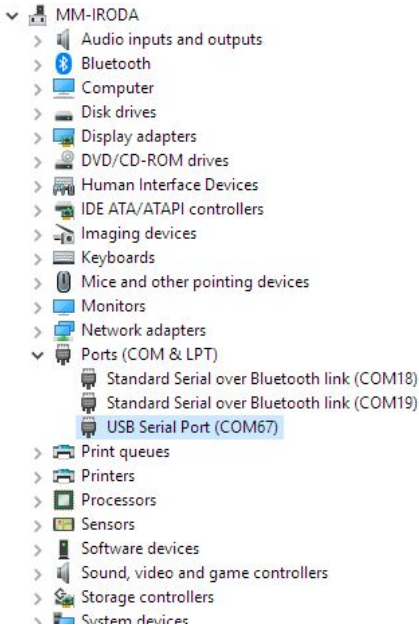


# COM Port Settings to avoid reset when connecting PC-USB to a powered P2-EVAL board

Plug in the P2-EVAL PC-USB port to your computer

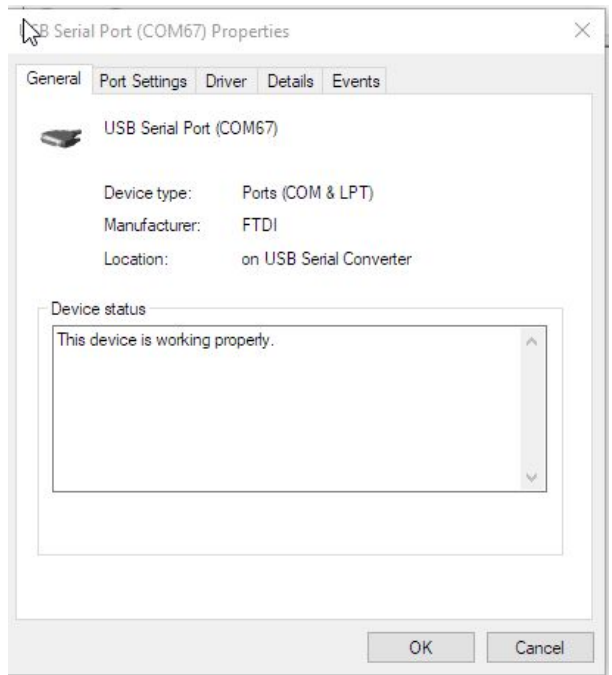
Open windows Device Manager

**Tip:** One way to open device manager:  
Hold the windows key and press “R”.  
Then type: `devmgmt.msc` and press enter

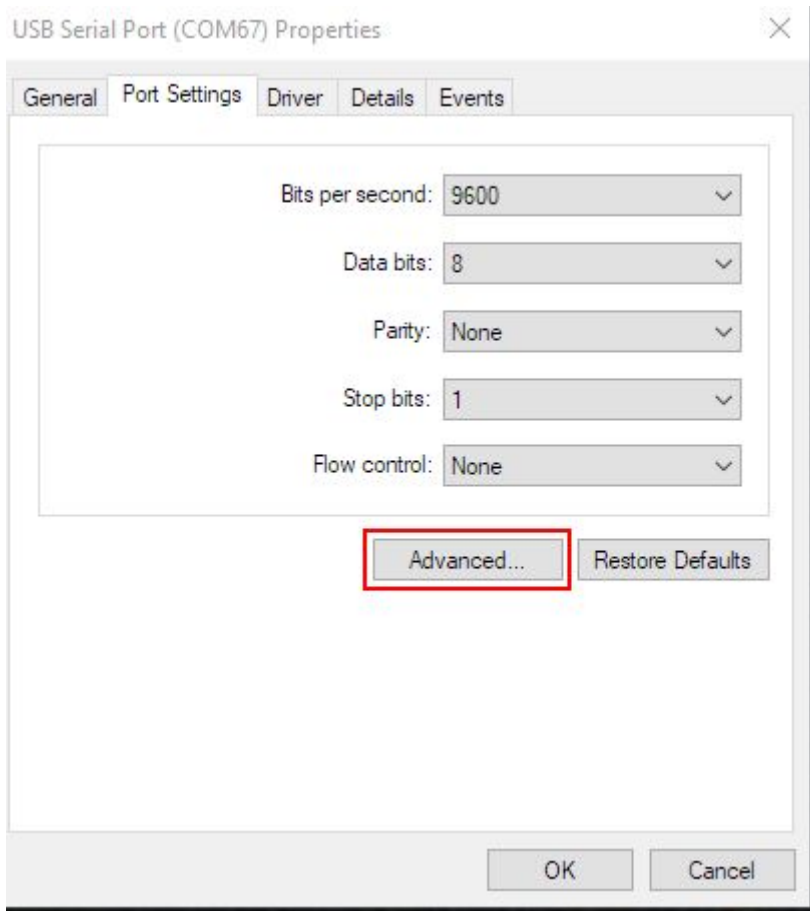


Open the list of Ports, and right-click on the USB Serial port that is connected to the P2-EVAL Board.

