HP Desktop Mini Hardware Reference Guide

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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 or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. For details on Windows* 8 functionality, go to http://www.microsoft.com for details.

For details on Windows 7 functionality. Go to http://windows.microsoft.com/en-us/ windows7/get-know-windows-7 for details.

To access the latest user guides or manuals for your product, go to http://www.hp.com/support, and select your country. Select **Find your product**, and then follow the on-screen instructions.

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For any further information or to request a full refund of the price of the computer, please contact your 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.

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Product features

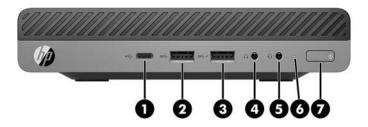
Standard configuration features

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)





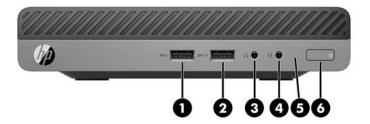
NOTE: Your computer model may look slightly different from the illustration in this section.

ltem	lcon	Component	ltem	lcon	Component
1	ss ⇔ 4	USB Type-C SuperSpeed port with HP Sleep and Charge*	5	O	Audio-out (headset)/Audio-in (microphone) combo jack
2	ss∵	USB 3.x port	6		Drive light
3	ss ⇔ 4	USB 3.x port with HP Sleep and Charge*	7	ψ	Dual-state power button
4	Ω	Headphone jack			

^{*}When the computer is on, the USB port connects a USB device, provides high-speed data transfer, and even when the computer is off, charges products such as a cell phone, camera, activity tracker, or smartwatch.

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

Front panel components (ProDesk 400)





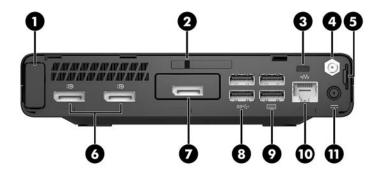
NOTE: Your computer model may look slightly different from the illustration in this section.

ltem	lcon	Component	ltem	lcon	Component
1	ss∵	USB 3.x port	4	O	Audio-out (headset)/Audio-in (microphone) combo jack
2	ss c. 1	USB 3.x port with HP Sleep and Charge*	5		Drive light
3	$\mathbf{\Omega}$	Headphone jack	6	ψ	Dual-state power button

^{*}When the computer is on, the USB port connects a USB device, provides high-speed data transfer, and even when the computer is off, charges products such as a cellphone, camera, activity tracker, or smartwatch.

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

Rear panel components (EliteDesk 800, and ProDesk 600)

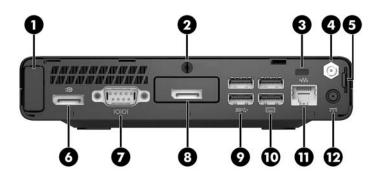


NOTE: Your computer model may look slightly different from the illustration in this section.

Item	lcon	Component	ltem	lcon	Component
1		Antenna cover	7	E	DisplayPort (optional)
				פו	NOTE: The DisplayPort is optional and may be replaced with one of the following ports: HDMI, VGA, USB Type-C alternate mode, or serial port.
2		Cover lock switch	8	SS∕Ç	USB 3.x ports (2) (black)
3		Security cable slot	9		USB 3.x ports (2) (black)
4		External antenna connector	10	***	RJ-45 (network) jack
5		Padlock loop	11		Power connector
6	‡Đ	Dual-Mode DisplayPort (D++) (2)			

Rear panel components (ProDesk 400)

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



Item	lcon	Component	ltem	lcon	Component
1		Antenna cover	7	IOIOI	Serial port (black)
2		Thumbscrew	8	Ð	DisplayPort (optional) NOTE: The DisplayPort is optional and may be replaced with one of the following ports: HDMI, VGA, or serial port.
3		Security cable slot	9	SS←	USB 3.x ports (2) (black)
4		External antenna connector	10		USB 2.0 ports (2) (black)
5		Padlock loop	11	-11.	RJ-45 (network) jack
6	ŧΒ	Dual-Mode DisplayPort (D++)	12		Power 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 support for assistance.

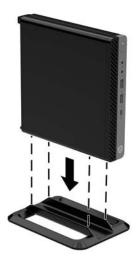


2 Setup

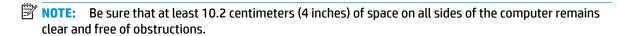
Changing from desktop to tower orientation

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

- NOTE: To stabilize the computer in a tower orientation, HP recommends the use of the optional tower stand.
 - 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 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. To avoid damage to the internal components of the computer, you must disconnect the power cord.
 - 5. Orient the computer so that its right side is facing up and place the computer in the optional stand.



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



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

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.

