## The pentium flaw

Science, Computer Science



Back in June, 1994 the Pentium Flaw was noticed by Intel testers, who had discovered a division error on the Pentium chip. Intel managers didn't see this as a major problem so they kept this from anyone outside their corporation. The nature of this issue was a mathematical problem in their Floating Point Unit (FPU), or the math coprocessor. The Pentium chip was having glitches in calculating large divisions. It wasn't until October 19th, when Dr. Thomas R.

Nicely had revealed the malfunction of the (FPU) trying to do certain calculations. Dr. Nicely was amathematicsteacherat Lynchburg College in Virginia. After running several test on the 486 and Pentium he had pin pointed the error to the Pentium chip. Dr. Nicely contacted Intel and they had confirmed the error, but said they had no reports till then. Intel handled the situation very poorly; they would not return contact to Dr. Nicely, forcing him to write a letter on the internet about the flaw.

Even then Intel continued to consider the problem as minor. The internet was getting loads of articles on the flaw and people were making a joke out of Intel. By not letting the industry know about the Pentium glitch, Intel showed their selves to be untrustworthy to the costumer. There are so many different ways Intel could have handled their mistake. They chose to rather send a measly email of apology from the President of Intel with the wrong address. This infuriated costumers saying it was a fake.

In the Pentium problem (Janeba, 1995) wrote: Intel's policy, when it first publicly admitted the problem around November 28 of 1994, was to replace Pentium chips only for those who could explain their need of high accuracy in

complex calculations. Intel tried to fix the problem still as a minor error and kept delaying the proper fix. By Intel postponing the fix on the (FPU) cost them even moremoneythan what it would have, if they'd answer back right away with an honorable fix. This goes to show you learn from your mistakes.

Eventually in late December Intel declared they would replace all flawed chips upon request. Now Intel has employees who keep up on newsgroups on the internet to see what people are saying about Intel; and they now conduct a better follow up with unsatisfied costumers. I believelntel did handle this publicity very incorrectly. For being a well-known corporation they didn't act like it. When they first got word of Dr. Nicely and his discovery on the flaw, Intel should've immediately contacted the professor with any apology and offered to replace the bad one.

If this procedure would have been done the professor would have been happy, and never have written what he did. Then customers possibly wouldn't have known of the flaw. In my opinion of the question, what would happen today if this same problem occurred? I don't think Intel would take the same route they did back then. Intel is a well-established corporation and I believe they would act faithfully with great hast, to solve the problem. I think they have a greater appreciation of their customers now, since this whole Pentium Flaw hit the fan.