

## **Sinclair Plans Low-Cost System (Popular Computing Weekly, 3rd-9th November 1983)**

### **Sinclair plans low-cost system**

SINCLAIR plans a low-cost development system to encourage software houses to write material for its new 'professional' machine.

"It is our intention that there should be, for our next computer, a relatively low-cost software development system available — priced around £1,000," said Sinclair's managing director Nigel Searle.

"Keeping the serious but small software house working on Sinclair products is very important to us. Something like a Vax system is clearly beyond the realms of some houses and developing software on the machine itself is no fun. So, we have put out a contract to develop such a system for a reasonable sum of money.

The announcement is bound to increase speculation that the new professional computer — code-named the ZX83 — will not be based around the Z80-chip, possibly a 16-bit device. Nigel Searle: "We would use a processor other than the Z80 when we can get a good price — a 16-bit device might cost as much as £10.

"Certainly we have looked at them all. We spent a lot of time looking at the 16032 which Acorn has gone for, but it is perhaps still a bit early. There is a danger of choosing a processor which does not become a standard and is not supported by the industry."

At the same time Nigel Searle reaffirmed Sinclair's commitment to the Spectrum machine, emphasising that the ZX83 — expected to be launched in 'early 1984 — would not be a replacement for it.

"We have considered the options available to us, but at the present there are no plans for any new low-cost machine.

"Obviously we would consider it much more keenly if Spectrum sales showed signs of dropping off, or if we felt that a competitor was seriously on the verge of damaging our sales. But, at the moment, I don't see anything on the horizon that might do that.

"Even so, we could not replace the Spectrum except with something completely software compatible.

## **A Quantum Leap from Sinclair (Popular Computing Weekly, 12th-18th January 1984)**

### **A quantum leap from Sinclair**

WELL, here it is! The new Sinclair QL microcomputer.

It is based on the 68000 16-bit processor with 128K Ram and twin microdrives as standard, all for a price of £399. Also supplied with each machine is a highly advanced suite of software: spreadsheet, database, word-processing and business graphics packages — over 300K of machine code software supplied on four micro cassettes, each with an accompanying manual.

The machine will not be software compatible with existing ZX Spectrum software and the QL runs a new version of Basic — the so-called SuperBasic.

Up to 90K is addressable in SuperBasic which includes structured programming commands and supports procedures. Five user-definable function keys are provided. SuperBasic has a keyword entry mode.

The machine has a bit-mapped colour high resolution screen — 32K of Ram is reserved for the display.

The QL has a built-in multi-tasking facility with a new QDOS operating system and full networking, enabling up to 64 QL or Spectrum computers to be linked.

The Sinclair QL is 19 inches long and 5 1/2 inches wide, with a full-size professional quality keyboard. It has tv and RGB monitor outputs and RS232C and twin joystick ports. Ram is expandable from 128K up to 640K. Although the 68000 chip is externally 16-bit, its internal architecture is 32-bit, making the QL considerably faster than an 8-bit chip such as the ZX80 (Spectrum) or 6502 (BBC and Commodore 64).

As is now traditional for new Sinclair products, the QL will be available initially only by mail-order.

## **Quantum Leap is now Official (Popular Computing Weekly, 19th-25th January 1984)**

### **Quantum leap is now official**

SINCLAIR has now formally announced its new £399 QL computer (see Popular Computing Weekly, January 12):

First deliveries of the 128K Ram, twin QL microdrive machine, based on the 32-bit 68008 processor, are scheduled for the end of February.

Initially the QL will be sold by mail and orders will be accepted by Sinclair in Camberley from Friday, January 20, onwards.

Each order for the machine should be accompanied by a further £7.95 to cover postage and packaging. Owners may also choose to pay an additional £35 to join QLUB, the QL User's Group, for a 12-month period.

Members of QLUB will receive a bi-monthly newsletter, and be able to get help with the four software package from Psion, receive annual upgrades of the software free of charge and be offered peripherals for the QL before non-members.

Sinclair plans an ambitious list of peripherals for the QL: 0.5M Ram expansion module, Winchester hard disc interface, terminal emulator, analogue/digital interface, modem, parallel Centronics interface and multichannel sound generator and an IEEE- 488 interface.

The QL will be manufactured exclusively by Thorn EMI Datatech.

In the autumn the machine will go on sale through retail outlets in the UK and will be launched in North America. In the US it will sell for \$499 and be marketed by Sinclair, initially by mail order.

