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DIARY

The next few meetings will be held on:

4 March
18 March
1 April
15 April

All meetings are held in the Shakespeare Hotel on Gibraltar Street, near Sheffield city centre, and non-members are always welcome.

SUPERCOMPUTERS COME OF AGE

Supercomputers today can outperform by at least one hundred times the biggest and fastest of the breed of machines known as mainframes. They do so because they have bigger memories, faster processors and more efficient ways of feeding data in and getting them out than any other breed of machines. They are so advanced that for many years few organisations have been able to use them cost effectively.

Fifteen years ago supercomputer makers produced between 15 and 20 systems each year: today they produce only twice that number. But the signs are that supercomputers have now found their niche. With scientists, engineers and even statisticians having to handle ever more complex data, they are finding that only the supercomputer will do the job. In the process, others are discovering new uses for the machines.

The current models can do 1260 million calculations per second, or they can handle in a five-hundredth of a second a calculation that would take a standard microcomputer about 50 minutes to complete. The next generation will be able to do 10 thousand million calculations per second.

Business Benefits

Could your firm's scientists use a machine that simulated every aspect of a complicated processing plant, factory or design project, and told them how the system would respond to all the predictable (and unlikely) conditions that it would face in a lifetime's use?

Then investigate a supercomputer; it could save your company money, or allow you to achieve a performance that before you could only dream of. Or if you are an academic (unfortunately there is no cure) with a theory (cutting it off does not help either) that is so complex that you cannot demonstrate its potential (one would think not) with existing machinery (that fellow Machine gets everywhere), then buy some time (Ho! Ho! the

plot thickens) on a supercomputer and see whether it holds up (if you need even an ordinary one you have got problems).

The capital cost of a supercomputer is undoubtedly higher than that of a mainframe, but that is like comparing the price of a light aircraft with a jet fighter. The latter is far better at a specific job and you pay for that. The cost of a mainframe that will handle one million instructions per second (similar to myself when the wife calls) is 24 times that of a supercomputer. Or look at it another way (go on be a devil). An aerodynamicist (a person who puts the holes into chocolate bars) using a supercomputer (big holes?) can calculate how the air flows around (a useful bit of knowledge to have in the office on the morning after) a new design in 15 minutes at a cost of £700: 30 years ago, the task would have taken 25 years and cost £8 million.

Coupled with the rapidly rising performance of supercomputers is the likelihood that their cost will tumble as more users buy them. Get ready for the age of the supercomputer.

The above article (excluding comments) was taken from the September 1984 edition of the magazine LINK-UP. The magazine of the British Association for the Advancement of Science.

Frank Webster

As a postscript to Frank's article, a story appeared in the computer press a few weeks ago concerning Seymour Cray, designer of some of the best-known supercomputers. On being told that Apple had ordered a Cray machine to help them design their next micro, he replied, "That's interesting, I'm using an Apple to design the next Cray!"

SPELL-MASTER

Computer Concepts' new spelling rom, Spell-Master, has arrived at last. In spite of its name, it can be used with any model of BBC computer, but if you are going to use all its features, you must have at least 16K of sideways ram. The manufacturers claim that it can be used with Inter-word, Wordwise, Wordwise Plus and View, and with any spooled files, including very long files.

The package consists of two 64K roms mounted side-by-side on a carrier, which plugs into a sideways rom socket. The carrier board is high enough to clear any rom mounted to its right, but there is not enough space in the Model B case to mount it in the right-most socket (15). If you have Inter-word fitted, Spell-Master must either be fitted to the right of it, or at least two sockets to the left, or the carriers of the two packages will foul each other (these restrictions may not apply to the B+ or the Master, because of the different physical lay-out of the sockets). Computer Concepts recommend fitting it in a lower priority socket than the Solidisk DFS and ADFS, Watford Shadow ram board roms, and other roms when Wordwise/Plus or View are fitted.

Also included are fitting instructions, a thirty-two page manual (with no index!) and a function key strip. The advertised price is £59, although I got mine for £49 (both inc vat) by ordering early. Past experience indicates that it will probably be obtainable for under £50 if you shop around, especially at user shows.

The 57 thousand word dictionary is entirely rom-based, and if you wish to make your own additions to it, this is done in sideways ram. This user dictionary can be save to disc and reloaded when required, or even blown onto an eprom if you wish. You can have as many dictionaries in the machine as you've got rom or ram space for. With my Solidisk Fourmeg board I can only update a dictionary in slot F, and only then if loaded, in with Spell-master's own *DLOAD command, although 'read only' dictionaries can be loaded into any slot using standard Solidisk commands, but NOT with *DLOAD! I suspect something similar may be true for other boards. This is no great problem if you know about it. Also (and this may be unique to the Fourmeg), you can't always *DLOAD, even into slot F, unless the computer is cleared or, in extreme cases, switched off and on.

