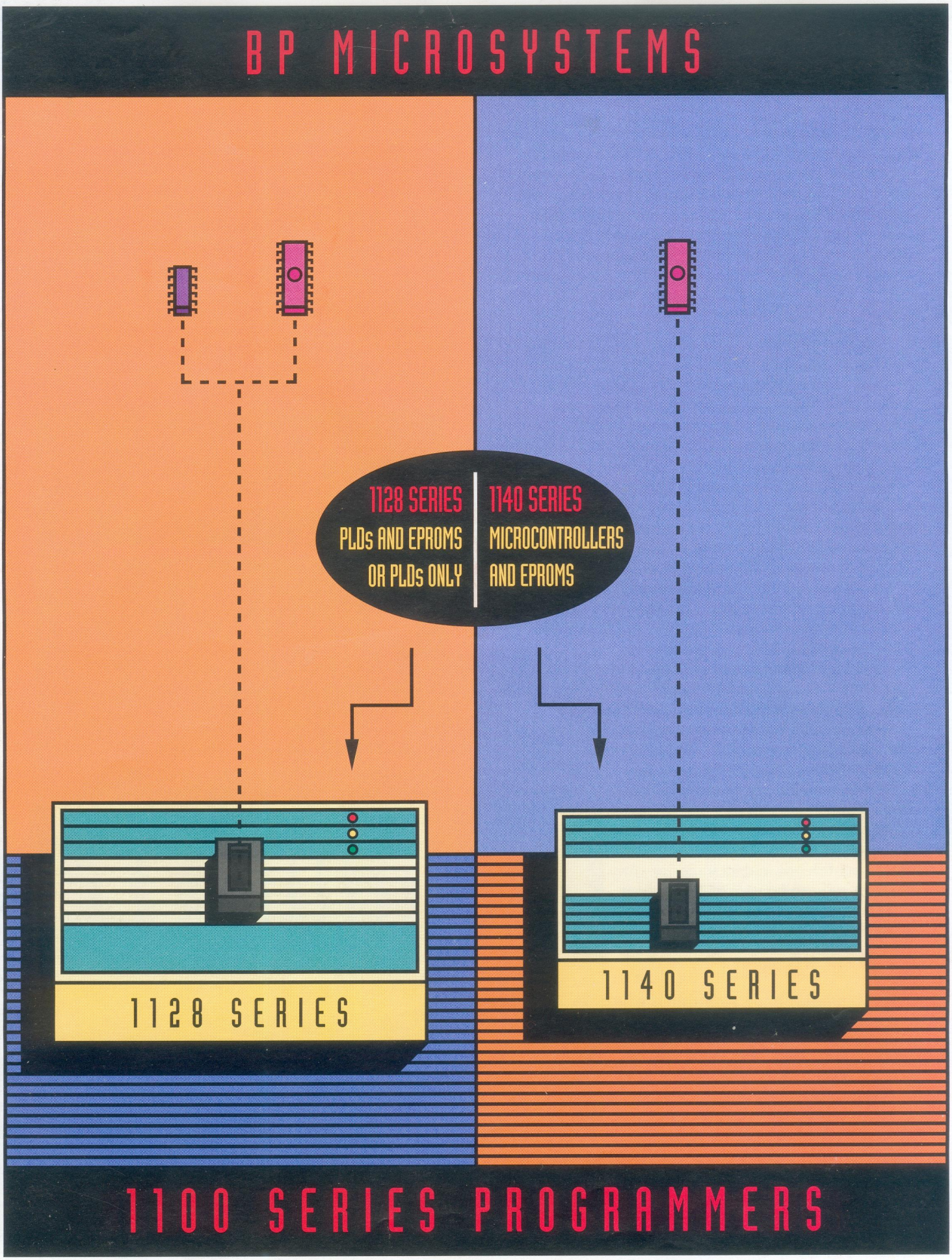
BP MICROSYSTEMS



1100 SERIES PROGRAMMERS

1100 SERIES INFORMATION

The 1100 series programmers are the price/performance leaders for PLD and EPROM programmers. Each model gives you high-quality support for a vast number of programmable devices at a very reasonable price. BP Microsystems reputation as the industry leader in device programmers is built upon great support, solid hardware and the most user-friendly software available.

SOFTWARE FEATURES

Our user-friendly control software works the way you expect it to. Just select a chip, load a file, and program. The system is self-installing and easy to update when you need support for new devices. Many sophisticated features make the software versatile enough to handle virtually any programming task.

To make this system easy to use, all options have intelligent default settings. For example, when you load a file, the file type and load address are determined automatically to save you time.

Selecting a programming algorithm from the software's database of thousands is quick and accurate thanks to powerful software. Just type in the part number and all devices that match your description will appear instantly for your selection.

Other advanced features include a built-in editor, macro record and play facility, and F1 key help at all times. Device specific information, available by pressing F2, tells you about the programming algorithm including programming voltage, electronic ID, and other information. Splitting a file into multiple EPROMs just requires setting a single option before you program.