## **QL Delays Expected as Orders Grow (Popular Computing Weekly, 16th-22nd February 1984)**

### **QL delays expected as orders grow**

FIRST deliveries of Sinclair's new QL computer are now unlikely to be dispatched to customers until at least the beginning of March.

The 28-day period allowed for delivery in the company's mail-order advertisements will be up for the first would-be owners this Friday, February 17. Yet most of the first batch of machines

expected at the end of this month will be sent to software authors for program development and to magazines for review.

The delay is apparently due to continuing development of the ULA chip and work still being carried out on the QL's SuperBasic. The design of the QL Microdrives has however now been finalised — none were in evidence in the machines shown at the January launch — and work to make the four Psion software packages fully compatible with the drives should be finished at the end of this week.

Orders for the QL are now building up at an alarming rate and some sort of order backlog — traditional for any new Sinclair product — seems inevitable.

Around 6,000 QL orders (worth £2.4m) have so far been placed, and 3,000 of those have been taken in the last week.

## **QL Delays Grow by the Day (Popular Computing Weekly, 23rd-29th February 1984)**

### **QL delays grow day by day**

SINCLAIR QL computer delivery schedules seem to be lengthening miraculously every week.

First customers for Sinclair's new computer have now all been sent a letter advising them that the company hopes to fulfill orders before the end of April. With the 28-day mail-order delivery deadline already up for some orders, this could mean a wait of a further nine weeks. Says managing director Nigel Searle: "We realise that the time between now and then will be frustrating (for customers) but we are confident that the QL will be worth waiting for and, of course, we will do everything possible to beat our target date for dispatch.

Sinclair is blaming "phenomenal demand for the delay. However, it is hard to see how even the most staggering response could have affected the very first orders placed.

Some of the 400 customers who had ordered their QL machines by the end of the first day it was announced (January 12) have received letters indicating delivery by the end of April. But Sinclair still firmly denies any production problem with the QL.

Meanwhile, cheques from customers are now being cashed and payed into a special "Readers Trust Account". It remains to be seen what Sinclair will do with the interest accruing from their customers' money, while hopeful owners continue to wait.

Popular Computing Weekly's own QL order was placed on January 12 and was effected on January 20. Six days have passed since the 28-day mail-order deadline has passed and our cheque has been cashed.

## **Compensation from Sinclair (Popular Computing Weekly, 8th-14th March 1984)**

### **Compensation from Sinclair**

SINCLAIR has now agreed to compensate QL customers, whose money is being held in a readers trust account. while they wait for their machines to be delivered (see PCW 1-7 March). This compensation is in lieu of returning the interest earned on the money.

According to a Sinclair spokesman, the company has now agreed in principle to compensate customers whose cheques have been cashed with a 'gift'. The exact form or value of this gift is not clear.

It may, however, be possible to force Sinclair to return interest accruing from money cashed. The National Federation For Consumer Goods has devised a legal clause which can be used to protect your money and your interest.

It advises that Sinclair customers should write on the back of their cheque or postal order the following:

'This money is sent on the condition that you will hold it as a trustee on my behalf and that it will remain mine until the goods have been sent to me. As from 28 days after you receive this money you will also hold on trust for me any interest which is earned on it. If you accept this payment you will be deemed to have accepted these conditions.'

Sinclair will then be faced with the choice of accepting the money and your conditions or sending it back and losing an order — very much the same sort of choice it has itself offered customers — carry on waiting or have your money back.

Sinclair has also admitted for the first time that it has been development problems with the QL that has caused the delay to deliveries, and not 'phenomenal demand' as was originally claimed.

When it launched the QL it had no OL machines in stock and design work was still continuing. The SuperBasic Rom was not finished and neither were four Psion software packages which are to accompany the machine.

Some sources also suggest that there may be problems with the design arising from the use of the Intel 8049 chip to handle the keyboard.

First deliveries of the QL are now expected at the end of March. Some customers ordering machines have now been notified by Sinclair not to expect delivery before the end of June.

For £1 the National Federation For Consumer Goods will send you its kit giving legal advice and stickers to attach to cheques.

Write to: NFCG, 12 Moseley Street, Newcastle Upon Tyne.

PCWs QL order: Week 7. Sinclair has confirmed it hopes to deliver before Week 11. The estimated interest gained by Sinclair from our money so far is £2.25.

