Tiktak's Projects

Robotics and Digital Electronics
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Posts Tagged ‘89S52 programmer’

Programming 8051 using arduino up for grabs!

Posted: April 19, 2014 in **Digital Electronics**, **Tutorials**
Tags: **8051 programmer**, **89S52 programmer**, **arduino**, **AT89S52 SPI Programmer**, **DIY Programmer for 8051**, **E-Gizmo**, **Gizduino**, **philrobokit**, **Philrobotics**, **Program 8051 with arduino**

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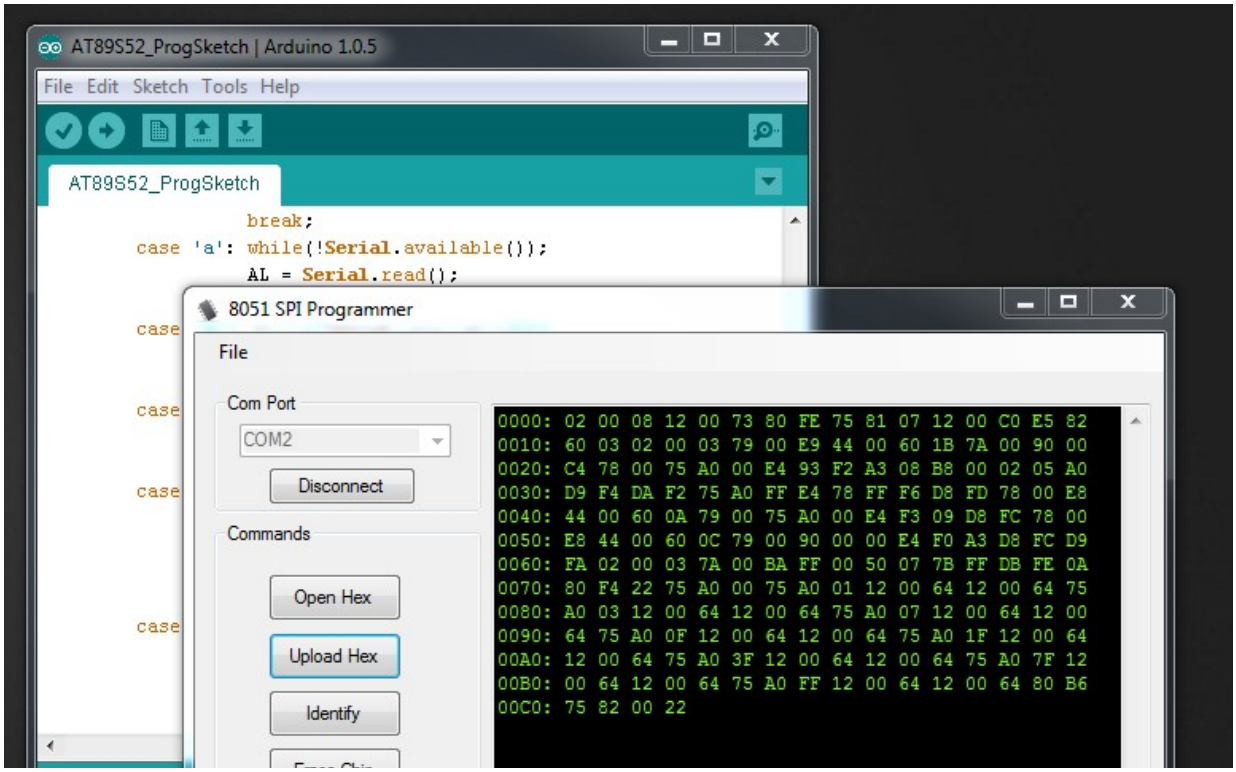
