
Subject: Re: Floating Point Bug on Intel Pentium CPUs

Posted by [murthy](#) on Wed, 23 Nov 1994 19:19:56 GMT

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Gregory D. Nowicki (nowicki@tardis.larc.nasa.gov) wrote:

: In article <[3avsus\\$22n@spool.cs.wisc.edu](mailto:3avsus$22n@spool.cs.wisc.edu)>, Liam Gumley <liamg@ssec.wisc.edu> writes:

: >This is not strictly IDL related, but may affect IDL users on Pentium

: >platforms who run complicated models. Recent discussion in the

: >comp.sys.intel newsgroup has focussed on the discovery of a bug

: >in the floating point unit on Intel Pentium CPUs. The bug is evident

: >during divide operations. The following code reportedly will show the

: >bug. It should give zero (or near enough to it), but on the Pentium

: >it returns z = 256.

: >

: >x = 4195835.

: >y = 3145727.

: >z = x - (x/y)*y

: >

: >Apparently some kind of chip replacement strategy is being considered

: >by Intel. For more details, tune to comp.sys.intel

: >

: >Cheers,

: >Liam.

: >liamg@ssec.wisc.edu

: >

: Above problem only there if using DOUBLE precision math, (DOUBLE in IDL,

: real*8 in Fortran, double in C, etc.)

: -Greg

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: /* nowicki@tardis.larc.nasa.gov | My opinions and mine alone . . . */

Not true. I get it using plain old FLOATs on my P90.

Jayant

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