

# TEXAS INSTRUMENTS

## TI Forum

by Ron Albright &  
Jonathan Zittrain

### JZ Reports Boston TI Fair Successful

Thanks to flawless organization by the Boston Computer Society TI-99/4A Users Group, the Boston "Fayuh" was a memorable event. Vendors and users groups from all over the Northeast attended, as did Myarc of Basking Ridge, NJ, and Disk Only Software of Rockville, MD.

I was delighted to have the opportunity to speak there, make some new acquaintances and renew old ones. The attitudes I observed at the fair may be a good representation of the TI community as a whole.

Both the savior and the bane of the TI-99/4A world is the fact that the majority of 4A computers are owned by "hobbyists." In one sense, since TI's abandonment of the 4A, the sharing of ideas and software has been left to the users. That burden has been shouldered well, mostly because of the hobbyist attitude—namely, to experiment and program for the joy of it, and to donate the results to the community at large.

The many public domain hardware schematics and programs produced by 99'ers around the country have maintained the 4A's progress. Users groups have sprung up and grown to meet the needs of many users. Unfortunately, the idea of sharing also boils down to an uncomfortable bottom line: it is extremely difficult to make a buck in the 4A market. Not only have some users taken on an attitude that new developments are "owed" to them, but companies find it difficult to market products that have public domain counterparts. Disk copying programs are a good example—commercial disk copying programs were rapidly overwhelmed by "fairware" and public domain programs that were often more efficient.

In most cases, this has only meant great bargains for the 4A consumer. Yet once a mindset is in place—one which expects everything for nothing in exchange—it is difficult to circumvent it. Commercial software producers have trouble remaining afloat. Those who merely give of their time and effort are placed in a better light than those who expect a

fair return. Soon the 4A community is relying heavily upon the generosity of programmers who write for the public domain.

A problem begins when those who have given so much become disillusioned. Be it a users group president who cannot find volunteers to help with a newsletter or a software author who has contributed something to the public domain—and received terse bug reports instead of gratitude—many of those who start off so full of energy and resolve burn out quickly. This turnover of contributors did not damage the supply of ideas and programs since there always seemed to be more people willing to take on additional tasks. I now raise the question: have we begun to run out of such people?

I believe something must be done soon to prevent the stagnation of the 99/4A. We, as users, must decide to what extent we will support our remaining commercial firms. We must also consider what we are doing to support those innovators who have supported us so greatly in the past. How many people run Paul Charlton's Fast-Term program daily, yet have not sent a \$15 check to the author as stated in the fairware agreement on the title screen? How many have then used the program to log in to a local bulletin board—but only to scan for new available downloads? How many people have appreciated the monumental effort that Barry Traver puts into his TRAVELER Diskazine each month—yet would rather receive a copy from a friend? How many have considered the payment of user groups dues the most significant contribution they have made in recent memory?

This need not be a question of guilt or morality. The problem can be phrased in simple material terms: without a significant shift in the balance of those who take compared with those who give, everyone will lose. The vast majority of 99/4A users are not businessmen who purchased their consoles, peripherals, and software on padded expense accounts. Yet what TI users can do is help themselves.

Ron and I are, as always, willing to help publicize or coordinate any effort that will benefit the TI community at large. *Computer Shopper* is

willing to support us—at least as long as we are a growing, thriving group. To those who have contributed newsletters and programs so far, you have our heartfelt thanks.

### DC Show Scheduled For October

Speaking of TI fairs, the MANNERS (Mid-Atlantic Ninety-Niners) user groups will be having a TI show at the Sheridan Hotel in Fairfax, VA, the last full weekend in October. Write to P.O. Box 267, Leesburg, VA 22075, for more information.

### Spike And Surge Protection

It could be your air conditioner kicking in or a lightning bolt, but regardless of the cause, a system lockup or burn-out is a frustrating event. A surge protector on the AC power line is a good insurance policy against current surges and spikes, and many surge protectors are less than \$10. Here is the schematic for a voltage spike filter, with an optional EMI/RFI filter included:

If you have a modem attached to your computer, note that equally devastating damage can come through the phone line. Some have reported that even with an AC surge protector, both modems and RS232 cards have been ruined by surges coming through the phone line.