Spell-Master can be used in a number of ways. It can check through a complete document, stopping at each word it does not recognise. It then gives you the option of ignoring the word (ie leaving it as it is), adding it to your own dictionary, or of correcting the spelling. If you opt for the latter, you are given a list of words from the dictionary that are nearest to what you've written (including any in your own dictionary), which you can browse through and pick the one you want. It can be entered directly from Inter-word by using an existing menu option, or from View or Wordwise/Plus by typing <CTRL> J. Within any of these wordprocessors, it is also possible to have immediate spell checking. Each word is checked as it is typed in, and the computer bleeps if it doesn't recognise it. You can then correct the spelling, add the word to the dictionary, or ignore it.

There is also a 'batch processing' type operation, whereby very long files can be corrected, a *CROSSWORD feature to give words containing wild-card characters, *ANAGRAM, and a *FUZZY command to give all words that are approximately similar to the typed string (useful if you're not quite sure of the spelling of a word).

I have only been playing around with it for a couple of days, and only one or two bugs have so far become apparent. Correcting 'INFOMATION' to 'INFORMATION' produced 'INFORMATION' so that, although the inserted 'R' is correctly in upper case, the final 'N' is now in lower case. Adding TFS to my user dictionary changed all the 'te' words above it (textile, etc) to 'tf' (tfxtile, etc), when browsed through! The words, being in ram, were not actually changed, of course, and they all appeared back to normal when the dictionary was next accessed (unless I browsed through TFS again!). The documentation notes that one and two letter words are not checked, so 'ot' and 'fo' can still appear.

However, my initial reaction is that CC have come up with another winner - definitely the best spelling checker for the Beeb yet (Beeb's in the dictionary!), providing you have sideways ram (and you're not using it for your wordprocessor rom!). There is a full review in the March A & B, which gives more details.

Dave Brown

SOLIDISK USER GROUP

Solinet, a user group for all those who use Solidisk products, has been started, partly, no doubt, to counter the very poor user support given by the company itself. The annual subscription is only £2, and they aim to publish a bi-monthly magazine on disc in Wordwise format. Members send a blank disc to the editor, together with return postage, and get the magazine copied on to it. I've seen numbers 4 and 5, and they contain a lot of interesting features, including reviews of roms and games, including a complete list of commands, and even rom images themselves, taken from such sources as Micronet.

The editor is Ken Hardacre, and he can be contacted at Solinet, 13 St John Street, Bridlington, East Yorkshire, YO16 5NL. A stamped addressed envelope should bring details.

ACORN 512 ADD-ON BOARD

The March Micro User points out that Acorn's 512K board, giving the Master MS-DOS compatibility, needs an 80 track dual disc drive if it is to work properly. Acorn have promised to modify future advertising to mention this, but the flyer for the new board that was slipped into my copy of the March Acorn User still made no mention of it.

WHAT'S IN THE MAGS?

A & B COMPUTING, March 1987, Vol 4, #3, 100pp, £1.50

Features & Programs:

Interview with editor of Micronet / Creating animated graphics / Maths modelling / A programmer's guide to the software industry / Large Econet network / Automatic transfer between disc and tape / Window scrolling for the Master / Sideways ram project / Pull-down windows for Wordwise

Reviews:

Softstrip / Pen-Friend2 / Logosounds / Lintrack pcb designer / Watford View Printer Driver / Beebug's Romit / Computer Concepts' Spell-Master / Plus the usual games reviews, inc W.A.R., and pokes for W.A.R., Raid Over Moscow, Repton 3 and Sim, and a map for Repton 2

THE MICRO USER, Mar 1987, Vol 5 #1, 164 pp, £1.25

Features & Programs:

Who Dunit game / Dino game / Compressor utility / Teletext page storage program / Radioactive half life / Use of Beeb in aircraft bird strike research / 1st of a series on communications / Use of two dimensional arrays / Jet Set Willy II map / Avoiding rom clashes / Adventure game maze mapping / Temperature transducer / Assembler collision detection / Spreadsheets / Program library / Assembler indexing / Printer codes / Pagemaker hints / Pseudo-code / AMX Mouse pictures

Reviews:

Casper 68000 second processor / Knitting software" / Halcien language / Plus the usual games & educational programs

ACORN USER, Mar 1987, #56, 186pp, £1.30

Features & Programs:

Getting the best from databases / Flags in assembler / Input and output devices / Artificial intelligence / Intelligent programs / Trivia program / View on the Compact

Reviews

Mini Office II / BBC's Picture Craft / Chalice's Mega-Rom toolkit / PMS B2F 6502 second processor / Plus the usual games, inc a Repton 2 map

Dave Brown

COVER

This month's cover was designed by Pete Frith. If you want to draw a cover or write an article for the Newsletter, please contact Dave Brown or Pete Frith.

FOR SALE

32K Ramamp sideways ram board with six rom sockets and software, Replay rom and three 5.25 inch disc boxes. £40.

Steve Tindall, Rotherham 378848.

Two uncased 40 track disc drives. £40 each. Pete Frith.