## **QL Non-Appearance Explained (Popular Computing Weekly, 26th April-2nd May 1984)**

### **QL non-appearance explained**

THE reason for the spectacular non-appearance of the Sinclair QL has now been made clear.

Soon after its January launch it became obvious to Sinclair's design team that the on-board operating system, SuperBasic and QDOS disc operating system software was not going to fit into the 32K Rom allocated for it in the hardware design.

In addition, Sinclair decided to further extend the software to include extra facilities such as turtle graphics.

With too much machine-code to squeeze into the Rom, Sinclair has decided to put a portion of it on to a separate chip.

First machines — which Sinclair has now promised will be in the hands of customers by the end of this month— will go out with the 'overflow' software provided as a separate Eprom board which will have to be plugged into the Rom cartridge port at the rear of the machine.

Later versions of the machine will have the software built into the main Rom, incorporated inside the computer, freeing the Rom cartridge port for the purpose for which it was intended. People who receive the plug- in Eprom version of the QL will be offered a hardware up-grade later — well before Rom cartridge software appears for the machine.

Because the QL design has a fixed 64K Rom address space, the larger-than-32K internal Rom will mean that the maximum size of cartridge software will be only 16K.

Explaining the decision to deliver first machines with a sideways Eprom board, Sinclair's spokesman said: "As far as customers are concerned, they want the machine they thought they were buying as soon as possible — and this is a way of doing that."

Sinclair now has over 13,000 waiting customers — four thousand more than at the end of February.

The form of compensation to be offered to waiting customers has also been sorted out. Each waiting QL customer — regardless of whether they have ordered by cheque or credit card — will receive an RS232 printer lead which retails at £14.95. Those who originally ordered a printer lead will get a refund.

PCWs QL order: Week 14. Delivery is now scheduled for the end of April.

## **QL Board for Sale? (Popular Computing Weekly, 31st May-6th June 1984)**

### **QL board for sale?**

THE processor board from the QL may well be available in the not too distant future for sale to other systems builders.

Sinclair Research and GST Computer Systems, based near Cambridge, are currently negotiating prices, quantity and delivery dates, although the final agreement is unlikely to take place until Sinclair has sorted out all its own QL delivery problems.

Sinclair has yet to send out all the machines to customers given end of April deadlines for delivery.

Those few customers who have so far received machines are still waiting to receive copies of the Basic manual.

## **QL Interest at Earl's Court (Popular Computing Weekly, 21st-27th June 1984)**

### **QL interest at Earl's Court**

LARGE crowds turned up for the Earl's Court Computer Fair last weekend.

The Sinclair stand dominated the show and the QL's on display attracted much interest. The machines appeared without their external Eprom boards and Sinclair is claiming now to be sending out machines to customers in this form.

After Dragon's announcement that it has called in the receiver it was surprising to see the company out in force. Dragon's big stand was rumoured to have been paid for by GEC so the Dragon may yet overcome its latest crisis.

Commodore showed its Plus/4 and C16 machines. The Vic 20 machines on the Commodore stand were outnumbered 15 to 1 by C64s.

Acorn launched its expansion unit for the Electron — the Plus 1. For £59.90 the add-on gives the Electron Centronics printer and joystick interfaces and twin Rom cartridge slots.

On the software side there was little of interest. The one exception was Psion's Match Point tennis game for the Spectrum.

## **Sinclair MD Defends the QL (Popular Computing Weekly, 28th June-4th July 1984)**

### **Sinclair md defends the QL**

SINCLAIR is planning an ambitious software publishing programme for the QL — over 50 titles before the end of the year.

Among the companies in discussions with Sinclair as well as Psion are Quicksilver, Melbourne House, Ultimate and Picturesque. The company is also talking with a number of American software companies including Digital Research, Microsoft, Lotus, Software Arts and Ashton Tate.

"Obviously this software isn't going to appear overnight — indeed the really good programs won't appear until early next year." said Sinclair managing director Nigel Searle. "The first QL's went out only seven weeks ago and the machine's processor is new to many of the houses involved.

Because of Sinclair's current pricing policy on blank micro-drive cartridges (£3 each to the software houses) initial software releases for the QL will not be cheap. "The houses we have so far signed contracts with are mostly writing packages which sell for around £40, so the price of the blank cartridge is less significant," said Searle.

"I wouldn't disagree that the current cartridge price is too high — the software houses all think so. But we have to balance supply and demand." At present Sinclair is producing over 100,000 cartridges a month but intends to increase production to over 40 million a year. Then Searle is confident the price will come down.

