

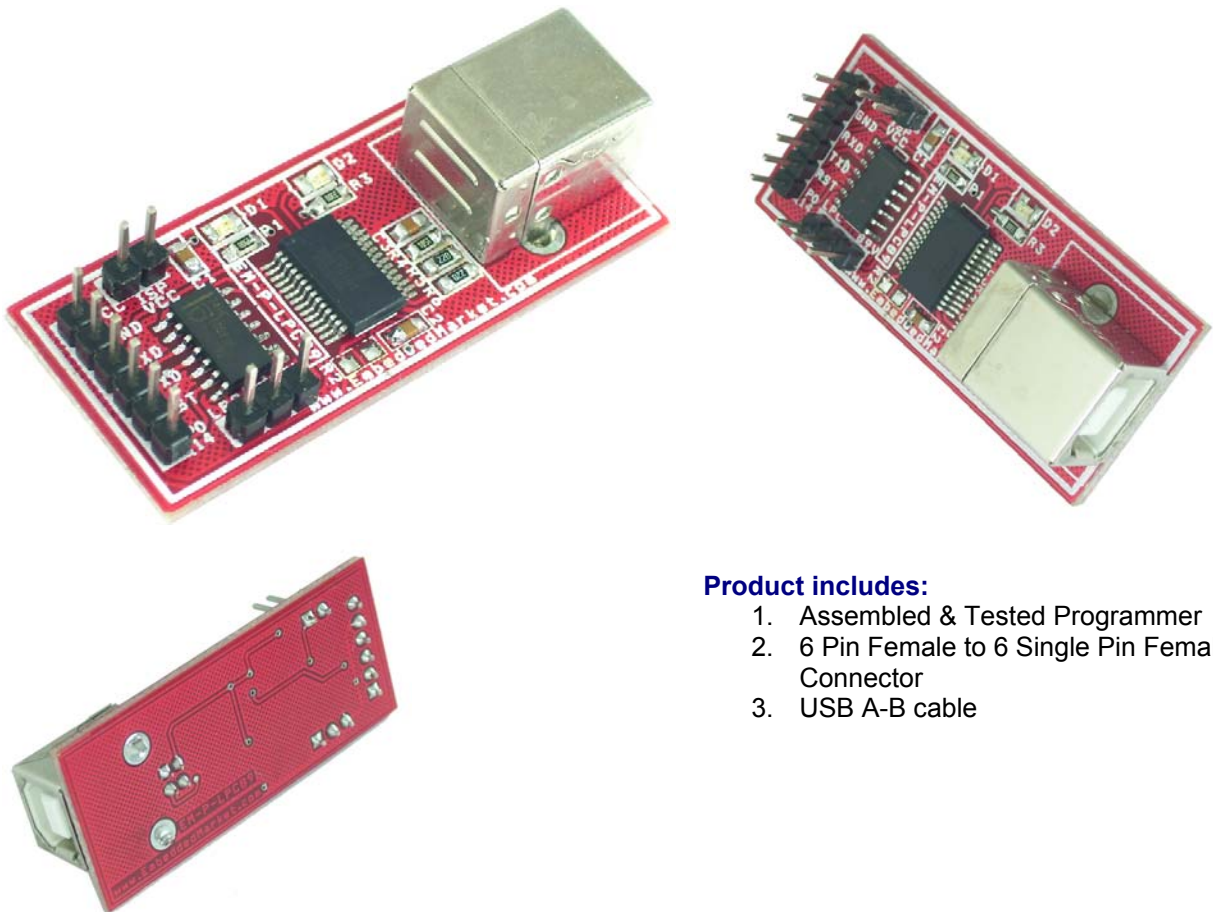
EM-P-NXP USB Programmer for LPC ARM and P89VXX Microcontrollers

User Guide

EmbeddedMarket.com presents the **USB Programmer for LPC ARM and P89VXX Microcontrollers.**

