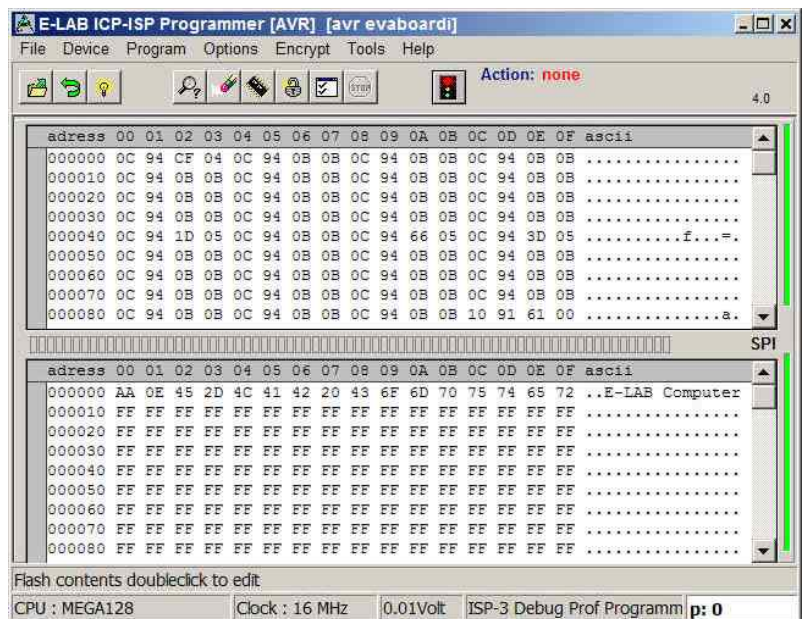


# UPP1-USB



Standalone operated with MMC card or PC Version **S** with rotary switch for program select Version **D** for the docking station for wired remote control



## Incircuit Programmer for AVR, AT89Sxx, AT89LSxx, AT89LPxx, TI CC1110, CC2510 and CC2430, Renesas R8C AVR S1200...Mega2560 in ISP + JTAG Mode, Xmega/PDI, Tiny/TPI

- UPP1-USB connects to the PC the USB interface.
- UPP1-USB works in the High-Speed USB-2 mode (480Mbit/sec). Can also be connected to USB-1 ports and HUBs
- No power supply necessary. The UPP1 can be supplied from the PC interface (USB) or from target.
- Automatic adaption to the target voltage (2.7-6Volt, ca. 17mA)
- Powerful and extensive software
- Software runs on XP/Vista/Windows7, 32 and 64bit. Win98 with some exceptions.
- Small, lightweight and handy device ca. 100x55x20mm
- Supports all SPI, JTAG, PDI and TPI programmable **AVRs**
- Supports all **XMegas** in PDI mode
- Supports Tinsys in TPI mode
- 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 ca. **3sec** (Mega128 JTAG Mode). Tiny44 in **1sec** (16MHz SPI)
- 2 programming modes, transparent = controlled by the PC and portable = operated from projects stored on the removable mini-SD card (included)
- With the version **S** upto 10 projects can be stored on the flash card and can be selected by a rotary switch
- The version **D** uses the docking station which can be remote controlled by a few wires.
- Option external switching power supply 100..250VAC with 8Volt/400mA (not included)
- Option adaptor from Atmel 6pol SPI to Atmel 10pol program connection (not included)
- Option adaptor from E-LAB JTAG to Atmel JTAG program connection (not included)
- Option adaptor from UPP1 6pin to TI/ChipCon CC2430 evaluation board (not included)
- Option **S** with selector switch (not included)
- Option **D** with docking station (not included)
- **UPP1** is optimal suitable for development desktop, programming stations, repair stations and for field services. Can be operated without a PC.

UPP1-USB	€220.00 +ship
UPP1-USB <b>S</b>	€267.00 +ship
UPP1-USB <b>D</b>	€267.00 +ship
Docking Station	€90.00 +ship

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# E-LAB In-Circuit Programmer

## UPP1-USB

### Version **S** with Selector Switch



With the rotary of the version **S** the user can select one out of ten projects stored on the flash card.

