drive, from the computer.
3. Turn off the computer properly through the operating system, then turn off any external devices.
4. Disconnect the AC power cord from the AC outlet and disconnect any external devices.
5. If the computer is on a stand, remove the computer from the stand and lay the computer down.
6. Remove the computer access panel.
7. Squeeze the fan latches at the two arrows (1) to release the fan.
8. Disconnect the fan plug from the system board (2), and then lift the fan out of the chassis.

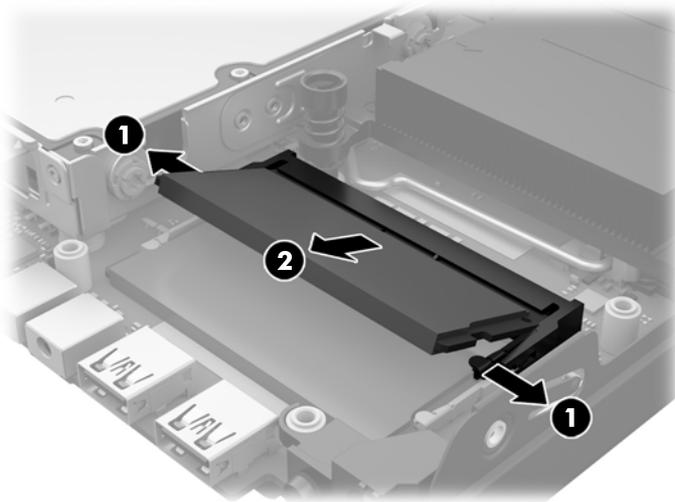


9. Locate the memory modules on the system board.

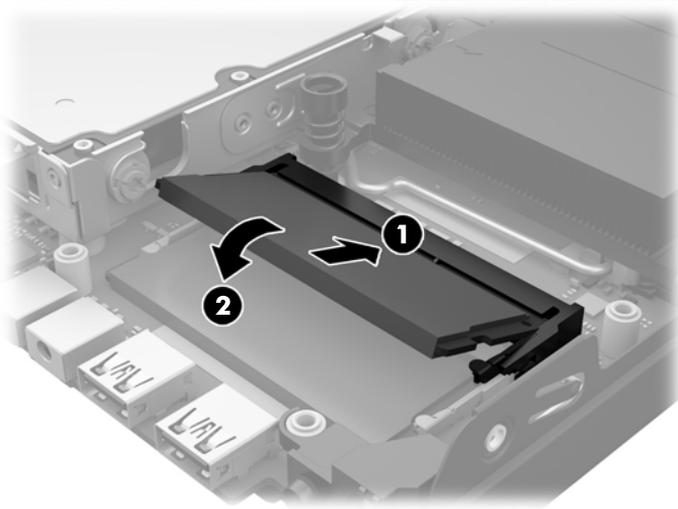


Item	Description	System Board Label	Socket Color
1	SODIMM1 socket, Channel B	DIMM1	Black
2	SODIMM3 socket, Channel A	DIMM3	Black

- To remove a SODIMM, press outward on the two latches on each side of the SODIMM (1) then pull the SODIMM out of the socket (2).

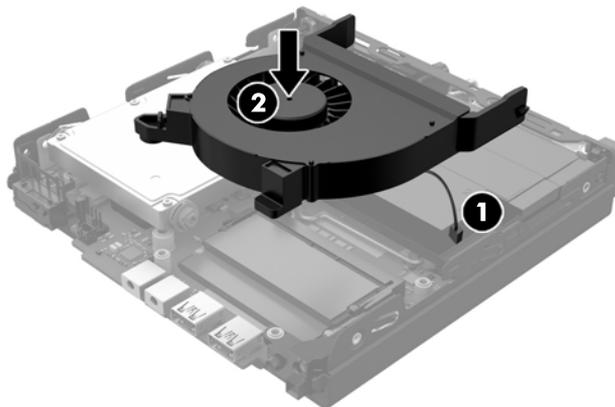


11. Slide the new SODIMM into the socket at approximately a 30° angle (1) then press the SODIMM down (2) so that the latches lock it in place.



 **NOTE:** A memory module can be installed in only one way. Match the notch on the module with the tab on the memory socket.

12. Connect the fan plug to the system board (1).
13. Set the fan into place and press it down to engage the latches (2).



14. Replace the access panel.
15. If the computer was on a stand, replace the stand.
16. Plug in the AC power cord and turn on the computer.
17. Lock any security devices that were disengaged when the computer cover or access panel was removed.

The computer automatically recognizes the additional memory when you turn on the computer.

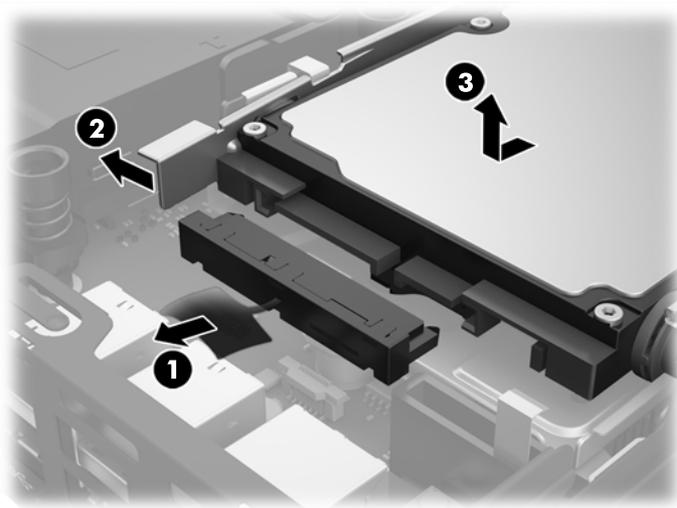
## Removing and replacing a hard disk drive (HDD)

 **NOTE:** Before you remove the old HDD, be sure to back up the data from the old HDD so that you can transfer the data to the new HDD.

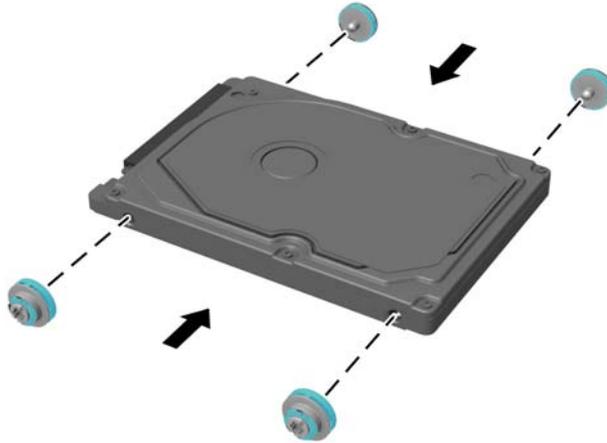
1. Remove/disengage any security devices that prohibit opening the computer.
2. Remove all removable media, such as a USB flash drive, from the computer.
3. Turn off the computer properly through the operating system, then turn off any external devices.
4. Disconnect the AC power cord from the AC outlet and disconnect any external devices.

 **CAUTION:** Regardless of the power-on state, voltage is always present on the system board as long as the system is plugged into an active AC outlet. You must disconnect the AC power cord to avoid damage to the internal components of the computer.

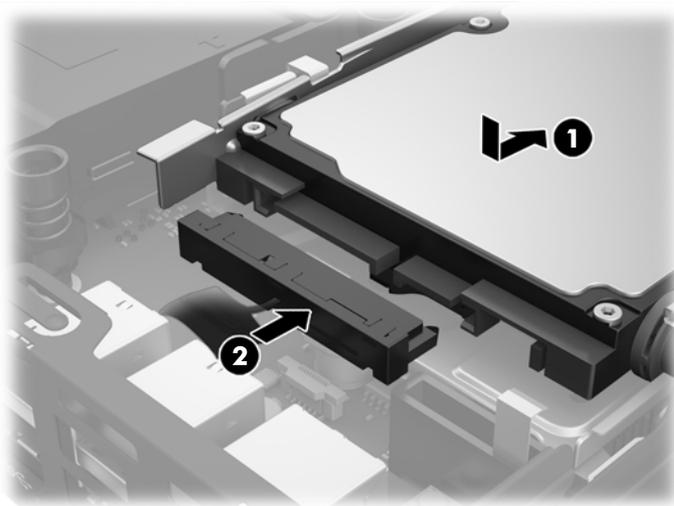
5. If the computer is on a stand, remove the computer from the stand.
6. Remove the computer access panel.
7. Pull the blue tab (1) to disconnect the HDD power and data cable from the HDD.
8. Pull the release lever next to the rear of the HDD away from the HDD (2). While pulling the release lever out, slide the drive back until it stops, then lift the HDD up and out of the cage (3).



