

Programming with Flash magic

For creating a .hex file in LPCXpresso, please refer,

<http://support.code-red-tech.com/CodeRedWiki/PostProcessApp>

Bring the robot in boot-loader mode by pressing and releasing the Reset button while SW1 is held down.

Use flash Magic to load this hex file. The detailed steps for configuring Flash Magic to load a hex file on the target platform are given below.

Using Flash Magic Tool

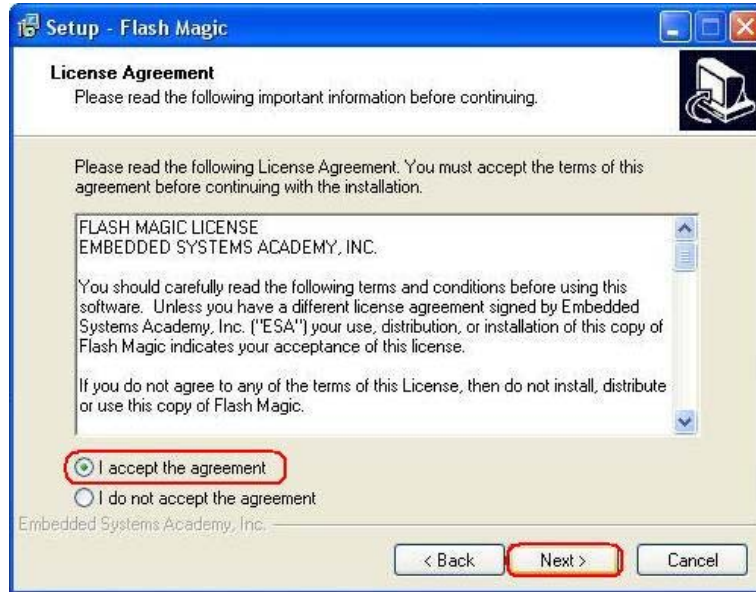
The LPC series of microcontrollers are preloaded with the boot loader firmware which allows self programming of microcontrollers using serial port. Flash magic is a utility which provides an interface for reading, writing and verifying the flash memory of the microcontroller.

Installing Flash Magic Tool

To install **Flash Magic**, Go to “Software” folder in the documentation CD and locate “**FlashMagic.exe**” file. Click on “**FlashMagic.exe**” to start the installation process. Once the installation process is started Flash Magic welcome screen will appear.



Please read the license agreement carefully. If it is acceptable click the radio button and click **Next>>** to continue.



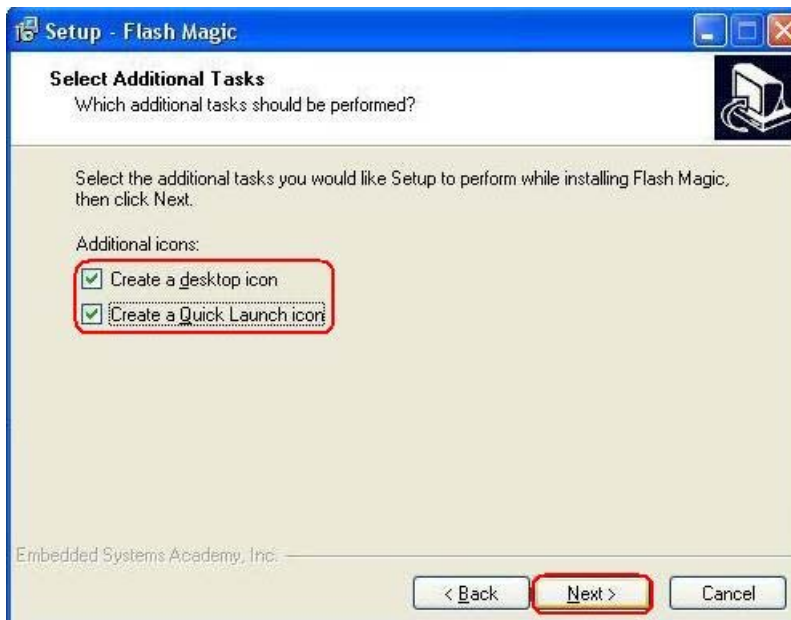
Select the destination folder and click **Next>** to continue.



In the next window choose the appropriate folder and click **Next>** to continue.