Select “Properties” in the pop-up mouse menu.

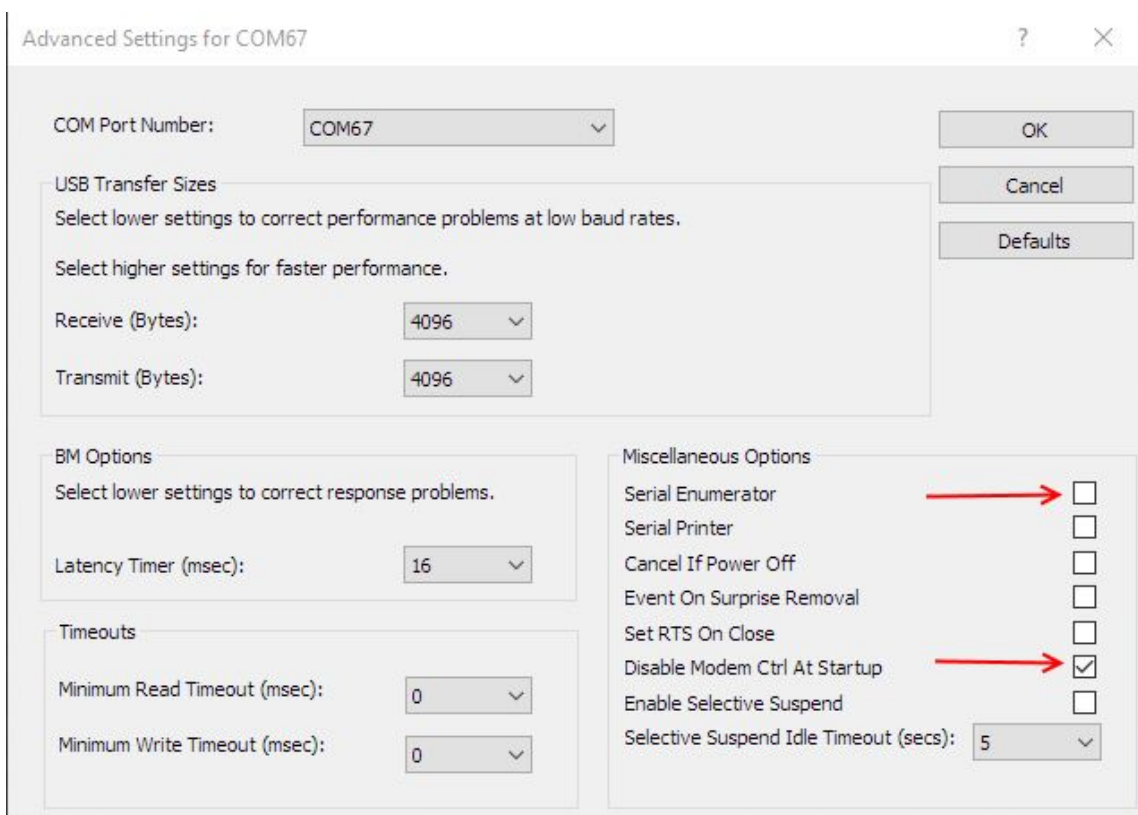


You will see the Properties window appear. Click on the second tab “Port Settings”



Click the "Advanced..." button

In the Advanced Settings menu, ensure "Serial Enumerator" is NOT ticked, and "Disable Modem Ctrl At Startup" is ticked, as shown in the following image.



After making the changes, click OK to close the window, then OK again to close the next window. Finally, Device Manager can be closed by clicking the X at top-right. All done !

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## What's going on then?

Serial Enumerator:

This is enabled by default, and is a legacy option whereby the serial port hunts for a serial mouse over the USB port. It does this by pulsing DTR 3 or 4 times, and if the mouse replies with an "M" character, the port is then treated as a mouse-port.

Disable Modem Ctrl At Startup:

This is unchecked (and so enabled) by default. Another legacy option that is use to wake up a modem when attached, by pulsing DTR 2 times. These pulses are sent after the "Serial Enumerator" pulses, if that option is also enabled.

Once both these features are disabled, there will not be any pulses to DTR (by the Operating System) when a USB cable is plugged in or out, and thus the P2-EVAL will not reset provided it is powered from the auxiliary power source (P2-USB).

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## Additional Observations

The serial port "Advanced" setting applies to one com port number. If your com port number changes, you will need to re-apply the settings, even if the device connected is the same. Windows remembers these settings by the com port number.

For example, the com port will usually change after editing FTDI settings (as FTDI will auto-generate a new serial number for the device).

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## Will this work with FLiP or the Activity Board ?

No.

FLiP will still reset. However, with the FTDI programming tool you can define the state of DTR (inverted or not). According to that setting, and with the above OS fix, you can define whether FLiP will reset when you unplug the USB, or when you plug in the USB.

Activity Board revA will behave like FLiP.

Activity Board revB will always reset when the USB port is powered down.