## **USBASP downloader**

I. Module Description:

The board is equipped with a brand-new original imported ATMega8A-AU chip

- 2. It is equipped with two indicator lights, one for power and the other for burning
- 3. On-board 500mA overcurrent protection self-resetting fuse
- 4. Support 5V and 3.3V power supply for the target board

The latest type of self-applicable automatic speed regulation.

Applicable to computers with Windows 8.1/8/7/XP 32-bit / 64-bit systems.

This product can be directly connected to the USB port of a computer. It is a true USB downloader. By connecting to the target board through it, you can download and program the single-chip microcomputer. It is convenient to use and particularly suitable for laptops and desktop computers. You can program, download and debug through the USB port.

li. Features of This Downloader:

Supports AT89S51/52 single-chip microcomputers

- 2. Support all ASP chips of AVR.
- 3. The output port is an ATMEL standard port.

4. It features USB power supply and the target board supports a target voltage of 5V, which can be selected through a jumper cap connection.

5. AUTOSPEED automatic speed regulation firmware. The downloader will automatically track the frequency of the chip to be programmed and automatically

change the speed to achieve automatic speed regulation.

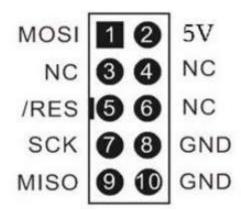
6. Reserve MOSI, MISO, RET, SCK, VCC and GND. The 6-pin interface makes it convenient for users to connect the target board as needed.

7. Reserve a PROGRAMMING interface, allowing users to upgrade the downloader firmware by themselves.

Programming software: AVR\_fighter, PROGISP1.66 PROGISP1.67, PROGISP1.68 compile a lower or higher software will do, to burn the same piece, very convenient.

Interface definition:

USB ASP Downloader interface definition



The corresponding connection definitions of pins and download cables for AT89S51 and S52 series:

MOSI-->P1.5

MISO-->P1.6

SCK——>P1.7

/RES——>RST

GND-->GND

5V——>VCC

Chips supporting burning:

"51 Series":AT89S51AT89S52AT89S53 AT89S8253 AT89S2051 AT89S8252 AT89S4051

"AVR Series":AT90can128 AT90can32

AT90can64,AT90pwm2,AT90pwm3,AT90s1200,AT90s2313,AT90s2323,AT90s2343,AT9 0s4414,AT90S8515,AT90S8535 AT90usb1286,AT90usb1287

Atmega103, Atmega128, Atmega1280, Atmega1281, Atmega16, Atmega161, Atmega162, Atmega163, Atmega164, Atmega165, Atmega168, Atmega169, Atmega2560, Atmega2561, Atmega32, Atmega323, Atmega324, Atmega325, Atmega3250, Atmega3259, Atmega328, Atmega329, Atmega3290, Atmega406, Atmega48, Atmega64, Atmega640, Atmega644, Atmega645, Atmega6450, Atmega649, Atmega6490, Atmega8, Atmega8515, Atmega8535, Atmega88,

Attiny11, Attiny12, Attiny13, Attiny15, Attiny22, Attiny2313, Attiny24,

Attiny25, Attiny26, Attiny261, Attiny28, Attiny44, Attiny45, Attiny46,

Attiny46,1Attiny84,Attiny85,Attiny861

Shipping list:

1 USBASP downloader x

10P data ribbon cable x 1