9. To install a HDD, you must transfer the silver and blue isolation mounting guide screws from the old HDD to the new HDD.



10. Align the guide screws with the slots on the chassis drive cage, press the HDD down into the cage, then slide it forward until it stops and locks in place (1).
11. Connect the HDD power and data cable (2) to the HDD.



12. Replace the access panel.
13. If the computer was on a stand, replace the stand.
14. Plug in the AC power cord and turn on the computer.
15. Lock any security devices that were disengaged when the access panel was removed.

## Replacing an M.2 PCIe solid state drive (SSD)

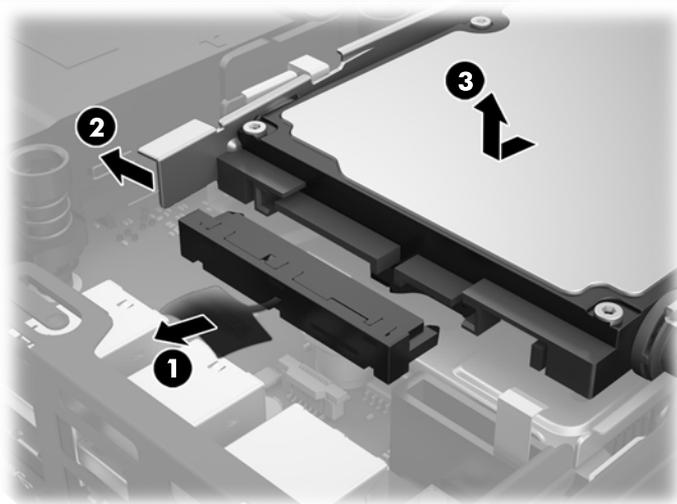
1. Remove/disengage any security devices that prohibit opening the computer.
2. Remove all removable media, such as a USB flash drive, from the computer.
3. Turn off the computer properly through the operating system, then turn off any external devices.
4. Disconnect the AC power cord from the AC outlet and disconnect any external devices.

**⚠ CAUTION:** Regardless of the power-on state, voltage is always present on the system board as long as the system is plugged into an active AC outlet. You must disconnect the AC power cord to avoid damage to the internal components of the thin client.

5. If the computer is on a stand, remove the computer from the stand and lay the computer down.
6. Remove the computer access panel.
7. Pull the blue tab (1) to disconnect the HDD power and data cable from the HDD.

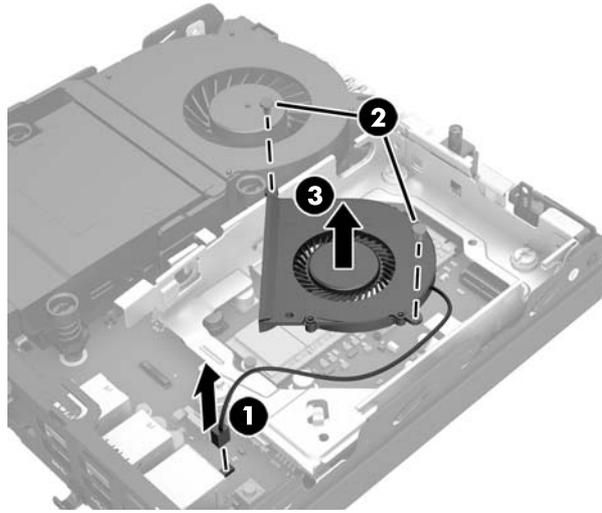
**⚠ WARNING!** To reduce risk of personal injury from hot surfaces, allow the internal system components to cool before touching.

8. Pull and hold the release lever next to the rear of the HDD outward (2).
9. Slide the drive back until it stops, and then lift the drive up and out of the cage (3).

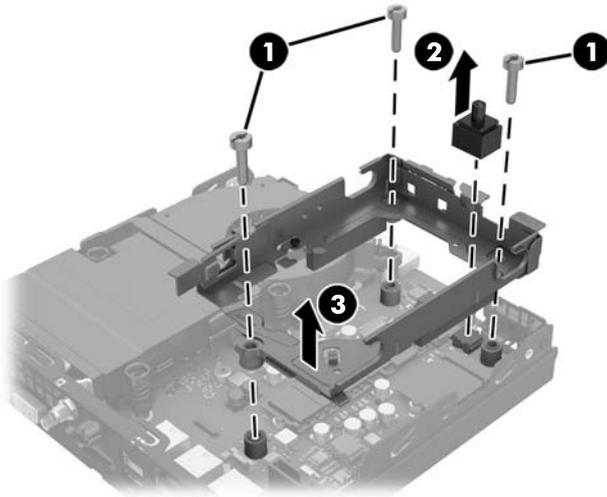


10. If your model is an EliteDesk 800, remove the secondary fan under the HDD.
  - a. Disconnect the fan plug from the system board (1).
  - b. Remove the two screws securing the secondary fan (2).

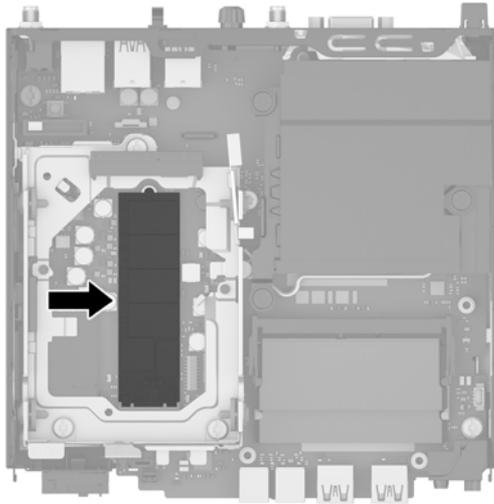
- c. Lift the fan out of the chassis (3).



- 11.** Remove the three screws securing the HDD cage to the chassis (1).
- 12.** Pull the hood sensor up and off the HDD cage (2).
- 13.** Lift the HDD cage out of the chassis (3).



14. Locate the SSD on the system board.



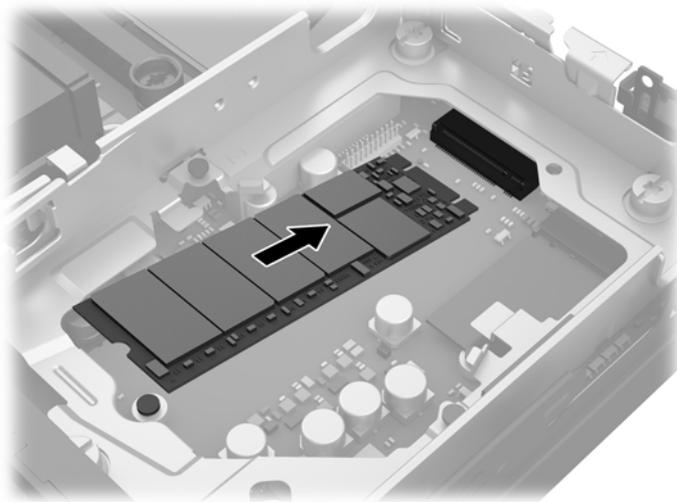
15. Remove the screw securing the SSD to the system board.
16. Grasp the SSD by the sides and carefully pull it out of the socket.
17. Insert the new SSD into the socket on the system board.