There are several ways to solve this problem. Unplugging the phone line during thunderstorms is one of the most direct and cost-efficient methods. Unfortunately, unplugging the line has a tendency to adversely affect the functionality of the phone and modem. Heath Co. of Benton Harbor, MI, offers a "Telephone Line Surge and Spike Protector," Kit No. SK-201. It is only a matter of time before others jump on the bandwagon and sport a whole line of

telephone surge protectors. The investment for that is less than \$20.

### Ron's Piece

Spring may be here, but the inactivity of "spring fever" has not caught up with the 99ers. The news is fast and furious and continues to be amazing. Perhaps the most exciting news to hit the TI 99/4A software scene in some times is the announcement by Steve Lamberti of Texaments (53 Center Street, Patchogue, NY 11772; (516) 475-3480) or "Turbo-Pasc 99." What this new software from Germany offers is "an integrated package that includes a command processor, full-featured editor, a single-pass compiler, and a linker." Instead of the expensive, slow, and tedious TI Pascal (which requires a separate and expensive hardware card plus software), you can now, according to Lamberti, use existing standard Pascal programs or write your own. The system would work much like the C99 package I (and hopefully many of you) have come to know and love. You would write your source code in standard Pascal syntax. Then, you would run it through the compiler. But unlike the c99 compiler which generates assembler source code which then must be assembled, the Turbo-Pasc compiler generates "pure TMS9900 machine code." Presumably, this bypasses the step of running the code through the Editor/Assembler package, as with c99. Texaments claims the programs run 50% faster than c99 code, and can be "linked" and "PROGRAM" image files (to be run from Editor/Assembler option 5) can be generated. The new Pascal system will not need any new cards—it's all software based. You will need the 32K memory card, a disk system, and the Editor/Assembler soft-

ware. Folks, this really sounds interesting. If it is as easy to use as it appears, this language could become as popular in the TI community as "Turbo-Pascal" (Borland) as in the MSDOS world. The unfortunate thing about it may be the price at which Texaments is introducing the package—\$79.95. I realize the package was developed in Germany and the manual had to be translated to English (at a cost claimed to be \$10,000!), but, in my opinion, any program selling for 80 bucks is not going to get a lot of takers. It might be a super package, but at \$50 or less, it would be an outstanding buy. Write Texaments for further details on availability.

### Sketchy, but all I have...

These details are very vague but the beast does exist as it was seen working and for sale at the Boston TI "Fayuh" (their spelling) in early April. Seems a company named "ML Systems" (P.O. Box 268, Valley Falls, RI 02864) has produced a product which allows you to buy an IBM XT-type keyboard and interface it to your TI. Now, while my fingers have gotten quite used to typing on this 3/4 size 99/4A keyboard, I have longed for the "wide-open spaces" of a Selectric-style keyboard. I have heard nothing but good things about the Rave 99 (23 Florence Road, Bloomfield, CT 06002) keyboard replacement. But this product seems to go Rave one better. The ML Systems product (see, I don't even know its name!) is not just a new keyboard interface, it is a "smart" interface. It even added commands like sprites, Call Say, Call Peek, Call Load, and "size" to BASIC. That is right, the interface also enhances console BASIC with fifty pre-programmed commands with function keys, shifted function keys, and the like. Further, it works all this magic with just a console—no memory expansion required. So, for \$86 for the interface, plus \$50-80 for an XT keyboard (the best buys are right out of the pages of this issue of *Computer Shopper*), you can be using a Selectric-keyboard layout with your TI plus have a BASIC that rivals the power of Extended BASIC. Sounds too good to be true, except the source of the informa-

