REPLAY II
Apple Program Copy And Development System

Now for Ile Also

Why ours is better!
1. Accurate copy of memory
2. Language card not needed to copy or run - when using Replay Card
3. Fast copy & restart - 15 seconds -
4. Analysis programs and 60 pages of documentation
5. Copy system in eprom - No need to boot other disks at copy time -

REPLAY II is an interface card that is slot independent. Users can stop a program, examine and change memory, or copy the program, and restart. Control of the APPLE is obtained by pressing the remote switch which comes on an 18 inch cable outside the APPLE. REPLAY II does not copy the original disk, rather it copies the program executing in memory. If a copy is desired a blank disk is inserted in drive 1 and the options on the menu are contained in the eprom on the REPLAY II card, no other disk needs to be booting for copying, unlike other copy cards. The very act of booting another disk alters memory which is detectable by some protected software.

REPLAY II does not change ANY memory. Extra memory is buffered to allow copying and analysis without altering the original memory contents. Other copy cards always change specific points in the original memory. REPLAY II faithfully reproduces the lower 48K of memory in a fast load format. The upper 16K can also be copied for a 64K copy. Standard DOS 3.3 files are created automatically for storage on floppy or hard disks. A RAM card is needed for this.

REPLAY II is fully documented in a 50 page manual. Utility programs supplied with the REPLAY II card include Program Analysis, Comparisons, Packing and Compression. A language card is not needed to run packed program copies.

Because most programs are written in Assembly language, the user should be familiar with Assembly in order to fully utilize the advanced Analysis and Packing programs. Users can now freeze a binary program and perform a transparent step or trace while continuous disassembly is shown. View text or hires during trace.

REPLAY II can automatically move protected APPLESOFT programs to a standard DOS 3.3 disk for listing or modification.

Now game players can save a game at any level and QUICKLY restart with the REPLAY II card. Users can freeze games, change variables to obtain unlimited ships or power, etc., then restart the program. Saving high scores is easy.

Minimum requirements are an APPLE II and a single disk drive.

To order or request info:
White or call
HEX COMPUTING are Australian dealers for Replay II cards. These cards are now in stock in Perth and can be mailed to you immediately.

PRICE: AUST. $175.00

For Apple II+ or Ile

REPLAY II is intended to be used as an analysis tool, for program development, and for making archival backup copies.

*Apple is a registered trademark for Apple Computers Inc.
REPLAY II is a card designed for many different uses. It can be used to copy programs executing in memory for backup purposes. The backup can then be used and the original kept in a safe place.

The Replay Card can also be used for program development or analysis. Since all memory is preserved the Replay card can be used to develop or analyze programs with the knowledge that using the card does not effect the original program.

A program can be stopped at any point desired. The following menu will appear when the user stops a program by pushing the button on the Replay card.

[*] REPLAY II [*]
C] COPY
M] MONITOR
B] BOOT 16 SECTOR DISK
E] BOOT REPLAY DISK
R] RESTART
L] VIEW SCREEN

All of the options are contained in the eprom on the Replay card. While Replay is in control the original memory is not altered unless requested by the user. A monitor is one of the options of the menu. If that option is selected the following screen will appear.

[*] REPLAY MONITOR [*] PC = xxxx
ON STACK = xxxxx xxxxx HOOK IN = xxxxx OUT = xxxxx
A = xx X = xx Y = xx SP = xx
SV*BDIZC
S$F2 RESET VECTOR = xxxxx STATUS = xxxxxxxx
M,P,L,S,W,G,##/#,##/#W,##/#,'A]

M = display this screen
W = clear memory
P = APPLESOFT ptrs displayed
L = display memory as hex and ASCII
= set memory to entered value
/ = search memory for entered value

Stack and input/output hooks displayed
Reset vector shown.
Status flags visible and labelled

There are monitor commands for displaying, searching or changing memory. APPLESOFT BASIC pointers can also be displayed in the format shown below.

[*] APPLESOFT POINTERS [*]
PROGRAM START [$67] = xxxxx END [$AF] = xxxxx
VARIABLE END = xxxxx STRING END = xxxxx
FREE MEM = xxxK CURRENT LINE = xxxxx

ENHANCED versions of the Replay eprom will be released in the future with more options for development and analysis. Remember that memory is preserved so that these options are transparent to the program being worked with.

