Subject: Re: Floating Point Bug on Intel Pentium CPUs
Posted by nowicki on Wed, 23 Nov 1994 18:43:54 GMT
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In article <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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