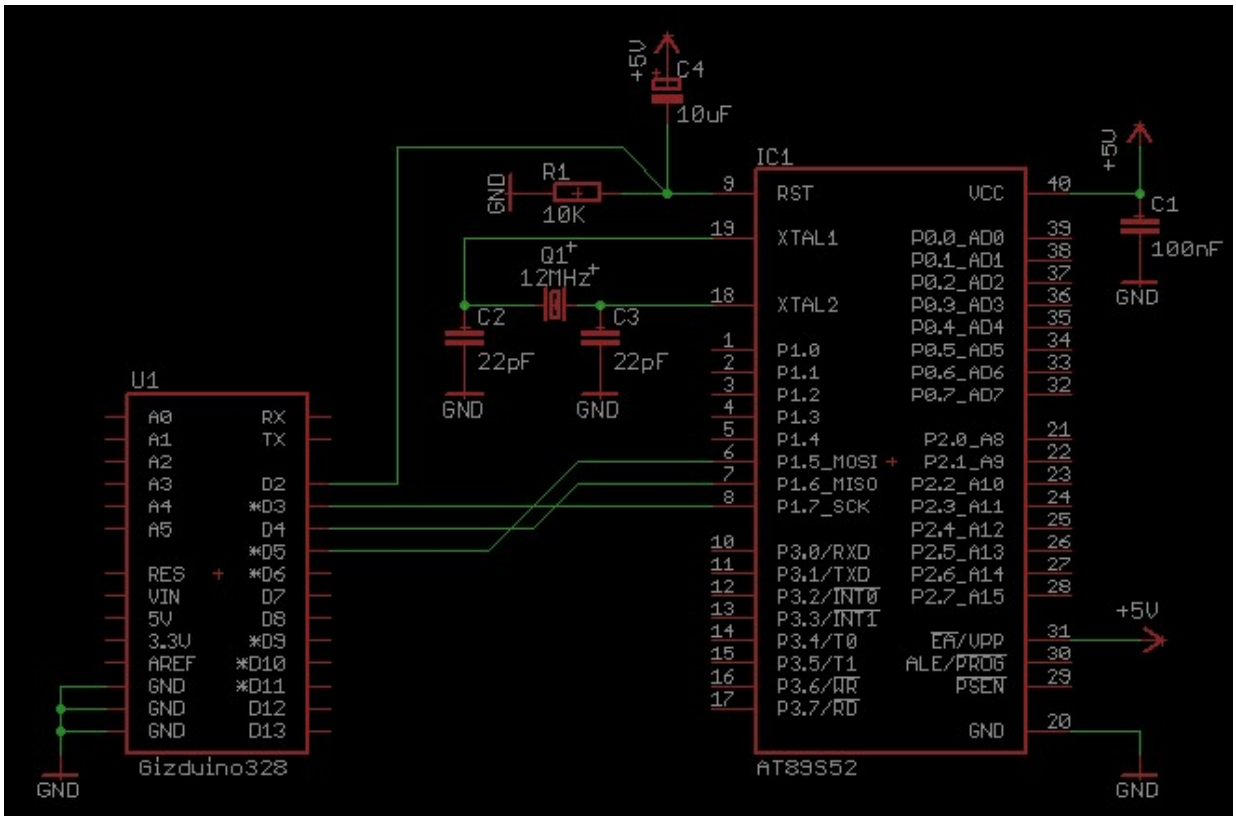
This project was lost, luckily while digging I found a backup file. I am now making this project available for public use. Released as is with no warranties, I am not liable for any harm done to your system. This should be used ONLY FOR EDUCATIONAL PURPOSES. The client file requires .NET Framework 4.0. The arduino sketch was compiled and tested with Arduino IDE 1.0.5 and Gizduino 328 (Arduino clone in the Philippines by e-Gizmo Mechatronics Central). The program for the 8051 was compiled with SDCC.



