

CHOOSE A COMPUTER FOR ITS MIND NOT ITS BODY.

Big. Lots of muscle. Sexy. All ways we describe the computer of our dreams. By those standards, the humble Reduced Instruction Set Computer (RISC) seems like nothing to write home about.

Unless someone in your family designs computers.

Because in high-level language benchmark tests* on the Berkeley campus, RISC outperformed heavy-weight superminis and micros by as much as four to one. (Incidentally, most benchmarks were written in C, the same language used to implement UNIX.)

Don't be fooled. What RISC lacks in sex appeal it makes up for in shrewdness.

Instead of using raw muscle to speed up memory references, RISC uses logic to eliminate them. Two hundred fifty-six registers, not memory, hold data for processing.

Parameter passing schemes worthy of a doctoral thesis are replaced by simple hardware. A sliding "register window" easily redefines one procedure's temporary data as another's parameters.

And while hundreds of complex instructions on most computers are never used by high-level languages, every super-optimized RISC instruction is. All 31.

But how would RISC perform when it left college and tackled its first real job?



Just fine, we thought. So when we considered architectures for our high-performance UNIX supermini, the Pyramid 90x, we felt quite comfortable taking a RISC.

We combined its large register stack (528 in our case), register window, and reduced instruction set (about half the number in a typical supermini) with some common computer techniques. Like virtual memory, caching and floating point.

The results were uncommon.

Two to four times the performance of popular UNIX hosts on standard benchmarks like Ackermann's Function. In less than half the floor space and at about half the price.

The first commercial implementation of RISC worked as well in the computer room as it did in the classroom.

And proved that you don't have to have brawn to make a good UNIX computer. Just brains.

We'll be glad to send you more information on how RISC works, including a reading list of recent research, if you send your name and address to RISC, Pyramid Technology, 1295 Charleston Road, Mountain View, CA 94043.

Your comments and questions are always welcome. Just call (415) 965-7200.

 **PYRAMID
TECHNOLOGY**

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