
Subject: Re: IDL time test with a PowerMac G4
Posted by [Mark Hadfield](#) on Fri, 08 Oct 1999 07:00:00 GMT
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Joseph B. Gurman <gurman@gsfc.nasa.gov> wrote in message
news:gurman-0710991007180001@barkochba.nascom.nasa.gov...

> ...
> Since the G4's beat Pentiums running Windoze hands-down in IDL
> ...

That's "Windows". But I digress. Pavel's original post quoted the following
for time_test2

```
> IDL> time_test2
> |TIME_TEST2 performance for IDL 5.2:
> |   OS_FAMILY=MacOS, OS=MacOS, ARCH=PowerMac
> | Mon Oct  4 15:36:29 1999
>   1   0.400000 Empty For loop,   2000000 times
>   2   0.166667 Call empty procedure (1 param) 100,000 times
>   3   0.066667 Add 100,000 integer scalars and store
>   4   0.083333 25,000 scalar loops each of 5 ops, 2 =, 1 if)
>   5   0.016667 Mult 512 by 512 byte by constant and store, 10 times
>   6   0.050000 Shift 512 by 512 byte and store, 100 times
>   7   0.083333 Add constant to 512 x 512 byte array and store, 50
times
>   8   0.116667 Add two 512 by 512 byte images and store, 30 times
>   9   0.266667 Mult 512 by 512 floating by constant and store, 30
times
>  10   0.133333 Add constant to 512 x 512 floating and store, 40
times
>  11   0.666667 Add two 512 by 512 floating images and store, 30
times
>  12   0.0500001 Generate 225000 random numbers
>  13   0.0666666 Invert a 150 by 150 random matrix
>  14   0.0166667 LU Decomposition of a 150 by 150 random matrix
>  15   0.116667 Transpose 256 x 256 byte, FOR loops
>  16   0.116667 Transpose 256 x 256 byte, row and column ops x 10
>  17   0.0166668 Transpose 256 x 256 byte, TRANSPOSE function x 10
>  18   0.200000 Log of 100,000 numbers, FOR loop
>  19   0.0333333 Log of 100,000 numbers, vector ops
>  20   0.150000   131072 point forward plus inverse FFT
>  21   0.183333 Smooth 512 by 512 byte array, 5x5 boxcar, 10 times
>  22   0.0166667 Smooth 512 by 512 floating array, 5x5 boxcar, 2
times
>  23   1.71667 Write and read 512 by 512 byte array x 20
>  4.73333=Total Time,   0.096772401=Geometric mean,   23 tests.
```

Here's the output from my PC (Compaq Deskpro 400 MHz Pentium II, 256 MB RAM,

Windows NT 4.0)

|TIME_TEST2 performance for IDL 5.2:

| OS_FAMILY=Windows, OS=Win32, ARCH=x86

| Fri Oct 08 10:17:32 1999

1	0.140000	Empty For loop,	2000000	times
2	0.131000	Call empty procedure (1 param)	100,000	times
3	0.100000	Add 100,000 integer scalars and store		
4	0.0900000	25,000 scalar loops each of 5 ops, 2 =, 1 if)		
5	0.0500001	Mult 512 by 512 byte by constant and store,	10	times
6	0.240000	Shift 512 by 512 byte and store,	100	times
7	0.171000	Add constant to 512 x 512 byte array and store,	50	times
8	0.180000	Add two 512 by 512 byte images and store,	30	times
9	0.381000	Mult 512 by 512 floating by constant and store,	30	times
10	0.300000	Add constant to 512 x 512 floating and store,	40	times
11	0.611000	Add two 512 by 512 floating images and store,	30	times
12	0.0300000	Generate 225000 random numbers		
13	0.0900000	Invert a 150 by 150 random matrix		
14	0.0200000	LU Decomposition of a 150 by 150 random matrix		
15	0.100000	Transpose 256 x 256 byte, FOR loops		
16	0.130000	Transpose 256 x 256 byte, row and column ops x 10		
17	0.0599999	Transpose 256 x 256 byte, TRANSPOSE function x 10		
18	0.190000	Log of 100,000 numbers, FOR loop		
19	0.0300000	Log of 100,000 numbers, vector ops		
20	0.391000	131072 point forward plus inverse FFT		
21	0.340000	Smooth 512 by 512 byte array, 5x5 boxcar,	10	times
22	0.0400000	Smooth 512 by 512 floating array, 5x5 boxcar,	2	times
23	0.120000	Write and read 512 by 512 byte array x 20		
3.93500=Total Time, 0.11991918=Geometric mean, 23 tests.				

The PC is faster overall, though some of the floating-point intensive operations are slower (e.g. 9, 20). Hardly "hands down".

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