Also, Sinclair will soon announce the names of a number of independent software duplication companies which will manufacture Microdrive software.

The US version of the QL will go out with Microdrives although Nigel Searle did not completely rule out the possibility of fitting a disc drive. "Obviously we are not so arrogant a company that — if the QL were to be totally unsuccessful over there — we wouldn't scratch our heads and maybe put in a disk drive."

Searle is confident that the QL's troubles are now past: "In some respects we got off to a bad start with the QL with its 'dongle' and production problems it was sometimes a little depressing. But while the press were jumping all over us we have been putting things right."

## **QL Upgrade Date Set (Popular Computing Weekly, 5th-11th July 1984)**

### **QL upgrade date set**

SINCE Sinclair began deliveries of the QL at the beginning of May, three different versions of Superbasic have been sent out with machines.

"The first version issued to customers was FB, which was a penultimate version of the firmware," said a Sinclair spokesman.

"The other versions, PM and AH, are almost identical, but AH is the final version, and an improvement on the others."

To find out which variant is on a given machine, users should type in Print Ver\$. The name of the variant should appear on the display.

Sinclair began delivery two weeks ago of QLs with the Eprom inside the machines rather than inserted in the Rom cartridge slot.

Machines delivered from the end of July should have the Superbasic in Rom rather than Eprom.

The conversion of QLs with 'dongle' Eproms is also scheduled to begin at the end of July.

"Our intention is to stagger the recall of machines," the spokesman continued, "and, as yet, we do not know how long customers will be without their QLs when recalled. The service will be absolutely free to customers."

## **Amstrad rescue leaves Sinclair free to try again, Electronics Times, 10th April 1986)**

**By Steve Rogerson**

Sir Clive Sinclair plans to continue as an electronics industry leader, despite Amstrad's £5 million takeover of his ailing computer business.

Sir Clive's aims are ambitious - wafer scale integration, a cheap cellular telephone and a large supercomputer. But he intends to develop two early ideas which have caused him more problems than success - electric vehicles and small tvs. The Amstrad deal has cleared his debts, estimated at £10m, and a number of backers, most of them unnamed, have stepped in to finance these future projects.

Barclays Bank is backing the wafer scale integration research based on an original patent from Ivor Catt. Sir Clive said the first product, a 5in 40Mbit wafer, would be launched next year. He admits his supercomputer is a few years away but he is talking about 1 billion floating point operations per second and more. This may be based on the Inmos transputer - sources say he has had lengthy discussions with Inmos.

But the next product from Sinclair Research will probably be a low price cellular telephone for the mass consumer market. The telephone is being developed at his Winchester subsidiary and Sir Clive will soon announce the name of the financial backer for this project.

Sinclair Research will also act as an industry think tank, doing contract research for other companies. Sir Clive said a number of firms were interested but he refused to name them.

On electric vehicles he said: "We have got designs for a full range of electric vehicles. We are negotiating for people to come in with us on that."

Meanwhile, Sinclair brand name computers will be sold by Amstrad. The firm ironically also plans to use the Sinclair name on a new range of calculators. Calculators were one of the first products for which Sinclair became well known.

Amstrad will also have first refusal on Sinclair's Pandora lap top computer which is being developed by Sinclair.

One product Amstrad is not interested in is the QL. Alan Sugar, millionaire founder and chairman of Amstrad, said "We will be destocking the QL. There is no future for it."

He said QL production had already stopped, but added he would be prepared to sell the technology if somebody was interested. He also said he may develop a computer based on the QL but with a disk drive, not a microdrive.

As part of the takeover deal, Sugar bought existing stocks of Sinclair computers, plus work in progress with Timex, AB Electronics and Thorn EMI. He refused to say how much he had paid for this.

Although he intends to continue the contracts with these companies for the time being, some production may be transferred overseas. Amstrad already makes some of its products in South Korea.

"The problem is," said Sugar, "that most of the parts come from Japan. There is an 18% import duty on microchips. If you make it outside the EEC, the duty on the finished product is only 4.9%"

He said he was trying to get the import rules changed and admitted that he could already get some chips without paying duty if he could prove that they are not available elsewhere.

Sugar also plans to tackle the poor quality reported on some software products for Sinclair computers by setting up a quality control body to check products. These would then carry a stamp saying they had been passed.

Sugar also plans to tackle the Japanese market. He said that cheap home computers were just taking off in Japan.