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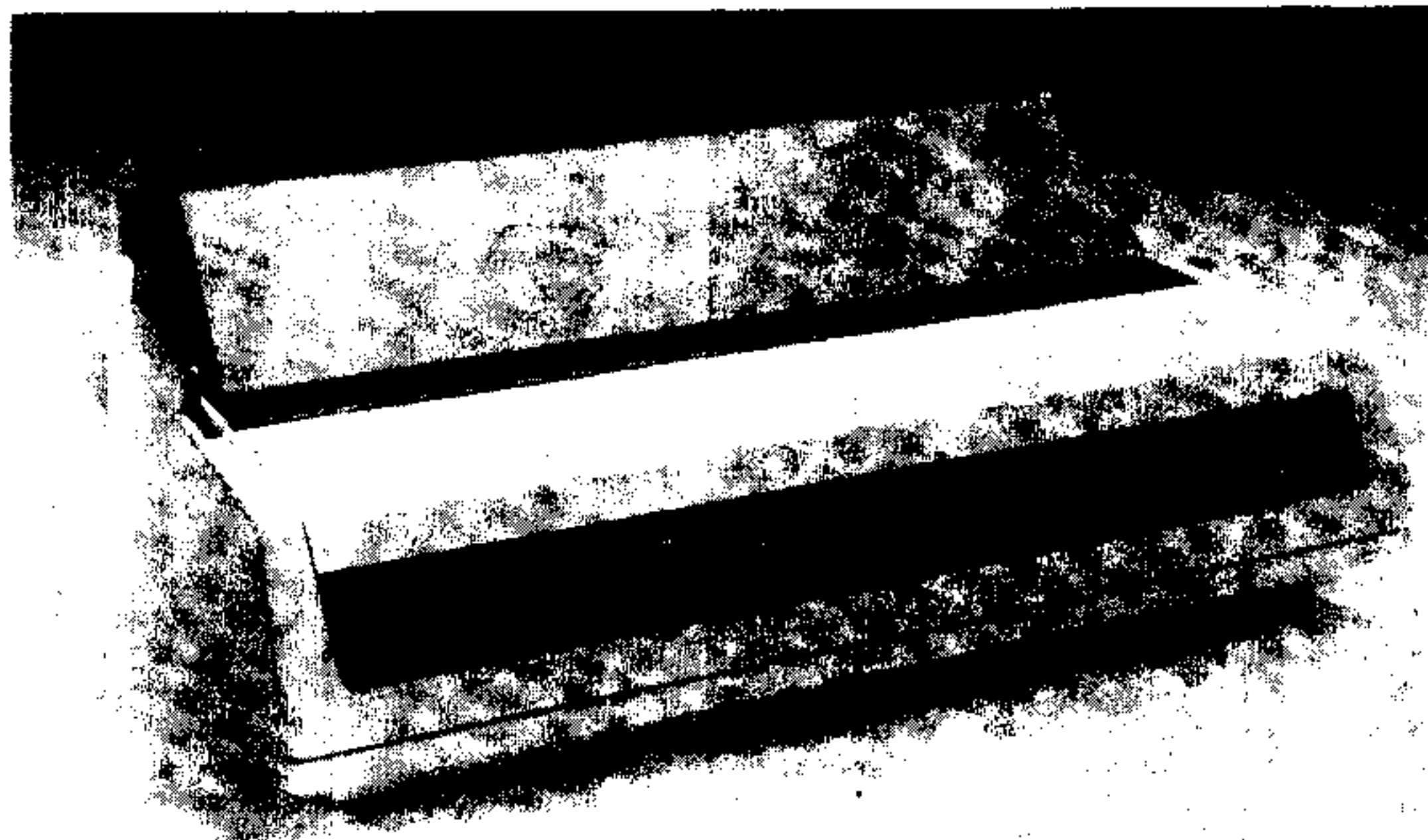
# Okidata Unveils New Printer

Okidata has announced a new, universally compatible dot-matrix printer, the Okidata 180, designed for the home-user/home office market. The company unveiled the new printer at the summer Consumer Electronics Show in Chicago, IL.

With standard Commodore serial and Centronics parallel interfaces, the Okidata 180 is compatible with every major PC available to the home user—without the added expense of separate interface modules. In addition, the printer supports all Commodore and Epson control codes, thereby ensuring compatibility with all major software packages home users may own.

