

Re: Intel details future Larrabee graphics chip

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- *From:* John Larkin <jjlarkin@xx>
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On Fri, 08 Aug 2008 18:12:14 +0100, Martin Brown
<||||newspam|||@nezumi.demon.co.uk> wrote:

John Larkin wrote:

So what do you think OS's will look like 10 years from now, when even home computers run on chips with 100's of cores? Still one gigantic VMS/Mach/NT descendent running on one CPU, thrashing and piping all over the place, doing everything, still vulnerable to viruses and application bugs, still mixing scheduling and virtual memory management and file systems and running PowerPoint with serial port interrupts?

A lot of IO is concentrated by the bridge hardware these days. And serial ports have had moderate to large FIFOs for about a decade.

XP runs quite happily on my dual core. Vista runs less happily on my new Toshiba portable and I will never recommend using it to anyone.

And those other cores stay idle unless you play a game?

I can see a case for cores allocated to processes with highest demand for resources, but I do not believe it makes any sense to have one thread per core with a properly designed secure operating system.

Umm, excuse me, what do those words mean, "properly designed secure operating system" ?

That's what my wife asked me once when I was stupid enough to use the phrase "too much garlic."

Re: Intel details future Larrabee graphics chip

In exactly the same sense as you claim for your magical hardware architecture a properly designed secure OS would be well secure.

There's nothing magical about lots of cores. Everybody is doing it.

I could be persuaded that Mickeysoft leave 'Doze vulnerable to avoid putting the AV people out of business (that would be anti-competitive).

As James says, don't assume malice when incompetence will do.

Things will never change? We'll always use 1980's OS architectures?

Sadly I suspect that might well be the case until some compelling reason to change comes along. Do you not remember how long the delay was before there were 32bit consumer grade OS's for the early 386 PCs?

What may well happen is that, once hundred-core CPUs are out in the wild, some small group of Linux kernal jocks will spin a version that *can* have file systems, drivers, stacks, and apps assignable to various CPUs. Then it would just be a configuration thing to assign one cpu to run just the OS. That would be dynamite for server apps.

Then Microsoft will scramble to catch up, as usual.

John

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