Verify and functional test operations can be performed at high and low Vcc limits to give you the highest confidence in data integrity. Any discrepancies detected can be viewed for analysis.

The software is compatible with any PC and may be used under Windows or OS/2 if desired.

PROGRAMMING ALGORITHMS

Each programming algorithm is written to conform to the semiconductor manufacturer's specification so you will be assured of high programming yields and long-term integrity in the programmed devices.

To guarantee that you get accurate programming waveforms on your PC, every BP Microsystems programmer incorporates its own microprocessor and power supply. Unlike "dumb" programmers, ours produce identical programming pulse widths whether you have a 486, a notebook computer, or an original PC.

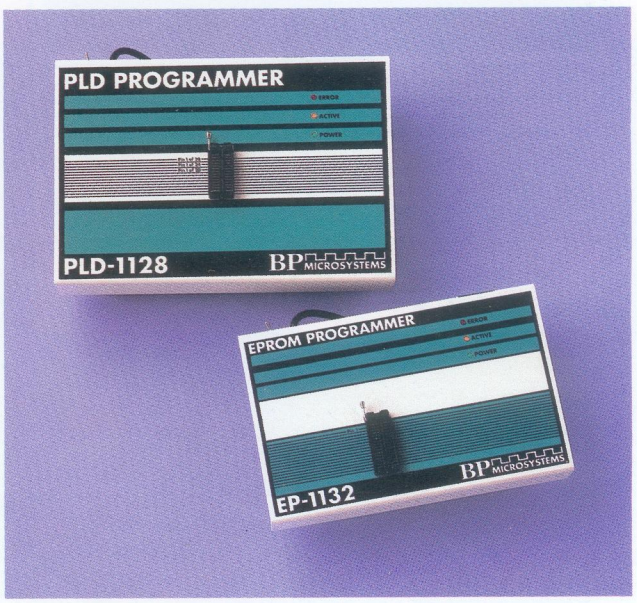
SUPPORT

Providing unparalleled support is nothing new to BP Microsystems. By continuing to provide toll-free technical support and free software updates for every programmer we have ever made, we keep the cost of ownership as low as possible.

You can speak with knowledgeable technicians at our factory by calling our technical support line (toll-free in U. S. and Canada). Outside the U. S., BP Microsystems' local representatives also provide technical support.

Free updates are available for the software through our bulletin board system (BBS), allowing you to program most new devices without any additional investment.

To select a chip, just type its part number.



PLD-1128 Programmer & EP-1132 Programmer

EP-1140 — EP-1132

Supports E/EPROMs and microcontrollers up to 40 pins

DEVICE SUPPORT

The EP-1140 supports virtually every E/EPROM from 2716 to 8 Mbit. This includes all 8-bit and 16-bit EPROMs, E/EPROMs in packages up to 40 pins, and flash EPROMs. The 87C51 derivative microcontrollers from AMD, Intel, Signetics, and others are also supported. All serial E/EPROMs are supported on the EP-1140 using an inexpensive adapter.

The EP-1132 supports nearly all 8-bit E/EPROMs from 2716 to 8 Mbit in 24 to 32-pin DIP packages only.

Adapters for programming PLCC parts are available for 32 and 44 pin EPROMs and microcontrollers.

These programmers have the flexibility to support practically any CMOS memory device available, letting you choose the part that is best for your application.

High-performance programming hardware delivers fast programming times and high yields. The programmer's small size makes it ideal for portable applications when used with a notebook computer.

CP-1128 — PLD-1128

SUPPORTS PLDs, E/EPROMs, and PROMs up to 28 pins

DEVICE SUPPORT

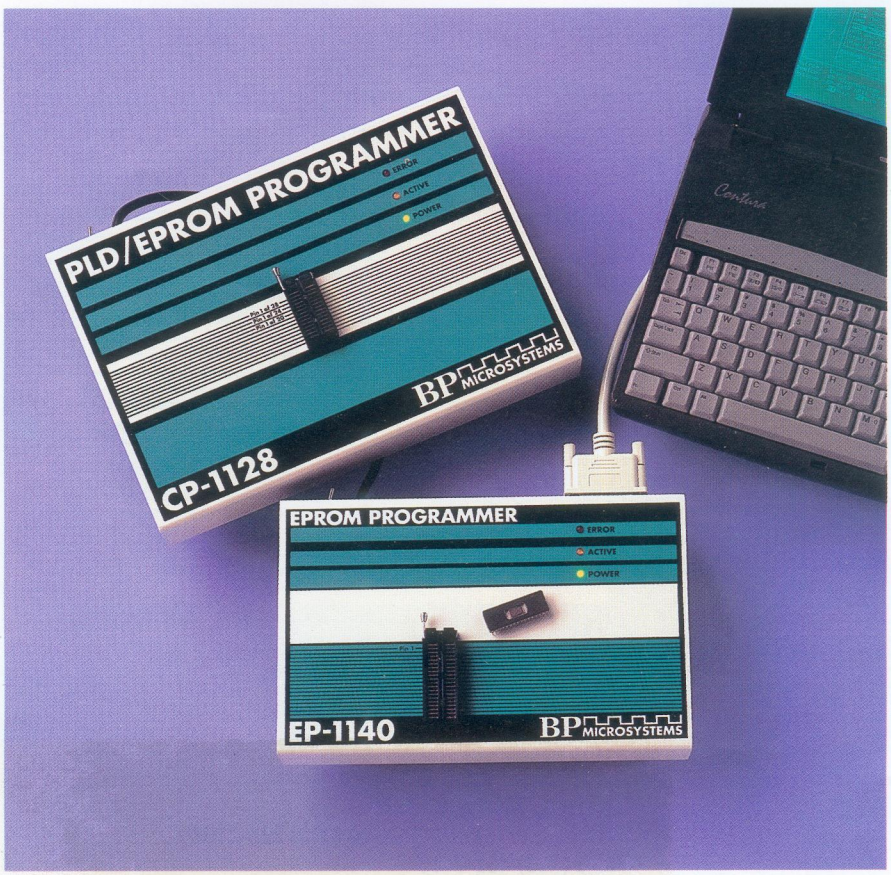
The CP-1128 directly supports PLDs, EPROMs, E/EPROMs, and PROMs up to 28-pins in a DIP package. Adapters allow the CP-1128 to support complex PLDs and other PLCC parts up to 84 pins. The PLD-1128 supports only PLDs.