"The dual interface provides a twofold benefit—to the mass retailer and to the home user," says Okidata product manager, T.R. Lamb. "It gives retailers a single SKU to cover every CPU offering they stock, while it enables users to keep the same printer for any future, upgraded computer they may acquire."

The Okidata 180's PC compatibility roster includes the Commodore 64/128, all IBM, IBM compatible, Tandy, Commodore Amiga, Atari ST, Apple IIe and any other com-



Okidata 180 Printer.

puter with a Centronics parallel interface.

#### Ergonomically Designed Front Panel Enhances Ease of Use

Okidata has simplified the operation of the Okidata 180 by designing the front panel to give users push-button control of frequently used commands. The new, ergonomically designed front panel condenses line feed and form feed commands into a single button. The top of form function is conveniently programmed into the printer's on/off switch.

In addition, Okidata has included print mode (Near letter Quality, Utility, High Speed Draft) and pitch (characters-per-inch) selection on the front panel of the Okidata 180—a feature usually offered only on higher priced printers.

#### Speed, Versatility Highlight Features

Printing at 180 cps in High Speed Draft mode, 120 cps in Utility mode and 30 cps in Near Letter Quality mode, the Okidata 180 is significantly faster than other printers cur-

rently available in the mass retail channel.

In addition, the Okidata 180 accepts paper from the top, bottom and rear up to .014 inches thick, making the printer ideal for home-office users who need to print on multi-part business forms.

The Okidata 180 features enhanced, emphasized and expanded printing, superscripts, subscripts and underlining. Bit-image graphics to 144x288 dots-per-inch also aid in producing high-quality printouts. The printer has a 2K standard

buffer and carries a low, 57 DbA noise rating.

#### Stamped With The Okidata Seal of Reliability

The Okidata 180 comes equipped with the standard features that have given Okidata products their reputation for reliability. Featuring a nine-pin printhead with a specified life of two hundred million characters, it accepts a self-inking ribbon cartridge with a specified life of three million characters.

Further evidence of Okidata reliability is the printer's Mean Time Between Failure (MTBF) rating of 4,000 hours and Mean Time to Repair (MTTR) rating of 15 minutes. Service is available at Okidata repair depots in Mt. Laurel, NJ, Arlington Heights, IL and Fremont, CA as well as Xerox Americare locations nationwide. There is a one-year warranty on parts, labor and printhead; and a toll-free number, 1-800-OKIDATA, is available for customer support.

#### Pricing and Distribution

The Okidata 180 will be available in August. Its suggested retail price is \$329.

For more information contact Okidata, 532 Fellowship Road, Mount Laurel, New Jersey 08054; (609) 235-2600.

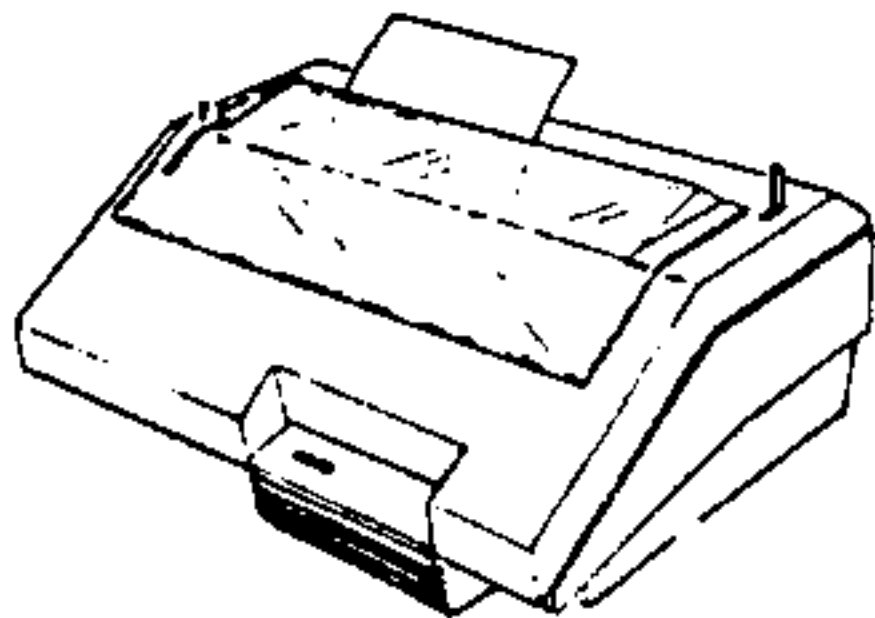
Mention that you read about it in *Computer Shopper*. ●

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#### TI Forum

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tion (Art Byers, Asst. Sysop of Delphi's TINN) is impeccable. Write these folks right away, folks.

