

MicroByte

Software for the 2650

NEWSLETTER 3

It has indeed been a long time since our last newsletter! Perhaps some of you thought that we had disappeared completely. Not so, Ian and Martin have just been busy working on some great new programs, answering a host of letters, supporting the old programs and of course delivering our current tried and true products to existing customers and a regular stream of new ones.

But now its time to start telling you about some of the items we have been working on. Unfortunately there is not space to tell about the UTILITIES, ASSEMBLER V2.0, BASIC 3.0, or the EMULATOR-DEBUGGER all of which will be announced in a future newsletter.

DOS

If you have asked us about DOS, the whisper is that it is undergoing its destructive testing and the MicroByte refinement process right now. More news later....



MicroByte now has BANKCARD facilities. We were prompted to make this move because of the difficulties our New Zealand customers have with currency exchange regulations. It appears New Zealand is very reluctant to let its money out of the country through the means of bank drafts, however no such restriction exists with Australian Bankcard.

However the use of Bankcard for purchases is not limited to New Zealand customers. If you wish to use your Bankcard when you order, please include your Bankcard number, expiry date and signature on the order form.

SBC-2650 (ALIAS ETI-685)

"The greatest thing to happen for the 2650 since the KT9500!"

Ron Koenig's Single Board 2650 computer on an S-100 card truly represents the injection of life that the ailing 2650 community requires to restore their lost interest in the worlds 'couthest' 8 bit microprocessor chip. Best of all the SBC-2650 plugs into the S-100 bus which will enable a 'real' 2650 computer to be constructed using other S-100 boards without your needing to be an expert at constructing hardware to do so.

From our point of view as software vendors, it provides a unique opportunity to establish some broader hardware and software standards than was ever the case previously.

Hackers

Lets face it, before the SBC-2650, to be a 2650 person you had to be a hacker. The lack of a ready made commercially available readily expandable computer system using a 2650 destined you to do it yourself. You had to build or modify the available hardware to do what you required your computer to do. Calling us 'hackers' is no more of an insult than calling a motorist who fixes his own car, a mechanic. However each of us hackers did have a unique individuality about the way we constructed OUR computer.

Of course some aspects of the design were inviolable. The monitor just had to be PIPBUG compatible in its entry points unless you wanted to ensure that nobody else's programs would run on your computer without requiring tedious modifications. But with 256 Extended I/O ports to choose between and a dozen

different devices with which to implement a port, every 2650 owner could (and did) establish a different set of extended port conventions, none of them compatible with anyone else. We encountered this problem when implementing ACOS. Some users had already used the C and D ports for their own purposes, not to mention ACOS's reserved memory area. And others had to build a suitable port; hardware again. Then there was the added problem that an S-100 oriented system does not consider C and D ports.

Ron Koenig has produced a board which will at last establish some standards for extended ports. The SBC-2650 contains a 8225 PPI which provides three eight bit I/O ports. This port can be addressed anywhere in the port address space, however port C of the 8225 addressed at port 32 is ideal for ACOS and we are using it for this purpose. PORTS A and B are available for other user purposes.

Of course there are some aspects of the SBC-2650 which are not as we would like. As supplied the SBC-2650 does not make provision to install ACOS.

SBCOS

However with a handful of board modifications and the new SBCOS EPROM you can have all the delights of both ACOS and BINRUG on this otherwise wonderful piece of hardware the SBC-2650. An information sheet detailing how to install SBCOS on the SBC-2650 is included with this newsletter. An update 2532 EPROM is available to registered purchasers of ACOS and PINRUG for \$25.00. So if the lack of ACOS was deterring you from purchasing an SBC-2650, be deterred no longer. SBCOS is available right now for the SBC-2650!

EDITOR

The TEXT EDITOR program which is supplied as part of the TEXT PROCESSOR package is now available as a product in its own right. It is an outgrowth of the text editor program included in the ASSEMBLER V1.x, but as you would expect offers a host of extra features to make editing easier. I am using it at this moment to prepare this newsletter and truly could not live without it.

EDIT V2.0 features:

- Much more extensive in-line editing functions which also operate during text and command input and allow character, word and line oriented editing.
- Ability to split and merge lines.
- Comma no longer required in commands,
- DOS version can chain to assembler or text processor, and LOAD, SAVE and REPLACE existing files.
- Reverse deletion or searching may be specified.
- Case of letters may be ignored or checked in searches and changes.
- Editor command tree may be extended.
- Upper/lower case mode switching provided.
- DELETE now deletes previous character, BS permits non-destructive editing.
- Editor macro command sequences may be defined and executed.
- Tighter error checking to prevent buffer overlap.
- Default COPY/MERGE buffer provided for moving or accumulating text.
- HTAB character may be expanded for display even in X edit mode.

EDIT V2.0 is available now for \$40. Perouse the information sheet enclosed with this newsletter for more appetite whetting details.

FORTH

"The easiest language I have had to implement" - Ian

"The hardest language I have ever documented" - Martin

If you have been exposed to FORTH then you will not need any convincing of its value as a programming language. It is incredibly fast (for a high level language), delightfully structured (in a disjointed sort of way), and although alarmingly unfamiliar at first encounter, rapidly develops devotees.

FORTH uses Reverse Polish Notation (RPN) consistently throughout and evokes the same sort of reaction as you probably had to your first RPN calculator, and the same sort of fanaticism after the initial unfamiliarity has worn off and enthusiasm sets in.

For example:

```
: DUMP HEX DO I C@ . LOOP ;
```

Defines a FORTH word which will dump the contents of memory. No nice formatting, but incredibly succinct and fast!.

```
400 0 DUMP
```

will dump the area of memory between 0 and 3FF. See how it is all backwards?