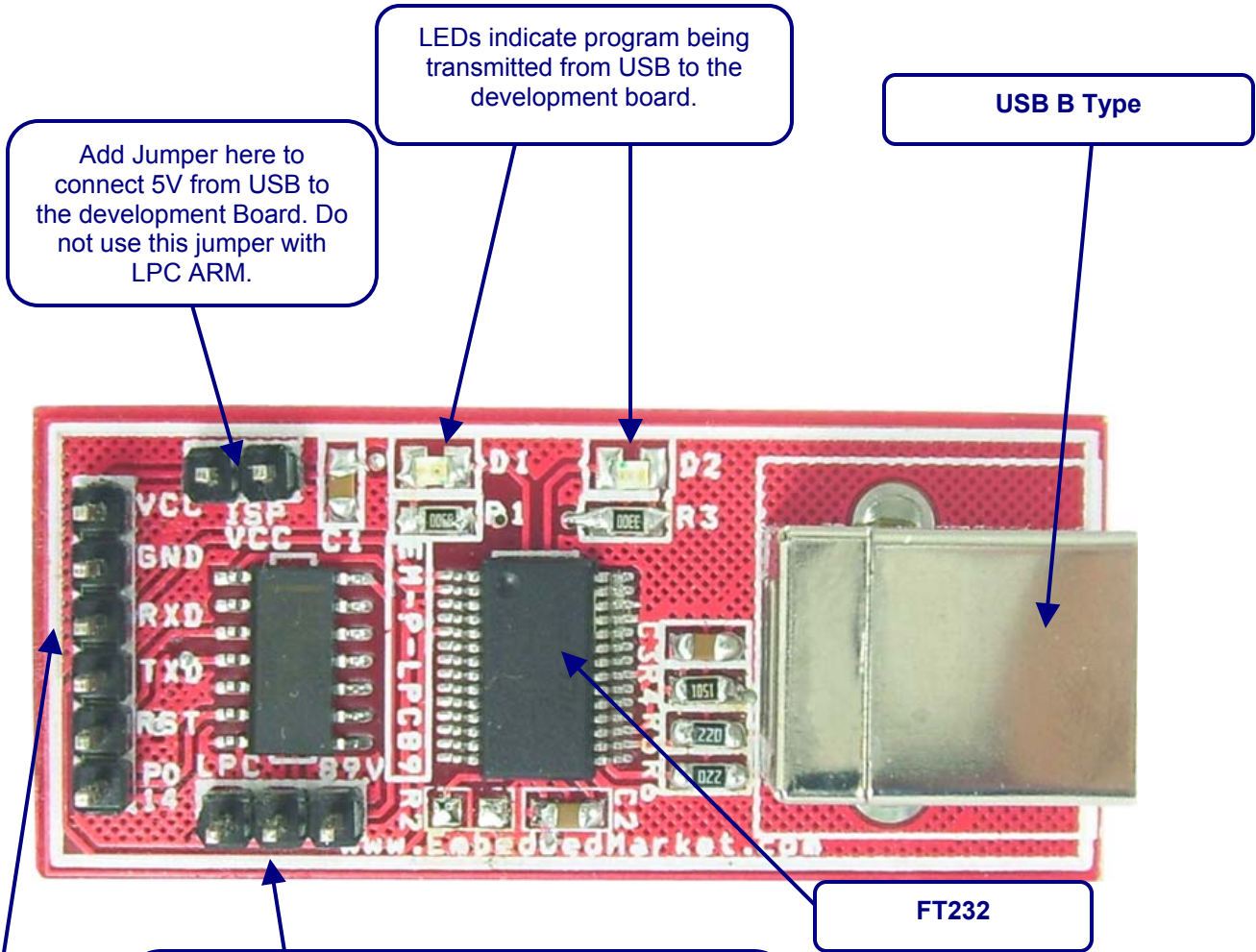
This is simple and low cost USB programmer for various LPC ARM processors and also for P89XX controllers.

Below is the simple datasheet and instruction manual which will simplify the usage of this **USB Programmer for LPC ARM and P89VXX Microcontrollers.**



Product includes:

1. Assembled & Tested Programmer
2. 6 Pin Female to 6 Single Pin Female Connector
3. USB A-B cable



Selection Jumper:
For LPC ARM Programming: Add Jumper between Left pin and Center.
For P89VXX Programming: Add Jumper between Right pin and Center.

Programming Header:

1. Vcc – 5V (Do not use for LPC ARM)
2. GND- Common Ground between this programmer & the development board
3. RXD – Connect to RX line of the microcontroller. (RX0 in case of LPC ARM)
4. TXD – Connect to TX line of the microcontroller. (TX0 in case of LPC ARM)
5. RST – Connect to RESET line of the microcontroller
6. P0.14 – BSL line for LPC ARM (Optional for LPC ARM and Not required for P89V51RD2 etc)

