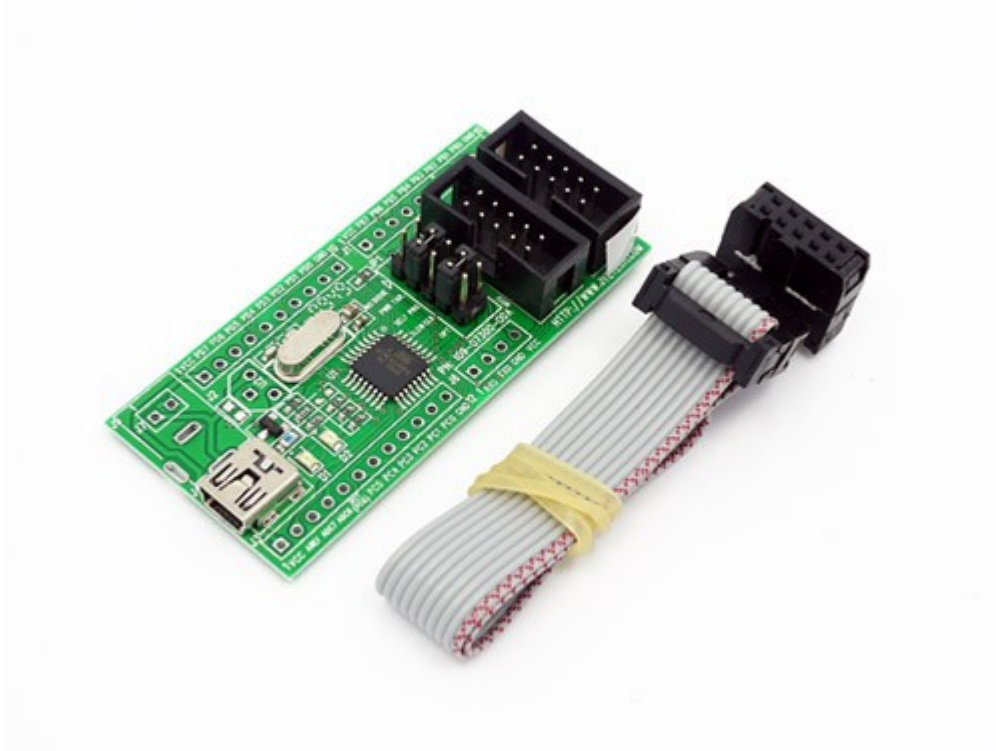


# SEED TECHNOLOGY INC (SEEEDUINO)

## AVR USB Programmer

### Model: TOL132C1B

#### Introduction



#### Features

- Can be used to program most AVR microcontrollers via USB (USBASP compatible. See <http://www.fischl.de/usbasp/> for details)
- A general purpose AVR Mega48 board with [all I/Os brought to sides of board](#) and holes matching 0.1 inch pitch prototype boards. Excellent for AVR experiments and developments. (Note: 07302 is shipped with ATmega48 on board)
- Can be separately powered by adding two commonly available through-hole components
- Compatible header provided for programming 062 oscilloscopes
- Can be converted to Uart/USB converter by simply reflashing it with AVR CDC firmware (available at <http://www.reursion.jp/avrcdc/>) and adding one resistor

#### Application Ideas

#### Cautions

The warnings and wrong operations possible cause dangerous.

#### Schematic

Click [here](#) to see the Schematic for AVR USB Programmer.

## ***Specification***

May include key specification and other specifications.

## ***Pin definition and Rating***

## ***Mechanic Dimensions***

## ***Usage***

## **Hardware Installation**

Click [here](#) to check the assembly drawing.

## **Programming**

Includes important code snippet. Demo code like :

```
Demo code
{
}
```

## **Example**

The projects and application examples.

## ***Bill of Materials (BOM) /parts list***

1. **Accessory included:**
  - 10-core programming ribbon cable
2. **Optional:**
  - [Mini USB cable](#)

## ***FAQ***

Please list your question here:

## ***Support***

If you have questions or other better design ideas, you can go to our [forum](#) or [wish](#) to discuss.

## ***Version Tracker***

Revision	Descriptions	Release
v0.9b	Initial public release	Sept 28, 2010

## ***Bug Tracker***

Bug Tracker is the place you can publish any bugs you think you might have found during use. Please write down what you have to say, your answers will help us improve our products.

## ***Additional Idea***

The Additional Idea is the place to write your project ideas about this product, or other usages you've found. Or you can write them on Projects page.

## **Resources**

- [How to Use the USB Programmer](#)
- [Schematic](#)
- [Assembly drawing](#)
- [Supporting software \(Windows/linux, in English\)](#)
- [AVR programmer firmware and USB driver](#)

## **See Also**

Other related products and resources.

## **Licensing**

This documentation is licensed under the Creative Commons [Attribution-ShareAlike License 3.0](#) Source code and libraries are licensed under [GPL/LGPL](#), see source code files for details.

## **External Links**

Links to external webpages which provide more application ideas, documents/datasheet or software libraries