#### Monty Strikes Again

Monty Schmidt is at it again. He, reportedly, has developed a "command line DOS" that will give the TI what many have begged for for years. The DOS will load into any device that has RAM at memory location >6000 to >8000 (this includes such things as "supercartridges," Gram Kracker, Gram Karte's, Databiotic's "Super Space," etc.) and gives you a myriad of DOS commands right from the old blinking cursor prompt in BASIC or XB. Commands like BEEP, CLS, COPY, DEL, DISKNAME, DIR, ECHO, ERASE, INIT, LINK, LOAD, DISKCOPY, CHKDSK, FORMAT, and TYPE (and more) available right out of memory without having to load any disk managers or such from disk first. Further, and perhaps most interesting of all, is the promise of a BATCH command—to run batched files

and programs from auto-boot. Should be a genuinely useful piece of software. Monty is a genius and his software always reflects that. You can get more information on this new DOS by writing Ryte Data (210 Mountain Street, Haliburton, Ontario, Canada K0M 1S0; (705) 457-2774).

#### Newsletter and the "Big Winner"

Newsletter of the Month goes to the Jackson County 99ers (1017 S. 16, Blue Springs, MO 64015). The newsletter editor, Mike Enzmann, sent along several issues of the JC99ers Newsletter and they were consistently superb. Thanks, Jackson County! The winner of the software giveaway is Joe Murphy of West Chester, Ohio. He wins a copy of "QS-Solitaire" from Quality 99 Software (1884 Columbia Road #1021, Washington, D.C. 20009, \$14.95), a terrific game as well as "Old Dark Caverns II," Donn Granros' phenomenally popular graphic adventure game (available from Tenex, P.O. Box 6578, South Bend, IN 46660; \$24.95). The response to the contest was excellent so it will

continue next month. You have to send in a postcard with your name and address to be eligible. Next month's software will be an extra-special offering, so be sure to drop your postcard in the mail right away. Also, we have new "freebie" handouts (programming tips and helpful hints gleaned from the many excellent newsletters we receive) monthly, so, drop us a self-addressed, stamped legal-sized envelope for these.

#### A Quickie

Are you one of those who believes that periodic cleaning of disk drive heads with one of those commercial kits is beneficial? If so, the following little program will turn those drive heads on the cleaning disk until you stop it. Don't run them on the cleaning disk for over 30 seconds.  
100 ! An Extended Basic program to run  
110 ! when cleaning your disk drive  
120 CALL CLEAR  
130 PRINT "< \*WORKING->": : :  
140 PRINT " Use FCTN 4 to stop": : : :

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### Super-Resolution Graphics continued from page 352

with this card, you can still use your old color monitor to see the colors in presentations or drawings when necessary. Prolonged concentration on the dancing images is very fatiguing, though.

The scheme works better in some modes than in others. On a color monitor, the EGA mode is unsuitable for conducting useful work. But, if you don't believe in color, except for games and toys, you could probably learn to love this card. It will give you all of the supported modes, including EGA, on a monochrome monitors.

To this day, I do not own a color monitor and I'm forced to borrow one from time to time when a Multiscan won't do. (This review was an example of such a time—my thanks to Micro Trends International of Pasadena.) For years my only

monitor was monochrome. I ran all color software through an emulation mode, in shades of gray, using a Genoa Spectrum card that I bought for about \$325.

When the EGA came out I wanted to be able to run the new software that was sure to follow. Unfortunately, there was no emulation so I bought an EGA and monitor. Now there is an inexpensive emulation and its performance on my old monochrome monitors looks great. The price? \$399.

