AN APPLE FOR YOUR IBM PC—THE QUADLINK BOARD

by G. Scott Owen*

The Apple II computer presently dominates the Chemistry CAI software scene. Approximately 85% of Chemistry CAI programs run on the Apple. Those considering the purchase of a microcomputer must decide whether to restrict themselves to a machine with somewhat limited capabilities (the Apple) but lots of software or to purchase a more powerful machine (like the IBM PC) with very little software currently available.

One solution to this problem is to buy an IBM PC and put an Apple in it. This is now possible because of an IBM PC board called the QUADLINK developed by the QUADRAM Corporation (4355 International Blvd., Norcross, GA 30093, 404-923-6666). QUADLINK is essentially a complete Apple computer on a single board and allows you to run both Apple and PC software.

INSTALLATION

The installation of the QUADLINK board is a little more difficult than the usual add-in PC board because the cables for the floppy disk drive, video display, and speaker must first go to the QUADLINK and then to the PC. Installing the board requires taking the other boards out of your PC (unless you have fingers like RUBBER MAN), hooking up the cables and then reinstalling all of the boards. This actually sounds worse than it is as it only takes about 15 minutes.

The software installation is quite simple, you first execute a program called QUADLINK.EXE (this can be done automatically on boot up by using an AUTOEXEC.BAT file). Then a second disk is inserted (called the FILER) and booted up in Apple mode. From then on to switch from the PC to the Apple and vice versa merely requires a CTRL-ALT-I (to go from the Apple to the IBM) and a CTRL-ALT-A to go the other way.

The QUADLINK has full access to all of your peripherals (at least the display screen, the printer, and the disk drives) and will turn your IBM 360 K double density drives back into 140 K Apple drives. As an added goody, if you have the IBM PC monochrome adapter you can't do IBM PC graphics but the QUADLINK allows you to do Apple graphics, in monochrome of course. If you have the IBM PC color graphics board then you get excellent Apple color graphics.

The main question for chemistry users is will the QUADLINK run our Chemistry CAI programs. QUADRAM states that the QUADLINK will run 99% of all Apple II software, but being a pessimist, and knowing that most of the Chemistry software is copy protected and uses special Apple "tricks", I wanted to see for myself. Well, the good news is that it works fine. I got into Apple mode, put Stan Smith's Organic series disk (from COMPRESS) into drive A:, typed PR#6, and it started up with no problem.

I didn't test all possible Chemistry programs but I did test several that used shape tables, machine language routines and special Apple features like page flipping. As some of you may know, the location of the page flipping software switches are one of the few differences in the Apple II and IIe. The QUADLINK appears to emulate the II rather than the IIe. The QUADLINK board executed every program I tried which includes the following: the COMPRESS Organic series, Gordon Barrow's Physical and General Chemistry programs, and the Pascal MOLEC program by Jim Currie and myself.

In summary, the QUADLINK board is an excellent investment for someone who wants the features of an IBM PC but also wants to use Apple software. There are some copy protection schemes that will baffle the QUADLINK (actually it is the disk drives - some Apple copy protected disks use a half track scheme which the Apple disk drives can read but the IBM PC drives cannot).

Since I only tested the programs which I have, I would suggest that you check out the QUADLINK on your own programs. The list price for the board is $680 but it is available from mail order firms for much less. For example, one company that I have dealt with, Conroy-La- Pointe (800-547-1289), lists the QUADLINK at $485.

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