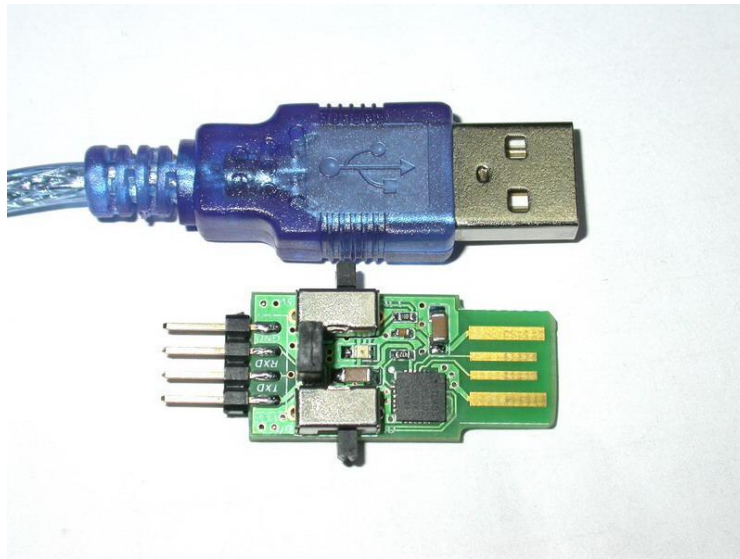


STC Microcontroller – The World's Largest 8051 MCU Family

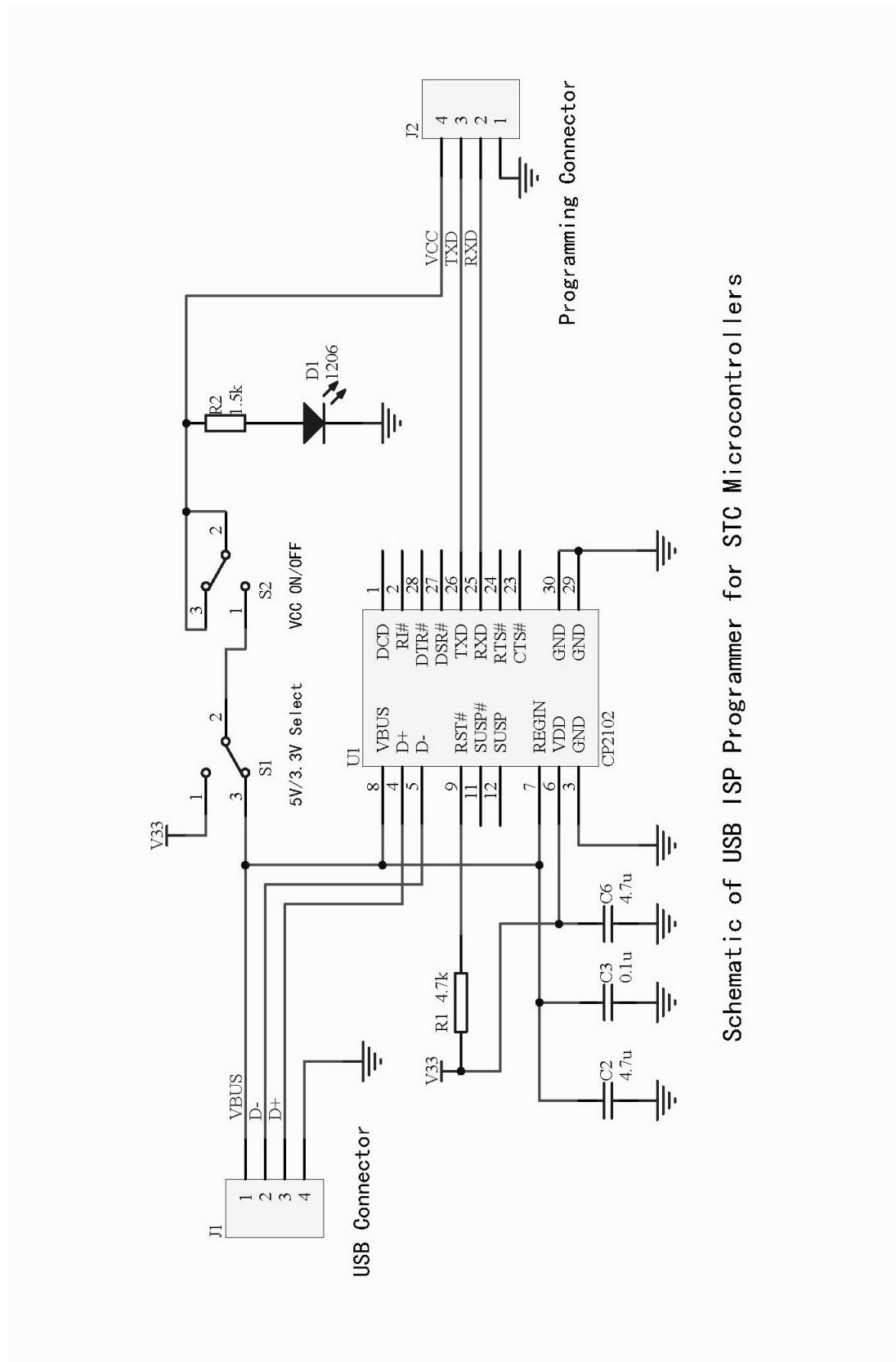


USB ISP Programmer for STC Microcontrollers

<http://www.stc-51.com>

STC Microcontroller – The World's Largest 8051 MCU Family

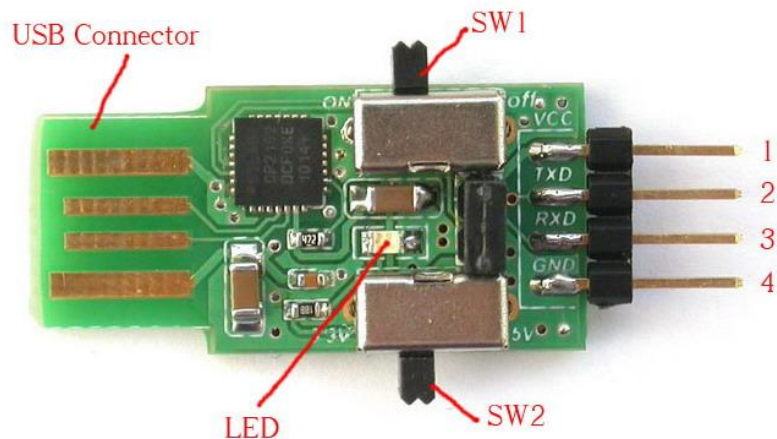
Schematic



Schematic of USB ISP Programmer for STC Microcontrollers

STC Microcontroller – The World's Largest 8051 MCU Family

Description



Device Description	
USB Connector	Connect to be inserted into USB host connector
SW1	Power switch for onboard power. Must turn off when using external power supply. If the system need more than 100mA current, external power supply must be used.
SW2	switch used to choose 3.3V-5V
LED	LED indicating power on
Pin 1	VCC pin, connect to VCC pin of target MCU
Pin 2	TXD of serial port, connect to RXD (P3.0) of MCU
Pin 3	RXD of serial port, connect to TXD (P3.1) of MCU
Pin 4	GND, connect to ground of target board

Related Resources
STC MCU ISP software for STC10, STC11 and STC12 series
STC MCU ISP software for STC15 series
Driver for STC-USB ISP tool

Usage Instructions
1. Install STC in system programm software on computer
2. Install driver for STC-ISP tool
3. Insert STC-ISP tool to USB port of the computer
4. Connect the ISP tool to the target board
5. Run the ISP software, select the proper MCU type and setting the options
6. Open the .Hex file you want to program to the MCU
7. Choose the correct voltage for the target board (if bus power is used)
8. Make sure SW1 is at "off" position and target board power is off
9. Click "Download" button.
10. Turn on the power of target (bus power or target board power)
12. Turn off the power supply after programming is finished

STC Microcontroller – The World's Largest 8051 MCU Family

About STC Microcontroller