- If the computer is on a stand, remove the computer from the stand and position the computer right-side up on a stable surface.
- 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.

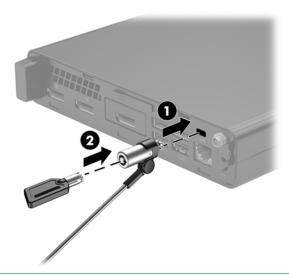
CAUTION: This computer supports the VESA industry standard 100 mm mounting holes. To attach a third-party mounting solution to the computer, use the screws that are supplied with the solution. It is important to verify that the manufacturer's mounting solution is compliant with the VESA standard and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

Installing a security cable

The security cable displayed below can be used to secure the computer.

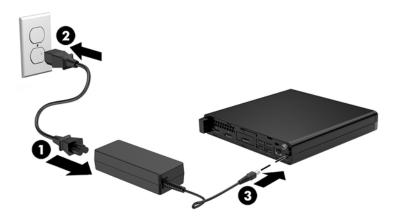


NOTE: The security cable is designed to act as a deterrent, but it may not prevent the computer from being mishandled or stolen.

Connecting the power cord

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

- 1. Connect the power cord to the AC adapter (1).
- 2. Plug the power cord into an AC outlet (2).
- 3. Connect the AC adapter to the power connector on the rear of the computer (3).



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.

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

Disconnect the 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 power cord grounding plug. The grounding plug is an important safety feature.

Plug the 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.

MARNING! 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 44 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 power cord from the power source before opening the computer to prevent damage to internal components.

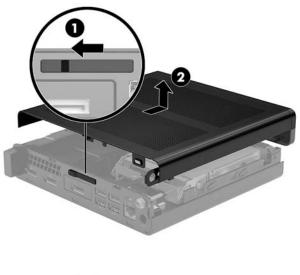
NOTE: Your computer model may look slightly different from the illustrations in this chapter.

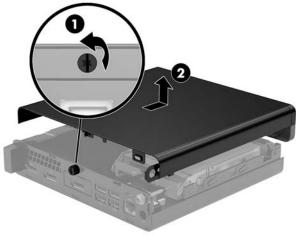
Removing the computer access panel

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 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 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. Then position the computer right-side up on a stable surface.
- 6. Depending on the computer model, slide the cover lock switch (1) to the left, or loosen the thumbscrew (1) on the rear panel as shown in the following images.
- NOTE: If necessary, a Torx T-15 screwdriver may be used to loosen the thumbscrew.

Slide the access panel forward, and lift it off the computer (2).





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

Replacing the computer access panel

On computer models with a cover lock switch on the rear panel, place the access panel on the computer and slide it back.

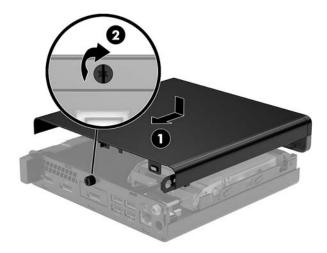


NOTE: When the access panel slides into place, the cover lock switch automatically locks.



On computer models with a thumbscrew on the rear panel:

- Place the access panel on the computer and slide it back (1).
- When the access panel slides into place, tighten the thumbscrew (2) to secure the access panel in place as shown in the following image.





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

Upgrading system memory

The computer comes with at least one small outline, dual in-line memory module (SODIMM). To achieve maximum memory support, you can populate the system board with up to 32 GB of memory.

Memory module specifications

For proper system operation, the memory modules must adhere to the following specifications.

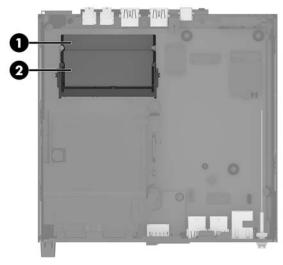
Component	Specification
Memory modules	1.2 volt DDR4-SDRAM memory modules
Compliance	Unbuffered non-ECC PC4-17000 DDR4-2133 MHz-compliant
Pins	Industry-standard 260-pin containing the mandatory Joint Electronic Device Engineering Council (JEDEC) specification
Support	CAS latency 15 DDR4 2400 MHz (15-15-15 timing)
Slots	2
Maximum Memory	32 GB
Supported	2 Gbit, 4 Gbit, 8 Gbit, and 16 Gbit non-ECC memory technologies single-sided and double- sided memory modules

NOTE: The system does not operate properly if you install unsupported memory modules. Memory modules constructed with x8 and x16 DDR devices are supported; memory modules 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 memory module slots

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



ltem	Description	System Board Label	Slot Color
1	Memory module slot, Channel B	DIMM1	Black
2	Memory module slot, Channel A	DIMM3	Black

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

- The system will operate in single-channel mode if the memory module slots are populated in one channel only.
- The system will operate in a higher-performing dual-channel mode if the memory capacity of the memory module in Channel A is equal to the memory capacity of the memory module in Channel B.
- The system will operate in flex mode if the memory capacity of the memory module in Channel A is not
 equal to the memory capacity of the memory module 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 memory module in the system.

