

How Fast Can Your Computer Go?

To achieve the maximum speeds offered by Mid Century Fiber it is important to know the maximum speed your computer is capable of. No matter how fast the data arrives at the interface, it will only pass through as fast as your device is capable of.

You can find the speed capability of your computer network interface card (NIC) by following the steps below that relate to your computer.

Windows

1. Open the **System Control Panel**
 - a. Right click on the "Computer" icon located on your desktop and select "Properties".

If the "Computer" icon does not appear on your desktop...

- a. Click "Start" and select "Computer". Click "Open Control Panel" in blue ribbon at top of page.
- b. Click the right arrow next to Network Adapters.

A list of network adapter will appear. Ignore and Bluetooth devices listed. Usually you can determine the speed capability by the name of the network interface card.

2. Click **Device Manager**
3. Click the **right arrow** next to **Network Adapters**
 - a. A list of network adapter will appear. Ignore and Bluetooth devices listed. Usually you can determine the speed capability by the name of the network interface card. It will show a 10, 100 or 1000 mbps (megabits per second), GigE or Gigabit Ethernet.
 - b. If your card shows 10/100baseTX Ethernet, 100mbps is the maximum speed of the device.

Mac OS X systems

1. Click the Apple icon in the menu bar and select **About This Mac**.
2. Click **More Info**.
3. Click **Support** in the upper right corner to display the OS X and Mac Resource Information.
4. Click **Specifications** in the Resources section.
5. Review the specifications to find the speed of your Mac's Ethernet interface card. Search the specifications for Ethernet.
 - o If you find Gigabit Ethernet, your NIC is gigabit-capable.
 - o If you find 10/100/1000BASE-T Ethernet, your NIC is gigabit-capable.
 - o If you find 10/100baseTx Ethernet your NIC is not gigabit-capable.

MacBook Air computers don't have Ethernet ports, so their specifications have no references to Ethernet. However, you can connect a MacBook Air to Ethernet with an Apple USB Ethernet Adapter.

Chromebooks

Multiple Chromebook models do not have an Ethernet Interface Card. Below is a list of Chromebooks and their Ethernet capability:

- Chromebox: GigE
- Samsung Chromebook 550: GigE
- Acer C7: GigE
- HP Pavilion: 10/100Mbps
- Samsung Chromebook: no Ethernet NIC
- Chromebook pixel: no Ethernet NIC
- Samsung Series 5: no Ethernet NIC
- CR-48: no Ethernet NIC
- Acer AC700: no Ethernet NIC

Did you discover...

1. Your computer does not have a built-in Ethernet/Network Interface Card?
 - a. You might be able to purchase a USB or USB3 Gigabit Ethernet adapter to achieve maximum speed. Contact your manufacturer directly.
2. Your Ethernet NIC or network adapter is not gigabit-capable?
 - a. You could check into replacing it with a new network adapter that would support Gigabit Ethernet.
3. Your computer is capable of the speeds but you are not getting the speeds you expect?
 - a. It could be your Ethernet cable and it might need to be replaced.
Cat5 = 100 Mbps
Cat5e = 1000 Mbps
Cat6 = 10Gbps
 - b. Not all NIC's are created equal. A discount store special is not going to be as fast as an enterprise Intel branded NIC.

Cat5e or Cat6 will support gigabit speeds. In general, Cat5e should work and is less expensive than Cat6.

Even with a gigabit-capable Ethernet Interface, other internal hardware or software inefficiencies (chipsets, motherboards, or other running applications) could hold you back from reaching the expected speed. You also have to consider the source. Not all services/sites can provide full speed to every user.