Memory Module Replacement
Instructions

Before you begin
Observe the following requirements before removing and replacing memory.

**WARNING**: Never open the cover while the power cord is attached. You might damage your computer or be injured by the spinning fan blades.

**WARNING**: Avoid touching sharp edges inside the computer.

**CAUTION**: Static electricity can damage the electronic components inside the computer. Discharge static electricity by touching the metal cage of the computer before touching any internal parts or electronic components.

**Tools needed**
Phillips #2 screwdriver
Hex tool

Small screws are easily lost. Remove screws over a surface that enables you to retrieve them if they fall.

**Troubleshooting**
If the computer displays a memory error after you have turned it back on, turn the computer off and unplug the power cord. Open up the memory compartment and make sure the memory module is inserted all the way into the slot, and then press down on it to be sure it is firmly seated.

**Memory compatibility**
The computer uses SODIMMs (small outline dual in-line memory modules) that must meet the following requirements:
- 204-pin
- DDR4-2133
- Unbuffered, non-ECC (64-bit)
- 1.2 V
- 16 GB maximum installable memory

Because the memory uses dual channels, you must use the same memory module type for both sockets.

**NOTE**: The actual memory transfer speed might vary, based on the processor used in your computer.

**NOTE**: Memory performance might vary due to different system configurations.

**Removing the memory module**
1. Disconnect the power cord and all attached cables from the back of the computer.
2. Using caution, lay the computer down on a flat surface covered with a soft cloth.

3. To remove the stand, rotate it upward (1), remove the four hex screws (2), and then lift the stand up and off the computer (3).

4. To remove the rear cover, remove the two screw covers (1) and two Phillips screws (2) located in the bottom of the cover. Lift off the cover, and then place it upside down next to the computer (3). The optical drive is mounted on the inside of the rear cover, and a cable connects it to the system board.

5. Locate the memory modules:
   1. Hard drive
   2. Memory modules

6. Remove the five Phillips screws that secure the system board cover (1), and then lift the cover off the computer (2).

7. Spread the two retention clips outward (1) until the memory module tilts up at a 45-degree angle. Remove the module (2). Use the same procedure to remove both memory modules.
8. Touch the replacement memory module bag to the metal of the computer, and then remove the replacement memory module from the bag.

Replacing the memory module

1. Align the notched edge of the module with the tab in the slot, and then press the module into the slot at an angle until it is seated (1). Press down on the module until the side retention clips snap into place (2). **NOTE:** Memory modules are notched to prevent incorrect insertion.

2. Position the system board cover over the system board (1), and then replace the five Phillips screws (2).
3. Align the rear cover with the computer and press it down until it snaps into place (1). Replace the two Phillips screws (2), and then replace the screw covers (3).

4. Position the top of the stand on the computer (1), and then replace the four hex screws (2). Rotate the stand downward (3).

5. Plug the power cord and any additional cables into the back of the computer.

6. Press the power button to turn on the computer.