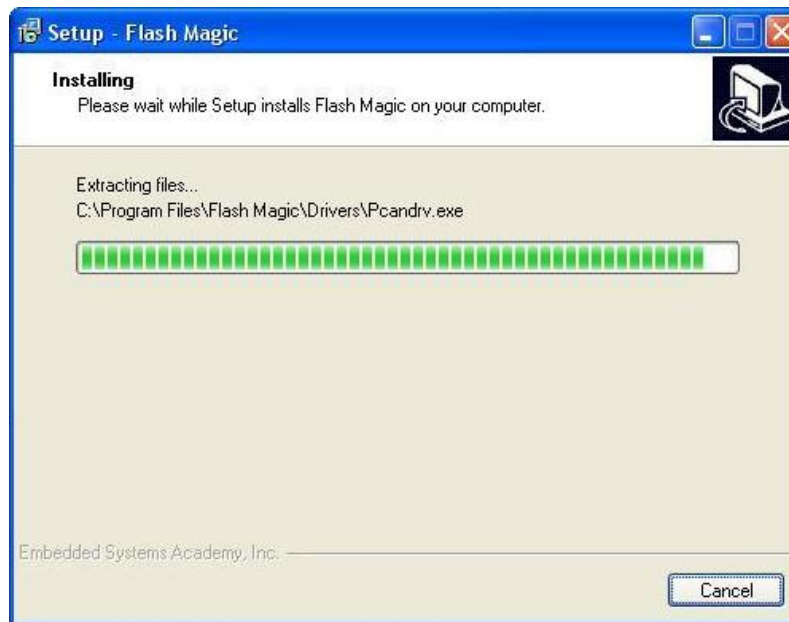
Select the desired option and click **Next>** to continue.



Setup is now ready to begin installing flash magic. Click **Install** to continue.



Wait till setup installs Flash Magic on your computer.

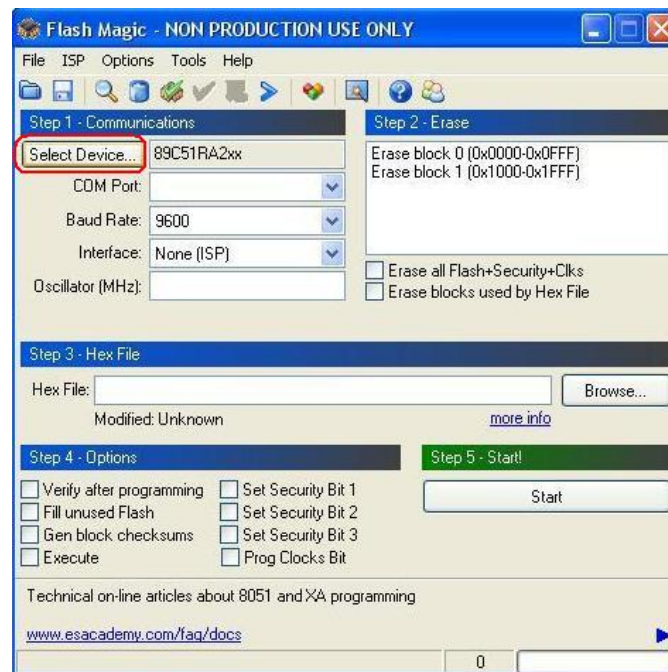


Click Finish to complete the installation process,

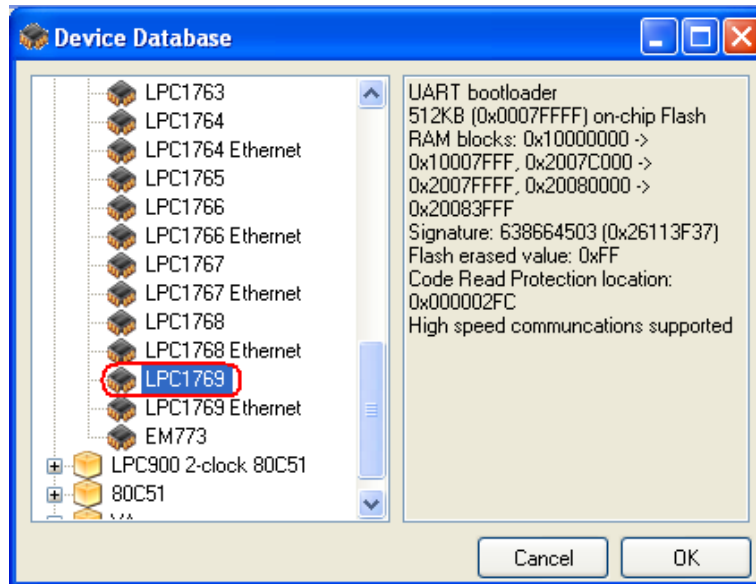


The next step is to load the hex file in to the microcontroller using Flash magic utility.

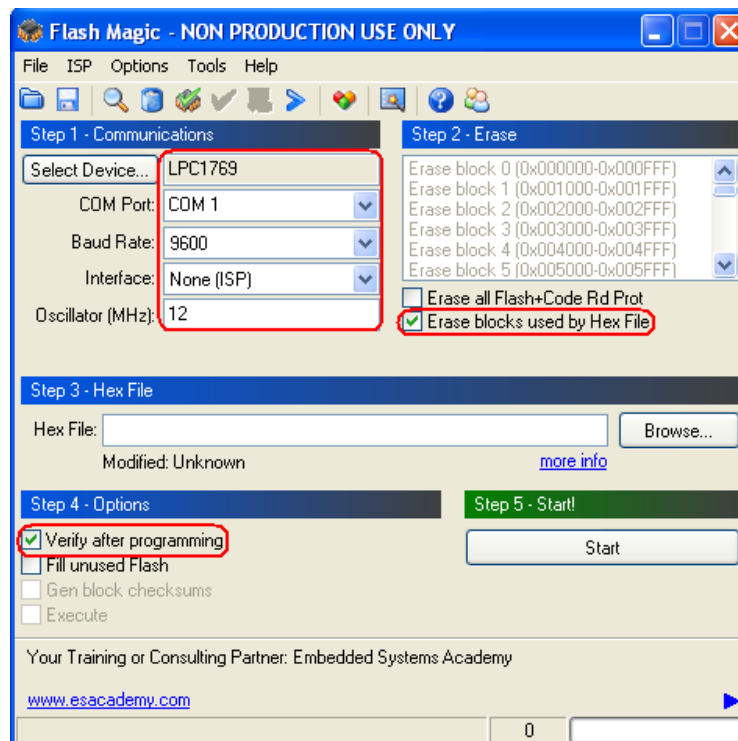
1. Click **Start>Programs>Flash Magic>Flash Magic** to start Flash Magic utility.
2. Click **Select Device** to select LPC7169 microcontroller.