### The Hercules Graphics Card Plus and Hercules InColor Card

Both of these new cards from Hercules offer an expansion of the HGC standard pioneered by them. Using the same 720by348 resolution as, and fully upward compatible with, the original mono graphic card, the new cards have added RAMFont. Utility software is included to build and edit fonts, dump screens to Ep-

son compatible printers, and diagnose problems with the system. There are also a number of sample fonts. The documentation includes programming information and sample code in addition to a technical reference.

RamFont gives these cards the ability to create thousands of characters which substitute for the standard fonts stored in the computer's character generation firmware. These fonts can have all of the richness of bit-mapped fonts but they are not created on the display in graphics mode, one bit at a time. Operating as if the characters were being produced by a character generator, in text mode, the fonts are displayed much more quickly. This greatly speeds up the processing of programs which employ RamFonts and many of the major word processors seem to be providing drivers to take advantage of the Hercules boards.

The InColor version of the card is scheduled to begin shipping soon. By the time you read this it will be in the stores at a list price of \$499. The new board adds color capabilities to the Graphics Card Plus. Color has been added in a way that greatly simplifies the process of modifying existing drivers. That virtually assures the availability of support from software vendors, many of

which already support the earlier monochrome version.

When Hercules first released the Graphics Card Plus, some reviewers openly questioned the wisdom of flying in the face of the dominant EGA standard. However, with the rapidly increasing popularity of desktop publishing, these may be more viable products

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150 ON ERROR 170  
160 RUN "DSK1.ZZZ"  
170 GOTO 150

### A First Glimpse

Thanks to the generosity of Myarc (specifically, Jack Riley, their marketing director) and the helpfulness of my editor at *Computer Shopper* (Stan Veit), I have a Myarc 9640 (a.k.a. "Geneve") for review. Unfortunately, it arrived too close to this column's deadline for me to do the detailed review I have planned (which, again thanks to Mr. Veit's support of the TI community, will appear as a separate piece from the Forum column). I will make a few comments and promise a more detailed review for the August issue.

The machine comes as a card to plug into the Peripheral Expansion Box with 512K RAM on board (expandable to 2 megabytes). The heart of the computer is the TMS9995

CPU, which is 5 to 6 times faster than the 99/4A's TMS9900 processor. Graphics, one of the most exciting aspects of the 9640, are provided by the Yamaha 9938 graphics processor. The card is well made, clean (no jumpers noted), and fits snugly and easily into the Pbox slot. The 9640 has ports to run an analog RGB monitor (like the Amiga monitor), or your existing TI monitor or even a TV set. There is also a mouse port, a device promised by Myarc for the near future (and I know a prototype exists and works, because I saw one). The computer comes with its own keyboard—an XT-type which is "standard" and an "enhanced" keyboard (with separate keypad and arrow keys), for a few dollars more. The software that comes with the machine is said to contain an 80-column TI-Writer (I hesitate to use the term) "clone" word processor, the necessary patches to make your Multiplan run in 80-column mode (and much, much faster), a "CSAVE" utility to

save all your cartridges to disk to run with the 9640 (which has NO cartridge port), and a limited version of DOS. I can tell you this much now: I like the hardware. I think the 9640 is a well-made, well-conceived machine with capabilities that rival the Atari 540 ST. I have not had enough time to run the software thoroughly, so I won't pass judgement on that yet. I will say that I found it a bit confusing. As of April 25 or so, Myarc was shipping the 9640 to its dealers and it is available for purchase. The dealer who has supported me the most (including sending me a whole set of the software when mine appeared trashed) was Jeff Guide at DOS (P.O. Box 4170, Rockville, MD 20850; (301) 369-1339). There is even a Myarc Support Group in the planning stages. Write Don Iverson (483 Valley Road, West Orange, NJ 07052) for details. Price for the 9640? I am unclear on this at the present, but it appears to be "less than \$500." Ask Jeff at DOS for his price. ●

### Printer Interface continued from page 345

This also clears the buffer for new text or pictures.