(https://tiktakx.files.wordpress.com/2014/04/screen.png)

Connection Diagram:



(https://tiktakx.files.wordpress.com/2014/04/schematic.png)

Instructions:
1. Select the Correct COM Port
2. Connect
3. Load up the Hex file
4. Upload Hex file to your MCU
5. Grab a beer and enjoy!

Click the Link below for the sketch and the client
DOWNLOAD FILES HERE (https://www.dropbox.com/sh/dms2ffae271ck3r/jx1LlbUBlQ)

Using an arduino to program AT89S52

Posted: March 21, 2012 in **Digital Electronics**
Tags: **8051**, **8051 flash SPI programmer**, **8051 programmer**, **89S52 programmer**, **AT89S52 programmer**, **programming 8051**, **Programming 8051 using arduino**, **programming 89s52 using arduino**, **slu**, **slu ece**, **SPI flash programmer**

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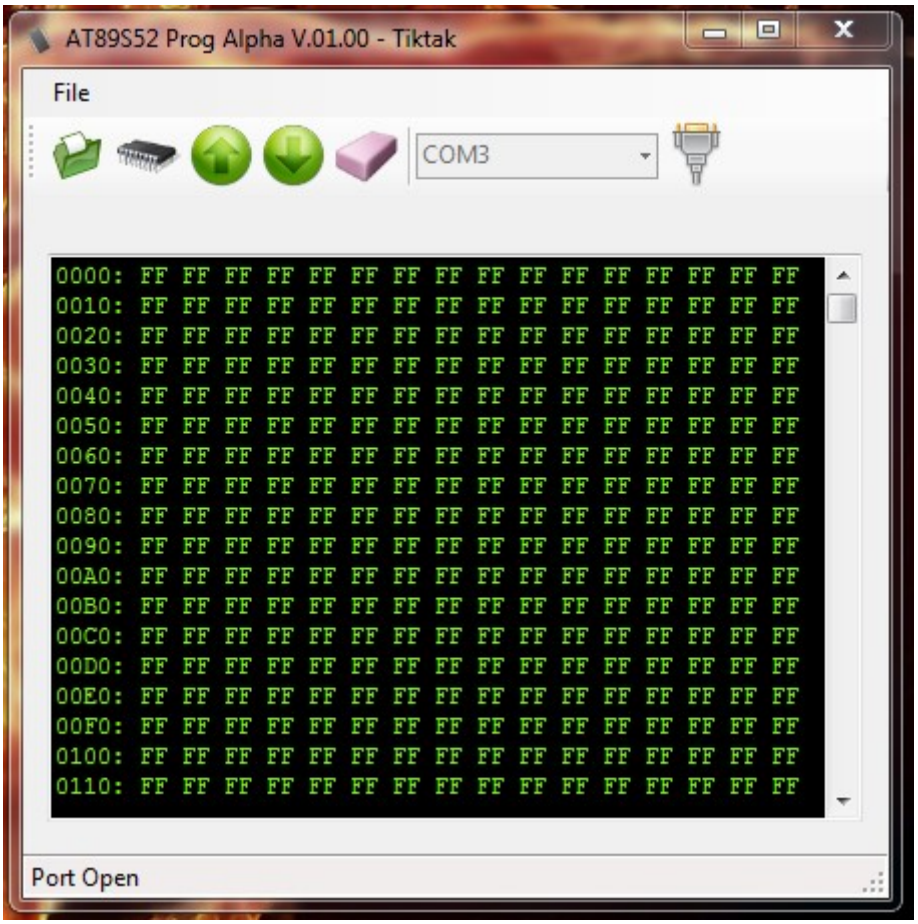
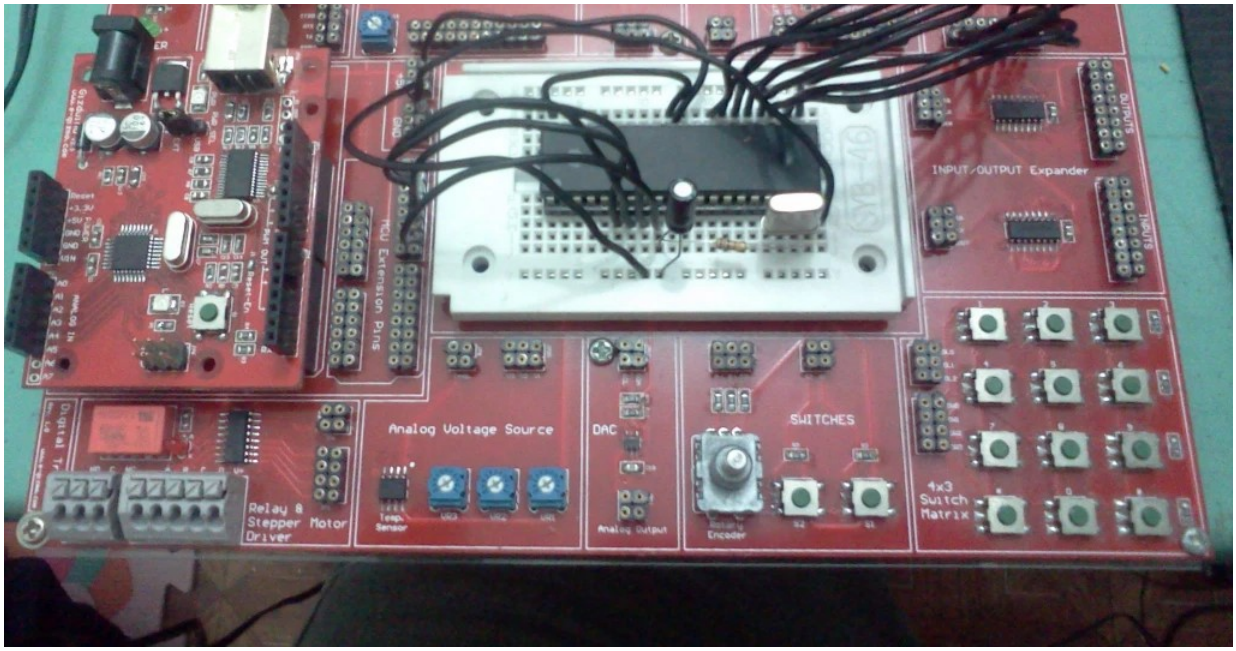
During the college days, we were thought how to use the 8051 microcontroller, as a student our biggest problem is how to burn our hex file to our chip. Until these days, this is still the problem of students in my school so I came up with an idea making a simple programer using my Gizduino (Arduino clone in the Philippines) lying around and writing a simple C# application to process the hex file. The 89s52 is the most common available in our place and the good thing is it can be programmed via its SPI port without needing high voltage to enter programming mode.



(https://tiktakx.files.wordpress.com/2012/03/s52_gui.png)

Programming the chip is not that difficult, we just need to issue series of commands as stated in the datasheet, the c# app will parse the hex file and what the gizduino will do is just to translate it to SPI commands, then voila we have our 8051 programmed in no time. The prototype is done using my general purpose digital trainer.



(https://tiktakx.files.wordpress.com/2012/03/the-prototype.jpg)

The Atmega 328/168 in the arduino is overkill for these purpose, I will port this later to a smaller and cheaper microcontroller.

The fun part Testing!