---

 **NOTE:** An SSD can be installed in only one way.

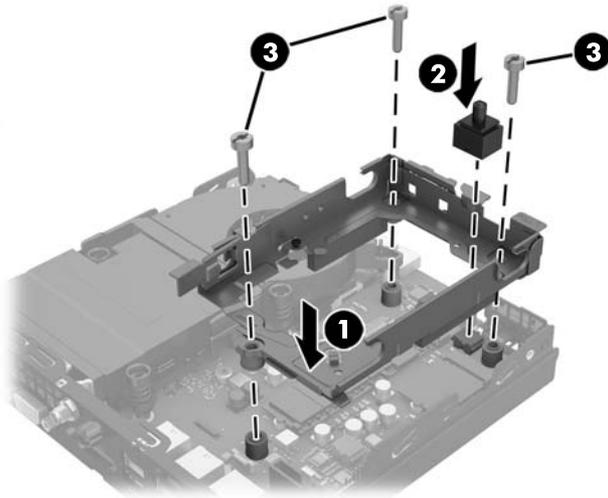
---

18. Press the SSD connectors firmly into the socket.
19. Press the SSD down to the system board and use the included screw to secure the SSD.

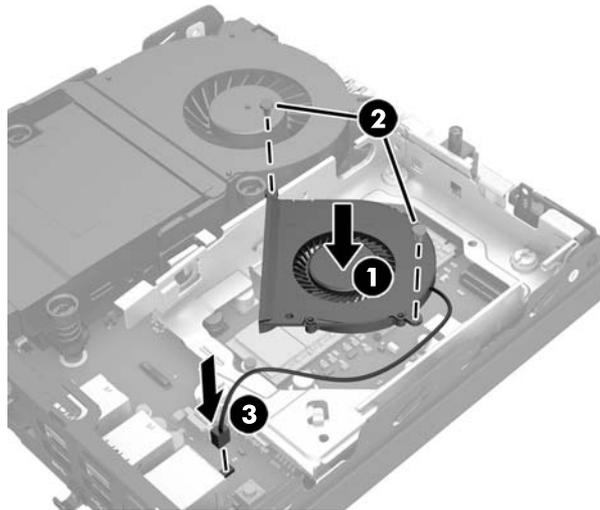


20. Set the HDD cage into the chassis (1).
21. Press the hood sensor firmly into place (2).

- 22.** Secure the HDD cage to the chassis with the three screws (3).

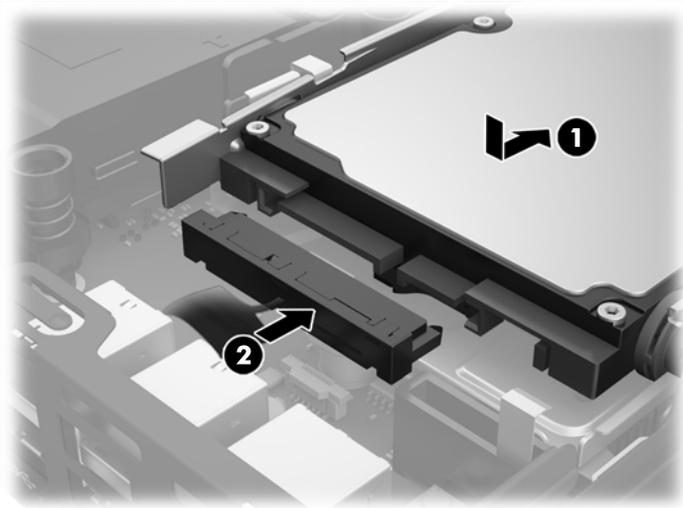


- 23.** If your model is an EliteDesk 800, replace the secondary fan under the HDD.
- a.** Set the fan in place in the HDD cage (1).
  - b.** Fasten the two screws to secure the fan to the chassis (2).
  - c.** Connect the fan plug to the system board (3).



- 24.** Align the HDD guide screws with the slots on the HDD drive cage, press the HDD down into the cage, then slide it forward until it stops and locks in place (1).

25. Connect the HDD power and data cable (2) to the HDD.



26. Replace the access panel.
27. If the computer was on a stand, replace the stand.
28. Plug in the AC power cord and turn on the computer.
29. Lock any security devices that were disengaged when the computer cover or access panel was removed.

## Replacing the WLAN module

1. Remove/disengage any security devices that prohibit opening the computer.
2. Remove all removable media, such as a USB flash drive, from the computer.
3. Turn off the computer properly through the operating system, then turn off any external devices.
4. Disconnect the AC power cord from the AC outlet and disconnect any external devices.

---

**⚠ CAUTION:** Regardless of the power-on state, voltage is always present on the system board as long as the system is plugged into an active AC outlet. You must disconnect the AC power cord to avoid damage to the internal components of the thin client.

---

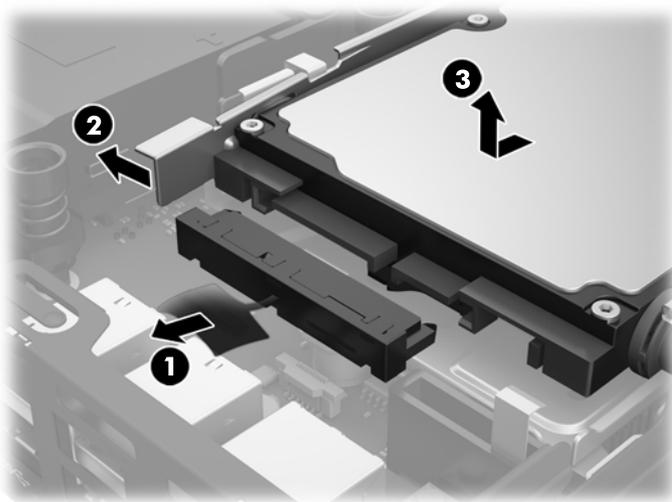
5. If the computer is on a stand, remove the computer from the stand and lay the computer down.
6. Remove the computer access panel.
7. Pull the blue tab (1) to disconnect the HDD power and data cable from the HDD.

---

**⚠ WARNING!** To reduce risk of personal injury from hot surfaces, allow the internal system components to cool before touching.

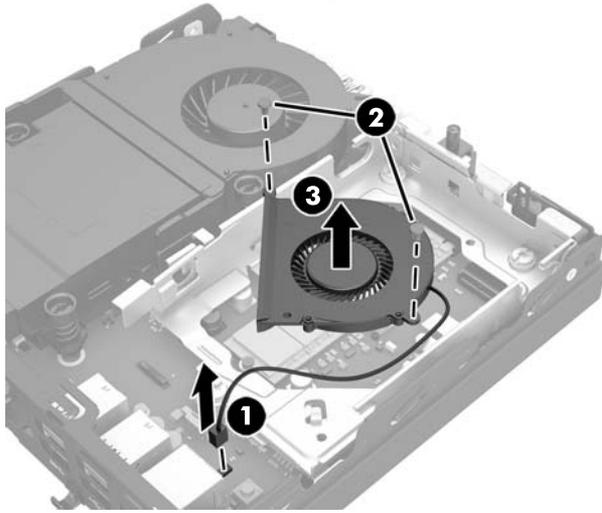
---

8. Pull and hold the release lever next to the rear of the HDD outward (2).
9. Slide the drive back until it stops, and then lift the drive up and out of the cage (3).

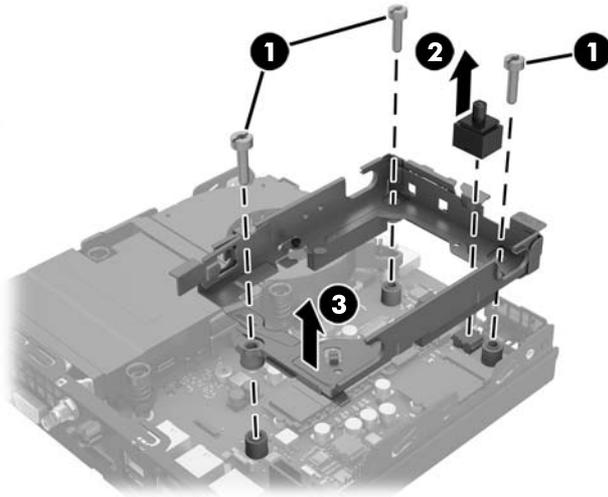


10. If your model is an EliteDesk 800, remove the secondary fan under the HDD.
  - a. Disconnect the fan plug from the system board (1).
  - b. Remove the two screws securing the secondary fan (2).