The manual is small enough to be held in one hand and contains everything you need to know to use the interface. A programmer's section at the back has information for techies who might want to create custom print drivers or EPROMs.

The printer supports the Canon PJ-1080A Color printer for those who need color graphics. It doesn't work with

the Okimate, since that printer must use its own interface.

While it is more expensive than other interfaces on the market, Device 1 contains more features as well. I don't think there is any other interface available that will let you get out of lock mode without powering down your entire computer system.

With all the other features it offers, I could even see Commodore printer owners buying one of these interfaces if they could get it at a discount.

Device 1 supports most printers including: Blue Chip M120/10, M150/10 and

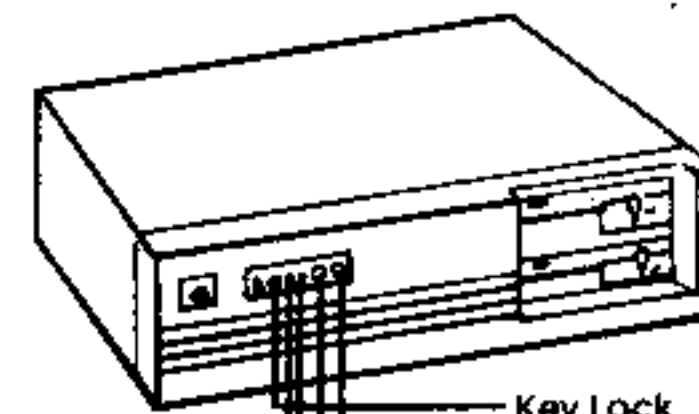
M150/15 BMC 80, 100 Canon PJ1080 Color Inkjet C-Itoh 8510 Prowriter, 8510S and NLQ Delta 10, 15 Diablo P10i, P12, P32 Epson Gemini 10X, 15X Legend 880/1080 Mannesmann Tally Spirit 80, MT160/180, MT 1600/1800 NEC 8023 Okidata Panasonic Radix 10, 15 Riteman Seikoha GP-100 Star SD10-15, SG10-15, SR10, SR15, NX 10-15, ND 15, NR 15, NE 15 Star LV1210 Device 1

Printer Interface, Prices: \$119.95, Progressive Peripherals and Software, Inc., 464 Kalamath Street, Denver, CO 80204; 303/825-4144 ●

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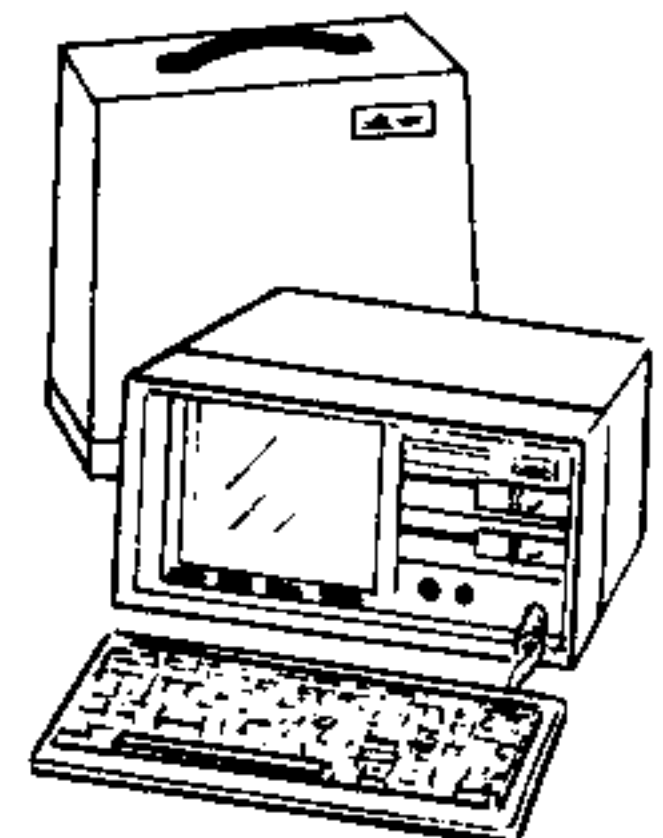


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