## THE TECHNOCRATS



Special Line

Memotech began with specialised products for the Sinclair ZX81, such as the Memopak, shown here, which provided the ZX81 with an extra 32K of RAM

## **Fruits Of Success**

After the success of its ZX81 expansion products, Memotech advanced to new products. One such product is a line of computer peripherals, like the 80-column dot matrix printer, the DMX 80

Memotech's latest venture is the MTX512, a 64K home and small business microcomputer. The MTX512 can store data on cassette, or on the optional floppy disk drive unit pictured here

Memotech is a British company that established its name as a manufacturer of useful add-ons and peripherals for the Sinclair ZX81. Recently the company began producing its own range of home microcomputers — the stylishly designed MTX series.

Memotech was established as a result of the enormous public interest in Sinclair Research's first microcomputers. Despite the popularity of the ZX80 and ZX81, it was soon apparent that the machines were severely hampered by lack of memory, and a huge market for add-on memory boards was created.

The company's founders were both lecturers at Oxford University: Geoff Boyd lectured in metallurgy at Wilson College, and Robert Branton taught mathematics at Christ Church. The two men first met at a computer exhibition at the university in 1981, and decided to work together on add-ons for the ZX81. Their first product was a 16 Kbyte expansion board for the

its Memopaks have exceeded 250,000 units. The packs, along with the MTX range of machines, are manufactured at the company's headquarters in Witney, Oxfordshire. The firm currently employs 110 people.

The MTX range was officially launched in February 1984, and the company claims sales of about 25,000 machines since then. Like the BBC Micro, the MTX comes in two models: the 32 Kbyte MTX500 and the 64 Kbyte MTX512. The machines use a Z80A microprocessor, and offer 16 colours in high resolution mode (256 × 192 pixels). The MTX BASIC is similar to BBC BASIC. The computer also features an on-board assembler/disassembler.

The computer can also be expanded to make use of Memotech's HRX graphics package. Starting with an unexpanded MTX500, the user can add disk drives and the three graphics controller boards: a 96-bit processor main controller board, a 'Frame Grabber' and a three-channel A/D converter. The resulting system is able to produce animations, picture composition and graphic design up to a full typesetting



machine. This was later followed by a whole series of 'Memopaks', including 32 Kbyte and 64 Kbyte RAM packs, the high resolution graphics (HRG) pack, a spreadsheet analysis (Memocalc), a word processor (Memotext), Centronics and RS232 interfaces and a keyboard.

When Sinclair Research released the Spectrum in 1982, Memotech decided against producing a range of add-ons for the new machine. Instead, using the experience and expertise it had gained in producing the hardware for the ZX81, Memotech chose to concentrate its resources on designing and building its own machines. Tim Spencer, Memotech's sales and marketing manager, explains: 'We felt that the ZX81 was not going to last much longer, so we decided to build our own computer. We did have the technology, after all. But the ZX81 has lasted far longer than we expected, and our packs are still selling well.'

Memotech estimates that international sales of

capacity. The system costs around £4,500.

Asked about the design philosophy behind the MTX range, Tim Spencer said: 'We are aiming at the more serious home user and the business market. The machines are not aimed at the games market, although of course you can play all the usual games on them.'

Because the MTX is capable of running CP/M, it can take advantage of the range of software available. However, the company is aware of a lack of cassette-based software that would give the machine greater appeal to the less serious home user. There are currently only about 40 different cassettes available for the MTX, and the company is actively encouraging the development of more programs. 'We have done quite a lot over the last few months,' Tim Spencer commented. 'We have close links with Continental Software, and PSS is writing for us.' There will also be a number of educational packages in the near future.