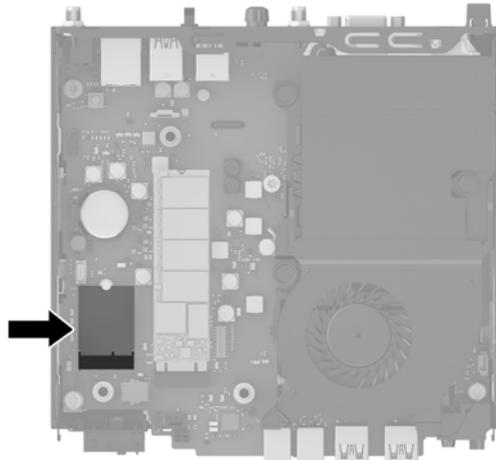
- c. Lift the fan out of the chassis (3).



11. Remove the three screws securing the HDD cage to the chassis (1).
12. Pull the hood sensor up and off the HDD cage (2).
13. Lift the HDD cage out of the chassis (3).



14. Locate the WLAN module on the system board.



15. Disconnect both antenna cables from the WLAN module.



**NOTE:** You may need to use a small tool, such as tweezers or needle-nose pliers, to disconnect and connect the antenna cables.

16. Grasp the WLAN module by the sides and pull it out of the socket.

17. Insert the new WLAN module into the socket on the system board.

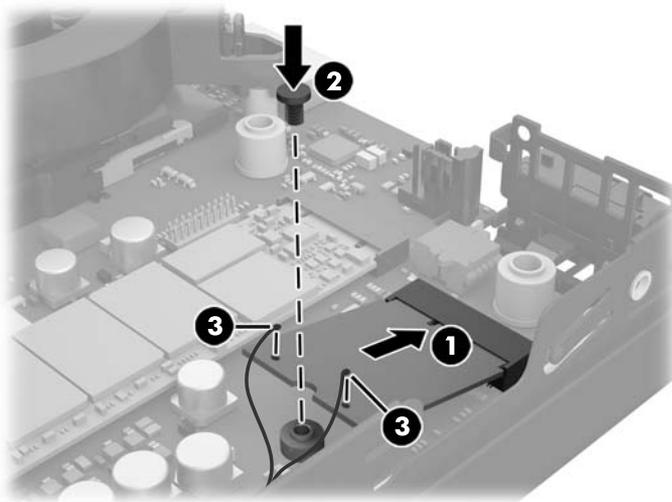


**NOTE:** A WLAN module can be installed in only one way.

18. Press the WLAN connectors firmly into the socket (1).

19. Press the WLAN module down to the system board and use the included screw to secure the module (2).

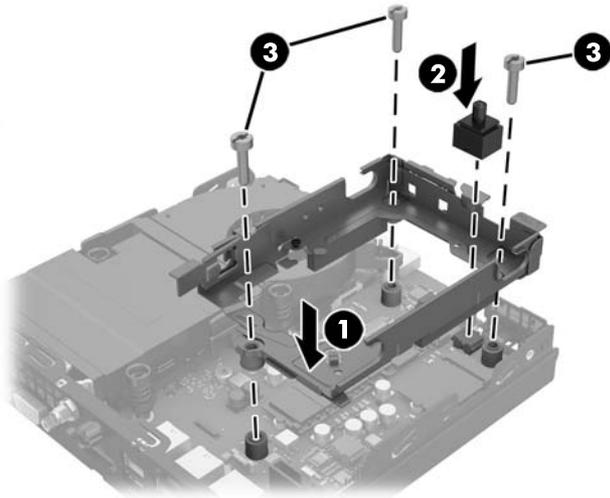
20. Attach the internal antenna to the antenna connectors (3) on the WLAN module.



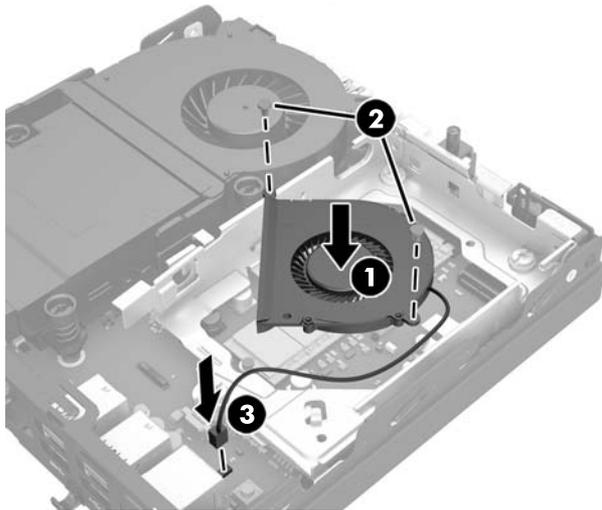
21. Set the HDD cage into the chassis (1).

22. Press the hood sensor firmly into place (2).

- 23.** Secure the HDD cage to the chassis with the three screws (3).

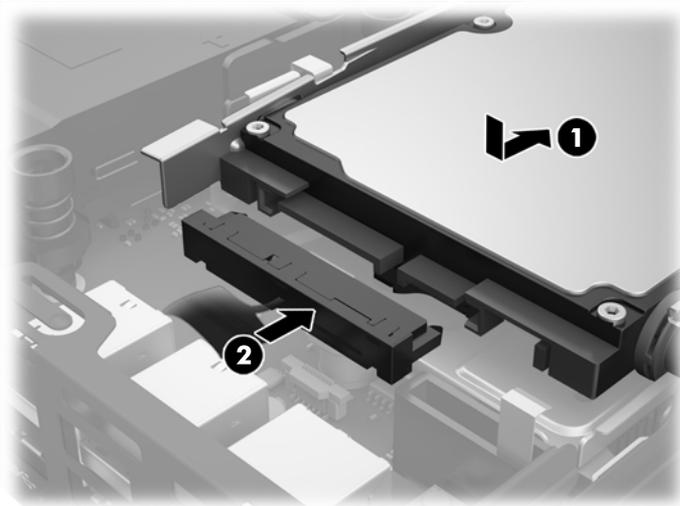


- 24.** If your model is an EliteDesk 800, replace the secondary fan under the HDD.
- a.** Set the fan in place in the HDD cage (1).
  - b.** Fasten the two screws to secure the fan to the chassis (2).
  - c.** Connect the fan plug to the system board (3).



- 25.** Align the HDD guide screws with the slots on the HDD drive cage, press the HDD down into the cage, then slide it forward until it stops and locks in place (1).

26. Connect the HDD power and data cable (2) to the HDD.



27. Replace the access panel.
28. If the computer was on a stand, replace the stand.
29. Plug in the AC power cord and turn on the computer.
30. Lock any security devices that were disengaged when the computer cover or access panel was removed.

## Installing an external antenna

Internal WLAN antennae are standard on all HP G2 Desktop Mini models. If the computer is to be installed in a metal kiosk or other enclosure, you may wish or need to use an external WLAN antenna.

1. Remove/disengage any security devices that prohibit opening the computer.
2. Remove all removable media, such as a USB flash drive, from the computer.
3. Turn off the computer properly through the operating system, then turn off any external devices.
4. Disconnect the AC power cord from the AC outlet and disconnect any external devices.

---

**⚠ CAUTION:** Regardless of the power-on state, voltage is always present on the system board as long as the system is plugged into an active AC outlet. You must disconnect the AC power cord to avoid damage to the internal components of the thin client.

---

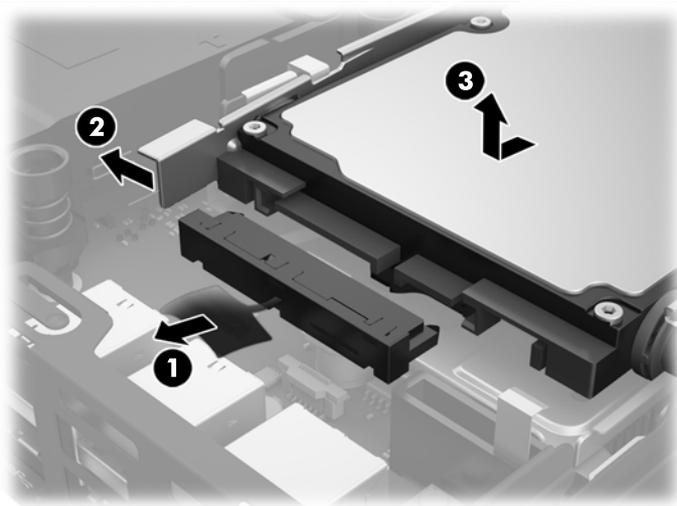
5. If the computer is on a stand, remove the computer from the stand and lay the computer down.
6. Remove the computer access panel.
7. Pull the blue tab (1) to disconnect the HDD power and data cable from the HDD.