Installing a memory module

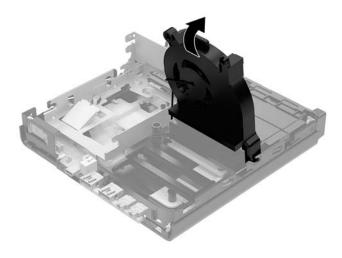
CAUTION: You must disconnect the power cord and wait approximately 30 seconds for the power to drain before adding or removing memory modules. Regardless of the power-on state, voltage is always supplied to the memory modules as long as the computer is plugged into an active AC outlet. Adding or removing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

The memory module slots 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.

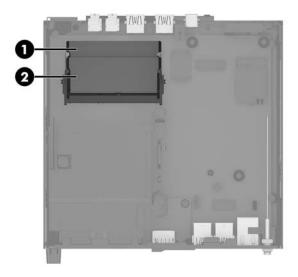
Static electricity can damage the electronic components of the computer or optional cards. Before beginning these procedures, ensure that you are discharged of static electricity by briefly touching a grounded metal object. For more information, see Electrostatic discharge on page 44.

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, and then turn off any external devices.
- 4. Disconnect the power cord from the AC outlet and disconnect any external devices.
- Remove the computer access panel.For instructions, see Removing the computer access panel on page 12.
- **6.** Tilt the fan up using the front tab and leave it in the up position.
 - NOTE: It is not necessary to fully remove the fan to remove or install a memory module.



7. Locate the memory modules on the system board.



8. To remove a memory module, press outward on the latches (1) on each side of the memory module, and then pull the memory module (2) out of the slot.



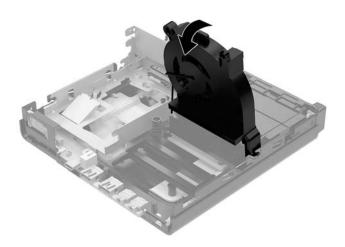
9. Slide the new memory module (1) into the slot at approximately a 30° angle, and press the memory module down (2) so that the latches lock it in place.



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

10. Tilt the fan down, and then press the fan down until the it clicks into place.

CAUTION: Avoid pulling the fan cable.



11. Replace the access panel.

For instructions, see Replacing the computer access panel on page 14.

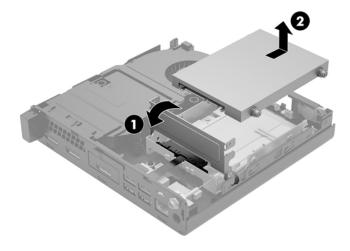
- 12. If the computer was on a stand, replace the stand.
- 13. Reconnect external devices, plug in the power cord, and then turn on the computer. The computer automatically recognizes the new memory.
- **14.** Lock any security devices that were disengaged when the access panel was removed.

Removing a hard drive

- NOTE: Before you remove the old hard drive, be sure to back up the data from the old hard drive so that you can transfer the data to the new hard drive.
 - 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.
 - Turn off the computer properly through the operating system, then turn off any external devices.
 - 4. Disconnect the 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 power cord to avoid damage to the internal components of the computer.
 - Remove the computer access panel.

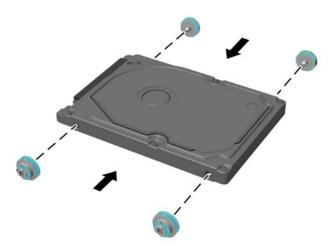
For instructions, see Removing the computer access panel on page 12.

- **WARNING!** To reduce risk of personal injury from hot surfaces, allow the internal system components to cool before you touch them.
- **6.** To remove the hard drive, rotate the hard drive latch up and out (1) to disengage the hard drive from the cage.
- 7. Slide the drive toward the rear of the chassis until it stops, and then lift the hard drive up and out of the cage (2).
 - NOTE: The power cable from the system board is located in the drive cage and disconnects when the hard drive is removed.

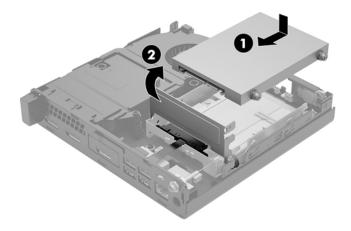


Installing a hard drive

- NOTE: Before you remove the old hard drive, be sure to back up the data from the old hard drive so that you can transfer the data to the new hard drive.
 - 1. If you are replacing a hard drive, transfer the silver and blue isolation mounting guide screws from the old hard drive to the new hard drive.



