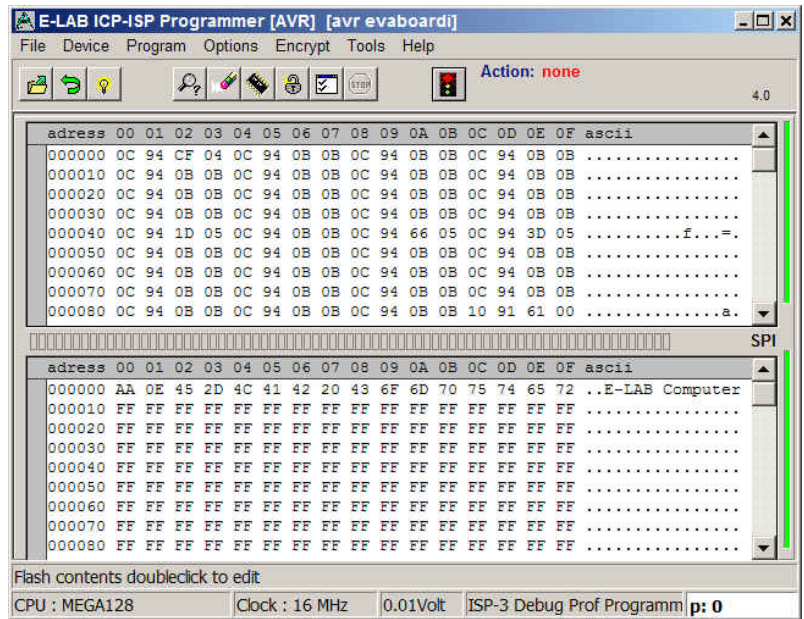


# UPP2-X with AES encryption



Standalone operated with microSD flash card  
 Upto 63 projects stored on the card are  
 usable. Elegant and easy user interface  
 Completely controllable by the PC.  
 Internal battery with 3.7V/700mAh



## Incircuit Programmer for AVR, XMega, AT89Sxx, AT89LSxx, AT89LPxx, TI CC1110, CC2510 and CC2430, AVR S1200...Mega256 in ISP + JTAG, XMega/PDI, Tiny/TPI/UPDI

- UPP2-X works in full-speed USB-2 mode. 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 or by the **internal battery**.
- Automatic adopting to the voltage of the target CPU (1.7-5.5Volt, ca. 80mA)
- Comfortable and comprehensive software support
- Software runs under Windows7/10/11, 32 und 64bit. Win98 with some restrictions.
- Small, leightweight and handy device 100x55x20mm
- Supports all SPI, JTAG, PDI, TPI and UPDI programmable **AVRs**
- Supports all **XMegas** with PDI mode
- Supports all Tinsys with TPI and **UPDI** mode
- Supports all SPI programmable **AT89Sxx**, **AT89LSxx** and **AT89LPxx** types
- Supports the TI/ChipCon **CC1110**, **CC2510** and **CC2430** family
- Supports the Serial Flash (SPI-Flash) **AT25DFxxx**, **S25FLxxx** and **SST25VFxxx**
- With **AES encryption** of the project and decryption in the UPP re-engineering is absolute impossible.
- **Programmable output voltage** (supply) for the target system. 1.8..5.2Volt 30mA..300mA
- Self update with new firmware through the Internet.
- Programs **128kB** Flash in about **3sec** (Mega128 JTAG mode)
- 2 programming modes, **transparent** = controlled by the PC and **portable** = controlled by projects stored in the removable micro-SD card (included)
- Up to **63 projects** can be stored on the card and can be started by a powerful menu system.
- Internal battery 3.7V/700mAh, optional 1500mAh
- EU Power supply 5V/800mA
- USB cable
- 2 programming cables, 10pin and 6pin
- **UPP2-X** 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-X(O) €364.00 +ship +VAT

**P.Rohlfing Elektronik**  
 Asternweg 5  
 D27801 Doettingen

Tel. 0176 84935600  
[Info@elab-programmer.de](mailto:Info@elab-programmer.de)  
[www.elab-programmer.de](http://www.elab-programmer.de)

## Data transfer

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



2. from PC through the programmer into the microSD 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-X in **Indirect Mode**



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

