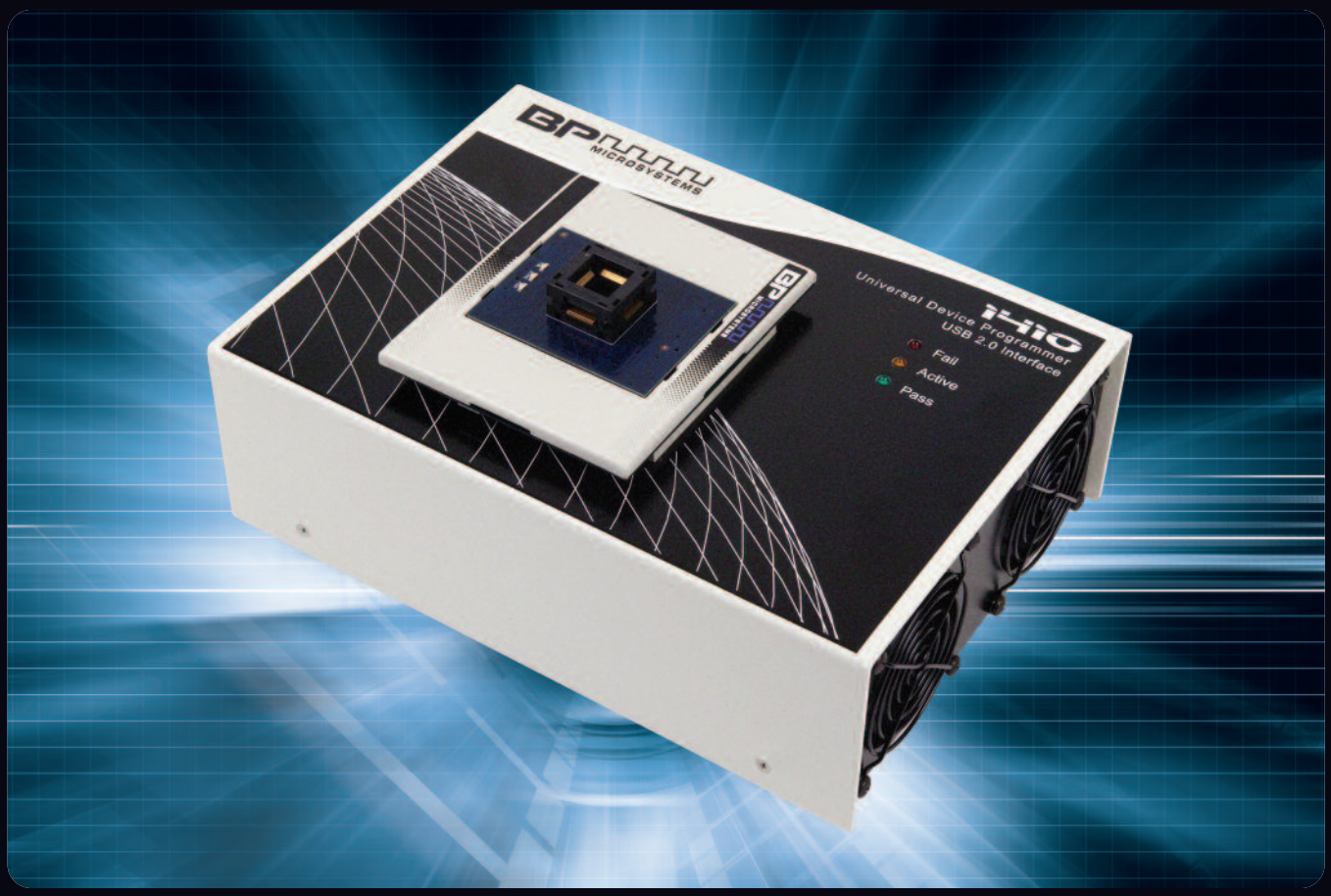
BP MICROSYSTEMS

1410/84 Universal Engineering Programmer



1410/84 Universal Engineering Programmer

The 1410/84 was designed to be the most cost effective solution in supporting today's device programming challenges. It is a universal device programmer that includes 84 pin drivers with complete continuity and functionality testing available on every pin.

The 1410/84's socket modules are designed to provide universal support for each package type. They are interchangeable to allow switching between device package types, and they are compatible with all BP Microsystems universal programmers. The 1410/84 also comes with BP JobMaster™ software. In addition, each socket module provides 100% continuity and functionality test before programming begins—a BP Microsystems exclusive feature that saves you time, frustration, and money.

- **Supports over 21,000 devices with voltages down to 2.4V (Vdd) including, but not limited to, EPROM, EEPROM, Flash EPROM, Microcontrollers, PLD, CPLD, FPGA and antifuse FPGAs**
- **Compatible with all existing socket modules, standard and automated**
- **Patented solution to guard against passing blank parts—available only from BP Micro**
- **Supports all device packages, including but not limited to, DIP, SDIP, PLCC, TSOP, SSOP, PCMCIA, SOIC, LCC, QFP, PQFP, PGA, SIMM, CSP, BGA, µBGA, TQFP and TSSOP**
- **Ideal for design engineering**
- **Uses USB 2.0 communication bus**

General

Operating Voltage:	100-240 VAC
Frequency:	50-60 Hz
Current Rating:	4-2 A (Fuse 250V 6A SB)
Dimensions:	11.75" (298mm) x 8.65" (220mm) x 4.68" (119mm)
Mass:	7.22 lbs. (3.28 kg)

Software

Required:	BPWin
File Type:	including, but not limited to, binary, Intel, JEDEC, Motorola, POF, RAM, straight hex, Tekhex, Extended Tekhex, ASCII hex, Formatted Binary (.DIO), AFM, OMF, LOF
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 verification timing, ADC, DAC
PC System Requirements:	Microsoft Windows 2000 or above

PIN Drivers

Quantity:	84-pins standard
Analog Slew rate:	0.3 to 25V/µs
Vpp Range:	0-25V
Ipp Range:	0-70mA continuous, 250mA peak
Vcc Range:	0-12V
Icc Range:	0-1A
Very low voltage:	to 2.4V (Vdd)
Rise Time:	4ns
Overshoot:	none
Protection:	overcurrent shutdown, power failure shutdown
Independence:	pin drivers and waveform generators are fully independent and concurrent on each site

Standard Accessories Included

software on CD-ROM
user manual on CD-ROM
power cable
data cable
48-pin DIP socket module (not pictured)
3-year hardware warranty

Features

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
Devices Supported:	including, but not limited to, Antifuse, Low Voltage, PROM, EPROM, EEPROM, Flash EEPROM, Microcontrollers, SPLD, CPLD, FPGA
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 including, but not limited to, Universal PLCC, standard PLCC, PGA, CSP, BGA, µBGA, SOIC, QFP, TSOP, LCC, SDIP, PCMCIA, SIMM—JobMaster™ software, and Advanced Feature Software
Programming Yield:	assured by independent universal pin drivers on each socket, short distance from pin drivers to device, and accuracy of waveforms
Algorithms:	all algorithms are manufacturer approved or certified (if required)—BP Microsystems has an excellent record of being first to provide certified algorithms for new devices
Algorithm Updates:	software updates are available throughout the year

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BP MICROSYSTEMS
Setting the standard in device programming

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