product review

Bubble boards from Intel . . .

Intel's first high density magnetic bubble board to combine up to 512 kbyte of storage with an interface for Multibus systems has been introduced. The board, iSBC 254, is designed for OEM customers as a reliable storage system for applications requiring nonvolatile memory, high data integrity, tolerance to harsh environments or rough handling and ease of operation.

It contains the IM 7220 bubble memory controller for operation in direct memory access (DMA), interrupt and polled modes. The DMA feature provides maximum flexibility in microprocessor-based system design and the IM 7220 controller features builtin powerfail protection and error correction. Up to four parallel IM 7110 1 Mbit bubble memory devices are on board, with capacity of 128, 256 or 512 kbyte being available.
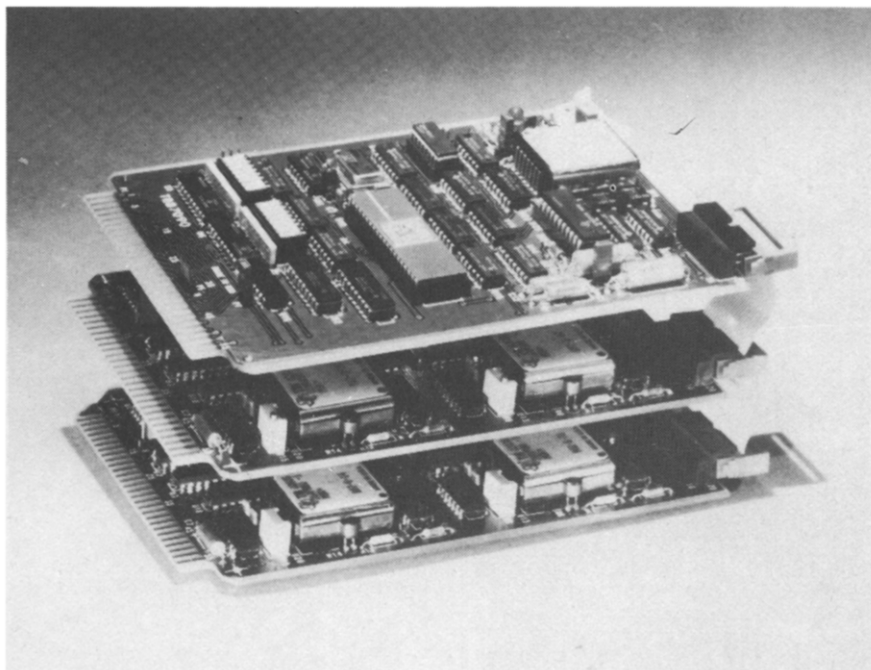
Board transfer rates vary with board capacity. The 128 kbyte version operates at a maximum transfer rate of 12.5 kbaud. In two or four-bubble boards, the bubbles can be accessed in parallel to achieve transfer rates of 25 kbaud for the 256k version and 50 kbaud for the 512k capacity. The board is software supported with

drivers in Intel's two real-time multi-tasking operating systems, iRMX/80 and iRMX/86.

The current US price of the 512 kbyte board in 100-unit quantities is $7050. The third quarter 1981 price, in lots of 100, will be $4625 while the third quarter price in 1000 quantity will be $2400. *(Intel Corporation, Rue du Moulin A Papier, 51, Boite 1, B-1160 Brussels, Belgium. Tel: (332) 660 30 10)*

. . . and Texas

TBB7090 and TBB7091 are single board bubble memory systems from Texas Instruments. Both are fully assembled and tested and supplied with 1, 2, 3 or 4 92-kbit bubble TIB0203 memories for 11.5, 23, 34.5 or 46 kbyte of storage respectively. They are available in 0–50°C and 0–70°C temperature ranges. They feature 4 ms access time and 50 kbaud data transfer rate. Unit prices range from £535 to £1110. *(Texas Instruments Ltd, Manton Lane, Bedford MK41 7PA, UK. Tel: (0234) 67466)*

TI's new bubble boards

Expandable MCZ systems

Zilog has announced two low cost, high power entry-level microcomputer systems with expansion options allowing full upgrading to the company's top-of-the-line systems.

MCZ 2/19 is a modular desktop building-block system unit based on the 4 MHz Z80A. It features 64 kbyte of RAM, a power supply that can accommodate up to four boards and 2.4 Kbyte of floppy disc storage. MCZ 2/49 is a complete integrated system that includes the MCZ 2/19 plus a fully functional CRT terminal, an improved version of Zilog's RIO operating system featuring a random access file system and a choice of COBOL runtime interpreter or BASIC.

Both systems are upgradable to the level of Zilog's most advanced local network system or communication function if required. Expansion capabilities include:

- 2.4 Mbyte additional floppy disc storage
- printers
- an optional CRT providing additional business oriented features
- ANSI COBOL software
- the system programming language, PLZ
- a four-line programmable serial interface (PSI/A) board which allows the user to implement ASYNC and the 2780/3780 workstation facility (see above)
- all the elements necessary to implement the Z-NET local computer network, including the RIO/CP (concurrent processing) operating system, the NST 2/01 network station transceiver, network protocal software and the SDS 2/01 shared data station

Two field installable upgrade kit options provide hardware modification and testing for four additional serial ports and for local networking.

List prices are £4250 for the MCZ 2/19 and £4955 for the MCZ 2/49 (unit quantities) with 90 day availability. *(Zilog (UK) Ltd, Babbage House, King Street, Maidenhead, Berks SL6 1DU, UK. Tel: (0628) 36131. Telex: 848609)*