Subject: Impressions of IDL on PowerMac vs. Sparc
Posted by Jeff Bloch on Tue, 31 Jan 1995 18:33:22 GMT
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We have just started playing with IDL on a Power Mac (Quadra 650 with Power Mac upgrade card, (6100/66 equivalent) with 40MB of memory) and comparing it to IDL running on a Sparc LX. We have found some very interesting speed differences. Simple large array operations are a factor of two FASTER on the Power Mac than on the Sparc, yet transcendental function array operations (sin, asin, tan, etc) appear to be a factor of two SLOWER on the Power Mac. Array operations using sqrt() also appear to be faster on the Power Mac. Operations using the convol() function are also much faster on the Power Mac. On the other hand, running the standard IDL demo on each shows the Power Mac running the demo ~40% slower. The Sparc LX did not page or swap during the tests.

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Subject: Re: Impressions of IDL on PowerMac vs. Sparc
Posted by walsteyn on Thu, 02 Feb 1995 20:52:44 GMT
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In <Pine.CVX.3.90.950131111953.24952A-100000@sstcx1.lanl.gov> Jeff Bloch <jbloch@sstcx1.lanl.gov> writes:

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> Mac upgrade card, (6100/66 equivalent) with 40MB of memory) and comparing it
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> differences. Simple large array operations are a factor of two FASTER on the
> Power Mac than on the Sparc, yet transcendental function array operations
> (sin, asin, tan, etc) appear to be a factor of two SLOWER on the Power Mac.

You might get a higher speed on the PowerMac if you would install
a new floating point math library (made by Apple). It's called MathLib.
Ask or read about it in a comp.sys.mac.* newsgroup. (I don't know the
details as I don't have a PowerMac. The only thing I do know is that
the MathLib in ROM is ``slow'' when it comes to transcendental functions...
The software patch, i.e., the MathLib extension, solves the speed problem.)

Good luck,
Fred. (walsteyn@fys.ruu.nl)

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> -- --------------
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Subject: Re: Impressions of IDL on PowerMac vs. Sparc
Posted by gurman on Thu, 09 Feb 1995 19:05:24 GMT
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In article <walsteyn.791758364@ruund3.fys.ruu.nl>, walsteyn@fys.ruu.nl
(Fred Walsteijn) wrote:

> In <Pine.CVX.3.90.950131111953.24952A-100000@sstcx1.lanl.gov> Jeff Bloch
<jbloch@sstcx1.lanl.gov> writes:
>
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> Good luck,
> Fred. (walsteyn@fys.ruu.nl)

   Another determinant of speed in math-dependant operations on PowerMacs

is the presence (and size) of level 2 cache. Does the Apple upgrade card come with an L2 cache card?

Joe Gurman

--
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