

Application Note #5471

Optimizing Firmware Upgrade Speed While Using a USB-Serial Adaptor

March 14, 2008

Functional Description

It is possible to increase the speed of doing a firmware upgrade while using a USB to Serial adaptor. If the adaptor has an FTDI chipset (such as FreeWave model USB-RS232-6), the latency can be reduced. The following is an example of how long it takes to do a firmware upgrade with different hardware configurations: with a normal hardware serial port – 45 seconds, with a USB to Serial adaptor with default settings – 810 seconds, and a USB adaptor with adjusted settings – 185 seconds.

Settings

Right-Click on My Computer and select Properties. Under the Hardware tab (Figure 1), click on Device Manager (Figure 2).

Figure 1

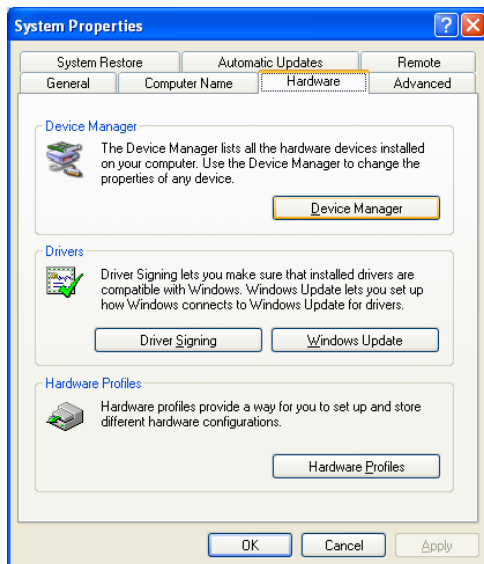
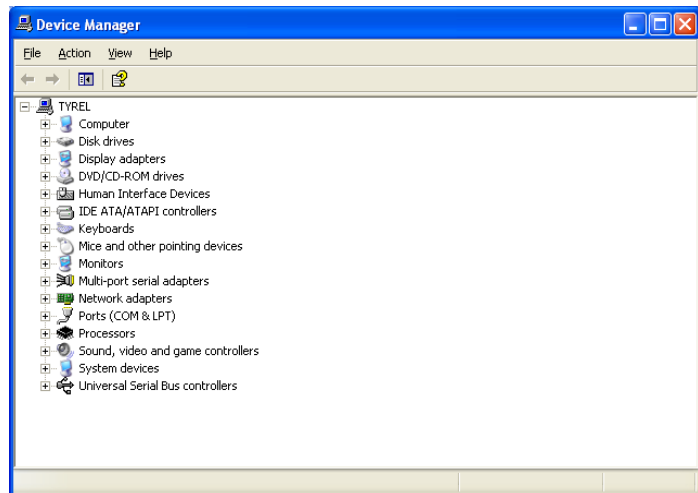


Figure 2



In the Ports section, select your USB port (Figure 3).

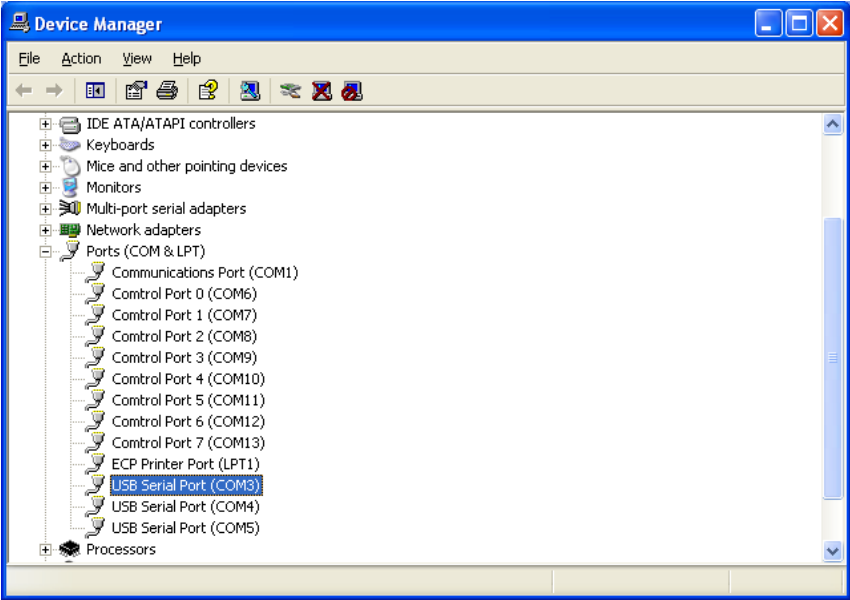


Figure 3

Right-Click and select **Properties**. On the properties window, go to the Port Settings tab and click on Advanced (Figure 4).

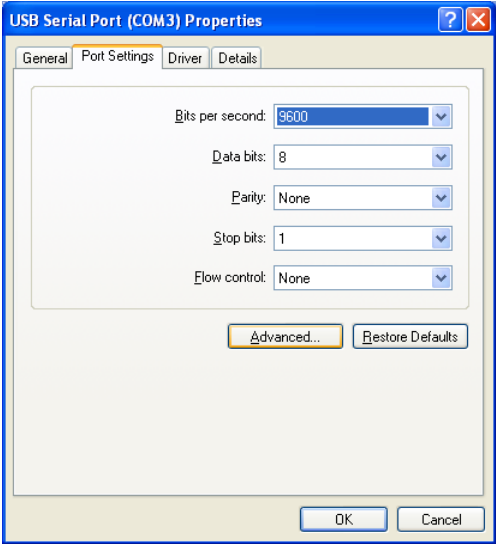


Figure 4

In the Advanced Settings window, change the Latency Timer to 1 (Figure 5).

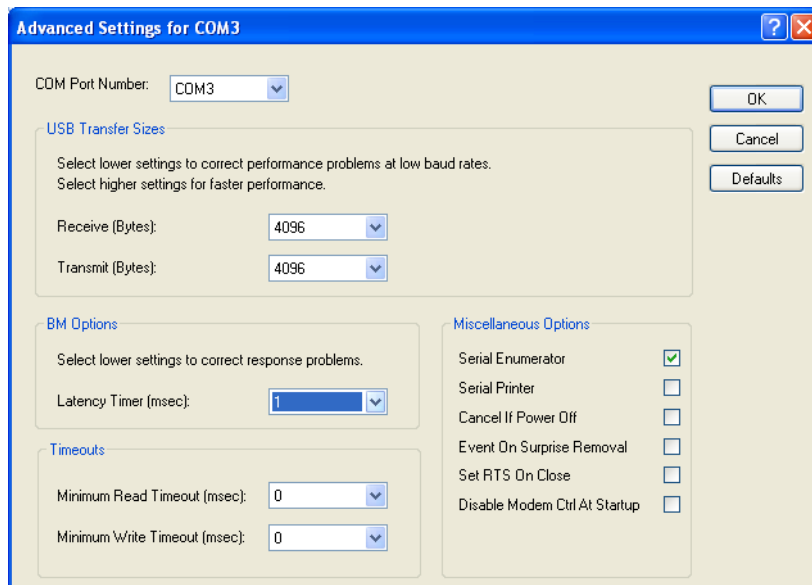


Figure 5

Press OK. The adaptor should now be able to program a firmware upgrade at faster speeds.

Please contact FreeWave Technical support if you have any setup questions or need any assistance.

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