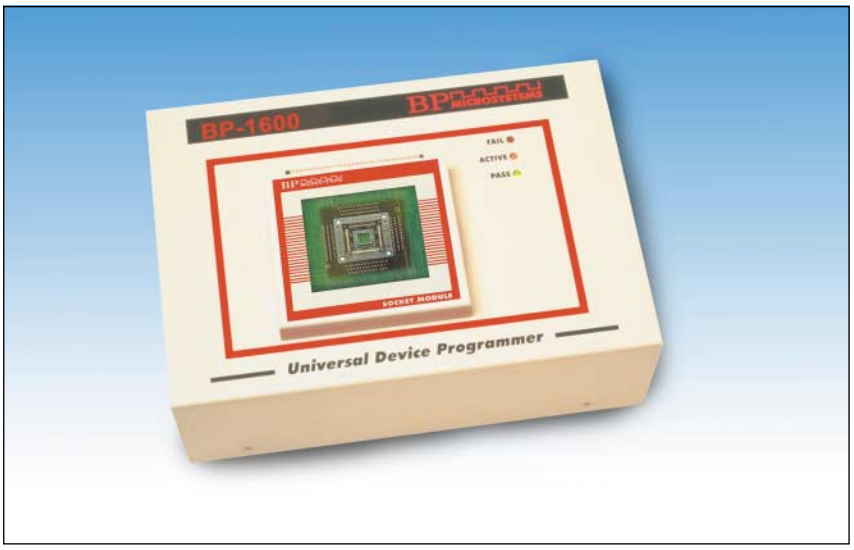
BP-1600 Universal Device Programmer



- Ultra-fast engineering programmer that supports over 15,800 devices
- Supports Very Low Voltage (VLV) devices down to 1.5V (Vdd)
- Supports all device technologies:
  - EPROM, EEPROM, Flash EPROM
  - Microcontrollers
  - PLD, CPLD, FPGA and antifuse FPGAs
- Supports all device packages including DIP, SDIP, PLCC, TSOP, SSOP, PCMCIA, SOIC, LCC, QFP, PQFP, PGA, SIMM, CSP, BGA and µBGA

The BP-1600 is the ultimate engineering device programmer. In terms of speed, device support, ease-of-use and flexibility, the BP-1600 is unsurpassed. It incorporates BP's latest 6th Generation Programming Technology for the faster programming while supporting devices from 5V all the way down to 1.5V.

Due to its speed and versatility, the BP-1600 is ideal for today's high density devices. To achieve higher programming speeds, the BP-1600 uses advanced, accelerated socket modules (the FX socket modules). These FX Socket Modules allow you to program at the fastest speeds in the industry. Like all BP universal programmers, the BP-1600 also supports the full range of BP's socket modules, that's over 265 Socket Modules available today. They are interchangeable to allow easy switching between device package types, and are compatible with all BP Microsystems universal programmers. So if you're programming the smallest µBGAs and Chip Scale Packages or even the largest QFPs, BP has the support for you.

Along with the speed comes the versatility to program more devices, too—including the latest flash memories, MCUs, PLDs, FPGAs and antifuse FPGAs. The BP-1600 supports over 15,800 devices and BP updates that support with new devices every six weeks.

The BP-1600 has 240-pin drivers standard which allows complete continuity and functionality testing available on every pin before programming begins—a feature that saves you time, frustration, and money.

The BP-1600 also comes with BP JobMaster™ software—a powerful tool that incorporates the use of ".bp" files. A feature exclusive to BP programmers, ".bp" files are valuable for both production and engineering departments, by ensuring proper job setup and secure data. The JobMaster files enable a user to easily transfer any ".bp" file, even by e-mail. This allows BP customers to easily share data securely around the world, transfer designs between engineering and manufacturing, and share programming files between customers and programming centers. JobMaster ".bp" files are error checked automatically, and aid to reduce or eliminate human error by only running jobs which have been tested and verified by a supervisor. The ".bp" files cannot be used if they have been modified inadvertently.

The BP-1600 system includes a three-year warranty and free lifetime software updates so you'll always have access to the newest programmable devices. Software is available on CD or on the Internet at www. bpmicro.com.

BP MICROSYSTEMS

SPECIFICATIONS

SOFTWARE

File Type: binary, Intel, JEDEC, Motorola, POF, RAM, straight hex, hex-space, Tekhex, Extended Tekhex, ASCII hex, Formatted Binary (.DIO), AFM, OMF, LOF, MER, and others

Device Commands: blank, check sum, compare, options, program, test, verify

Features: data editor, revision history, session logging, on-line help, device and algorithm information

HARDWARE

Calibration: automatic self-calibration

Diagnostics: pin continuity test, RAM, ROM, CPU, pin drivers, power supply, communications, cable, calibration, timing, ADC, DAC

CPU: 80486-DX4 at 96MHz, with proprietary hardware accelerator

PIN DRIVERS

Quantity: 240-pins standard

Voltage: 0 to 25.00V in 6.25µV steps

Current: 0-1A, 15µA resolution

Slew rate: 0.001 to 2500V/µs

Timing: 1µs - 1s, ±1µs, ±0.01%

Clocks: continuously variable 390 KHz to 30 MHz

Protection: overcurrent shutdown, power failure shutdown

GENERAL

Power: 90-260VAC, 47-63 Hz., 1.2 KVA, IEC inlet connector for worldwide use

Mass: 7.22 lbs. (3.28 kg)

Maintenance: none required

STANDARD ACCESSORIES

software disk

user manual

power cable

data cable

48-pin DIP socket module

File Loading: automatic file type identification; no download time because programmer is PC controlled; supports Intel, JEDEC, Motorola S-record, POF, straight hex, hex-space, Tekhex, and other file formats

Device Selection: intelligent device selector allows you to type as little or as much of the part number as you like then choose from a list of devices matching your description

Algorithms: only manufacturer approved or certified algorithms are used; BP Microsystems has an excellent record of being first to provide certified algorithms for new devices

Algorithm Updates: free software updates are available eight times per year

Devices Supported: Antifuse, Low Voltage, PROM, EPROM, EEPROM, Flash EEPROM, microcontrollers, SPLD, CPLD, FPGA

Test Vectors: supported on PLDs up to 240 pins

Continuity Test: each pin, including Vcc, ground, and signal pins, may be tested before every programming operation

Protection: overcurrent shutdown; power failure shutdown; ESD protection, reverse insertion, banana jack for ESD wrist straps

Options: available Socket Modules include Universal PLCC, standard PLCC, PGA, CSP, BGA, µBGA, SOIC, QFP, TSOP, LCC, SDIP, PCMCIA, SIMM among others—JobMaster™ software, Advanced Feature Software, and Autohandler Interface are also available

Features and specifications subject to change without notice

CE

BP MICROSYSTEMS

Setting the standard in device programming

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