So this version is well predestinated for repair and service purposes and also for small series production programming.

The projects can be downloaded directly from the PC into the flash card plugged in the UPP1. Also the card can be plugged into the MMC card holder of the PC and then the projects can be directly stored onto the card without using the UPP1.

### Version **D** with Docking Station



With the Docking Station the UPP1 becomes remote controllable. By 4 control lines one out of 16 projects stored on the flash card can be selected.

With an additional control line the programming of the selected project can be started. Two output lines return the busy and the error state which must be read and interpreted by the controlling system (PLC, PC etc).

The inputs and outputs are opto isolated and can work with 5Volt= upto 24Volt=

So this version is well predestinated for small to large series production programming.

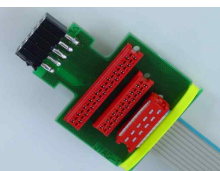
For small series production purposes the program PackProg is included. The functions are reduced to Load project, program target, test target. No manipulation of fuses etc. possible. Remote control via Telnet is supported.



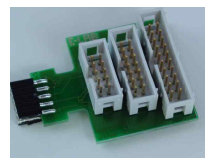
One mini-SD Karte with an MMC adaptor is included



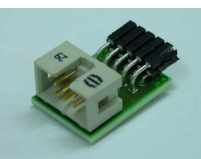
As an option an external SPS powersupply for 100..230V~ is available



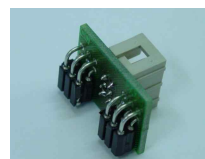
As an option an adaptor is available from E-LAB 6pin SPI to AVR 10pin SPI



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



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



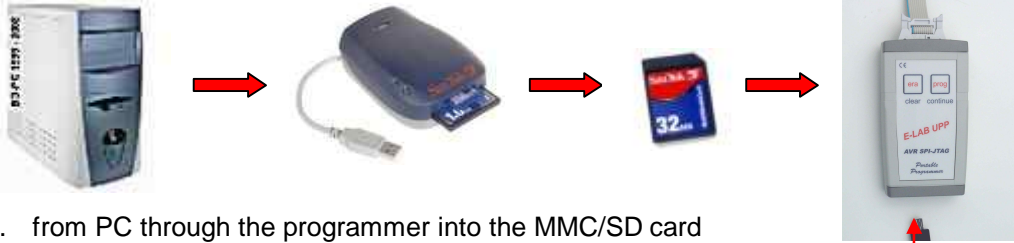
As an option an adaptor is available for the Chipcon Evaluation Board CC2430DB

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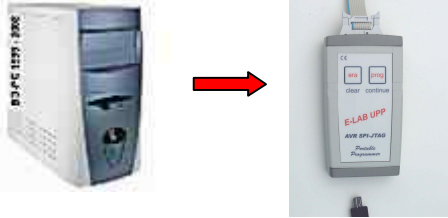
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## Data transfer

1. from PC with a Flash Writer into the MMC/SD flashcard



2. from PC through the programmer into the MMC/SD card



## Programming

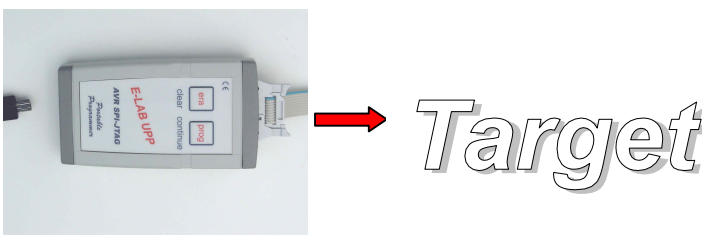
1. from PC without the use of the flash card in **Direct Mode**



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



3. without a PC in **Stand-alone Mode** out of the MMC/SD card



With the option "S" selecting one project out of 10 stored projects through a rotary select switch on the bottom of the unit.



4. remote control from a PC, PLC or any process controller through the docking station

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