Using the PIC24 Microstick II with a Terminal Emulator

The PIC24 Microstick II can be used with a terminal emulator to output text and input data. The Microstick II should be connected to a host PC via a FTDI TTL-232R-3.3V USB-to-TTL cable for the PC serial communication link. These are available for in-lab use in in the laboratory or may be purchased for individual use. One supplier source is http://www.digikey.com/product-detail/en/ftdi-future-technology-devices-international-ltd/TTL-232R-3V3/768-1015-ND/1836393. Figure 1 shows the serial cable connected to the Microstick II. Note the cable orientation shown for proper operation of the serial link.

Figure 1. FTDI TTL-232R-3.3V USB-to-TTL cable connection

Drivers may need to be downloaded and installed onto the host PC for the serial link to work properly. Virtual COM port (VCP) drivers cause the USB device to appear as an additional COM port available to the PC. A VCP driver may be downloaded and installed from http://www.ftdichip.com/Drivers/VCP.htm. Once installed, the COM port settings may be viewed using the device manager. Figure 2 shows an example COM port device properly configured.

Figure 2. Virtual COM Port configured as COM5 on a Host PC
Any properly configured terminal emulation program should work with the serial link to the Microstick II. The putty.exe terminal emulation program can be downloaded from the class website. The PuTTY Configuration dialog box settings show match the serial link settings. The Serial line selected should match the virtual COM port. The Speed (Baud Rate) should be 9600. This will match the settings for MPLAB projects. Figures 3 and 4 show the session and terminal settings.