8/16 RAM

Good

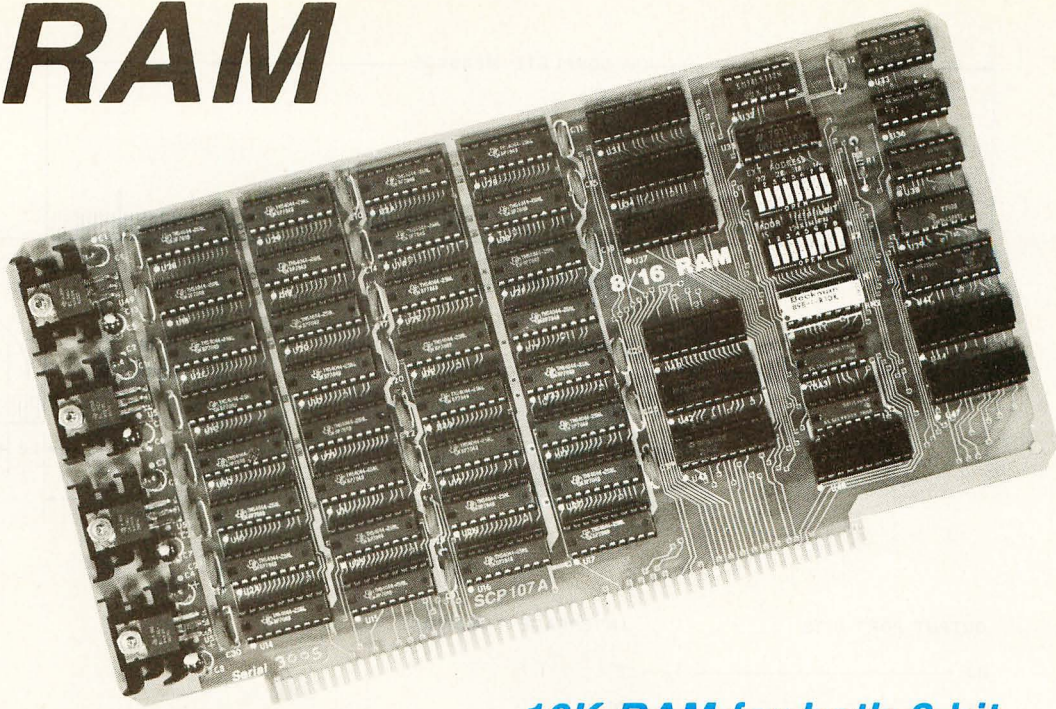**through**

the

'80s

16K RAM for both 8-bit and 16-bit S-100 systems

The 16-bit micros are coming — fast!

1980 will be the year of the 16-bit microprocessor. With their increased speed, with their expanded instruction sets which dramatically simplify programming, and with the sophisticated languages and operating systems their architectures support, the 16-bit micros promise a many-fold increase in computing power. Here at Seattle Computer, we have been shipping our 8086 CPU card since early November, but this is just the beginning for us. We plan to augment the capabilities of our 8086 with sophisticated new hardware for the disk and for serial communications, and with our new interrupt-driven, multi-user disk operating system. All will be introduced by mid-year. Not that we are alone in the 16-bit world — Microsoft BASIC is available now for the 8086, with other languages in the works. Several other firms have announced or are developing 8086 CPU cards, and no doubt systems using the Z8000 or 68000 will appear by the end of the year.

8/16 Fully Meets IEEE Standard

The 8/16 was designed to be in full compliance with the proposed IEEE Standard for the S-100 Bus. This Standard defines extensions which allow 16 data bits and 24 address bits while maintaining compatibility with the original bus. The 8/16 fully implements these extensions, and thus can be expected to interface smoothly with these new 16-bit machines.

How it works. . .

The 8/16 chooses a data path width of 8 or 16 bits by sampling the newly-defined bus line over which the "Sixteen Request" signal is sent. All 16-bit processors will use this signal. If it is present, the 8/16 organizes itself as 8K by 16 bits. If it is absent, the 8/16 is 16K by 8 bits wide, just like any other 8-bit memory. Thus data path width selection is automatic.

For your 8-bit machine. . .

To use the 8/16 in your 8-bit machine, all you need to do is set the address of the board on its DIP switches and plug it into your computer. The 8/16 offers "extended addressing" as proposed by the IEEE, which is an alternative to "bank select" in opening adress space beyond 64K. With extended addressing, memory can appear as a smooth, continuous block of up to 16 megabytes, any of which can be accessed at any time. This contrasts with bank select in which blocks of up to 64K are switched on and off by special software. If your system does not provide the 8 extra address lines required for extended addressing, this feature may be disabled and the extra lines ignored at the flip of a switch. The 8/16 is fully static so there is no need for concern over clocks or in applications using DMA. Our current one-year reliability on similar boards is 98% so you can expect years of trouble-free service from your 8/16.

. . .and then 16-bits

This is what the board was designed for. It is guaranteed to run with our 8086 CPU set when the clock is at 8 Mhz. As it was designed to the IEEE Standard, there should be no trouble interfacing to any manufacturer's CPU.

To order. . .

There are two ways to go. Check with your local dealer. If he does not have the 8/16 in stock, he can order it and have it for you in a few days. Or, you can order direct from the factory for $525. Bank cards, CODs okay. There is a 10-day return privilege on factory orders. All boards are guaranteed for one year — both parts and labor. Available from stock.

Write or check reader service card for information about our other 8086 products
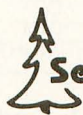
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