---

**⚠ WARNING!** To reduce risk of personal injury from hot surfaces, allow the internal system components to cool before touching.

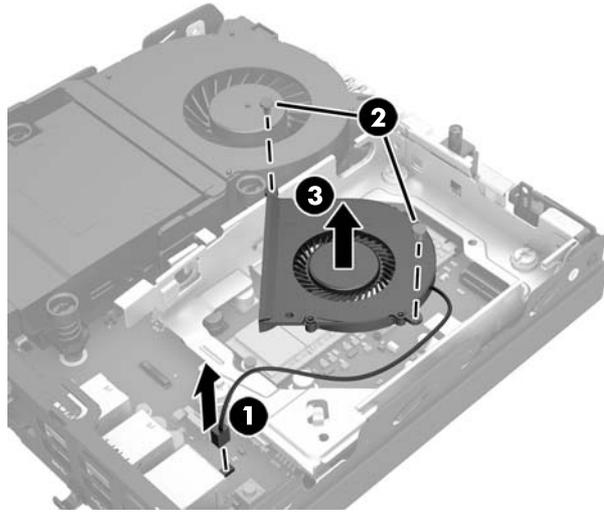
---

8. Pull and hold the release lever next to the rear of the HDD outward (2).
9. Slide the drive back until it stops, and then lift the drive up and out of the cage (3).

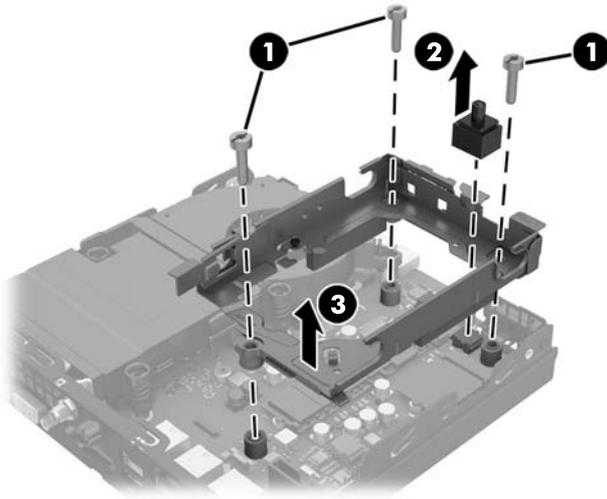


10. If your model is an EliteDesk 800, remove the secondary fan under the HDD.
  - a. Disconnect the fan plug from the system board (1).
  - b. Remove the two screws securing the secondary fan (2).

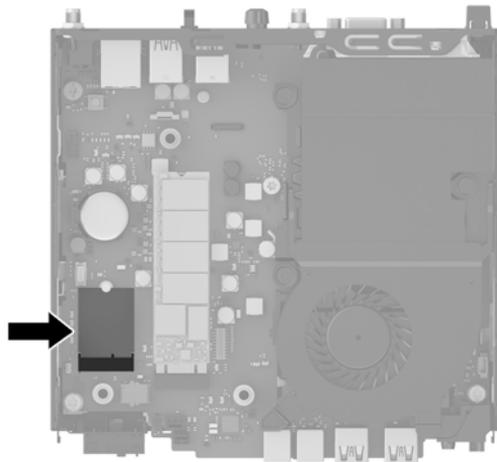
- c. Lift the fan out of the chassis (3).



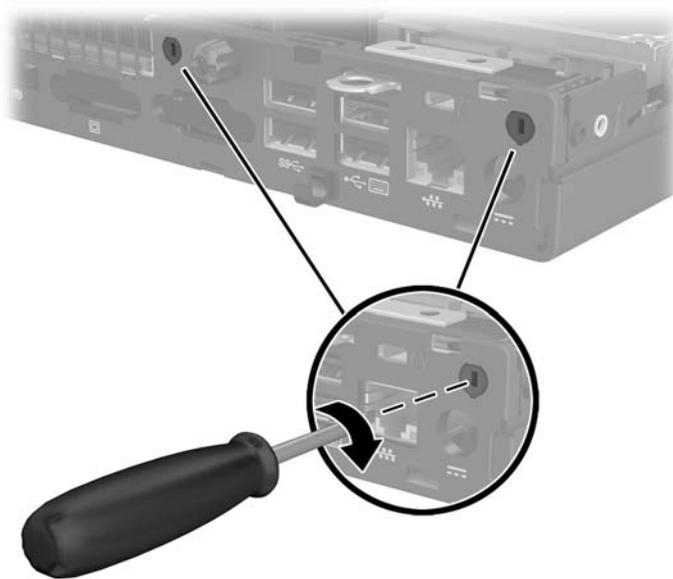
- 11.** Remove the three screws securing the HDD cage to the chassis (1).  
**12.** Pull the hood sensor up and off the HDD cage (2).  
**13.** Lift the HDD cage out of the chassis (3).



14. Locate the WLAN module on the system board.



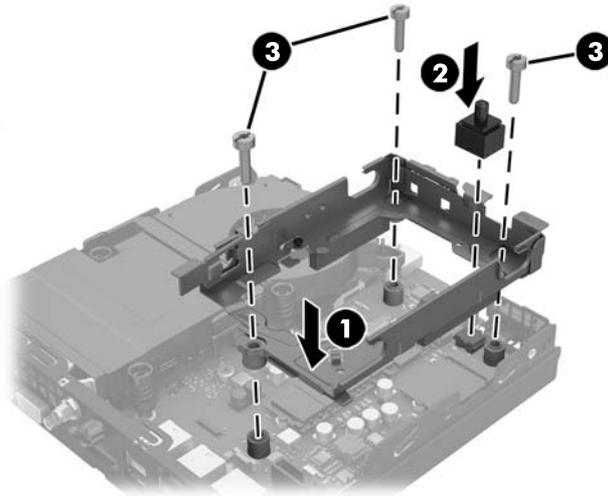
15. Disconnect the internal antennae from the WLAN module.  
For instructions, see [Replacing the WLAN module on page 25](#).
16. Locate both external antenna positions on the rear panel.
17. Insert a Phillips screwdriver in each knock-out feature and rotate to remove the blank.



18. Feed the external antenna cable through each hole and screw the antenna into position.

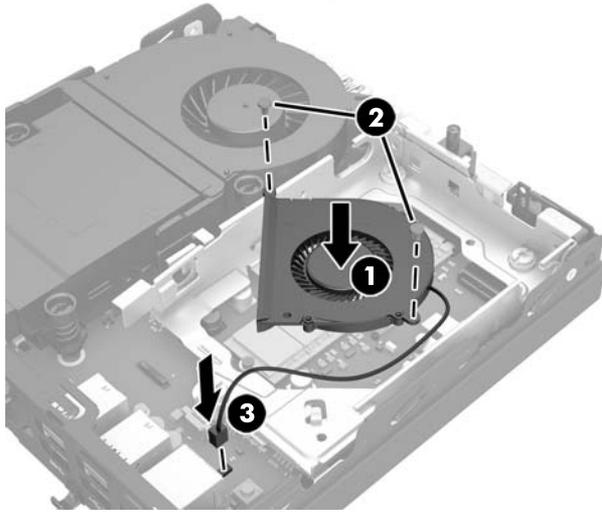


19. Connect the external antenna cables to the WLAN module.
20. Set the HDD cage into the chassis (1).
21. Press the hood sensor firmly into place (2).
22. Secure the HDD cage to the chassis with the three screws (3).

