TEXAS INSTRUMENTS

Randy's Ravings

by Randy Holcomb

Hello and welcome back, hope you all had a nice and safe holiday season. Let's take a look at what's happening in the TI world.

9938 Compatibility. A few issues ago we started to go over the 9938 VDP for the 99/4A and its implications for improved video. It is 100% software compatible with the present 9918A, but it is NOT (repeat, NOT) 100% hardware compatible-i.e., you cannot just plug the 9938 in place of your 9918A and expect it to work. As a start, the 9938 is a shurnk 64-pin DIP versus the standrad 40-PIN DIP for the 9918A (.1" pin spacing on the 40 pin package versus .1" package.) It IS possible to come up with an adaptor board that will map the 64 pins into the 40-pin package but some serious drawbacks are that motherboard modifications will be necessary in order to fully implement all the modes supported by the 9938. Also, an RGB monitor would be required to fully exploit all the detail that the 9938 is capable of yielding. Myarc will more than likely incorporate the 9938 in their new computer (when/if it comes out) and other people are looking into making add-on PBox cards or side-mount cards using the 9938.

New products: Jim Peterson of Tigercub Software has released Nuts and Bolts 2, a follow-up to his Nuts and Bolts disk. The price for number 2 is $19.95, for both the first and latest disk its $37 postpaid. Check the TI Software ads section in the Computer Shopper for his address. And while I'm talking about Jim, I think we ought to thank Jim for letting many of the TI User's group's print his "Tips from the Tigercub" series in their newsletters - many of the newsletters I have received have contained the Tips and in some cases make up most of the content of the newsletters.

Speaking of newsletters, if you have something of interest that you would like to see shared on a national level send our way here in care of the azine. Conversely if you ld like to reprint a parlar "Randy's Ravings" artidrop me a line here at the Computer Shopper to request permission to reprint a particular column. (Just like software, this column IS copyrighted!)

C99 — It's Implications. A version of the C language is now available for the 99/4A from Clint Pulley, 38 Townsend Ave., Burlington, Ontario Canada L7T 1Y6. It is usersupported software and a $20.00 donation is suggested.

The version of C99 is based on the small-C compiler written by Ron Cain in the Dr. Dobbs Journal No. 45 (May 1980). This verion, according to the author, was originally constructed on a DEC PDP11/60 using Decus-C and was later ported (after some 30+ revisions) to the TI. Most of C99 is written in C, so it is self-compiling, which leaves the door wide open for many future modifications and extensions to the language. This C compiler produced assembly source code as its output and in addition can handle in-line assembly code. Code generated by this C compiler is claimed to be fully-relocatable and can be saved as program-image files.

This C compiler may have proved to be just as important a step in keeping the 99/4A alive as releasing TI Forth to the user community. Since the facilities are present for adding lanugage extensions it shouldn't be too hard to add access to the many GPL-based routines hiding in the console (Floating point, interrupt processing, display formatting, etc.) or to add custom features to the compiler. The BIG things that are exciting about this compiler is that it generates assembly source (which means object code after you assemble it) and that the language presented in this version will allow a wide variety of C programs written for other machines to be ported over to the 99/4A. I have an incomplete set of the distribution files, I hope to have the rest of the files necessary in time for next month's column to do an in-depth analysis and review of this system, but if half of what I have seen in the docs I presently have hold up, this will keep machine going for quite a while!

Another XBasic product you may want to look at is PCKEYS from TechniGraphics (443 Perrie Drive #302, Elk Grove Village, IL 60007). This utility allows you to define the CTRL keys to do whatever function you need, and includes a screen-dump utility for Epson/Geminicompatible printers and a catalog program utility. Suggested price for PCKEYS is $22.50.

The Future for TI: That's a good question. The 99/4A, surprisingly, has managed to keep itself and its users (and me) busy with new software (albeit fewer releases) and some new peripherals (Millers Graphics Gram Kracker, Top Radio Supply's 16/32 memory card, CorComp's Triple-Tech as examples). My editor is still surprised that we get TI traffic — at times so am I, but I have come to the realization that people are making do with what they have and aren't all that ready to jump onto the next gee-whiz-bang computer that comes down the pike. As for the computers that TI still makes, sales of the Business Pro are moving along, and sometime soon we'll see the first Unix-based machine from TI, more than likely based on the 32000 series. Reports are saying that TI is feverishly working on conversion utilities that will serve as a bridge from the current 990/Business system series over to the Unix machine to ease transition — the question as to whether the 990/Business System series is dead is certainly at issue — it's wait and see time.

What does the future hold? Read next month's Computer Shopper and find out!   ●

PROfessionally Speaking (about the TI Pro)

by Dick Evans

The events of the past few months seem to indicate that Texas Instruments, Inc. is unaware of the fact that their secret entry into the personal computer marketplace has been discovered by thousands of individuals and more than by just a few companies. Everything coming from the corporate Public Relations Department touts TI's advances in chip making and leading edge software development. Personally, I think this is great. I see a bright, solid future for my personal computer. However, all of these advances and improved products don't really meet my daily needs. To find satisfaction for these I must rely upon third party manufacturers and developers. Now, and in the articles to come I am going to try and introduce you to some of the things that TI is doing.

For both our benefits, I will keep it simple. I am also going to be discussing some of the third party hardware and software that is designed for the TIPC or includes the TIPC in its compatibility listing. The TI information will be coming from their publications and the TI Public Relations office, as well as personal contacts I have developed over a period of time. The third party product information will be coming from various resources. A portion of this will be freeware and user supported software that is being developed by individuals and small companies that do not have large advertising budgets. In many cases the only true investment is in the code.

Two messages are coming from TI in loud, clear tones and multi-page, color graphics. One is "we need dealers," not storefront hardware pushers but, technically sophisticated solutions marketers. The other is "we are big in AI." (AI being artificial intelligence, for those of us who weren't sure.) What does this push for dealers, ("VARs" according to TI,) mean to those of us who already have our microcomputers? A VAR is a value added reseller. By definition this means that you, the end user, is buying more than just the basic hardware from the dealer. Most of the VARs I've met are marketing very good, proprietary software to a well defined vertical market. They occupy dignified business offices in professional complexes and along with being somewhat hard to find, do not really know a great deal about applications outside their own area of expertise. Another limitation they seem to share is a lack of third party product knowledge. So we are somewhat dependent on the local storefronts that sell software. I don't think that anything will be accomplished by the retelling of the various horror stories users have related because of those visits.

Our next adventure of information is magazines. Until recently, those could have been counted on one hand with most of the digits at rest. Some improvement is visible. Another information resource is the user group. TI, Inc. supports an international users group organization that seems to share the corporate desire to remain both silent and secret. Other than their once monthly magazine, which is valuable and contains advertisements for TI compatible products, they are unknown.

Telecommunications and independent users groups appear to be our most viable resource for information and product knowledge. There are a few local and a national bulletin board service that supports the TIPC. There is a newly formed national users group that may become a valuable and viable resource. Much of that will depend on the response they get from their first membership invitation mailing. I'll put the contact information for the various groups at the end of this article. Let's move on.

Artificial Intelligence (AI) is the "buzzword" for a developing technology that is computer based. It does not replace anything. It is an addition to and an extension of the basic capability of a digital computer. You must remember that the "digital" in a computer