

USB Interfaced Ultra-high Speed Universal Device Programmer

Features

- High speed programming. 32Mb FLASH 13.5 sec (Program+verify)
- ISP (In-System Programmable) devices supported
- 430+ socket adapters including 150+ FBGA package types supported
- Very low-cost, high performance, and very compact
- Highest value in the industry \$0.027/device supported
- USB Interfaced
- [CE and ROHS Compliant](#)

Detailed Features

- Programs high-density Flash memory devices at near theoretical minimum programming times.
- Standard 48 pin universal pin-drivers come with universal package adapters to support all types of devices in same package with a single adapter. No adapters are needed for DIL devices. Universal adapters ensure rapid algorithm update. Device-specific adapters are also available for devices above 48 pins that are mounted on DIL48 module. Down to 1.5V low voltage devices are supported directly, thanks to the DAC controlled I/O levels.
- Advanced hardware features minimized Bounce noise. Only IC manufacturers approved algorithms are adopted. High yield rates are guaranteed for all devices including low voltage, critical and second-hand devices. +5% and +10% Vcc verification promises programming reliability.
- In-System Programmable (ISP Support).
- Supports EPROM, EEPROM and Flash memory, PIC, AVR and other popular microcontrollers and PLDs.
- Free life-time software update.
- Pin continuity and wrong chip insertion check prevent chips from accident damage.
- Over-current and over-voltage protection for programmer hardware.
- Software supports Windows 98/Me/NT/2000/XP.
- Operator friendly control software combines many powerful functions with ease of use. Project minimizes the whole process of device selection, file loading, device configuration setting, operation option, batch file setting etc. to a single step. History of device selection and file loading simplify operation. Batch command combines device operations like program, verify, security into a single command at any sequence. Auto-start starts batch command automatically as soon as the chip is detected to be inserted in the socket properly. Serial number can be generated and programmed into devices automatically in anyway customer specified. The correct device type will be suggested according to the actual ID read when a mistake type is selected. With help of the open API user can even change the buffer content from chip to chip. Recognizes file formats and detects large file offset automatically.

Speed Comparison

Type	Program (sec)	Verify (sec)	Program+verify (sec)	Memory Size (ea)
28F320W18	9	4.5	13.5	32Mb FLASH
28F640W30	18	9	27	64Mb FLASH
AM29DL640E	38.3	10.6	48.9	64Mb FLASH
MB84VD21182DA	9.6	2.9	12.5	16Mb FLASH
MB84VD23280FA	38.3	10.6	48.9	64Mb FLASH
LRS1381	13.3	4.6	19.9	32Mb FLASH
M36W432TG	11.8	4.6	16.4	32Mb FLASH
MBM29DL323TE	17.5	5.5	23.3	32Mb FLASH
AT89C55WD	2.1	1	3.1	20KB MCU
P89C51RD2B	4.6	0.9	5.5	64KB MCU

Specifications

- Device Supported: EPROM, Paged EPROM, Parallel and Serial EEPROM, FPGA Configuration Serial PROM, FLASH Memory (NOR and NAND), NVRAM, SPLD, CPLD, EPLD, Firmware HUB, Microcontroller, MCU, Standard Logic.
- Socket Adapters Supported: DIP, SDIP, PLCC, JLCC, SOIC, QFP, TQFP, VQFP, TSOP, TSOPII, SOP, P SOP, TSSOP, SON, EBGA, FBGA, VFBGA, µBGA, CSP, SCSP, etc.
- PC Interface: USB
- Optional Accessories: Package Adapter

Warranty Support

Standard 1 Year Warranty: Included with purchase of SuperPro 280U. Covers device update and repair. Xeltek pays Fedex GND when shipping product back to customer for US only. It doesn't apply for international customers.

Programmer is warranted to be free of manufacturing or workmanship defects for one year from the date of purchase. We charge \$155 for repairing Superpro 280U Programmer after one-year warranty period expires. For technical support, you may use ticketing system, live chat or forum; you may also give us a call during our business hours Monday through Friday, from 8:00am to 4:30pm (PST).

Hardware & Electrical Specifications

- Power supply : Input 100V-240VAC, Output 12VDC
- Programmer unit dimension : 320(L) x 300(W) x 85(H) mm
- Gross shipping weight : 4 Lbs (1.8 kg)

Items Included

- SuperPro 280U Programmer
- AC adapter
- Software CD
- USB Cable
- User' s Manual