

LONE STAR



TI President

The President and Chief Executive Officer of Texas Instruments, Mr J Fred Bucy. Mr Bucy has occupied the position of President since April, 1976

Texas Instruments could be credited with creating the home computer revolution. In 1958, one of the company's engineers invented the integrated circuit, which is the basis of the microcomputer. Twenty years later, the TI99/4A — the first micro aimed specifically at the home user — was marketed by the company.

Introduced in 1978, the TI99/4A home computer used the Texas Instruments' 16-bit TMS9900 microprocessor, and had 16 Kbytes of RAM memory. There was a choice of 16 colours and three sound channels on the machine. Despite healthy sales, however, the computer fell victim to the ferocious price war that developed in the United States in 1982 and 1983. In the United Kingdom, the machine originally sold for around £1000 (£645 for the machine and the remainder for an American standard colour television). This price was progressively reduced to around £80. At the end of 1983, TI ceased production of the machine entirely.

Richard Mann, TI's European Public Relations Manager, says: 'The TI99/4A was selling extremely well, but it was not profitable and we lost several hundred million dollars.' Asked if TI intends to launch another machine, he replied: 'Absolutely not. We made that very clear at the time. We are more interested in selling machines for hundreds of dollars rather than tens of dollars.' However, TI intends to remain 'firmly in the professional computer market'.

The company's other products range from

children's electronic toys, such as Speak and Spell, to minicomputers and sophisticated seismic detection equipment. It has 15 manufacturing plants around the world and an annual turnover of \$4 billion.

Texas Instruments was founded by two scientists, John Karchner and Eugen McDermott, in 1930, and was originally named Geophysical Service Incorporated. Karchner had been investigating the idea of bouncing sound waves off geological strata to calculate their depth, and the company was set up in Dallas, Texas to sell this idea to the oil industry.

GSI grew steadily throughout the 1930s, developing new techniques and equipment for seismological surveying, and during the Second World War its surveying equipment proved useful in detecting submarines, which led to the establishment of a laboratory and manufacturing division of GSI. By 1951, this offshoot of the parent company had grown to such an extent that it was decided to establish it in its own right. The new company was christened Texas Instruments.

The following year, TI obtained a licence from Bell Laboratories to manufacture the newly-invented transistors, and in 1954 it produced the world's first transistor radio. In 1958, Jack Kilby, an engineer with the company, invented the integrated circuit, and TI has remained at the forefront of research in this field. Kilby also assisted in the invention of the world's first hand-held electronic calculator in 1967.

The TI Professional computer, which was launched in January 1983, is based on the 8088 processor, and can therefore run CPM-86 and MS-DOS. Later that year, TI introduced the Texas Instruments portable business computer and the hand-held CC40 micro.

Today, the company also produces a wide variety of electronic components including 64 Kbyte RAM chips, of which TI claims to be one of the world's largest suppliers. TI chips appear in almost every home computer, including the Commodore 64 and the Sinclair Spectrum. In common with most other chip manufacturers, TI has developed a range of 16-bit processors, including the TMS9900 featured in the TI99/4A. This processor was unusual in having no internal registers, which were included in a special 'scratchpad memory' external to the CPU. Richard Mann says: 'The TMS9900 was a bit ahead of its time. It had many powerful features, but the architecture was not seized upon.' Texas Instruments has now marketed a 16-bit processor known as the TMS99000, and this, the company hopes, will be more successful.

Texas Instruments Plant

Much of the manufacturing of Texas Instruments equipment is done at this modern Expressway facility in Dallas, Texas

