SPECIFICATIONS

MACABEL

ABEL FOR THE APPLE MACINTOSH II OR IIX WORKSTATION A/UX VERSION

GENERAL DESCRIPTION

ABEL,™ the industry standard PLD design software, is now available on the Apple Macintosh® II or IIx workstation. MacABEL allows you to take advantage of the personal productivity features of the Macintosh to easily describe and implement logic designs in programmable logic devices (PLDs) and PROMs.

Like ABEL Version 3.0 for other popular workstations, MacABEL combines a natural high-level design language with a language processor that converts logic descriptions to programmer load files. These files contain the required information to program and test PLDs.

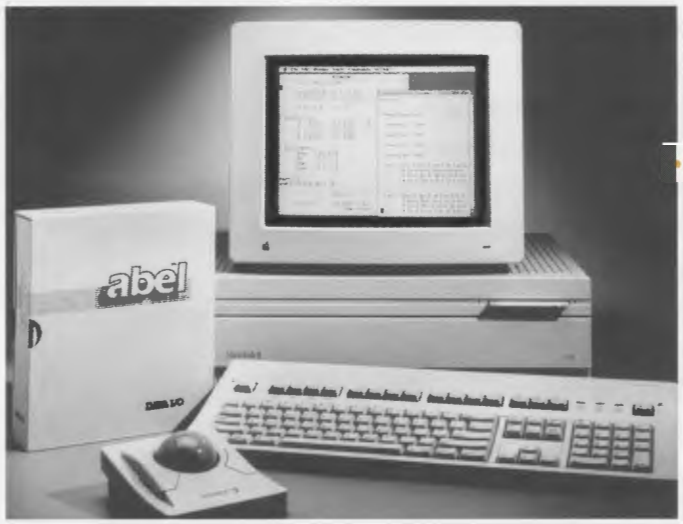
MacABEL allows you to describe your design in any combination of Boolean equations, truth tables or state diagrams – whichever best suits the logic you are describing or your comfort level. Meaningful names can be assigned to signals; signals grouped into sets; and macros used to simplify logic descriptions – making your logic design easy to read and understand.

In addition, the software's language processor provides powerful logic reduction, extensive syntax and logic error checking – before your device is programmed. MacABEL supports the most powerful and innovative complex PLDs just introduced on the market, as well as many still in development.

MacABEL runs under the Apple A/UX™ operating system utilizing the Macintosh user interface. A/UX is an implementation of AT&T's Unix® System V, Release 2, Version 2 for the Macintosh II workstation. A/UX features full AT&T Unix System V implementation, as well as 4.2- and 4.3-based extensions. TCP/IP, Sun Network File System (NFS) and UUCP support is included. This lets you connect existing Ethernet or serial networks with software and protocol compatibility.

FEATURES

- 100% PLD manufacturer support, including more than 200 different PLD architectures
- Support for mainstream as well as advanced PLD architectures, including the Cypress 7C330, Lattice 6001, ATMEL V750, AMD 29M16, Altera EP1800, and TI PSG507
- Full documentation, including User's Guide, Language Reference, Applications Guide, Systems Specific Information, and User Notes
- 75 design examples provided on disk or tape; 20 design examples provided in the Applications Guide
- Logic Diagram Package showing more than 180 PLD architectures, as well as fuse, pin, and node numbering
- PALASM (version one only) to ABEL conversion utility
- JEDEC file to ABEL source file decompiler; produces macrocell map (type of flip/flop, type of input, number of input terms, feedback path, reset and preset inputs)



- Boolean equations
- State machine diagram entry, using IF-THEN-ELSE, CASE, GOTO, and WITH-ENDWITH statements
- Truth tables to specify input to output relationships for both combinatorial and registered outputs
- High-level equation entry, incorporating the boolean operators used in most logic designs `(!,&,#,$,!$)`, arithmetic operators `(-,+,*,/,%,<<,>>)`, relational operators `(==,!=,<,<=,>,>=)`, and assignment operators `(=,:=)`
- Absolute fuse patching (i.e. you control the state of any fuse)
- Text librarian, allowing source statements to be stored, reducing execution of commonly used functions
- Four levels of logic reduction algorithms
- Powerful functional simulation, with six trace levels
- Standard JEDEC 3A format programmer load file for data transfer to logic programmers
- Automatic design documentation showing device utilization/listing, device pins available for input and output, the number of product terms used, and product terms still available for use
- Enhanced fusemap generator, handling new macrocells with configurable register types and feedback types
- Dot extensions, to permit greater flexibility for designing more complex devices, such as specifying register type with devices with dynamic register control
- "EZSIM," to shorten the simulation iteration loop, bypassing reduction and fusemap generator

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SYSTEM SPECIFICATIONS

Required System Configuration

- Apple Macintosh II or IIx workstation with 3½" disk drive
- Monochrome or color monitor with video card
- Keyboard
- A/UX operating system
- Minimum two MB RAM
- Paged Memory Management Unit (PMMU)
- Minimum 80 MB hard disk

Recommended Equipment

- Four MB or more total memory is recommended (four MB is standard on Macintosh IIx)

Distribution Media

- 3½" diskettes: tar format

*PROGRAMMABLE LOGIC DEVICE MANUFACTURERS * SUPPORTED*

Altera
Advanced Micro Devices/MMI
ATMEL
Cypress Semiconductor
EXEL Microelectronics
Fairchild Semiconductor
Gould Electronics
Harris
Intel
International CMOS Technology
Lattice Semiconductor
National Semiconductor
PLX Technology
Ricoh
Samsung Semiconductor
SEEQ Technology
SGS-Thomson Microelectronics
Signetics
Sprague Solid State
Texas Instruments
VLSI Technology

PROM MANUFACTURERS SUPPORTED

ABEL supports all of the PROM, EPROM, and EEPROM manufacturer's devices up to 32K bits.

* MacABEL has 100% PLD manufacturer support. Please refer to the monthly Data I/O Reference Chart of Programmable Devices for specific device support for each manufacturer.

Specifications are subject to change without notice.

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