- 2. Align the hard drive guide screws with the slots on the hard drive cage, press the hard drive down into the cage, and then slide it forward until it stops and locks into place (1).
- 3. Rotate the hard drive latch down (2) to engage the hard drive.



Replace the access panel.

For instructions, see Replacing the computer access panel on page 14.

5. If the computer was on a stand, replace the stand.

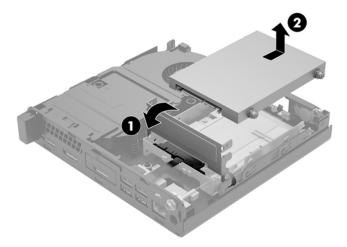
- 6. Reconnect external devices, plug in the power cord, and then turn on the computer.
- 7. Lock any security devices that were disengaged when the access panel was removed.

Replacing an M.2 PCIe solid-state drive

- 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 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 power cord to avoid damage to the internal components of the computer.
- Remove the computer access panel.

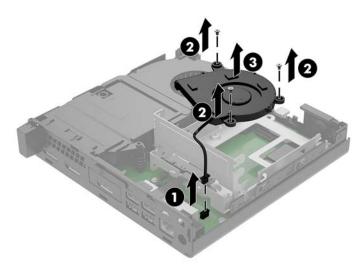
For instructions, see Removing the computer access panel on page 12.

- **WARNING!** To reduce risk of personal injury from hot surfaces, allow the internal system components to cool before you touch them.
- Rotate the hard drive latch up and out (1) to disengage the hard drive from the cage.
- 7. Slide the drive back until it stops, and then lift the drive up and out of the cage (2).

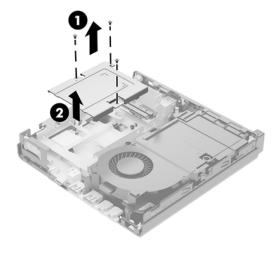


- 8. If your model is an EliteDesk 800 65W, remove the secondary fan under the hard drive.
 - **a.** Disconnect the fan plug from the system board (1).
 - **b.** Remove the three screws securing the fan (2).

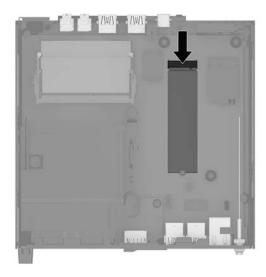
Lift the fan out of the chassis (3).



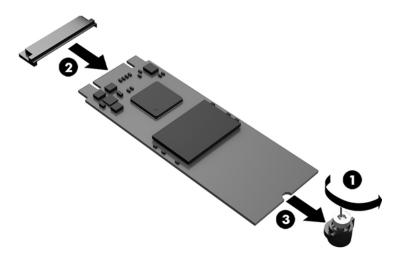
- To remove the hard drive cage, remove the three screws (1) securing the hard drive cage to the chassis.
- **10.** Lift the hard drive cage (2) out of the chassis.



11. Locate the solid-state drive on the system board.

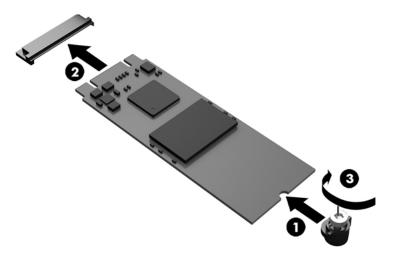


- 12. Remove the screw securing the solid-state drive to the system board (1).
- **13.** Grasp the solid-state drive by the sides and carefully pull it out of the socket (2).
- **14.** Remove the screw holder from the solid-state drive (3) for use on the replacement solid-state drive.

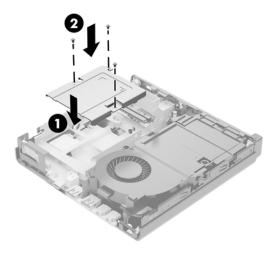


- 15. Insert the screw holder into the niche on the end of the new solid-state drive (1).
- **16.** Insert the new solid-state drive into the socket on the system board and press the solid-state drive connectors (2) firmly into the socket.
 - NOTE: A solid-state drive can be installed in only one way.

17. Press the solid-state drive down to the system board and use the included screw (3) to secure the solidstate drive.

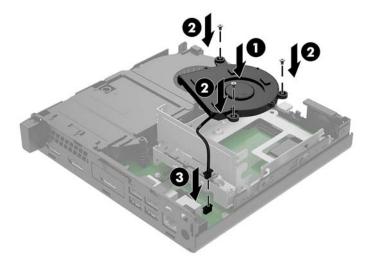


- **18.** Set the hard drive cage (1) into the chassis.
- **19.** Secure the hard drive cage to the chassis with the three screws (2).