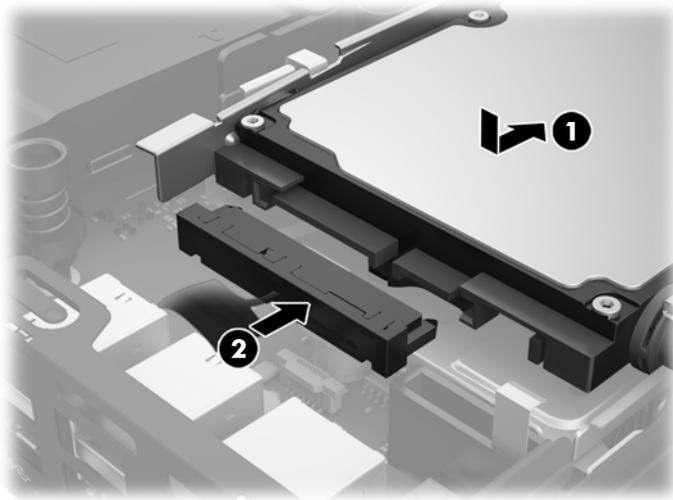


23. If your model is an EliteDesk 800, replace the secondary fan under the HDD.
  - a. Set the fan in place in the HDD cage (1).
  - b. Fasten the two screws to secure the fan to the chassis (2).

- c. Connect the fan plug to the system board (3).



- 24. Align the HDD guide screws with the slots on the HDD drive cage, press the HDD down into the cage, then slide it forward until it stops and locks in place (1).
- 25. Connect the HDD power and data cable (2) to the HDD.



- 26. Replace the access panel.
- 27. If the computer was on a stand, replace the stand.
- 28. Plug in the AC power cord and turn on the computer.
- 29. Lock any security devices that were disengaged when the computer cover or access panel was removed.

# Replacing the battery

The battery that comes with the computer provides power to the real-time clock. When replacing the battery, use a battery equivalent to the battery originally installed in the computer. The computer comes with a 3-volt lithium coin cell battery.

---

**⚠ WARNING!** The computer contains an internal lithium manganese dioxide battery. There is a risk of fire and burns if the battery is not handled properly. To reduce the risk of personal injury:

Do not attempt to recharge the battery.

Do not expose to temperatures higher than 60°C (140°F).

Do not disassemble, crush, puncture, short external contacts, or dispose of in fire or water.

Replace the battery only with the HP spare designated for this product.

**⚠ CAUTION:** Before replacing the battery, it is important to back up the computer CMOS settings. When the battery is removed or replaced, the CMOS settings will be cleared.

Static electricity can damage the electronic components of the computer or optional equipment. Before beginning these procedures, ensure that you are discharged of static electricity by briefly touching a grounded metal object.

**📝 NOTE:** The lifetime of the lithium battery can be extended by plugging the computer into a live AC wall socket. The lithium battery is only used when the computer is NOT connected to AC power.

HP encourages customers to recycle used electronic hardware, HP original print cartridges, and rechargeable batteries. For more information about recycling programs, go to <http://www.hp.com/recycle>.

---

1. Remove/disengage any security devices that prohibit opening the computer.
2. Remove all removable media, such as a USB flash drive, from the computer.
3. Turn off the computer properly through the operating system, then turn off any external devices.
4. Disconnect the AC power cord from the AC outlet and disconnect any external devices.

---

**⚠ CAUTION:** Regardless of the power-on state, voltage is always present on the system board as long as the system is plugged into an active AC outlet. You must disconnect the AC power cord to avoid damage to the internal components of the computer.

---

5. If the computer is on a stand, remove the computer from the stand and lay the computer down.
6. Remove the computer access panel.
7. Pull the blue tab (1) to disconnect the HDD power and data cable from the HDD.

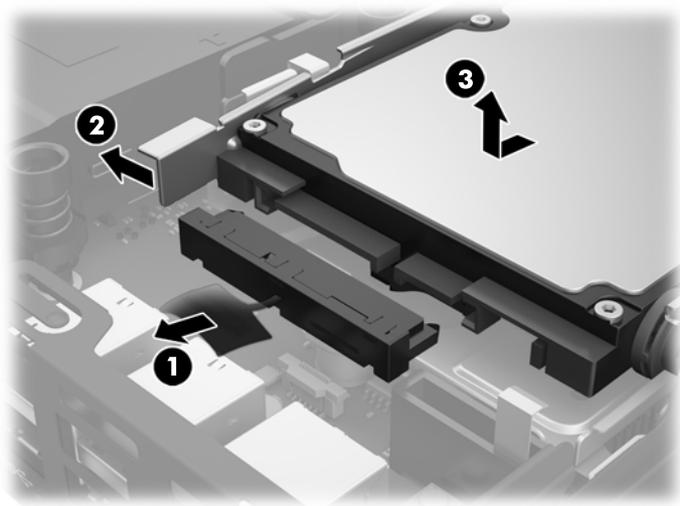
---

**⚠ WARNING!** To reduce risk of personal injury from hot surfaces, allow the internal system components to cool before touching.

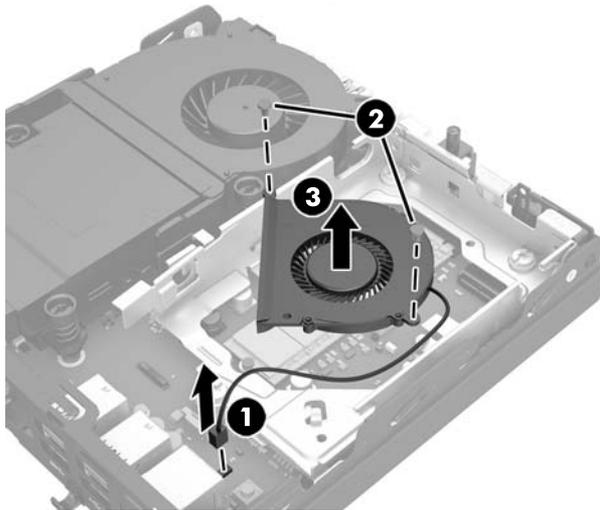
---

8. Pull and hold the release lever next to the rear of the HDD outward (2).

9. Slide the drive back until it stops, then lift the drive up and out of the cage (3).

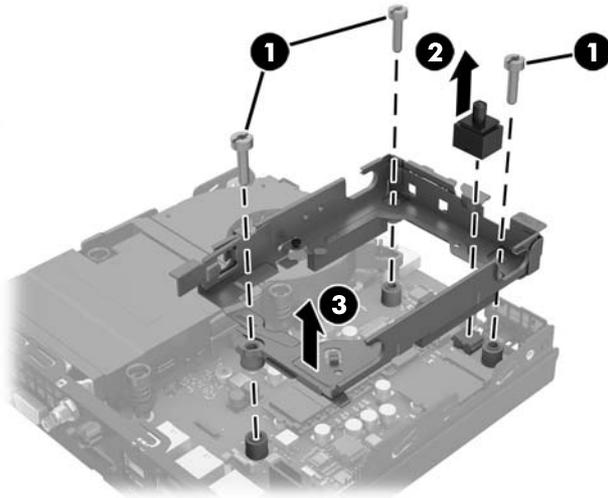


10. If your model is an EliteDesk 800, remove the secondary fan under the HDD.
  - a. Disconnect the fan plug from the system board (1).
  - b. Remove the two screws securing the secondary fan (2).
  - c. Lift the fan out of the chassis (3).

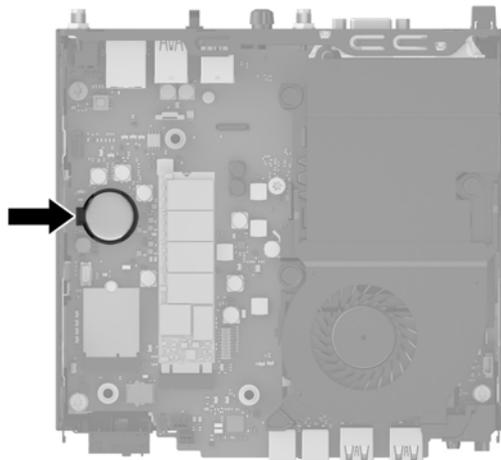


11. Remove the three screws securing the HDD cage to the chassis (1).
12. Pull the hood sensor up and off the HDD cage (2).