Socket adapters are available to support many high pin count PLDs such as MACH and pLSI devices. PLCC to DIP adapters are also available for 20-, 28-, and 32-pin devices.

HARDWARE FEATURES

The 1128's powerful hardware properly supports advanced devices such as 4 and 5 ns bipolar PALs, 5 ns CMOS PALs, complex PLDs, and ECL PALs - devices that our competition can not support at any price. PLDs up to 28 pins are supported with test vectors; larger devices can be programmed, but not tested. The software is updated frequently so be sure to request the latest device list to see which devices are currently supported.

The 1128 series PLD programmers are every bit as dependable as they are rugged. The 1128's high speed pin drivers allow programming and functional testing on all PLDs up to 28 pins. Larger PLDs may be programmed but not tested. Each pin driver is fully programmable so the 1128 has the flexibility to support the latest algorithms without ever needing to change your hardware. Devices in the socket are protected from damage during power up and power down. All critical program (waveform) timing is generated directly by the crystal controlled microprocessor inside the programmer. Proprietary high speed pin drivers provide high yield and accurate test results even with today's fastest PLDs. Programming algorithms are approved by semiconductor manufacturers to ensure that you will be able to program your devices with confidence. The programmer will connect to any PC through a standard parallel printer port, allowing it to be used even with notebook computers.



CP-1128 Combination Programmer & EP-1140 E/EPROM Programmer

SPECIFICATIONS

SOFTWARE

File Type: binary, Intel, JEDEC*, Motorola, POF*, straight hex, hex-space, Tekhex, Extended Tekhex, and others (*1128 series only)

File Size: limited by hard disk

Test Vectors: limited by hard disk

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

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

Installation: automatic (just copy the file to your hard disk)

HARDWARE

CPU: 1128 series Z80; 1140 series 8088

RAM: does not limit device or file size

Diagnostics: RAM, ROM, CPU, pin drivers, power supply, communications, cable, ADC, DAC

Communication: Centronics parallel

Socket: Zero Insertion Force Gold DIP

1128 SERIES - PIN DRIVERS

Voltage: 0 to 25V in 100mV steps

Current: up to 2A peak

Slew rate: 0.001 to 1000 v/µs

Calibration: automatic self-calibration

Protection: current limiting, reverse insertion, power failure

1128 SERIES - GENERAL INFORMATION

Size: 30.5cm L x 22cm W x 7cm H; 12" L x 8.75" W x 2.75" H

Mass: 3.2kg; 7 lbs

Power: 110-125VAC or 220-250VAC 50-60Hz, 30 VA

Maintenance: none required

1140 SERIES - GENERAL INFORMATION

Size: 27cm L x 18cm W x 6cm H; 10 .6" L x 7" W x 2.5" H

Mass: 2.7kg; 6 lbs

Power: 110-125 VAC or 220-250 VAC 47-63 Hz; 25 VA

Maintenance: none required

COMPUTER

Operating System: MSDOS or compatible (Windows or OS/2 optional)

Port: Standard parallel printer port

Memory: 520K available minimum (EMS optional, will improve performance of large files.)

Disk: 1.2M or 1.44M floppy with hard disk or network

CPU: 8088 to 486...

PROGRAMMING TIMES

27C64: EP-1140 - 4s, CP-1128 - 5.3s

27C010A: EP-1140 - 39.2s

GAL22V10B: CP-1128 - 3.4s (1000 vectors 5.4s)

MACH230: CP-1128 - 5s

Times are somewhat dependant on computer speed

STANDARD ACCESSORIES

software disk including entire device library

user manual

power cable

data cable

OPTIONS

PLCC socket adapters

Support: service contract

Features and specifications subject to change without notice.

Available from:

BP MICROSYSTEMS

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