

# COMPUTER BITS

By Carl Warren

## New Boards Work—and Play—Hard

**Y**OU'RE probably aware that most microcomputer manufacturers are touting their systems for business applications and, as such, are offering a host of hardware and software products to ease customers into automated book-keeping and all kinds of other office tasks.

Even the Apple II computer, which isn't really suited for business applications in its basic configuration, is being applied for business with the help of plug-in pc boards. These range from Microsoft's Z80 Softcard to the many 80 by 24 video-enhancement cards.

These options are important to Apple II users since they make accessible the better word-processing packages such as MicroPro's WordStar. Two such cards of particular interest come from Videx, Inc., and Vista Computer Corp.

The Videx card, called the Videoterm and priced at \$345, is designed to slip into any slot on the Apple II backplane and provides a crisp 80 by 24-character display, as well as full upper- and lower-case ASCII characters.

Installing the card is simple, and requires no patches to the operating system, Apple DOS, or CP/M. But if you require a 40-character display, you'll need the Soft Video Switch for \$29. This allows switching the display between 80 and 40 columns, and handles graphics switches. The Soft Video Switch works well, although we felt this capability should have been part of the Videoterm card.

The only difficulty we experienced with the Videoterm board involved WordStar. Microsoft delivers a version of WordStar for the Apple II that reportedly functions with the Videx card. Unfortunately, such is not the case without a patch supplied by MicroPro. Nor will the card work with standard WordStar, even when changing the keyboard characters with the CONFIGIO program supplied with Softcard.

However, once you get the correct software, everything works well. The display is crisp, quick, and noise-free, with smooth scrolling. Moreover, we could write a BASIC program that made use of both screen sizes—dynamically switching while the program ran without causing any screen flutter.

A further enhancement for the Apple II's keyboard and display is the Videx Enhancer II terminal card. This \$149 card is worth every cent. It gives your Apple II a true typewriter-style keyboard, and permits use of the SHIFT key. You can even re-map the keyboard to

produce custom-character sets, and Videx supplies the necessary software.

The Enhancer II is installed by removing the old logic board under the Apple II keyboard and replacing it with the Enhancer II. You must remove the computer's case, but the Enhancer II's instruction manual is very clear on all aspects of this procedure. In addition, you have to remove some ICs on the Apple II motherboard and replace them with Videx-supplied ICs. This was the only disparity we found with the board. We have suggested that Videx include special sockets that allow attaching cables to an IC, much like Mountain Computer does with its CPS card.

With the Enhancer II in place there were two things we particularly liked: To reset the Apple II, you must now simultaneously hold down the CONTROL and RESET keys, thus preventing unwanted resets. We also appreciated the full-line, type-ahead buffer, which greatly improves throughput.

The Vista Vision-80 card is another exciting bit of hardware that can add features to your Apple II. This \$375 card fits into the Apple II backplane (slot 3), must be connected to the video output jacks to handle software display switching, and requires no operating system modifications. In addition, the Vision-80 card works with all software—including standard WordStar—without modification.

The Vision-80 card also comes with built-in communication protocol. This requires that there is a RS-232C serial card in slot 2 of the Apple II backplane. The protocol uses special control codes to send data. This feature, without any supporting software, turns the Apple II into an intelligent terminal capable of communicating with any other computer system.

Although Vision-80 operates well, we did find that when the card was first installed, monitor linearity may require adjustment. If your monitor uses a 75-ohm input, the on-screen display may be dim. We also found that scrolling speed was slow in comparison to the Videx board, and that the cursor wasn't always visible, which is bothersome—especially with WordStar.

While using Vision-80 we did find some fixes, though. To improve the video output, change resistor R8 from 220 to 100 ohms to remove any slight display tearing. To speed up the scroll, at the expense of causing snow on the screen, lift pin 4 of U16 and pin 13 of U18, tie the pins together, and ground them.

Making the cursor visible requires a little more elaborate modification. To do this, lift pin 8 of U18 out of its socket. Then, using Wire-Wrap wire and a low-wattage soldering iron, tack a wire from U19 (pin 1) to U18 (pin 10). Do the same from U19 (pin 2) to U18 (pin 9), and U19 (pin 3) to U18 (pin 8). Be sure to leave pin 8 of U18 out of its socket. When the Vision-80 is set up in this manner, its operation equals that of a Videx board.

Both Vision-80 and Videx are very capable boards, and your selection should be based on your particular needs. If communication is important, the Vision-80 card will fill the bill. On the other hand, numerous software packages have been created to support the Videx board, thus making it a wise choice also.

**Computer Whiz.** Want to add communications to your CP/M-based system? Then contact Metalogic Corp. about Whiz. This \$150 communication package, written in the C language, uses a "Smart Menu," and allows transmission speeds up to 9600 baud.

Although the prime purpose of Whiz is to allow communication between computer systems, the designers have added built-in CP/M commands such as directory, erase, and rename. You can use Whiz to set up a menu of frequently dialed phone numbers that can be called up with a single character entry, and you can use the package with smart or dumb modems.

But that isn't all. Unlike other communications packages that simply turn your computer into an intelligent terminal, Whiz has the ability to speed data-file transmissions by compressing them up to 40%—a 120-bit/s increase.

Whiz supports virtually any protocol and works equally well with programmable and non-programmable baud-rate generators, and can be installed by anyone. The only thing left out of the Whiz Version 1.1 are split-screen operation and the capability for use with other programs. But Metalogic's president, Lou Barnett, assured us that Whiz enhancements are already in the making. Right now they feel that Whiz is state-of-the-art—and we agree. ♦

### FOR MORE INFORMATION

To get more information on items mentioned in this column, contact the following manufacturers directly.

#### Commsoft

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415-493-2184

#### Metalogic Corp.

4325 Miraleste Drive  
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#### Videx, Inc.

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#### Vista Computer Co.

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