FORTH v1.0 is our initial release and contains a full FORTH-79 standard compiler, EDITOR (written in FORTH), and a set of demonstration modules. Although FORTH V1.0 is a compiling language, the current version cannot produce minimal standalone compiled programs. FORTH v2.0 will do so, when we work out how to do it ourselves. Our intention is to write many of our applications programs using FORTH to reduce the time inherent in machine language program development without sacrificing the speed penalty or space overhead of BASIC.

FORTH v1.0 is not documented to the same high standard of our other products, so we are selling it at a lower price than is normal for the programs which have hundreds of hours of program development and documentation time to be recouped. Our unashamed intention is to get you hooked on FORTH so that you will not be able to restrain yourself when FORTH V2.0 finally hits the streets and will rush out and buy it.

FORTH V1.0 is available in BINBUG format tape (without source codes!) for \$40, or on ACOS format tapes and VHS or MicroByte DOS disk with complete source codes for \$35.

The apparent price discrepancy is because BINRUG tapes are a real drag to dump and the extra cost reflects the extra time required to do so.

PHONE NUMBER

Up till June 1981 MicroByte had a telephone number which you could have rung if you really wanted to talk to us. It was Martin's home phone and although it was never really advertised as such, neither did I object if you looked up the telephone book and rang me up to talk about the 2650 or enquire about your order. After all you were paying.

I did not object until the month when my paid employment demanded my undivided attention and I was interstate for a fortnight. It was during this month that my wife received several abusive and downright offensive telephone calls from a MicroByte customer who became irate because I was not available to talk to. She was acting on my instructions to act simply as a receiver of name and phone number so I could return the call, however this caller refused to leave his name so that I could call him back. I did what any reasonable person would have done under the circumstances, I had our private telephone number changed to an unlisted one to prevent a recurrence of the incidents. Unfortunately, this action denied the majority of our customers who are totally reasonable and share with me my anger against the irresponsible few who necessitated this action, the avenue to contact MicroByte.

At last we have decided to do something about it. MicroByte has had its own telephone installed complete with its own telephone answering machine. Its number is the same as Martin's previous private number, (062) 41-2029. We did try for 41-2650, but someone already had that number.

Call MicroByte on (062) 41-2029 any time you like day or night. If I am present I will answer the phone and talk to you. If I am not present, the phone answering machine will take your message and I will return your call as soon as possible.

We hope this will meet your needs for direct communication with us better than a letter can hope to provide.

SLOW DELIVERIES AND AN EXPLANATION

Yes, I must confess that some orders have been tardy in delivery in the last few months. Most customers have been commendably tolerant, (perhaps they have suffered at the hands of worse mail order firms?) but some have been righteously and quite correctly indignant that we have taken six weeks or longer to deliver their order.

MicroByte is Ian Binnie and Martin Hood. Both of us have full time paid employment and MicroByte is a spare time activity. Ian does most of the program development and tape and EPROM duplication. Martin writes the

documentation, acts as a constructive critic about the programs and fills the orders. Every so often our paid employment makes demands upon us which reduce 'spare time' to almost nothing and regrettably MicroByte has to suffer.

If your order is a little slow in coming, DO complain to us, it may have been overlooked or lost, but be nice about it. We do not delay your order on purpose, and sometimes there just is not even time to write and say there will be a delay. We do our best and thank you for your support when our best is not as good as it should be.

SUPPORTED USERS

We have received a number of enquiries about when Supported Users should renew their 'annual' subscription.

When the concept of a Supported User was first promoted, corrections to programs were coming in thick and fast and it was anticipated that a quarterly issue of the Collected Program Updates would just nicely keep up with the plethora of program corrections. I suppose that we should all be happy that only two program corrections have occurred in the past twelve months. However it hardly seems worth while to issue a whole volume of Collected Program Updates for just two corrections, neither of them being devastating 'can't possibly live with' type problems.

So, rather than produce unnecessary and very slender volumes of Collected Program Updates, they will only be issued when there is a worthwhile collection of errors to be corrected, or when users (ie. YOU) provide us with a sufficient collection of handy hints to make its publication worthwhile.

Since the charge for being a Supported User is principally to cover the cost of printing and posting the Collected Program Updates, (and they cost very close to \$5.00 per issue to print and post!), we will stick by our original promise of four CPU issues for your \$20. All Supported User subscriptions will expire after the fourth Collected Program Updates, whenever that happens to be issued.

As I hinted in the previous paragraph, the emphasis of the Collected Program Updates is changing from being totally a vehicle for MicroByte to display the dirty linen of its mistakes, to a User Journal which includes MicroByte Program corrections. Send your contributions, preferably in Text Processor - machine readable format (ACOS, DOS or BINBUG), to Martin Hood, MicroByte, PO BOX 274, Pelconnen, 2616. Initially we will print almost anything of interest to 2650 users. Later we will become more selective.

MicroByte PRICES current 1st June 1982

ACOS v2.D, v3.D	\$ 60
ASSEMBLER v1.1	\$ 45
BASIC v1.7	\$ 35
BINBUG v3.6, v4.5, v5.3, v6.0	\$ 40
EDITOR v2.0	\$ 35
FORTH v1.0	\$ 35
- Binbug version	\$ 40
SBCOS	\$ 75
SOURCE GENERATOR v3.1	\$ 45
TEXT PROCESSOR v1.0	\$ 75
- DOS version	\$100
 SUPPORTED USER registration	 \$ 20
 Postage and Packing	
Surface mail within Australia	\$ 2
Airmail - Australia, Zone 1 & 2	\$ 5
- Anywhere else	\$ 10

Note Programs are sold as complete packages and CANNOT be supplied in part only at a discount.

We cannot program user supplied EPROMS since we cannot guarantee their condition when received by us.

All prices and terms are subject to change without notice.