13. Lift the HDD cage out of the chassis (3).



14. Locate the battery and battery holder on the system board.

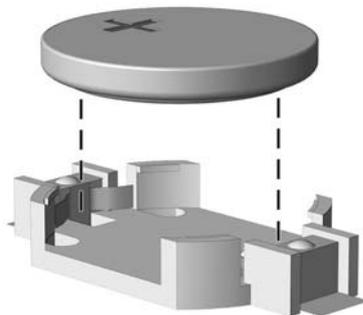


---

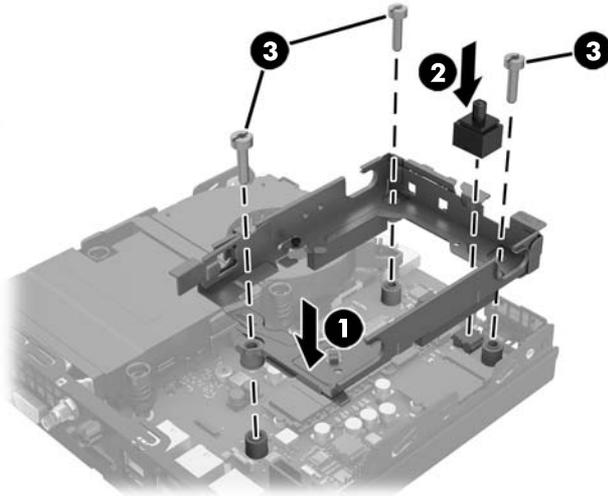
 **NOTE:** You may need to use a small tool, such as tweezers or needle-nose pliers, to remove and replace the battery.

---

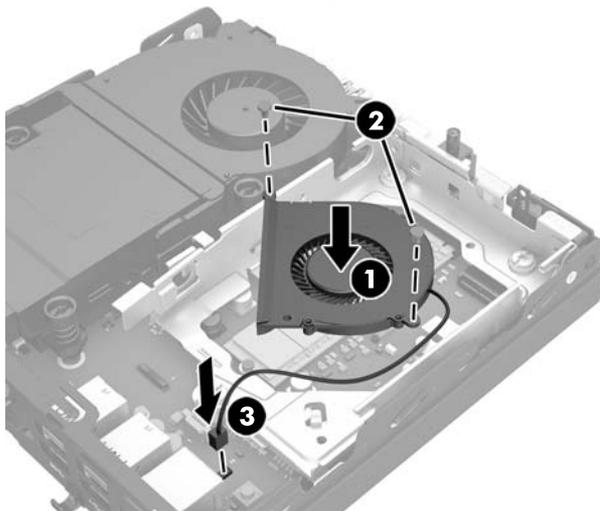
15. Lift the battery out of the holder.



16. Slide the replacement battery into position, positive side up. The battery holder automatically secures the battery in the proper position.
17. Set the HDD cage into the chassis (1).
18. Press the hood sensor firmly into place (2).
19. Secure the HDD cage to the chassis with the three screws (3).

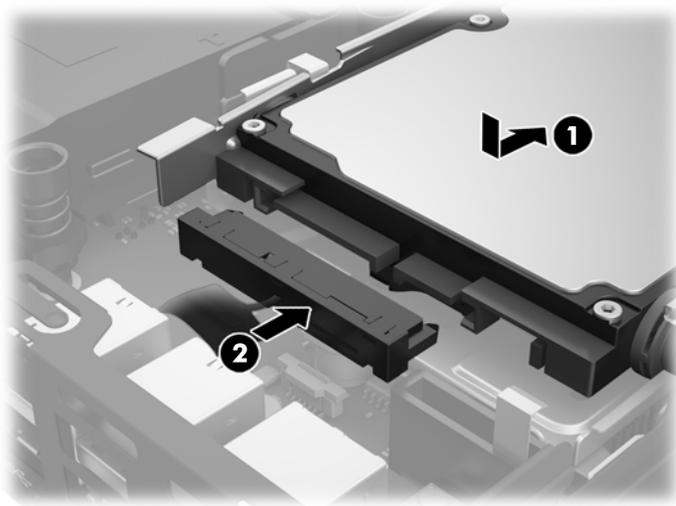


20. If your model is an EliteDesk 800, replace the secondary fan under the HDD.
  - a. Set the fan in place in the HDD cage (1).
  - b. Fasten the two screws to secure the fan to the chassis (2).
  - c. Connect the fan plug to the system board (3).



21. Align the HDD guide screws with the slots on the HDD drive cage, press the HDD down into the cage, then slide it forward until it stops and locks in place (1).

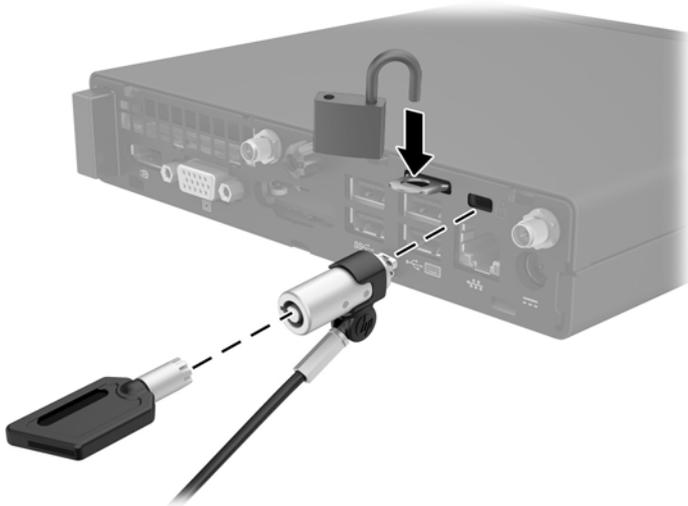
22. Connect the HDD power and data cable (2) to the HDD.



23. Replace the computer access panel.
24. If the computer was on a stand, replace the stand.
25. Plug in the AC power cord and turn on the computer.
26. Lock any security devices that were disengaged when the computer access panel was removed.
27. Reset the date and time, your passwords, and any special system setups using Computer Setup.

## Installing a security lock

The cable lock and padlock displayed below can be used to secure the computer.



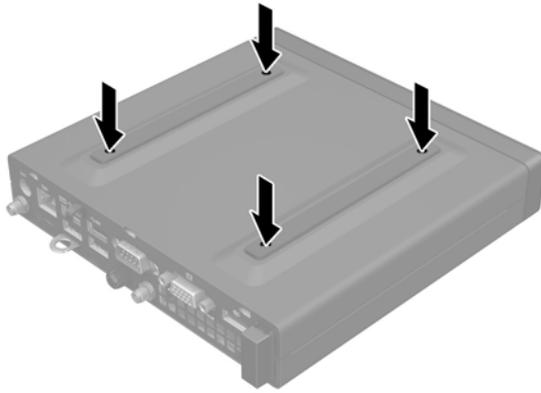
## Attaching the computer to a mounting fixture

The computer can be attached to a wall, swing arm, or other mounting fixture.



**NOTE:** This apparatus is intended to be supported by UL or CSA Listed wall mount bracket.

---



1. If the computer is on a stand, remove the computer from the stand and lay the computer down.
2. To attach the computer to a swing arm (sold separately), insert four screws through the holes on the swing arm plate and into the mounting holes on the computer.

---

**CAUTION:** This computer supports the VESA industry standard 100 mm mounting holes. To attach a third-party mounting solution to the computer, use the screws that are supplied with the solution. It is important to verify that the manufacturer's mounting solution is compliant with the VESA standard and is rated to support the weight of the computer. For best performance, it is important to use the power and other cables provided with the computer.

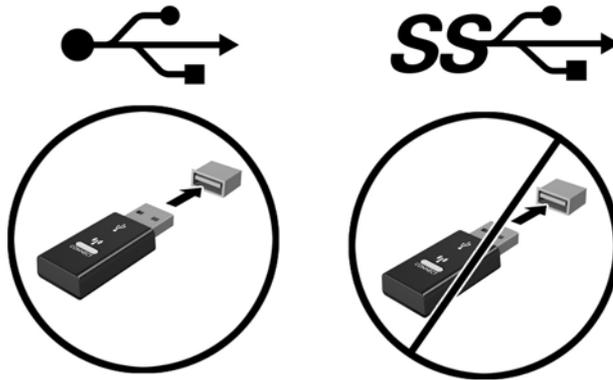
---

To attach the computer to other mounting fixtures, follow the instructions included with the mounting fixture to ensure that the computer is safely attached.

