## 8051 development board

## www.alselectro.com

The 8051 development board can be used as a learners kit as well as a project board.An ISP programmer is required to fuse the HEX file on to the target 40 pin IC (89S 51 or 89S 52).



The HEX file is created using KEIL software.

Care should be taken while connecting the ISP programmer with the Development board.Look out for the GND connection printed on the boards .

## The GND of ISP must match the GND of Development board.

Connect the USB cable of ISP programmer to USB port of your PC.

No external power is required for the Development board. Power is sourced from USB port of PC.



**PROGISP** is the software used to load the HEX file on to the target chip.

**KEIL Microvision** is the software to create HEX file using C code or Assembly language.

Download the software here :

http://www.alselectro.com/files/8051 isp.zip

The drivers for the ISP Programmer is found inside the Drivers folder of PROGISP.

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GIVEIO.SYS	7/16/2004 10:52 AM	System file	
🧇 progisp.exe	8/28/2009 9:17 AM	Application	
📄 progisp.ini	2/25/2015 6:50 AM	INI File	

Open the DEVICE Manager of your PC while connecting the ISP programmer to USB port. If you get an exclamation mark against device, Update driver & browse to the location of Drivers inside PROGISP folder you've downloaded.

Once the Drivers are installed you get the USBasp under Device manager.

The setup is now ready to load the HEX file.



We use the PROGISP application to load the HEX file on to the target IC. No installation is required for this software , it's a standalone one.

Double click progisp.exe to open the application.

The PRG ISP & USB ASP buttons should be bright .If it's greyed out , then check the USB cable connection & the driver installation.

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Select the target chip (here 89S 52) from the "Select Chip " drop down menu.

Ensure that following buttons are Enabled :

Verify Signature

Chip Erase

Program Flash

Verify Flash

If you enable the LOCK CHIP button , others can't make a copy of your chip.

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Click on FILE -- > LOAD FLASH & browse to the location of the HEX file you've created using KEIL.





Once the HEX file is loaded , click on AUTO button to perform the tasks you've enabled.

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The status bar at the bottom indicates the progress of operation.



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Finally the HEX is successfully loaded on to the target chip.

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If the PROGRAM FLASH button is not enabled , you get Flash Verify Error while fusing.



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