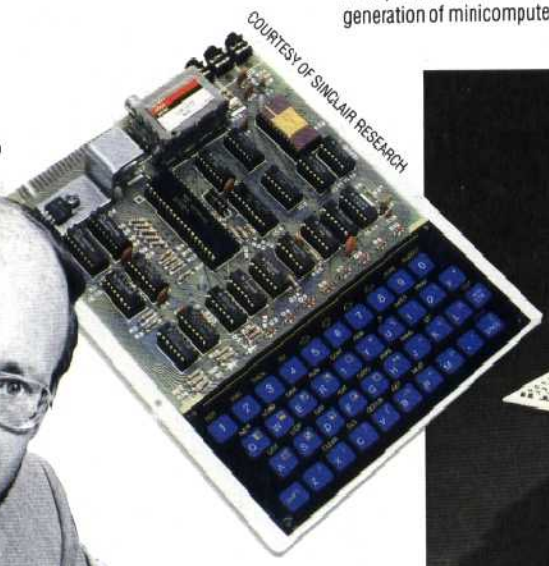
that fitted in a limited-memory chip and could be incorporated into a home machine. Gates' company, Microsoft, became as much the standard producer in languages as Digital Research became in operating systems, and his fortune was made.

With these developments, advances in hardware and applications software quickly followed. Dan Bricklin and Bob Frankston produced the first micro spreadsheet program, VisiCalc, at their Software Arts company. Distributed by Personal Software on the Apple II, this became the best-selling applications package ever, and to emphasise its connection Personal Software changed its name to VisiCorp. WordStar was produced by Seymour Rubinstein's MicroPro and became the major best-seller in the CP/M word processor market.

The hardware that these packages were running on became cheaper and more powerful. Adam Osborne, who began as a technical writer, journalist and software publisher after moving to the US from Britain, launched a successful business computer with a large amount of expensive software included in the already

COURTESY OF SINCLAIR RESEARCH

Sir Clive Sinclair
Following his innovative products in hi-fi, calculators, miniature radios, pocket TVs and digital watches, the unparalleled success of his microcomputers (ZX80, ZX81, and the Spectrum) earned him a knighthood in 1983



COURTESY OF SINCLAIR RESEARCH

competitive price. And, of course, there is Sir Clive Sinclair, who set new price levels with the ZX80, ZX81 and ZX Spectrum, and has made home computing possible for millions of first-time users.

The standard for microcomputers in the last two years has been set by IBM with the IBM PC. Launched in 1982, this machine is proving increasingly popular. Virtually every software house and hardware peripherals maker is now producing material for the PC, and that in turn is encouraging more and more people to choose the machine.

The IBM PC brings together several of the pioneers from the early days of the micro industry. The microprocessor comes fom Intel, the originator of that technology; the operating systems come from Bill Gates' Microsoft, diversifying from languages, and from Gary Kildall's Digital Research; and two of the first software packages put on the machine were VisiCalc and WordStar.

COURTESY OF HEWLETT PACKARD

Small Beginnings
Surprisingly, the technology of microcomputers developed more from the sophisticated programmable calculators (such as this Hewlett-Packard HP65) than from the earlier generation of minicomputers

IAN McKINNELL

The Big One
IBM's acceptance of the microcomputer's viability didn't come until 1982, but it still had the predicted effect. Almost every new business microcomputer now boasts IBM PC compatibility to capitalise on the huge base of software

Steve Wozniak and Steve Jobs still run Apple, on the whole in direct competition with IBM, and are pinning their company's hopes on the revolutionary technology in the Lisa (see page 261) and Macintosh (a cut-down version of the Lisa at around £2,000). Chuck Peddle started his own company, Sirius, and took a big slice of the UK business before IBM arrived, though his company has since encountered financial difficulties.

But Peddle will surely be back. The short history of micro business shows that the originators are also the survivors — even when the multinationals try to take over the game.

Herman Hauser

JUDY GOLDHILL

From Little Acorns...
Though less innovative in price than Sinclair, the contribution of Chris Curry and Herman Hauser (as designers and directors of Acorn computers) has been no less valid. The Acorn Atom, BBC Microcomputer, and the Electron are all seen as milestones in their own right

JUDY GOLDHILL

Chris Curry