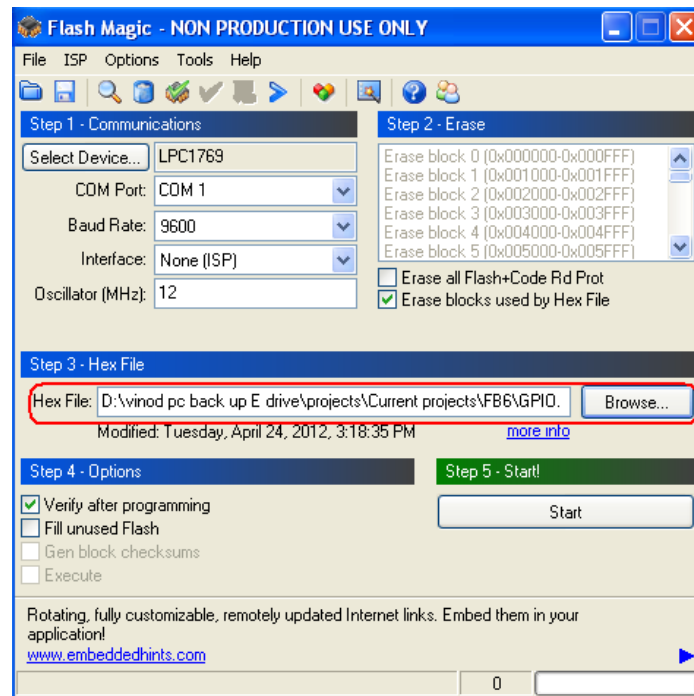
- Expand the **ARM Cortex** and select **LPC7169** from the displayed list of microcontrollers.



- After selecting the microcontroller, select the COM port that you are going to use and ensure that other settings are as shown in the figure below.



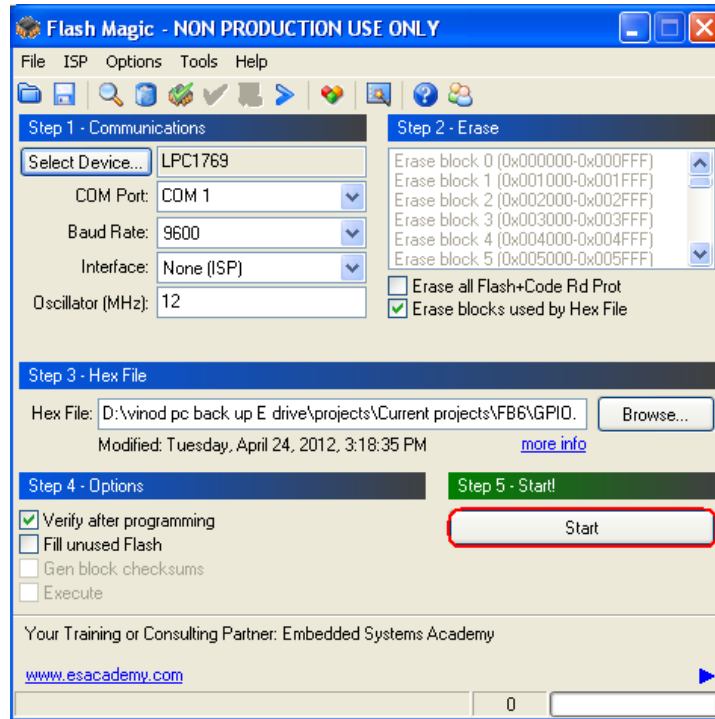
5. To select the hex file click **Browse** and point to the folder that was created earlier and select the hex file.



6. Before loading the hex file prepare Fire Bird VI by doing the following hardware setup.

- i. Connect a DB9 cable between the DB9 serial connector **COMx** port on your PC and the DB9 serial connector at the back side of Fire Bird 6.
- ii. Slide ON/OFF switch to **ON** position.
- iii. Enter in to boot load mode by keeping the **SW1** switch pressed and then press **RESET** switch present on the back panel of the Fire Bird VI.

7. After completing the hardware setup in step 6, click start to begin programming the hex file.



8. Observe the status bar at the bottom of the Flash Magic tool. Wait for the “**Finished**” status and press “**Reset**” switch.



If not successful then repeat again from step 6.