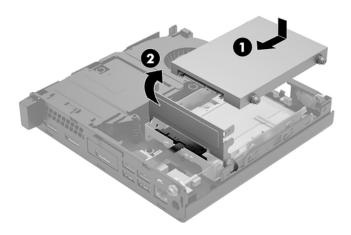


- **20.** If your model is an EliteDesk 800 65W, replace the secondary fan under the hard drive.
 - Set the fan in place in the hard drive cage (1).
 - Fasten the three screws to secure the fan to the chassis (2). b.

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



- 21. Align the hard drive guide screws with the slots on the hard drive cage, press the hard drive down into the cage, then slide it forward (1) until it stops and locks in place.
- **22.** Rotate the hard drive latch down to engage the hard drive (2).



23. Replace the access panel.

For instructions, see Replacing the computer access panel on page 14.

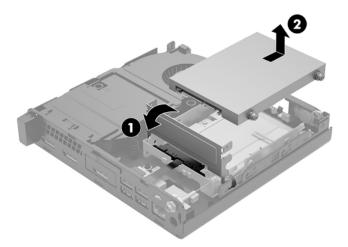
- **24.** If the computer was on a stand, replace the stand.
- **25.** Reconnect external devices, plug in the power cord, and then turn on the computer.
- **26.** Lock any security devices that were disengaged when the access panel was removed.

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 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 power cord to avoid damage to the internal components of the computer.
- 5. Remove the computer access panel.

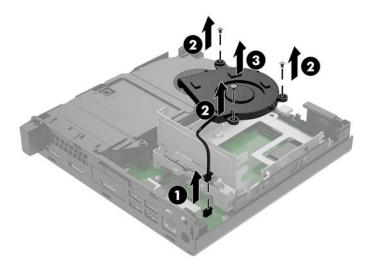
For instructions, see Removing the computer access panel on page 12.

- ⚠ WARNING! To reduce risk of personal injury from hot surfaces, allow the internal system components to cool before you touch them.
- **6.** Rotate the hard drive latch up and out (1) to disengage the hard drive from the cage.
- 7. Slide the drive back until it stops, and then lift the drive up and out of the cage (2).

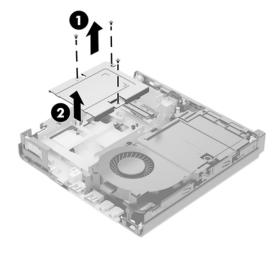


- If your model is an EliteDesk 800 65W, remove the secondary fan under the hard drive.
 - **a.** Disconnect the fan plug from the system board (1).
 - **b.** Remove the three screws securing the secondary fan (2).

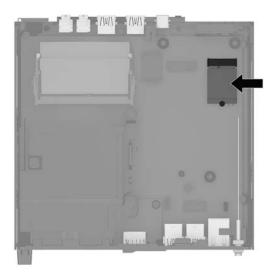
c. Lift the fan out of the chassis (3).



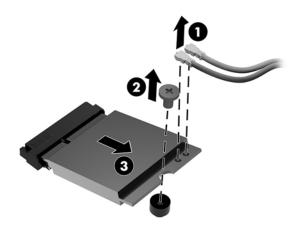
- **9.** Remove the three screws (1) securing the hard drive cage to the chassis.
- **10.** Lift the hard drive cage (2) out of the chassis.



11. Locate the WLAN module on the system board.

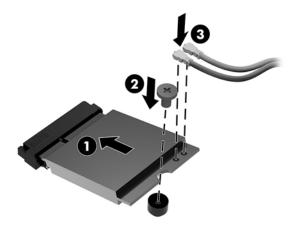


- 12. Disconnect both antenna cables (1) from the WLAN module.
 - NOTE: You may need to use a small tool, such as a pair of tweezers or needle-nose pliers, to disconnect and connect the antenna cables.
- 13. Remove the screw (2) securing the WLAN module to the system board.
- 14. Grasp the WLAN module (3) by the sides and pull it out of the socket.

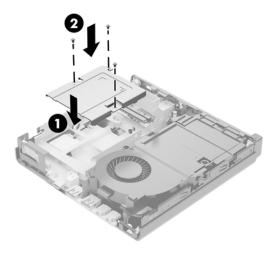


- 15. Insert the new WLAN module into the socket on the system board.
 - NOTE: A WLAN module can be installed in only one way.
- **16.** Press the WLAN module connectors firmly into the socket (1).
- 17. Press the WLAN module down to the system board and use the included screw to secure the module (2).

