

Re: Seeing VERSIONINFO under Vista?

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In article news:<b6dj535hhse5iah6aacvg5nb7qk8akg8jf@xxxxxxx>, Joseph M. Newcomer wrote:

Remember, the PC was a bootleg project within IBM. It had very limited budget, not the billion dollars or so it takes to create a new fab line!

That proves my point -- IBM had no concept of how successful the PC would be, nor of how it would shape the development of personal computing for at least the next couple of decades. They also had a mainframe business to protect, and no desire to impact upon the marketplace for their mainframe computers. To them, the PC was just something to offer to the mainframe customers who kept asking for personal desktop computers for office tasks, and who might otherwise have gone to another manufacturer.

Of course they didn't want to spend the money to produce a /good/ PC, it wasn't in their own immediate business interests -- but that's why I do blame IBM, which is what we were talking about. Had IBM wanted to do the job well they could have done so.

In the event, they did the job well enough to threaten their own mainframe business anyway, but not well enough to allow them to profit so much from PCs that the loss of mainframe business didn't matter, and not well enough to spare us the pain of intel's crappy chips.

I repeat: I do blame IBM.

The decision to build the PC with off-the-shelf parts was a given. Any major R&D effort would have resulted in an up-front investment that could not have been recovered unless the computer was sold at noncompetitive prices.

I don't accept that. Look how much money the PC has made IBM, over the years, despite being an over-engineered, under-designed piece of rubbish build around a chip designed for a completely different purpose and marketed by a company who had a major financial interest in its NOT being successful. If IBM had designed their own CPU from scratch and built a new factory to produce they'd

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have had their investment back in a few years.

They did not understand how much money was at stake ... that's their fault, and they deserve the blame.

I suspect you've never actually participated in a business in which hardware fabrication played an important role and time-to-market and competitive pricing were relevant considerations.

I have, actually, but that's not important, here. I don't believe time-to-market was considered important. What was important was to be seen to be doing something so that their mainframe customers wouldn't but a shedload of PCs from their competitors. I think those customers would have been happy to wait --- these were the days when nobody ever did get sacked for buying IBM.

The IBM PC was never competitively priced. The original PC cost two or three times the price of a good desktop CP/M system but had just 16k of RAM, ROM BASIC, and a cassette deck (no floppies, no hard drive).

The "in the past" probably refers to the PowerPC chip, which Motorola manufactured under license from IBM. This agreement was reached in the mid-1990s ...

I was thinking more of the System370 on a chip, which was essentially a tailor-made 68000 with a different instruction set ... that predates the PPC by some years.

I didn't mean to suggest that IBM and Motorola had any cross-manufacturing agreements in place at the time that the original PC was developed, just that IBM and Motorola are companies with a fairly common corporate direction ... so it was not inconceivable --- even then --- that they could have reached an agreement had they had the will.

It is not coincidental that the Z80 instruction set and the 8080 instruction set were assembler-compatible. It was a deliberate design decision taken by Zilog.

Naturally.

The bitwise representation of the opcodes were different ...

Not true. The Z80 ran 8080 binaries. The assembler mnemonics and syntax were different but the bitwise operations were identical. The Z80 had more

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instructions and more registers — in particular it had the IX and IY registers which could be used similarly to the HL register (called M in 8080 assembler) to address memory but which also allowed a 1–byte immediate offset.

The 8086 architecture added many things to the 8080 architecture, including the SI and DI registers, which filled the same role as the Z80's IX and IY, which made it really easy to port Z80 code to the 8086 family.

I do not recall major issues on 8080/8086 translation, but the 8085 was a different beast.

From a software POV the 8085 was exactly the same as the 8080 except that it provided additional hardware IRQs (three maskable and one non–maskable, as opposed to one of each on the 8080). From an electronic and circuit–design POV it was rather different (in particular — and like the Z80 — it ran from just +5V supply and didn't require –5V or +12V).

http://en.wikipedia.org/wiki/Intel_8085

But this is not relevant, because IBM at that time labored under the delusion that they would be writing all the application packages anyone would ever need.

One of the stated reasons for choosing the intel chips was the ease with which 3rd–party software could become available. It was all part of IBM's failure to understand the PC's potential that they saw it as just a box to tick on the sales brochure (so that their mainframe customers could satisfy all their needs from IBM, and not have to talk to competitors) and they had no wish to have to get involved in the provision of software or support. They probably thought that ROM basic was enough!

This was not actually a consideration. The key problem was getting enough chips available to meet the need, and Motorola simply refused to consider that level of delivery.

I blame IBM! If they had correctly predicted the number of PCs that they would sell Motorola might have been stunned into activity.

Cheers,
Daniel.

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