STC is a Chinese IC design company. The major product line is enhanced 8051 based microcontroller. Now there are more than 1000 different products in 5 series: STC10, STC11, STC12, STC15, STC89. All STC 8051 microcontrollers are based on a high performance 1T architecture 8051 CPU core. With the enhanced kernel, STC series execute instructions in 1 to 6 clock cycles, (about 6-8 times faster than conventional 8051 device), and have a fully compatible instruction set with industrial-standard 80C51 mcu.

In-System Programming (ISP) and In-Application Programming (IAP) enable the developers to upgrade the program and data in system. In addition, the STC mcus have an extra I/O port (P4), a 6-source 2 priority level interrupt structure, on-chip oscillator and a watchdog timer.

Features of STC8051 microcontroller:

- Enhanced 80C51 CPU, 1T per machine cycle, 6-8 times faster than conventional 8051
- 0.5-62K on-chip flash ROM
- up to 2048KB SRAM
- Be capable of addressing up to 64KB of external RAM
- Dual data pointer
- Ultra safe code protection for flash ROM
- 6 vector address, 2 level priority interrupt
- Up to 3 UART with hardware address recognition, frame-error detection and baud-rate generator
- Internal oscillator
- 3 power management modes, Power consumption is less than 1uA in power down mode
- Up to 40 programmable IO
- 8 to 48Pins, DIP/PLCC/QFN/SOP/DIP/SSOP package
- Highly EDS protecting

Due to the rapid progressing of China's huge market, STC is now the world's largest 8051 microcontroller family. Thanks for the huge annually selling quantity, STC is also the most cost effective MCU in the industry. It will lower down the cost dramatically when improving the performance significantly. Please visit www.stc-51.com to learn more and buy STC microcontroller online.

More information can be found online at <http://www.stc-51.com>