Why the REPLAY II card is better:

1. Accurate copy of memory. Extra memory is buffered in to obtain an accurate copy of memory for your backup. Other cards alter memory. Even a slight change in memory can change the operation of your program when it restarts.

2. Language card not needed to copy or run. When using the REPLAY II card the language card is not needed. Copies can be made and executed by the Replay card. A language card allows some enhancements but is not required in the minimum configuration.

3. FAST copy and restart. The user can = =
   A. Stop a program
   B. Copy lower 48K
   C. Restart program

   In under ** 15 ** seconds!!! 64K copies take only slightly longer. Game players have instant freeze, copy, restart for fast play. Restart of a previous copy is fast, also.

4. Analysis programs and 60 pages of documentation. The user is supplied with extensive documentation covering many different uses of the card.

5. Copy system in eprom. no need to boot other disks at copy time. This eliminates the need to keep a separate disk immediately on hand just to load in the copy software. Loading in the copy software also alters memory irrevocably!

Standard DOS 3.3 files of the copied program are created automatically. Two standard binary files are created of the lower 48K program memory.

Some uses of the Analysis programs are:
   A) searching copied programs for code/ASCII areas
   B) condensing copied programs to minimum size.
   C) comparing copies of programs for differences
   D) comparing standard DOS to nonstandard DOS, find differences
   E) disassemble copied programs for analysis and modification

Memory resident programs are those programs that totally load into memory to execute. Many programs such as spreadsheet programs and games usually fall into this category.

Multiple access programs such as large adventure games or multiple module programs are copyable by users with experience. The Replay card can be used as a tool to analyze the software. Suggestions are given in the documentation.
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APPLE III - LEMON OR PEACH?

If you are considering the Apple III here are some thoughts to encourage you. Apple Computer, Inc., in summer 1982 Unleashed a major upgrade to Apple III. Free, to previous owners! Here is the heart of a letter from a 3A member.

Dean McCabe of West Trenton, NJ.

The owner of an Apple III can do many of the things that the owner of a II can do, plus more. When the system emulates an Apple II, it does it so completely that you get a 40 column display and all the other weaknesses as well as the strengths of the II, such as, compatibility with a wealth of software from 3A.

When the III is in "native" mode it provides more memory, better audio, a full duplex RS232 serial port which can tie to modems and printers and so on, a more extensive and solid keyboard, 80 columns, Pascal, and...The key to the Apple III system is that the operating system software is loaded into RAM from some inexpensive media. This means that the system can easily run in the latest revision of any language made available. Currently, that includes Apple III BASIC and Pascal.

To the best of my knowledge, no other languages such as FORTRAN are yet available. But when they are, no hardware change or addition should be required such as Integer and AppleSoft firmware cards as with the II. The concept of loading the operating system into RAM is not new, but it's just coming into acceptance.

Rumor has it that Apple is going to introduce a super version of the II as well as a 16 bit system in early 1983. However, the days of the Apple II are far from over! The only very large bodies of software which exist for small computers are for the Apple II, TRS80 and those that use the CP/M operating system.

If the Apple II was like exploring the moon the Apple III is like exploring the Solar System. Oh yes, one last comment. It was a lemon, but now it's a PEACH!

PKASO INTERFACE FOR YOUR PRINTER

This catalog was prepared with Apple Writer and the PKASO (Picasso) printer interface card by Interactive Structures, and typed by Epson MX80. The card is available for several printers including the Epson MX70, 80 and 100, Centronics 739, Okidata 82A and 83A, IDS Prism and NEC 8023A-C. To use the card with the Epson MX80 requires that GRAPHTRAX (3 EPROMS) be installed in the printer. The card comes with cable, manual and demonstration disk.

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NEEDS WORK 251 & 252

FOR PROGRAMMERS ONLY

None of the programs on these volumes work, yet they almost always seem to work. This is due to the simplicity of the original author's code. You may have to modify or rewrite the programs to make them work as intended.

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