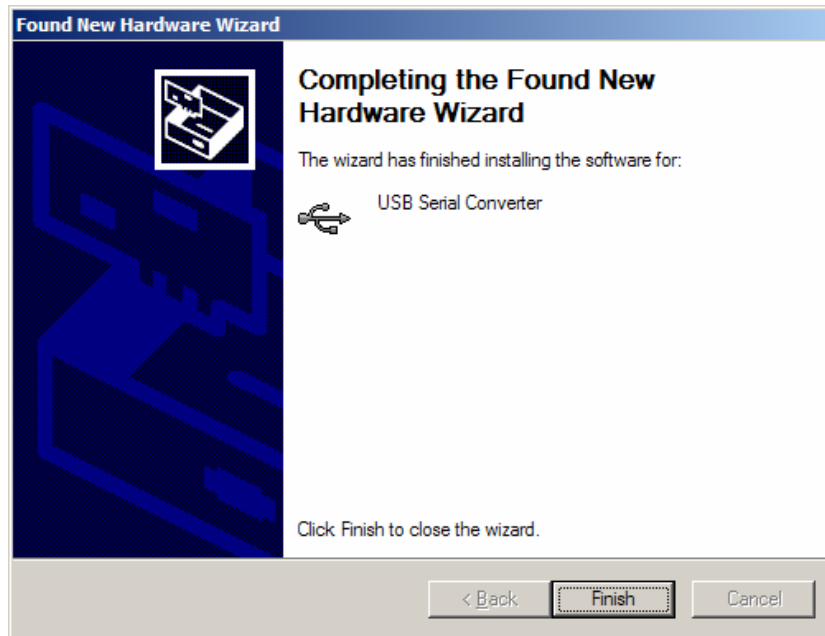**FDI**   USB-ICP-LPC9xx
Quick Start Guide   **FDI**

Installing the USB-ICP

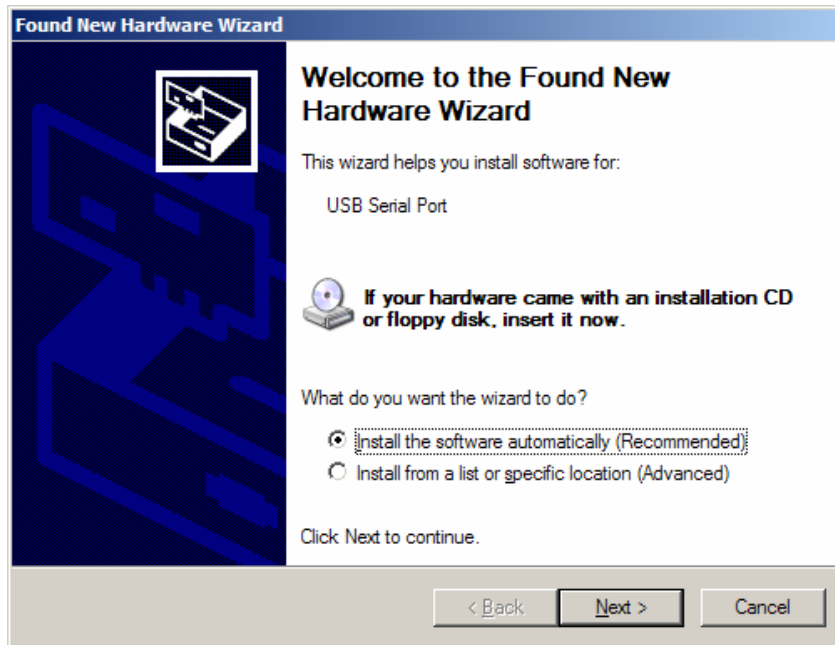Note: This part of the Quick Start Guide applies to ALL versions of the USB-ICP Programmer

