

- Two programmers in one, a double value: PC mode for engineering and Stand-alone mode for production. The programmer operates in either PC hosted mode or stand-alone mode.
 - - Under PC hosted mode, a PC controls the programmer via a high-speed USB connection to program a chip.
 - Under stand-alone mode, the user controls the programmer via 16-characters, 2-line LCD display with 6-KEY keypad.
 - A CF (compact flash) card stores the project files.
- Highest user value for the market: 47,893 devices support at \$1,195 ea represents less than \$0.03/ device supported.
- [CE and ROHS Compliant](#)
- Universal pin-drivers for up to 100 pins (optional)

Detailed Features

- Supports IC devices from manufacturers and continuing
- Two programmers in one: PC mode for engineering and Stand-alone mode for production. The programmer operates in either PC hosted mode or stand-alone mode.
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 - Under stand-alone mode, the user controls the programmer via 16-characters, 2-line LCD display with 6-KEY
 - A CF (compact flash) card stores the project files.
- Programmer and tester of TTL/CMOS logic ICs and memories.
- In stand-alone mode, the user can operate multiple units to construct a concurrent multiprogramming system.
- Fastest low-cost programmer in the market.
- Advanced hardware design for low-voltage, low noise, fast operation, and compactness
- Standard 48-pin DIL ZIF Socket. Compatible with 300/600 mil devices up to 48-pin.
- Programs devices with Vcc as low as 1.5V
- 430+ socket adapters including 180+ FBGA packages. Adapters sold separately.
- Over-current and over-voltage protection for safety of the chip and programmer hardware.
- Microsoft Windows 98/Me/NT/2000/XP/ VISTA compatibility
- Only IC manufacturer approved programming algorithms provide high reliability.
- Fastest low-cost programmer in the market
 - Programs high-density Flash memory devices at near theoretical minimum programming time.
 - Intel 28F320W18 (1.8 volts 32Mbit) at 18 seconds (13 sec for program and 5 sec for verify).
 - Speed comparable to Data I/O FlashPak.
 - Standard universal 48 pin-drivers support devices down to 1.5 volts.
 - 100 pin-driver expander module (optional), PEP3000, allows for programming of devices with up to 100 pins.
 - Universal pin-driver architecture up to 100 pins makes it easy to develop device algorithms and to locate socket adapters.
- Advanced hardware feature
 - Advanced hardware design minimizes ground bounce noise enabling programming of low voltage, down to 1.5 volts, devices reliably.
 - Only IC manufacturer approved programming algorithms are used for high reliability.
 - $\pm 5\%$ and $\pm 10\%$ Vcc verification enhances programming reliability.

- In-System Programmable (ISP Support).
- Supports 47,861 devices from 208+ manufacturers including EPROM, EEPROM and Flash memory, PIC, AVR and other popular microcontrollers and PLDs. More devices are added and released every week. Priority update for customer requested devices. - Free software updates via Internet.
- Designed for multi-applications, three modes of operation are supported.
 - Standard PC hosted operation for R&D and Engineering.
 - Stand-alone operation for manufacturing or service. Built-in keyboard and LCD display provides for local operation.
 - Terminal mode to operate via an external instrument such as IC handler, terminal, or controller.

*** Note: Stand-alone or Terminal mode operation requires an optional Compact Flash card to be inserted for operation.

- Pin continuity and wrong chip insertion check prevent chips from accidental damage.
- Over-current and over-voltage protection for safety of the chip and programmer hardware.
- Microsoft Windows 98/Me/NT/2000/XP/VISTA compatibility
- For various gang programming solutions
- New user-friendly and powerful software with many new functions.
 - Project function simplifies processes such as device selection, file loading, device configuration setting, program option, and batch file setting into one touch step.
 - History of device selection and file loading simplifies user operation.
 - Batch command combines device operations like program, verify, security into a single command at any sequence.
 - Auto start batch command begins to program a chip automatically as soon as the chip is inserted.
 - Serial numbers can be generated and programmed onto a chip.
- Clustering of programmers provides for flexible and easy way for volume production programming. Several units work together in stand-alone mode to provide an environment for volume programming. Advantages over traditional gang programming are:
 - Flexible and expandable: start with one unit and add more units as the need arises.
 - Less downtime: in case of a failure of a unit, other units continue to operate.
 - Concurrent programming: each chip begins to program as soon as a chip is inserted into a socket.
 - 47,861 devices supported: device updates are quick and easy.
- Device Supported:
EPROM, Paged EPROM, Parallel and Serial EEPROM, FPGA Configuration Serial PROM, FLASH Memory (NOR and NAND), BPROM, NOVRAM, 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, μ BGA, CSP, SCSP, etc.
- PC Interface: USB
- Stand-alone mode operation Storage Media: Compact Flash Card (Optional)
- Optional Accessories: PEP3000 Pin-driver Expansion Pack, Socket Adapters, Compact Flash Card