18. Match the label on each antenna cable to the corresponding connector on the WLAN module and attach the antennas (3) to the connectors.

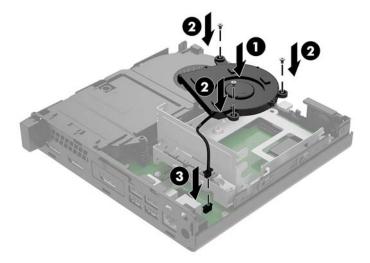


- **19.** Set the hard drive cage (1) into the chassis.
- **20.** Secure the hard drive cage to the chassis with the three screws (2).

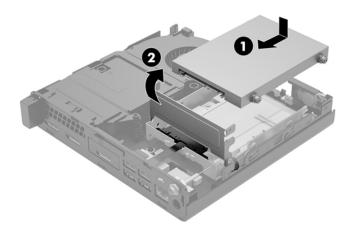


- 21. If your model is an EliteDesk 800 65W, replace the secondary fan in the hard drive cage.
 - **a.** Set the fan in place in the hard drive cage (1).
 - **b.** Fasten the three screws (2) to secure the fan to the chassis.

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



- 22. Align the hard drive guide screws with the slots on the hard drive cage, press the hard drive down into the cage, then slide it forward (1) until it stops and locks in place.
- 23. Rotate the hard drive latch down (2) to engage the hard drive.



24. Replace the access panel.

For instructions, see Replacing the computer access panel on page 14.

- **25.** If the computer was on a stand, replace the stand.
- **26.** Reconnect external devices, plug in the power cord, and then turn on the computer.
- **27.** Lock any security devices that were disengaged when the access panel was removed.

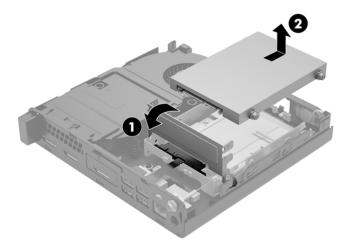
Installing an external antenna

Internal WLAN antennae are standard. 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 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 power cord to avoid damage to the internal components of the computer.
- Remove the computer access panel.

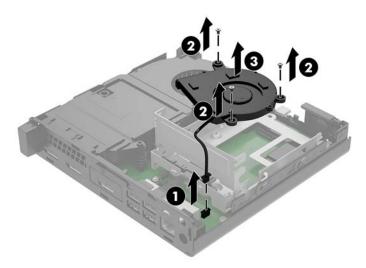
For instructions, see Removing the computer access panel on page 12.

- **WARNING!** To reduce risk of personal injury from hot surfaces, allow the internal system components to cool before you touch them.
- 6. Rotate the hard drive latch up and out (1) to disengage the hard drive.
- 7. Slide the drive back until it stops, and then lift the drive up and out of the cage (2).

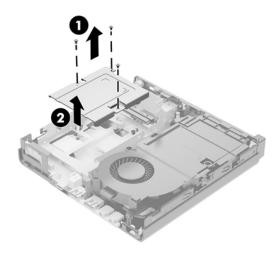


- 8. If your model is an EliteDesk 800 65W, remove the secondary fan under the hard drive.
 - **a.** Disconnect the fan plug from the system board (1).
 - **b.** Remove the three screws securing the secondary fan (2).

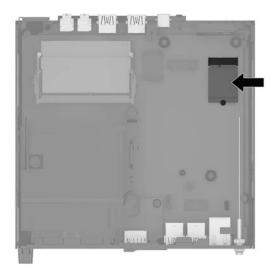
Lift the fan out of the chassis (3).



- Remove the three screws securing the hard drive cage to the chassis (1).
- **10.** Lift the hard drive cage out of the chassis (2).



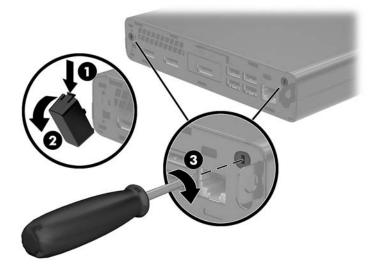
11. Locate the WLAN module on the system board.



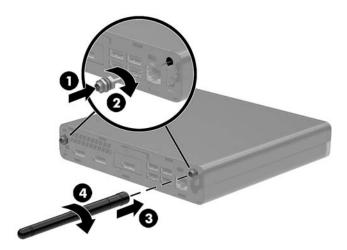
12. Disconnect the internal antennae from the WLAN module.

For instructions, see Replacing the WLAN module on page 27.

