

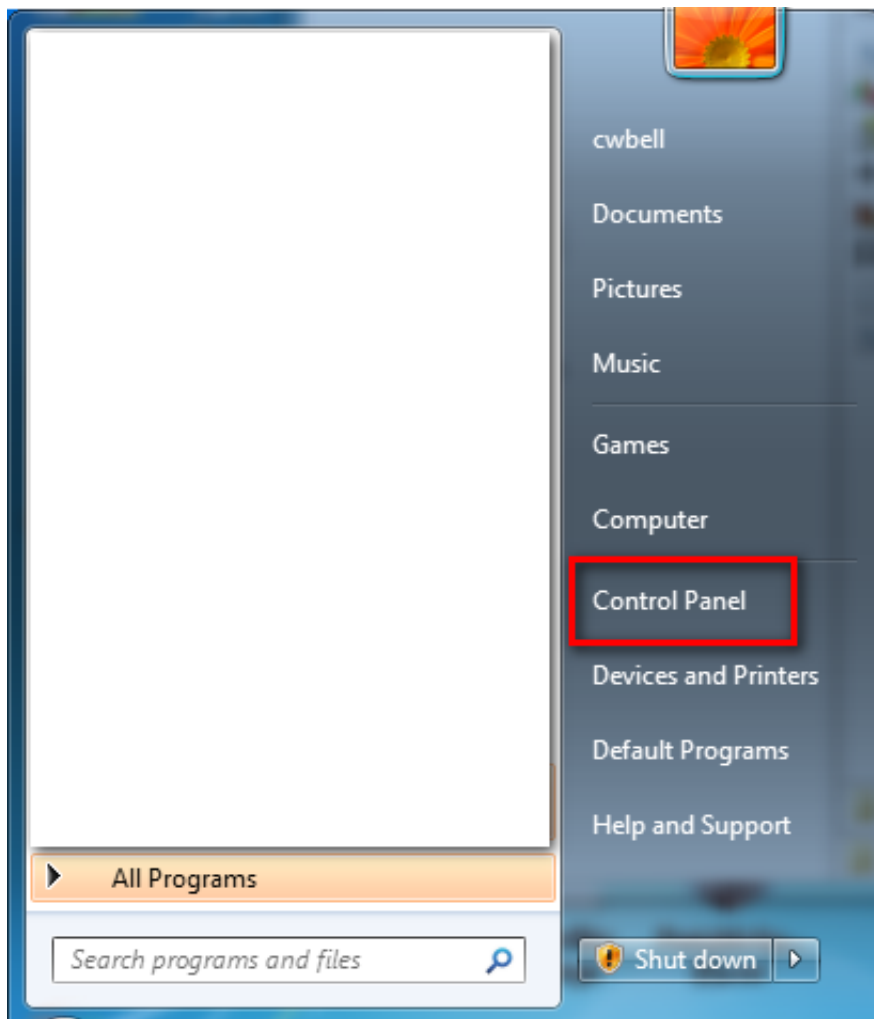
Connecting to RS232 on the FPGA

The new FPGA devices use a USB-UART, rather than the old hardware RS232 connections. Unfortunately, this makes connecting to them a bit more difficult. This document will help you connect to the serial port created by the USB-UART.

