

8-Bit Champion

In price-performance, look to Intel's powerful iAPX 88 microprocessor to leave the pack behind. Both now and down the road.

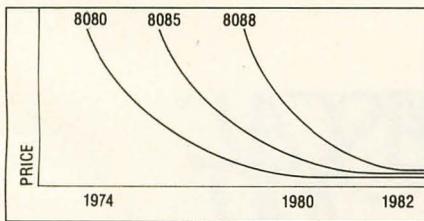
In price-performance races, the iAPX 88 is the one to beat. It's two times faster than the Z-80A and the 6809. And recent benchmark tests show that the iAPX 88, with its 8088 CPU, consistently outperforms its closest competitors in memory efficiency, ease of programming and throughput—by as much as 4 to 1. This is especially important in high-performance tasks such as block moves, character searches, word shifts, and 16-bit multiplies. All critical for applications like word processing, terminal control, scientific instrumentation and industrial control.

And because it's the only 8-bit microprocessor that addresses up to 1 million bytes of memory, the 8088 can take on large programs. Without having to slow down due to overlays or memory bank switching, like other 8-bit processors.

Tough price competitor

In price competition with other 8-bit microprocessors, the iAPX 88 has become the front runner.

You save dramatically on



8-Bit Microprocessor Price Trends

memory chips, too. The iAPX 88 takes—on the average—30% less memory than competitors for the same programs. Then too, it allows you to use lower cost memory to get the same throughput as competitors. With a 5MHz 8088, you can use our 450ns memories and still outperform a 4MHz Z-80 requiring 250ns chips. Depending on

the application, your cost savings here can be substantial.

No contest now with new Intel software

To unleash the new power that the iAPX 88 puts in your hands, it takes more powerful software—

	iAPX 88	Z-80	6809	8085A
Relative performance	1 (5MHz)	0.4 (4MHz)	0.6 (2MHz)	0.3 (3MHz)
16-bit object code compatible	8086	NONE	NONE	NONE
Relative assembly language code required	1	1.5	1.4	1.5
Memory/I/O address space	1 Megabyte/64K	64K/256	64K/NONE	64K/256
Multi/co-processing	YES (with 8087, 8089)	NO	NO	NO
PASCAL PL/M FORTRAN	YES	NO	NO	YES
ICE symbolic debugging	YES	NO	NO	YES

the kind only Intel delivers today. Software that produces object code directly and gives you important extensions that allow you to fine-tune the software to your application.

Software such as PASCAL-88, the block-structured application language rapidly becoming the one most widely used. With our PASCAL-88, you can do direct port I/O and interrupt handling, as well as independent program module compilation. And produce code that runs faster than other, P-code interpreter versions.

Along with PASCAL-88, you get PL/M-88, our systems implementation language, our ANSI-compatible FORTRAN, and our ASM-88 macroassembler. So with more software capability than you've ever had before; now you

can choose the right language tool for each application—whatever it calls for.

Get out in front with complete development support

All the development support tools you need are ready to go today from Intel. Start with the Intellec® Microcomputer Development System. Add to that our ICE-88™ in-circuit emulator. Together they give you CPU emulation in real time, plus features like symbolic debugging, diagnostic commands and program trace capability. With these tools you'll get your products to market faster than by any other route.

Looking down the road

Best of all, with the iAPX 88, your investment in today's solution is protected. Since the 8088 is 100% object-code compatible with the 16-bit 8086—plus its future generations, the iAPX 186 and iAPX 286—you have the industry's only guaranteed headstart on the path to the future. Regardless of which language you're writing in.

So if you want to outdistance the pack, choose the iAPX 88—available today from your local Intel distributor. To get your copy of benchmark results, contact your local Intel sales office or distributor. For more information write Intel Corporation, 3065 Bowers Avenue, Santa Clara, CA 95051. Or call (408) 987-8080.

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