Sinclair takes a leap

**By Geof Wheelwright
and Ian Scales**

Sir Clive Sinclair declared war on the business computer market last week with a £399 128K 32-bit micro that looks set to stunt the growth of IBM's Junior and tune out the BBC Micro.

With a sculpted typewriter keyboard and two 100K built-in Microdrives, as well as windows and four substantial applications packages included, the new Sinclair QL (Quantum Leap) computer must be an early contender for the best buy of 1984. Sinclair has promised to start filling mail orders by the end of February and should have machines in the shops by late summer.

An ambitious expansion program for the machine makes it even more attractive. Though the QL comes with an unheard-of 128K for its £399 price, it can be further expanded to 640K with a 0.5Mb RAM pack that plugs into the left-hand side. Also planned for the QL is a C compiler, an assembler for the 68000 processor, a terminal emulator, an analogue/digital converter, a hard disk (Winchester) interface, modem, IEEE interface and a parallel printer interface.

One of the machine's prime features is the way the operating system, QDOS, uses the power of the 32-bit processor to run multitasking. There is a powerful windowing capability which allows several programs to be run concurrently in different parts of the screen.

The QL's price is the same as Acorn's BBC Micro and Sir Clive made no bones about his contention that the QL is vastly superior.

But Sinclair means to do more with the QL than simply go after Acorn's market. According to Sir

Upgradable QL — the new Sinclair machine with 0.5Mb plugged in.

Clive, the QL has been designed to appeal to a completely new user. In effect he's taking a slight gamble for the machine falls neatly between the home computer and personal business market. The danger for Sinclair is that the machine may appear too expensive to the home user and too down-market for the business user.

The prospects for the QL appear to depend largely on the changing cost/performance ratio of RAM against disk storage. Dropping the conventional floppy disk drive has gone some way towards making the machine the sort of product the company knows best — it's almost all chips, cheap, and portable enough to send through the post.

It's the inclusion of the Microd-

rives rather than conventional disk storage which has particularly kept the price down.

It may well be that the Microdrives are seen more as back-up storage. The best bet is that the machine's real capabilities will only be realised with the promised .5Mb RAM upgrade.

At first sight, the software products appear impressive. It could be

argued by Sinclair and the software producer Psion, Sinclair's star software house, that the bundled software is worth the price of the system alone.

There are four standard packages — a spreadsheet, a word processing package, a sophisticated database system (which Psion seems the most proud of), and a business graphics package.

Stylish Oric

The new Oric ROM has surfaced in unexpectedly stylish guise — a new 48K Oric micro.

Called the Atmos, Oric's new system was due to be launched this week at the Which Computer? show. It will be available from the end of January for £170.

The most obvious advance of the Atmos over the Oric 1 is in looks. The case is re-styled in black and red with a full-pitch typewriter keyboard. The Oric printer and the fabled micro drives will also be available in the classy new livery.

The machine's innards aren't too different from the Oric 1's. Built around a 6502A, with 16K of ROM holding the Basic interpreter and operating system, it comes in 16K and 48K models. The notorious

ROM, Oric claims, has been sorted out by Oric and its software suppliers. 'Between us we've greatly improved the ROM and removed all its quirks,' said Dr Paul Johnson, Oric's director of research and development.

But sources close to Oric suggest some of the quirks remain: the TAB function still prints spaces, for example.

The Oric disk drives are the Hitachi 3in units, giving 320K on doubled-sided, double density disks.

The company also claims to have devoted considerable attention to cassette tape loading, including Verify, Store and Recall of arrays. It has also written a utility to sidestep some of the most common

The Oric Atmos — putting on the style.

loading faults.

Oric Products is known to feel that it has had a rough ride from the UK technical press over the flaws and delays that afflicted the Oric 1

— late arrival of the 16K model, idiosyncracies of the Basic, disk delay and others. The improvements may be seen as too cosmetic to redress the balance.