

# Installing a SIMM in your desktop

## Step 1: Get out the tools you'll need.

- Non-magnetic screwdriver (for opening your case)
- Your computer manual

## Step 2: Ground yourself.

Static electricity can damage your module and other computer parts. You need to ground yourself to avoid "shocking" your computer. If you have wrist straps designed for this purpose, you should wear them. If you don't have wrist straps, here is the easiest way to ground yourself:

- Turn off the computer, monitor, and all accessories (printer, speakers, etc.)
- Leave the computer power cord plugged in. (It's OK to unplug your accessories if you like.)
- Briefly touch an unpainted metal part of your computer case.
- Plant your feet and don't walk around. If you do need to walk around, ground yourself again before touching any of the internal parts of your computer.

## Step 3: Open your computer case.

Every computer case is a little different, so consult your manual if you have any questions about how to open your case.

- If you haven't already done so, turn off the computer, monitor, and all accessories (printer, speakers, etc.)
- Remove any screws holding your cover in place.
- Remove the desktop cover.





**Tip:** Make sure you put the screws from your computer case in a safe place so that it's easy to put your system back together again!

**Step 4: Find the SIMM slots and banks.**

### **SIMM Slots**

SIMM slots are usually white with retaining clips at each end of each slot.



SIMMs fit into slots as seen in the picture below. Here, two of the slots are already filled with modules.



## Installed SIMMs Open SIMM Slots Retaining Clips

When installing SIMMs, it is important to remember that most systems (Pentium and newer), require two SIMM modules to make a single bank of memory. Because of this, you need to fill the two slots in a bank with identical modules. However, each bank can hold different size modules. For example, bank 1 (slots 1 and 2) may have two 32MB modules, while bank 2 (slots 3 and 4) may have two 16MB modules. The larger modules must be in the first bank (slots 1 and 2).

Note: For most 486-based systems, a memory bank can be single SIMM. Early 486-based systems may require four 30-pin SIMMs to make a single memory bank.

The memory banks on your motherboard should be clearly labeled.

**Tip:** It may be easier to install your SIMMs if you lay your computer on its side.

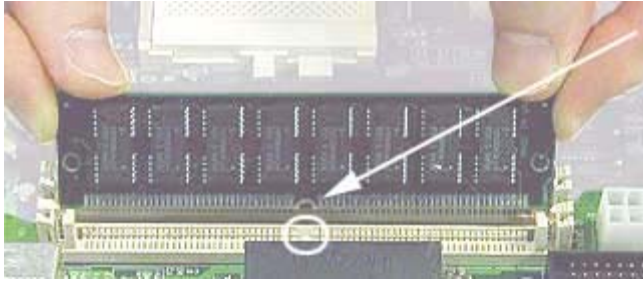
### **Step 5: Remove the memory you are replacing (if necessary).**

If you have an open SIMM bank, skip this step and go on to Step 6. If all of your SIMM banks are full, you will need to remove one or more of your old modules before you can install the new memory.

- Press down on the retaining clips on either side of the module.
- Remove the module from the slot.

### **Step 6: Install your new module(s).**

- Take your module out of its anti-static bag and hold it by the edges.
- If you have more than one open bank, fill the lowest numbered bank first. If you can't see any numbers on your motherboard, use the slot that is closest to the filled slot(s).
- Line up the notches in the row of metal pins at the bottom of your module with the keys in the SIMM slot on your motherboard. (If the notches don't line up right away, flip your module around and try it the other way. It doesn't matter which side of your module has the black chips or the stickers on it. The important thing is to line up the notches.)



### **Line up the notch**

The notch on the module fits into a key in the slot (circled).

- Hold the module at a 45-degree angle to the slot and slide it into place.



### **Place module in slot**

Slide module into slot at a 45-degree angle.

- Rotate the module until it is standing upright in the slot and the two retaining clips on either side of the slot snap into place.



### **Rotate module**

Rotate the module until it is standing upright in the slot. Retaining clips on each end of the slot will snap into place around the module.

**Tip:** Try to avoid touching the metal pins at the bottom of your module. You probably won't harm them if you do touch them, but it's better to be safe than sorry.

## **Step 7: Test it.**

Before you close your case, turn your computer back on. You should see the new amount of memory displayed on your startup screens or in the properties for "My Computer" (if you use a Windows operating system). If everything works correctly, skip to Step 9. If not, go to Step 8.

## **Step 8: Troubleshooting**

If you have trouble with your new RAM, check these things first.

- Check the power cords. Is everything plugged in properly?
- Check the module. Did both side clips snap to hold the module firmly in place? Try removing the module and replacing it to make sure it is seated properly in the slot.
- Check the wires and cables inside your computer. Did you accidentally bump one of the cables inside your computer while you were installing your module? A loose hard drive cable can prevent your computer from booting up properly. Make sure all the cables are firmly in their sockets.

## **Step 9: Close your case.**

Congratulations! You have successfully installed your new RAM! Now just put the cover back on your case and plug in your accessories. Your computer should be speeding along in no time.