1) Plug the USB-ICP into the back of the computer. Do NOT plug the USB-ICP into a hub or docking station hub.
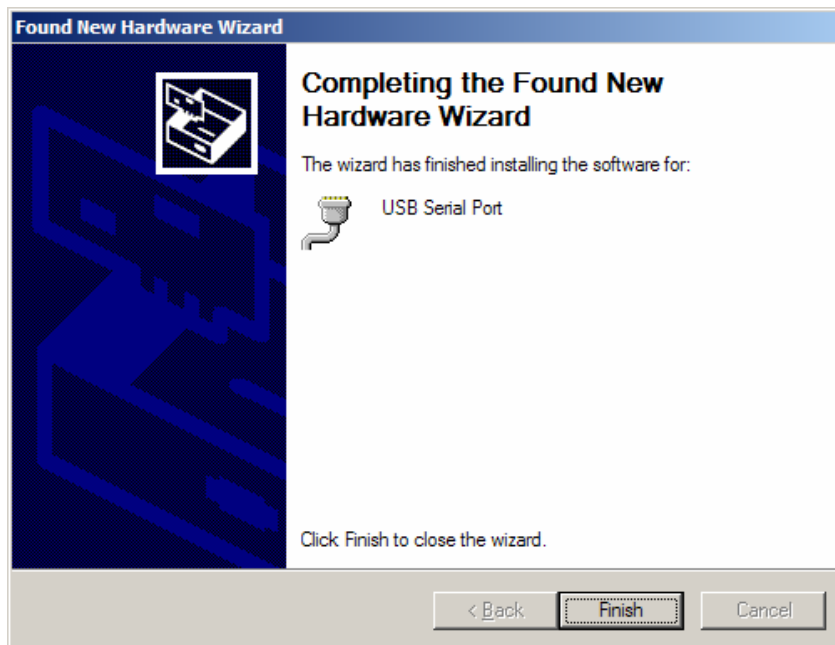2) Click **Next** on the following dialog.

3) After processing for awhile, click **Finish** on the following dialog.
    If the drivers are not found, you can download them from:
    http://www.teamfdi.com/products/usb-icp/usb-icp.shtml.

Found New Hardware Wizard

Completing the Found New Hardware Wizard

The wizard has finished installing the software for:

USB Serial Converter

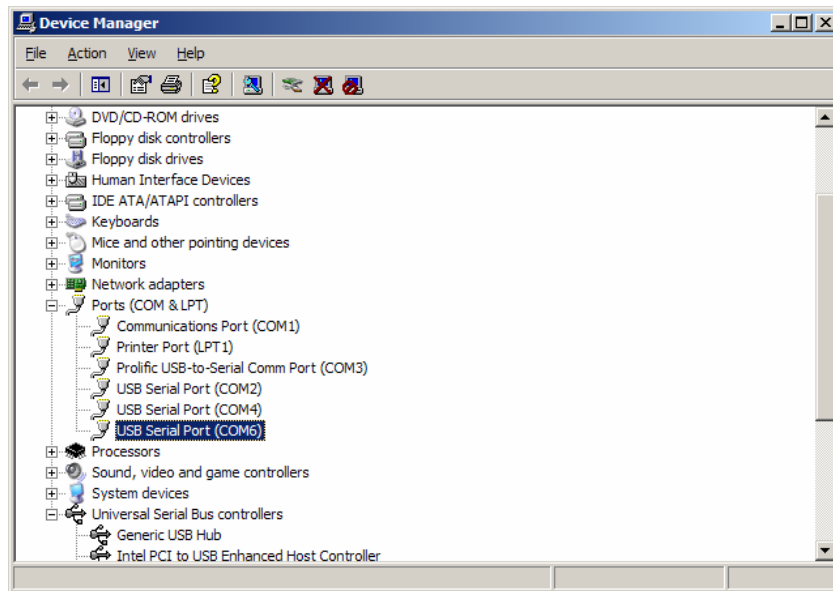Click Finish to close the wizard.

[< Back] [Finish] [Cancel]