**Devices Supported by:
USB Programmer for LPC ARM and P89VXX Microcontrollers**

8051 Made by NXP:			
P89C51RB+	P89LPC901	P89LPC9103	
P89C51RC+	P89LPC902	P89LPC9107	
P89C51RD+	P89LPC903	P89LPC952	
P89C51RB2Hxx	P89LPC906	P89LPC9401	
P89C51RC2Hxx	P89LPC907	P89LPC918	
P89C51RD2Hxx	P89LPC908	P89LPC9321	
P89C660	P89LPC912	P89LPC9351	
P89C662	P89LPC913	P89LPC9408	
P89C664	P89LPC914	P89LPC9201	
P89C668	P89LPC920	P89LPC9211	
P89C669	P89LPC921	P89LPC922A1	
P89C51RA2xx	P89LPC922	P89LPC9241	
P89C51RB2xx	P89LPC930	P89LPC9251	
P89C51RC2xx	P89LPC931	P89LPC9301	
P89C51RD2xx	P89LPC932	P89LPC931A1	
P89C60X2	P89LPC933	P89LPC9331	
P89C61X2	P89LPC934	P89LPC9341	
P89LV51RB2	P89LPC935	P89LPC9402	
P89LV51RC2	P89LPC904	P89LPC9361	
P89LV51RD2	P89LPC915	P89LPC9151	
P89V51RB2	P89LPC916	P89LPC9161	
P89V51RC2	P89LPC917	P89LPC9171	
P89V51RD2	P89LPC924	P89LPC970	
P89V660	P89LPC925	P89LPC971	
P89V662	P89LPC932A1	P89LPC972	
P89V664	P89LPC936	P89LPC980	
P89LPC938	P89LPC9102	P89LPC982	
P89LPC983	P89LPC985		
ARM7 Made by NXP:			
LPC2101	LPC2129	LPC2148	LPC2365
LPC2102	LPC2131	LPC2194	LPC2366
LPC2103	LPC2132	LPC2210	LPC2367
LPC2104	LPC2134	LPC2212	LPC2368
LPC2105	LPC2136	LPC2214	LPC2377
LPC2106	LPC2138	LPC2220	LPC2378
LPC2109	LPC2141	LPC2290	LPC2387
LPC2114	LPC2142	LPC2292	LPC2388
LPC2119	LPC2144	LPC2294	LPC2458
LPC2124	LPC2146	LPC2361	LPC2468
		LPC2364	LPC2478



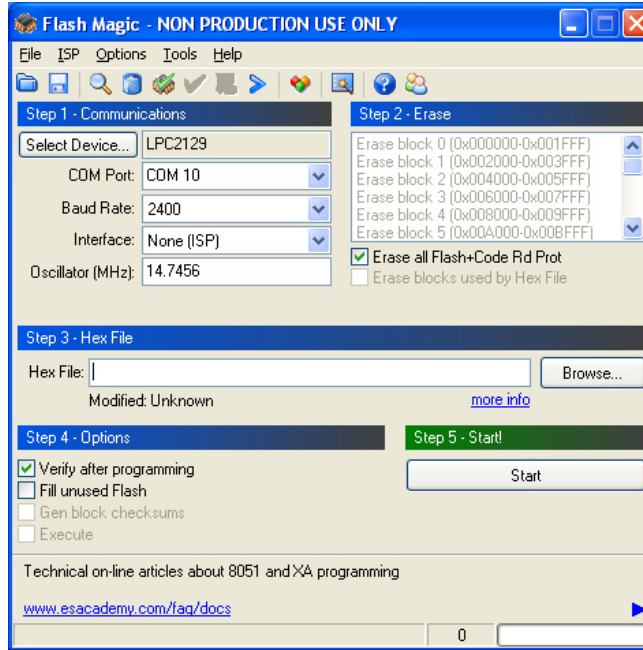
ARM Cortex M3 made by NXP:			
LPC1751	LPC1758	LPC1768	LPC1313
LPC1752	LPC1764	LPC1759	LPC1342
LPC1754	LPC1765	LPC1769	LPC1343
LPC1756	LPC1766	LPC1311	
ARM Cortex M0			
LPC1111	LPC1112	LPC1113	LPC1114

How to Program?