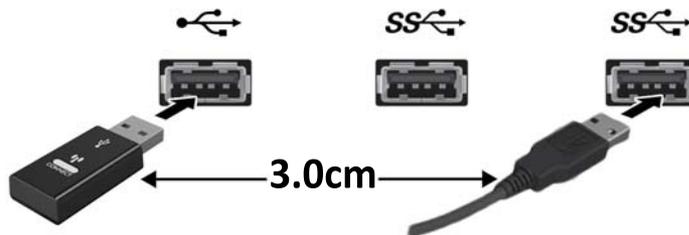
## Synchronizing the optional wireless keyboard and mouse

The mouse and keyboard are synchronized at the factory. If they do not work, remove and replace the batteries. If the mouse and keyboard are still not synchronized, then follow this procedure to manually re-synchronize the pair.

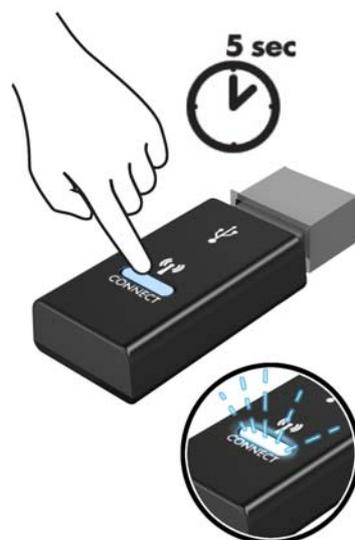
1.



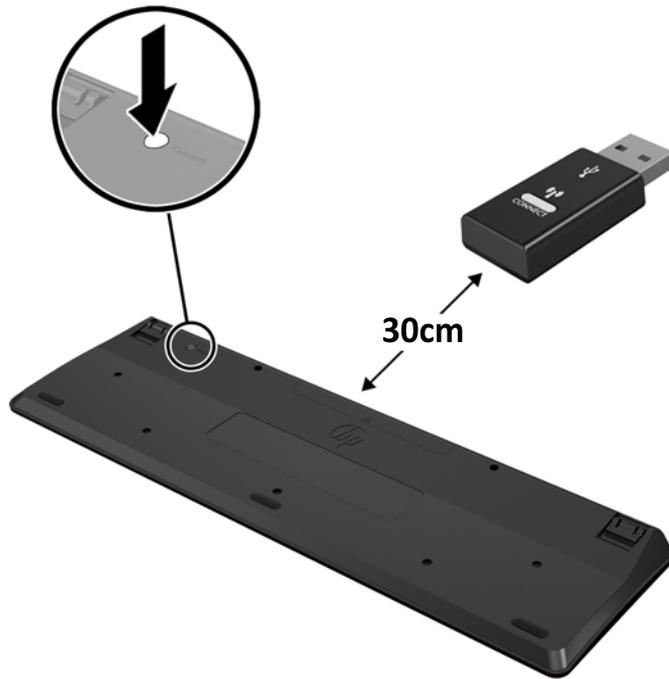
2.



3.



4.



5.



**NOTE:** If the mouse and keyboard still do not work, then remove and replace the batteries. If the mouse and keyboard are still not synchronized, then synchronize the keyboard and mouse again.

---

# A Electrostatic discharge

A discharge of static electricity from a finger or other conductor may damage system boards or other static-sensitive devices. This type of damage may reduce the life expectancy of the device.

## Preventing electrostatic damage

To prevent electrostatic damage, observe the following precautions:

- Avoid hand contact by transporting and storing products in static-safe containers.
- Keep electrostatic-sensitive parts in their containers until they arrive at static-free workstations.
- Place parts on a grounded surface before removing them from their containers.
- Avoid touching pins, leads, or circuitry.
- Always be properly grounded when touching a static-sensitive component or assembly.

## Grounding methods

There are several methods for grounding. Use one or more of the following methods when handling or installing electrostatic-sensitive parts:

- Use a wrist strap connected by a ground cord to a grounded workstation or computer chassis. Wrist straps are flexible straps with a minimum of 1 megohm +/- 10 percent resistance in the ground cords. To provide proper ground, wear the strap snug against the skin.
- Use heelstraps, toestraps, or bootstraps at standing workstations. Wear the straps on both feet when standing on conductive floors or dissipating floor mats.
- Use conductive field service tools.
- Use a portable field service kit with a folding static-dissipating work mat.

If you do not have any of the suggested equipment for proper grounding, contact an HP authorized dealer, reseller, or service provider.



**NOTE:** For more information on static electricity, contact an HP authorized dealer, reseller, or service provider.

---

---

## **B Computer operating guidelines, routine care and shipping preparation**

### **Computer operating guidelines and routine care**

Follow these guidelines to properly set up and care for the computer and monitor:

- Keep the computer away from excessive moisture, direct sunlight, and extremes of heat and cold.
- Operate the computer on a sturdy, level surface. Leave a 10.2 cm (4 inch) clearance on all vented sides of the computer and above the monitor to permit the required airflow.
- Never restrict the airflow into the computer by blocking any vents or air intakes. Do not place the keyboard, with the keyboard feet down, directly against the front of the desktop unit as this also restricts airflow.
- Never operate the computer with the access panel or any of the expansion card slot covers removed.
- Do not stack computers on top of each other or place computers so near each other that they are subject to each other's re-circulated or preheated air.
- If the computer is to be operated within a separate enclosure, intake and exhaust ventilation must be provided on the enclosure, and the same operating guidelines listed above will still apply.
- Keep liquids away from the computer and keyboard.
- Never cover the ventilation slots on the monitor with any type of material.
- Install or enable power management functions of the operating system or other software, including sleep states.
- Turn off the computer before you do either of the following:
  - Wipe the exterior of the computer with a soft, damp cloth as needed. Using cleaning products may discolor or damage the finish.
  - Occasionally clean the air vents on all vented sides of the computer. Lint, dust, and other foreign matter can block the vents and limit the airflow.

# Shipping preparation

Follow these suggestions when preparing to ship the computer:

1. Back up the HDD files to an external storage device. Be sure that the backup media is not exposed to electrical or magnetic impulses while stored or in transit.



---

**NOTE:** The HDD locks automatically when the system power is turned off.

---

2. Remove and store all removable media.
3. Turn off the computer and external devices.
4. Disconnect the AC power cord from the AC outlet, then from the computer.
5. Disconnect the system components and external devices from their power sources, then from the computer.



---

**NOTE:** Ensure that all boards are seated properly and secured in the board slots before shipping the computer.

---

6. Pack the system components and external devices in their original packing boxes or similar packaging with sufficient packing material to protect them.

---

# Index

- A**
  - access panel
    - removal 10
    - replacement 11
- B**
  - battery replacement 35
- C**
  - computer operating guidelines 44
- E**
  - electrostatic discharge, preventing
    - damage 43
  - external antenna
    - installation 30
- F**
  - front panel components
    - EliteDesk 705 3
    - EliteDesk 800 2
    - ProDesk 400 4
    - ProDesk 600 2
- H**
  - hard disk drive
    - installation 18
    - removal 18
- I**
  - installation guidelines 8
  - installing
    - battery 35
    - computer access panel 11
    - external antenna 30
    - hard disk drive 18
    - lock 39
    - memory 13
    - security lock 39
    - SODIMMs 15, 35
    - solid state drive 20
    - WLAN module 25
- K**
  - keyboard
    - synchronizing wireless 41
- L**
  - lock
    - installation 39
- M**
  - memory
    - installation 13
    - maximum 13
    - slots 13
    - socket population 14
    - SODIMMs specifications 13
    - specifications 13
  - mounting the computer 40
  - mouse
    - synchronizing wireless 41
- P**
  - power cord connection 9
  - product ID location 7
- R**
  - rear panel components
    - EliteDesk 705 5
    - EliteDesk 800 5
    - ProDesk 400 6
    - ProDesk 600 5
  - removing
    - battery 35
    - computer access panel 10
    - hard disk drive 18
    - SODIMMs 15, 35
    - solid state drive 20
    - WLAN module 25
- S**
  - security lock
    - installation 39
  - serial number location 7
  - shipping preparation 45
  - SODIMM
    - specifications 13
  - SODIMMs
    - installation 15, 35
    - removal 15, 35
  - solid state drive
    - installation 20
    - removal 20
  - specifications, memory 13
  - synchronizing wireless keyboard and mouse 41
- T**
  - tower conversion 12
- V**
  - ventilation guidelines 44
  - VESA mounting holes 40
- W**
  - WLAN module
    - installation 25
    - removal 25