4) The next dialog will appear. Click **Next**

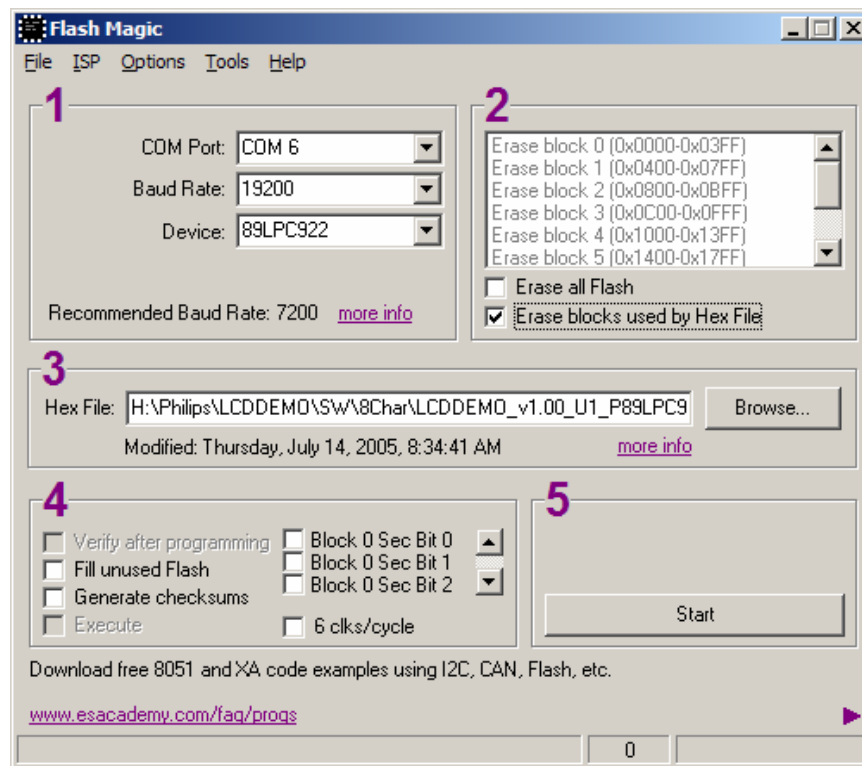5) After processing for awhile, click **Finish** on the following dialog.

6) Open the Device Manager (Go to Start->Settings->Control Panel->System->Device Manager).

7) Notice the new USB Serial Port added to Ports and its associated COM port (see below). The COM port number can be changed by right clicking on Properties and selecting Port Settings->Advanced->COM Port Number.

8) The USB-ICP is now properly installed. Note the COM port installed for use with Flash Magic.

Using Flash Magic with USB-ICP to program P89LPC9xx Devices

1) Plug the USB-ICP programmer into the USB port.
2) Make sure your target device IS NOT powered. DO NOT APPLY EXTERNAL POWER TO THE TARGET WHILE ICP PROGRAMMING. Damage will occur if the target is powered during ICP programming.
3) Plug the cable from the USB-ICP Programmer (RJ end with LEDs) to the target device.
4) Run Flash Magic v2.44 (or later) with the following settings:
   a. Section 1
      i. COM Port: Select COM port that matches installed USB-ICP
      ii. Baud Rate: Always 19200
      iii. Device: Choose target device processor type
   b. Section 2
      i. Click "Erase blocks used by Hex File".
   c. Section 3
      i. Click **Browse** and select HEX file to be programmed.
   d. Section 4
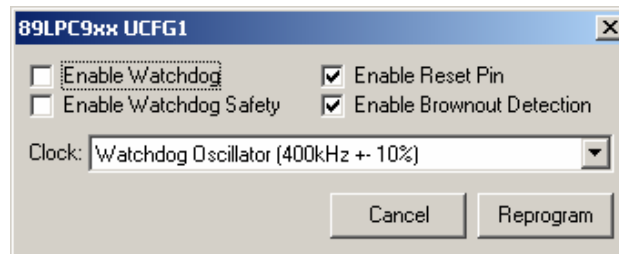   i. Make sure all checkboxes are NOT checked and especially in the scrolling block sector area.

5) Before starting, confirm the communications is working by selecting ISP -> Read Device Signature. Three numbers will be reported similar to the following dialog.

If 0xFF is reported for all 3 numbers, the USB-ICP is working but not able to communicate with the target device – DO NOT CONTINUE UNTIL THIS IS RESOLVED. In all other cases, an error dialog will be reported. Click **Close**.

Device Signature

Manufacturer ID: 0x 15

Device ID 1: 0x DD

Device ID 2: 0x 23

Close

6) Program the target by clicking **Start** and wait until "Finished" appears at the bottom.

7) Then select ISP -> Device Configuration. Enter the desired settings and click **Reprogram**. You will need to determine the proper settings for your application. Extreme care should be taken in that incorrect settings may result in your device not being capable of being ICP programmed.

89LPC9xx UCFG1

☐ Enable Watchdog   ☑ Enable Reset Pin
☐ Enable Watchdog Safety ☑ Enable Brownout Detection

Clock: Watchdog Oscillator (400kHz +- 10%) ▼

Cancel   Reprogram

A dialog should then appear saying "Configuration successful reprogramming."

8) Unplug the USB-ICP and apply power to the target.