Subject: Re: IDL 6.3 for Mac OS X on Intel Now Available
Posted by Foldy Lajos on Thu, 13 Jul 2006 19:00:44 GMT

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Hi,

a little FL promotion :-)

On Thu, 13 Jul 2006, JD Smith wrote:

> it's *FAST*. Here's the breakdown for some portable OSX systems,
> following along the tests at:
>
>   http://idl.tamu.edu/mac_bench.php
>
> System   TT3 (AVG)   TT3 (GEOM) JD_TEST
> ===
==================
> PB (G4 1.67GHz,   2GB, PPC IDL native)   3.20   .13   1.86
> MBP(CoreDuo 2GHz, 1GB, PPC IDL via Rosetta) 3.45   .13   3.02
> MBP(CoreDuo 2GHz, 1GB, i386 IDL native)   1.69   .06   0.32

  FL (64 bit linux) on a dual 1.8GHz Opteron   0.57   .02   0.13

not bad :-)

for FL, TT3 includes assoc test (0.02 s), and running JD_TEST as

 a=randomu(sd,100L*100000l)
 t=systime(1) & a=sqrt(a)/(a>0.5) & print,systime(1)-t

(!CPU.TPOOL_MIN_ELTS is 0 by default in FL, because FL uses different
limits for different operations (eg 100000 for addition, 25000 for sin))

and another good news: the new Intel Core 2 processors will have more
SSE/SSE2 execution units, so FL will be even faster.

regards,
lajos

> All times in seconds.
>
> PB == PowerBook
> MBP == MacBook Pro (thanks to Jason Harris for a temporary loan)
> TT3 == Time Test 3, run under IDL 6.3, demo mode.
> AVG == average

> GEOM == geometric mean
> JD_TEST ==
>   IDL> a=randomu(sd,100L*!CPU.TPOOL_MIN_ELTS)
>   IDL> t=systime(1) & a=sqrt(a)/(a>0.5) & print,systime(1)-t
>
> So, for things which are limited by a single processor (TIME_TEST3),
> we're roughly ~2x faster than a G4 PB (which was a slow IDL system, to
> be fair), with only 20% more clock speed.
>
> But, the real fun comes when running big array manipulations, like
> JD_TEST, where the dual Core Duo processors can flex their muscles.
> Here the speedup is closer to 6x, which is almost too good to believe.
> This will of course depend on which operations you use, but testing a
> variety of arithmetic ones, I found speedups of anywhere from 2-7 on
> arrays large enough to make multi-threading effective.
>
> The MBP (a portable system) is now comparable in speed to a quad-processor
> G5, and (I suspect) similar dual-processor Linux/Windows desktops. Very
> respectable. Woeful OSX/IDL performance, R.I.P.
>
> JD
>
>