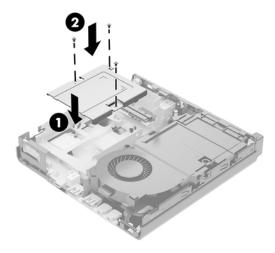
- **13.** Locate both external antenna positions on the rear of the chassis.
- 14. To view the knock-out feature on the left side of the rear panel, remove the antenna cover by pushing down on the antenna cover (1) and pulling it away (2) from the panel.
- **15.** Insert a Phillips screwdriver in each knock-out feature and rotate (3) to remove the blank.



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

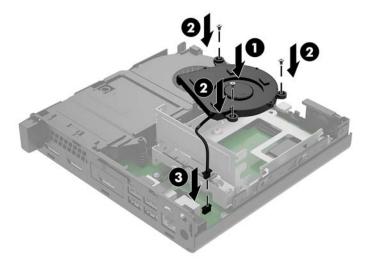


- 17. Connect the external antenna cables to the WLAN module.
- **18.** Set the hard drive cage (1) into the chassis.
- **19.** Secure the hard drive cage to the chassis with the three screws (2).

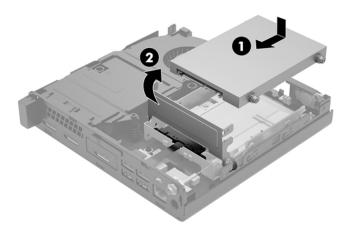


- 20. If your model is an EliteDesk 800 65W, replace the secondary fan under the hard drive.
 - Set the fan in place in the hard drive cage (1).
 - Fasten the three screws to secure the fan to the chassis (2). b.

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



- 21. Align the hard drive guide screws with the slots on the hard drive cage, press the hard drive down into the cage, then slide it forward (1) until it stops and locks in place.
- **22.** Rotate the hard drive latch down (2) to engage the hard drive.



23. Replace the access panel.

For instructions, see Replacing the computer access panel on page 14.

- **24.** If the computer was on a stand, replace the stand.
- **25.** Reconnect external devices, plug in the power cord, and then turn on the computer.
- **26.** Lock any security devices that were disengaged when the 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.

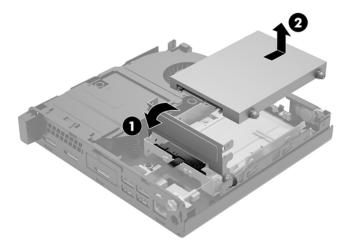
HP encourages customers to recycle used electronic hardware, HP original print cartridges, and rechargeable batteries. For more information about recycling programs, go to http://www.hp.com/recycle.

- 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 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 power cord to avoid damage to the internal components of the computer.
- 5. Remove the computer access panel.

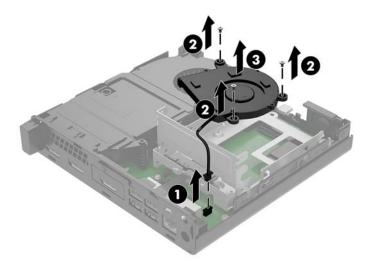
For instructions, see Removing the computer access panel on page 12.

- **6.** Rotate the hard drive latch up and out (1) to disengage the hard drive.
 - <u>MARNING!</u> To reduce risk of personal injury from hot surfaces, allow the internal system components to cool before touching.

7. Slide the drive back until it stops, and then lift the drive up and out of the cage (2).

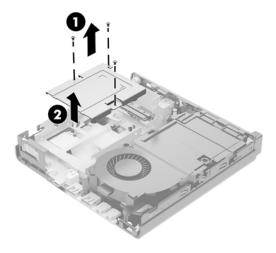


- 8. If your model is an EliteDesk 800 65W, remove the secondary fan under the hard drive.
 - **a.** Disconnect the fan plug from the system board (1).
 - **b.** Remove the three screws securing the secondary fan (2).
 - **c.** Lift the fan out of the chassis (3).

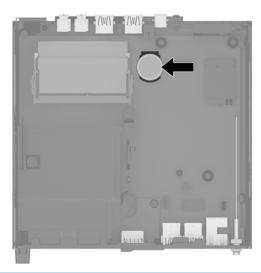


9. Remove the three screws (1) securing the hard drive cage to the chassis.

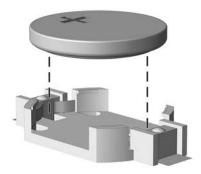
10. Lift the hard drive cage (2) out of the chassis.



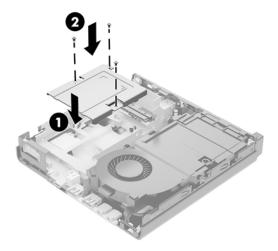
11. Locate the battery and battery holder on the system board.