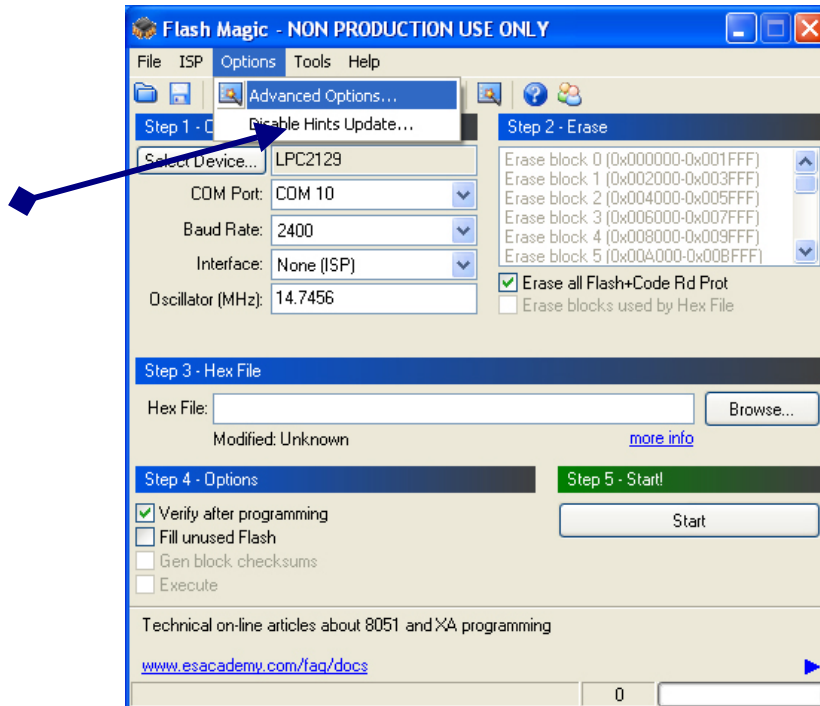
1. Add / remove **jumper** as shown in above picture depending on the type of microcontroller being programmed.
2. Use the Female to Female connector provided with the product to connect the **“Programming Header”** to your development board.
3. Re-check the jumper selection again.
4. Connect A to B Type USB cable (also called as USB cable for printer) from the programmer to your PC / Laptop
5. If you have connected this Programmer for the first time then you may need to install the drivers. Download the drivers matching with the operating system installed on your PC / Laptop. The download link is : <http://www.ftdichip.com/Drivers/VCP.htm>
6. After installing the drivers, you may download the FlashMagic Software from link: <http://www.flashmagictool.com/>



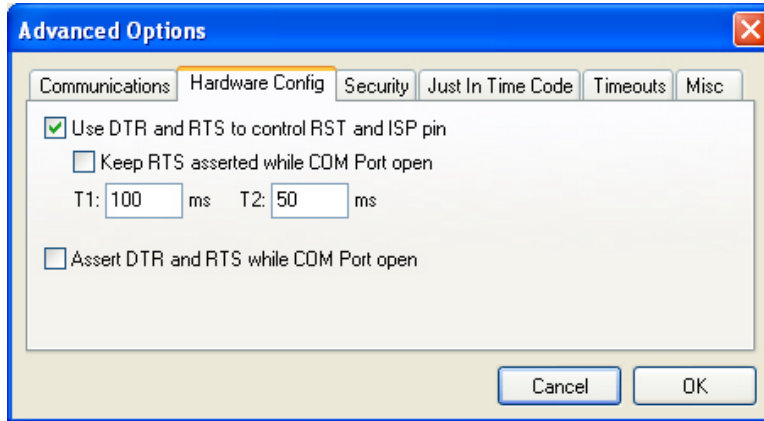
7. Install the FlashMagic software and start it from program menu.
8. In FlashMagic, Select the microcontroller's name, COM Port number, Baud Rate and other details as shown below:



9. In FlashMagic, click Options=>Advanced Options menu

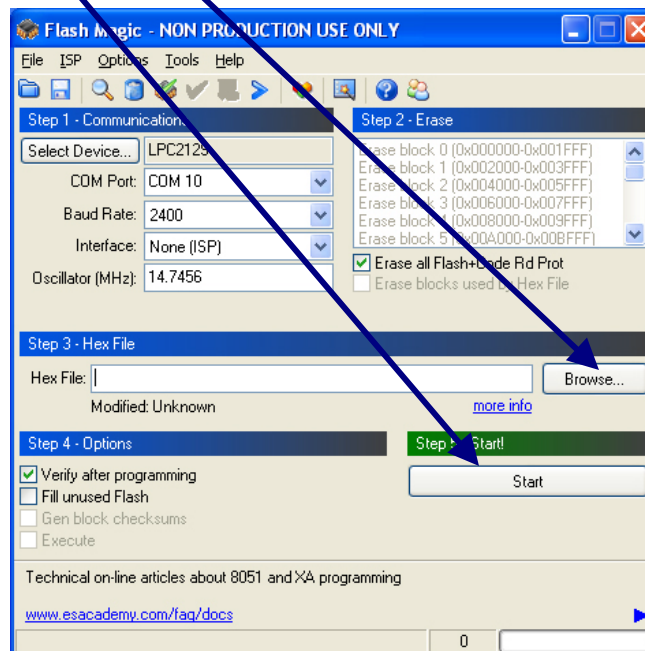


10. It will open “Advanced Options”. Make selection as shown below.



11. Click OK once done with the selection in “Advanced Options”.

12. Click “Browse” to select the hex file and click “Start” button in FlashMagic software to begin the Programming process.





Manufacturer's Contact Information:

**Embedded Market
205 Decision Tower
Next To CityPride
Satara Road
Pune 411037
India**

support@embeddedmarket.com

www.embeddedmarket.com