

SMALL UNDERTAKINGS

Casio is perhaps best known in the UK for the production of watches, calculators and musical instruments. Over the last few years, however, the company has introduced a range of hand-held and pocket computers in an attempt to gain entry to this specialist computer market.

Casio claims to control 50 per cent of the world calculator market but, surprisingly, the company has just 3,300 employees worldwide. In 1983 Casio's turnover was \$29 million — a low figure for a high-volume electronics manufacturer. Tony Manton, the UK calculator sales manager, states that this is a deliberate approach. 'We are a very small company and pretty conservative. Huge advertising campaigns aren't our style,' he says.

The company was founded by the five Kashio brothers after the Second World War. It was then known as Kashio Seisakujo, and started by manufacturing office equipment. In the early 1950s, the company developed the 14-A Relay Calculator; this was one of the first electrical calculating machines and was as big as a desk top, weighing 130kg (286 lb). Further calculators were developed, and in 1957 the company name was changed to Casio Computer Company Ltd.

Casio UK was established in 1974, and found a ready market for low-priced electronic

calculators. In 1982 the first Casio pocket computer, the FX-702P, was launched. This was designed for the scientific user and had an unusual keyboard layout, with the keys arranged in alphabetical order instead of the more usual QWERTY format. Sales were disappointing, and the machine was replaced by the FX-700P, which was equipped with a QWERTY keyboard.

This was followed by the PB-100, a pocket-sized computer aimed at the business user. Similar in design to the FX-702P, it featured a liquid crystal display and numeric keypad. Casio also produced custom-built cassette recorders, printer/plotters and RAM packs for both machines.

A recent replacement for the PB-100 is the FX-750P. This computer features two 'RAMcard' slots, which take small metal packs (about the size of a book of matches) that can hold up to 4 Kbytes of data. Each card is fitted with a three-volt battery that stores the memory contents once the card has been removed from the computer, thus allowing programs to be saved and loaded into the machine as required. Each battery gives a year's storage; when the battery needs to be replaced the programs are reloaded from tape.

Casio also produces the FP-200, a hand-held computer that is equipped with 8 Kbytes of RAM. This can be expanded to 32 Kbytes. The FP-200 has an LCD display, giving eight rows of 20 characters in text mode and supporting a graphics resolution of 160 × 64 pixels. The latest machine in the Casio range is the SL-800. This is a low-priced calculator that is about the size and weight of a credit card. The slim design is a result of a manufacturing process known as 'filming', in which components are printed onto laminated film rather than being soldered onto a conventional circuit board.

In many European countries and the Far East, Casio distributes business computers and MSX standard home computers. In the UK, however, the company has concentrated on calculators and small computers. Asked why Casio has not attempted to break into the British home and business market, Tony Manton cites the cut-throat nature of this sector of the industry. 'We intend to expand upwards slowly,' he says. 'We need to educate people to tell them that pocket and hand-held computers are more than calculators.'

In addition to any future expansion in this area, Casio is using the expertise gained in the electronic keyboard field to produce a series of machines based around the MIDI digital interface (see page 534). Such machines should make their market debut by the end of this year.



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Top Of The Tree

Tadao Kashio, President of Casio, is one of five members of the Kashio family at the top of the Casio corporate structure