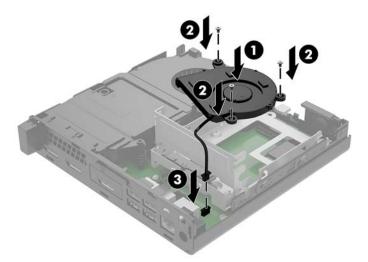
- NOTE: You may need to use a small tool, such as tweezers or needle-nose pliers, to remove and replace the battery.
- 12. Lift the battery out of the holder.



- **13.** Slide the replacement battery into position, positive side up. The battery holder automatically secures the battery in the proper position.
- **14.** Set the hard drive cage (1) into the chassis.
- **15.** Secure the hard drive cage to the chassis with the three screws (2).

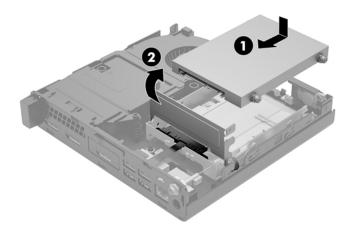


- **16.** If your model is an EliteDesk 800 65W, replace the secondary fan under the hard drive.
 - **a.** Set the fan in place in the hard drive cage (1).
 - **b.** Fasten the three screws to secure the fan to the chassis (2).
 - **c.** Connect the fan plug to the system board (3).



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

18. Rotate the hard drive latch down to engage the hard drive (2).

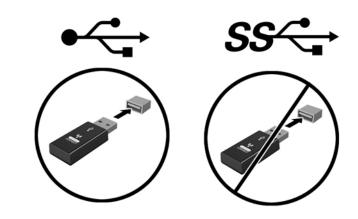


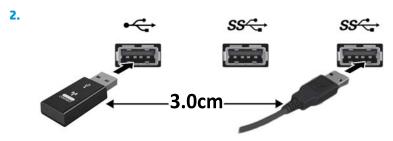
- **19.** Replace the computer access panel.
- **20.** If the computer was on a stand, replace the stand.
- **21.** Reconnect external devices, plug in the power cord, and then turn on the computer.
- **22.** Lock any security devices that were disengaged when the computer access panel was removed.
- **23.** Reset the date and time, your passwords, and any special system setups using Computer Setup.

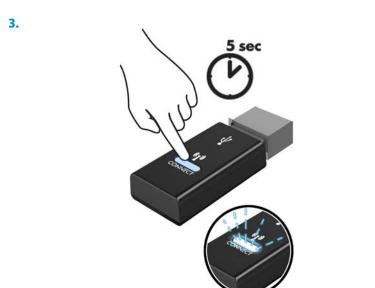
Synchronizing the optional wireless keyboard and mouse

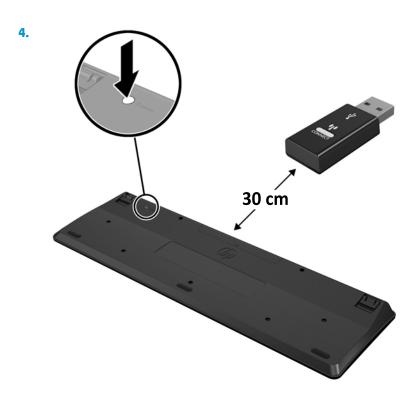
The mouse and keyboard are synchronized at the factory. If they do not work, remove and replace the batteries. If the mouse and keyboard are still not synchronized, then follow this procedure to manually resynchronize the pair.

1.











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.

Electrostatic discharge

A discharge of static electricity from a finger or other conductor may damage system boards or other staticsensitive 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 hard drive 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 hard drive locks automatically when the system power is turned off.
- Remove and store all removable media.
- Turn off the computer and external devices.
- 4. Disconnect the 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.

C Accessibility

HP designs, produces, and markets products and services that can be used by everyone, including people with disabilities, either on a stand-alone basis or with appropriate assistive devices.

Supported assistive technologies

HP products support a wide variety of operating system assistive technologies and can be configured to work with additional assistive technologies. Use the Search feature on your device to locate more information about assistive features.



NOTE: For additional information about a particular assistive technology product, contact customer support for that product.

Contacting support

We are constantly refining the accessibility of our products and services and welcome feedback from users. If you have an issue with a product or would like to tell us about accessibility features that have helped you, please contact us at (888) 259-5707, Monday through Friday, 6 a.m. to 9 p.m. Mountain Time. If you are deaf or hard-of-hearing and use TRS/VRS/WebCapTel, contact us if you require technical support or have accessibility questions by calling (877) 656-7058, Monday through Friday, 6 a.m. to 9 p.m. North American Mountain Time.



NOTE: Support is in English only.

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