

Hardware backwards compatibility

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Backwards compatibility applies not only to software. It also applies to hardware. And when hardware goes bad, the software usually takes the blame.

The HLT instruction tells the CPU to shut itself down until the next hardware interrupt. This is a big win on laptops since it reduces power consumption and thereby saves your lap from third-degree burns.

We (well, specifically, Jeff) had this implemented and working in Windows 95 but discovered to our dismay that there were many laptops (some from a major manufacturer) which would lock up unrecoverably if you issued a HLT instruction.

So we had to back it out.

Then the aftermarket HLT programs came out and people wrote, “Stupid Microsoft. Why did they leave this feature out of Windows.” I had to sit quietly while people accused Microsoft of being stupid and/or lazy and/or selfish.

But now the statute of limitations has expired so at least I can say something (though I’m still not going to name that major manufacturer, nice try).

My favorite bad hardware, though, was a system which would crash if the video card was put in an expansion slot too far away from the power supply. Manufacturers will do anything to save a nickel.

And yet Windows 95 ran on almost all of this bad hardware. Why did we go to all this effort to accomodate bad hardware? Consider:

- You have a computer that works okay.
- You go to the store and buy Windows 95.
- You take it home and install it.
- Your computer crashes.

Whom do you blame? Hint: Not your computer manufacturer.

I have more hardware stories, but I have a meeting soon so I'll have to stop here for today.

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