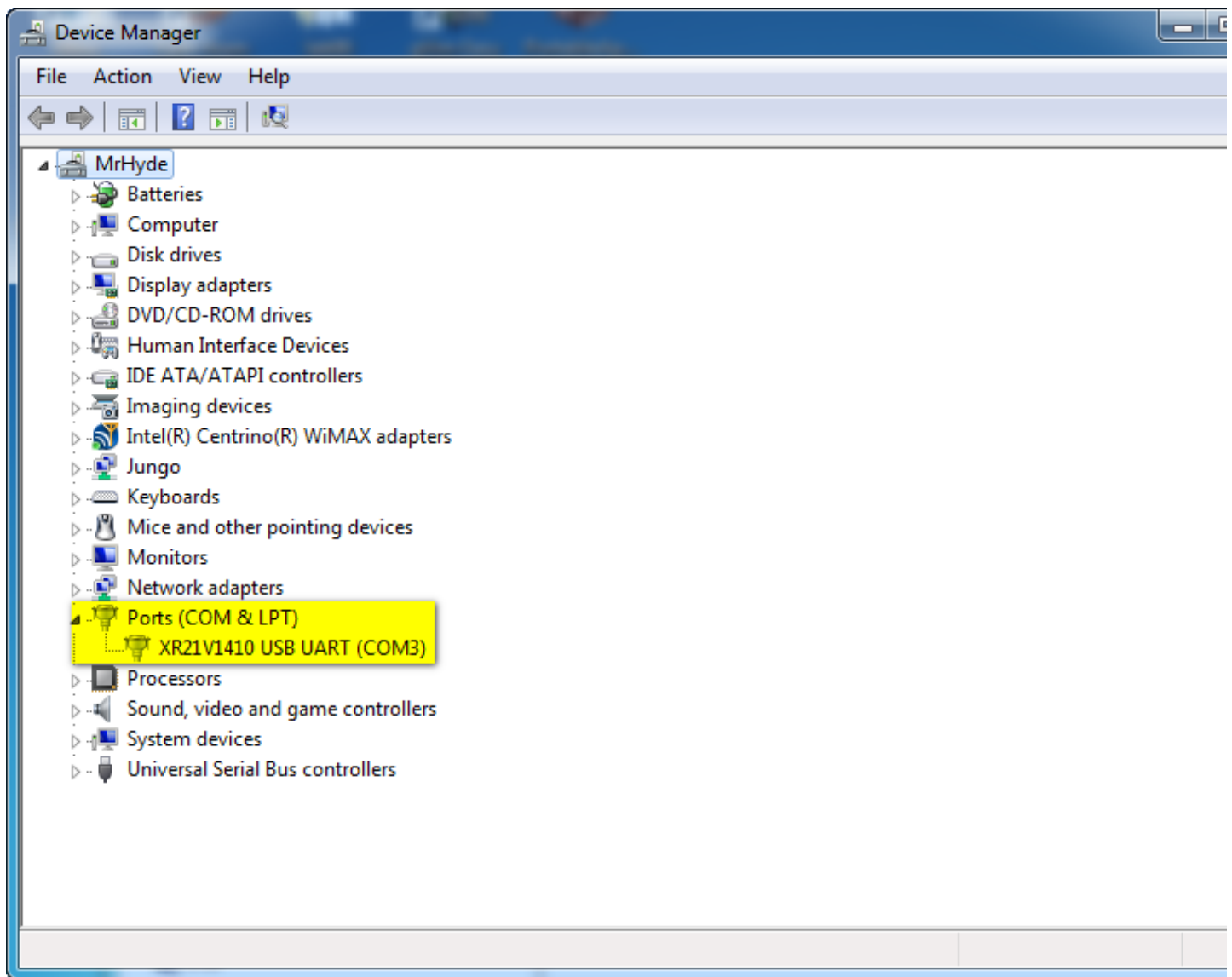
1. Plug the USB-UART port to the PC using a micro-usb cable. The UART port is the port marked... UART.
If necessary, wait for the Windows drivers to install.
2. Open the Windows Control Panel (Start Menu->Control Panel)
3. Open the Device Manager*.
 1. In the list of device categories, you should see one named 'PORTS (COM & LPT)'. Expand this category.
 2. Within the PORTS category, you should see a listing similar to: XR21V10410 USB UART (COM3)
 3. The port labelled USB UART is the one we care about. Take note of the COM port (in this case, COM3).
4. Launch PuTTY (Download from [here](http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html) [↗] <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html> if necessary)
 1. For 'Connection Type' select 'Serial'
 2. For Serial line, enter the COM port from step 3.2 (COM3 in this case)
 3. For 'Speed,' enter the programmed baud rate. (Set in Verilog code)
 4. Press 'Open'
5. And that's pretty much it.

* On the C4 machines, you will need to enter the username/password used for logging in. You will then get a warning telling you that, since you're not root, you can't make changes. This is fine - we don't want to make changes.

Control Panel (you really should already know where this is...)



Device Manager:



PuTTY Configuration:

