



6842 Valjean Avenue  
Van Nuys, California 91406  
(213) 989-1204

## **APB-102 ULTRA ROM BOARD/EDITOR**

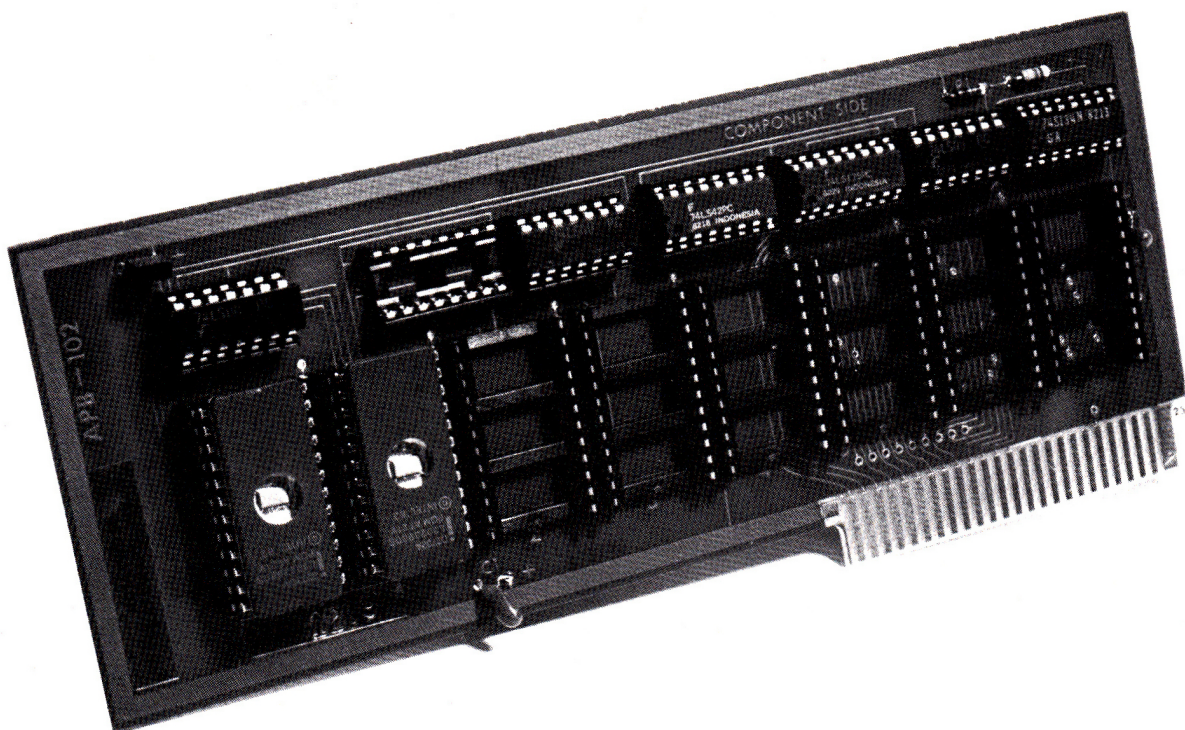
*Hollywood will have Special Effects  
on your Apple®*

**HOLLYWOOD HARDWARE, INC.** is an offshoot of APOGEE, INC., a cinematic Special Effects Studio composed of the people who brought you the visual effects for "STAR WARS", "BATTLESTAR GALACTICA", "STAR TREK - The Motion Picture", "AVALANCHE EXPRESS", "CADDYSHACK", "FIREFOX", "NEVER SAY NEVER AGAIN", and other films.

We started designing peripherals because we needed them for our computerized camera and laser systems, and no one else offered them.

Now we're selling them because we've used them and we know they work!

**The Ultimate Applesoft® Enhancement . . .  
. . . plug it in and TRIPLE your efficiency!**



"Apple" and "Applesoft" are registered trademarks of Apple Computer, Inc.





6842 Valjean Ave.  
Van Nuys, Ca 91406  
(213) 989-1204

## DATA SHEET

### ULTRA ROM BOARD/EDITOR

#### THE PROBLEM

How many times have you heard or uttered this lament: "Applesoft® is easy enough to learn but it's not powerful or convenient enough for sophisticated programming." What if a simple addition made that forever untrue? What if that addition required no hardware modifications, no special programs to be loaded, no reduction in memory available to Applesoft? And what if it could be made to appear or disappear with a few keystrokes?

Well, we were forced to answer the same questions for our own use, and we were so satisfied with the result that we are offering the HOLLYWOOD HARDWARE Ultra ROM Board for sale.

#### THE FIRMWARE

**GPLe® (Global Program Line Editor)** is a powerful Applesoft programming aid written by Neil Konzen. It offers such a significant increase in programming efficiency (editing speed is increased from 2-5 times) that anyone having used it will never want to work without it. In its original RAM form it is worth the 4K of main memory and occasional reloading required.

However, a new version of GPLe, modified by Paul Johnson to run in ROM, is resident on the firmware card, never requires reloading, and requires no RAM except for 208 Bytes in page 3. (Note: Page 3 is an isolated memory space not used by BASIC). No free zero page locations are altered.

The editor is called by a PR#n (where n is the number of the slot the card is in). While "hooked up" it interprets every character from the keyboard. This allows it to pass normal BASIC or DOS commands onward, or generate its own input based on editor commands. Because the ROM board turns itself off between relevant keystrokes, conflicts with another program or I/O board are very unlikely. Even so, the firmware checks for conflicts and disconnects itself when it senses one. Also, typing a "ctrl Q" will cause the editor to unhook itself completely, leaving a totally standard Apple®. Even page 3 is available if desired. A PR#n will again restore the editor, with no damage to the BASIC program.

The features of GPLe are too numerous to list here (refer to the Quick Reference Guide), but here are some highlights:

**Line editing:** The editor can easily move through a line inserting or deleting characters. You can make the cursor jump to the beginning or end of a line, or find any desired character. Once a line is satisfactory, you do **not** have to move the cursor through every character to enter it, a significant timesaver.

**Global editing:** You can search any part of a program for every line containing a certain string of characters, and then display those lines for editing purposes. Or, if you like, the editor can automatically replace every occurrence of the key string with a different one. Imagine trying to change every occurrence of a variable or sub-routine-call in Applesoft!

**Macro's:** You can enter commands or series of commands up to 230 characters long with just 2 keystrokes, using the macro feature. They are easy, logical, and astoundingly helpful. For example:

Instead of "CATALOG, D1" ..... type "(esc) 1"

Instead of "LIST" ..... type "(esc) L"

Instead of "CALL-869" ..... type "(esc) 8"

Instead of ">>>>>>>>" type "(esc) >"

Macros can be taken from an extensive table provided in ROM, and can be created by you in RAM. Since any macro can call any other, very elaborate command strings are possible with little effort. Of course, the user's table can be saved to disk whenever desired.

**"&" Extensions:** These machine language utilities enhance the Apple both while editing and running programs. Again, here are just highlights:

**Searches:** Fast routines can search through Applesoft for any character or string and print out line numbers. Or you can search through all memory for any Hex or ASCII string and be given the memory locations at which they occur.

**Conversions:** Quick Hex-Dec-Binary-ASCII conversions are performed almost instantaneously for you.

**"Not New":** A utility which helps to recover lost programs.

**LANGUAGE EXTENSIONS:** Applesoft enhancements include: "IF THEN, ELSE" logic flow, which allows for more structured programming, and "PRINT USING . . ." functions, which greatly improve output formatting convenience. Dollars and cents listings are a snap!

Because these extensions are always resident in your Apple, any program using them will simply load in and run!

#### THE HARDWARE

Ultra ROM board is a slot independent ROM board with 8 sockets, each accommodating a 2716 or 2732 EPROM, interchangeable with no modifications. Each 2716 or 1/2 2732 is over-laid into the 2K I/O memory space from \$C800 to \$CFFF. On-board firmware controls bank switching and facilitates jumps and calls between banks. Thus, up to 32K of resident ROM space is provided, that does not impinge on the main board or language card memory space. The firmware automatically turns the board off after access and can co-exist with any other I/O board that follows Apple convention. For special applications the resident firmware is also changeable by the user. The board works equally well on the Apple II+ or IIe.

#### THE FUTURE

New Apple enhancements are coming soon, and new ROM chips carrying them will be available for simple plug in to the board. Do you have any utilities that you are tired of entering or loading? We will support you in "ROM"ing them, and if we like them, we'll market them for you.

G.P.L.E. ©1983 Neil Konzen

Sold under license from SYNERGISTIC SOFTWARE

"Apple" and "Applesoft" are registered trademarks of Apple Computer, Inc.