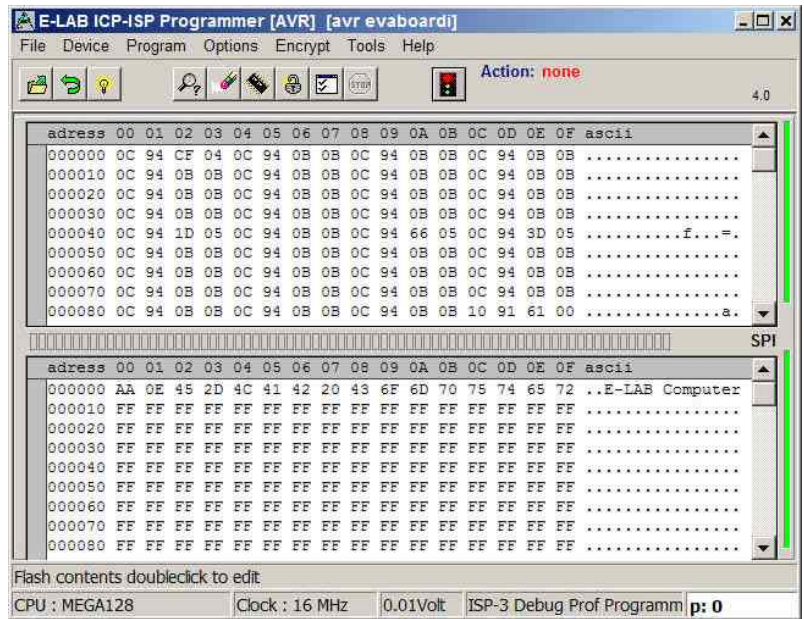


# UPP2-USB



Standalone operated with miniSD flash card  
 Upto 64 projects stored on the card are usable  
 Elegant and easy user interface  
 Completely controllable by the PC

## Incircuit Programmer for AVR, AT89Sxx, AT89LSxx, AT89LPxx, TI/Chipcon CC1110, CC2510 and CC2430 programs S1200...mega256 in ISP and JTAG Mode

- Connects to the PC through the USB interface
- UPP2-USB works in high-speed USB-2 mode (480Mbit/sec). Can also be operated by USB-1 ports and HUBs
- No power supply necessary Device is supplied by the USB interface of the PC's (or by the target).
- Automatic adopting to the voltage of the target CPU (2.7-6Volt, ca. 20mA)
- Comfortable and comprehensive software support
- Software runs under Win98/2000/XP. Win98 with some restrictions.
- Small, lightweight and handy device 100x55x20mm
- 2 programming modes, **transparent** = controlled by the PC and **portable** = controlled by projects stored in the removable mini-SD card (included)
- Upto **64 projects** can be stored on the card and can be started by a powerful menu system.
- Option: adaptor from Atmel 6in SPI to Atmel 10pin programming header (not included)
- Option: adaptor from E-LAB JTAG to Atmel JTAG programming header (not included)
- Option: adaptor from UPP2 6pin to TI/ChipCon CC2430 evaluation board (not included)
- Supports all SPI or JTAG programmable **AVRs**
- Supports all SPI programmable **AT89Sxx**, **AT89LSxx** and **AT89LPxx** types
- Supports the TI/ChipCon **CC1110**, **CC2510** and **CC2430** family
- **Programmable output voltage** (supply) for the target system. 3.3..5.2Volt 30mA..300mA
- Self update with new firmware through the Internet.
- Programs **128kB** Flash in about **3sec** (Mega128 JTAG mode)
- **SPI and JTAG** programming support
- **UPP2-USB** with USB connection is optimal suitable for work and repair stations and small production..
- The portability predestinates the device for service purposes
- Because of the powerful menu system and user interface supported by a graphic display this device is perfectly suitable also for un-experienced users..
- Thereby also the preferred device for in-house services and the common field **Service Area**
- Absolutely the best device there.

UPP2-USB €364.00 +ship +MwSt  
 Power Supply 110..230V included  
 miniSD flash card included

made in Germany

**E-LAB Computers**  
 Grombacherstr. 27  
 D74906 Bad Rappenau

Tel. (0049) 7268/9124-0  
 Fax. (0049) 7268/9124-24  
 www.e-lab.de info@e-lab.de

## Data transfer

1. from PC with a Flash Writer into the miniSD flashcard



2. from PC through the programmer into the miniSD card



## Programming

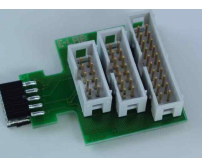
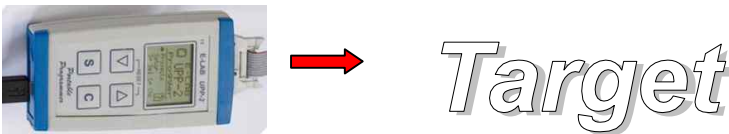
1. from PC without the use of the flash card in **Direct Mode**



2. from PC with the use of the flash card in the UPP2-USB in **Indirect Mode**



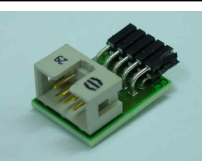
3. without a PC in **Stand-alone Mode** out of the miniSD card



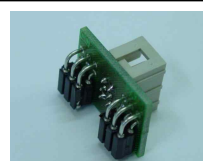
As an option an adaptor is available from E-LAB 10pin JTAG to Atmel 10pin JTAG



As an option an adaptor is available from E-LAB 6pin SPI to AVR 10pin SPI



As an option an adaptor is available for the Chipcon Evaluation Boards CC1110..CC2511



As an option an adaptor is available for the Chipcon Evaluation Board CC2430DB

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Fax. 07268/9124-24  
www.e-lab.de info@e-lab.de