SPEC® CINT2006 Result

Sun Microsystems

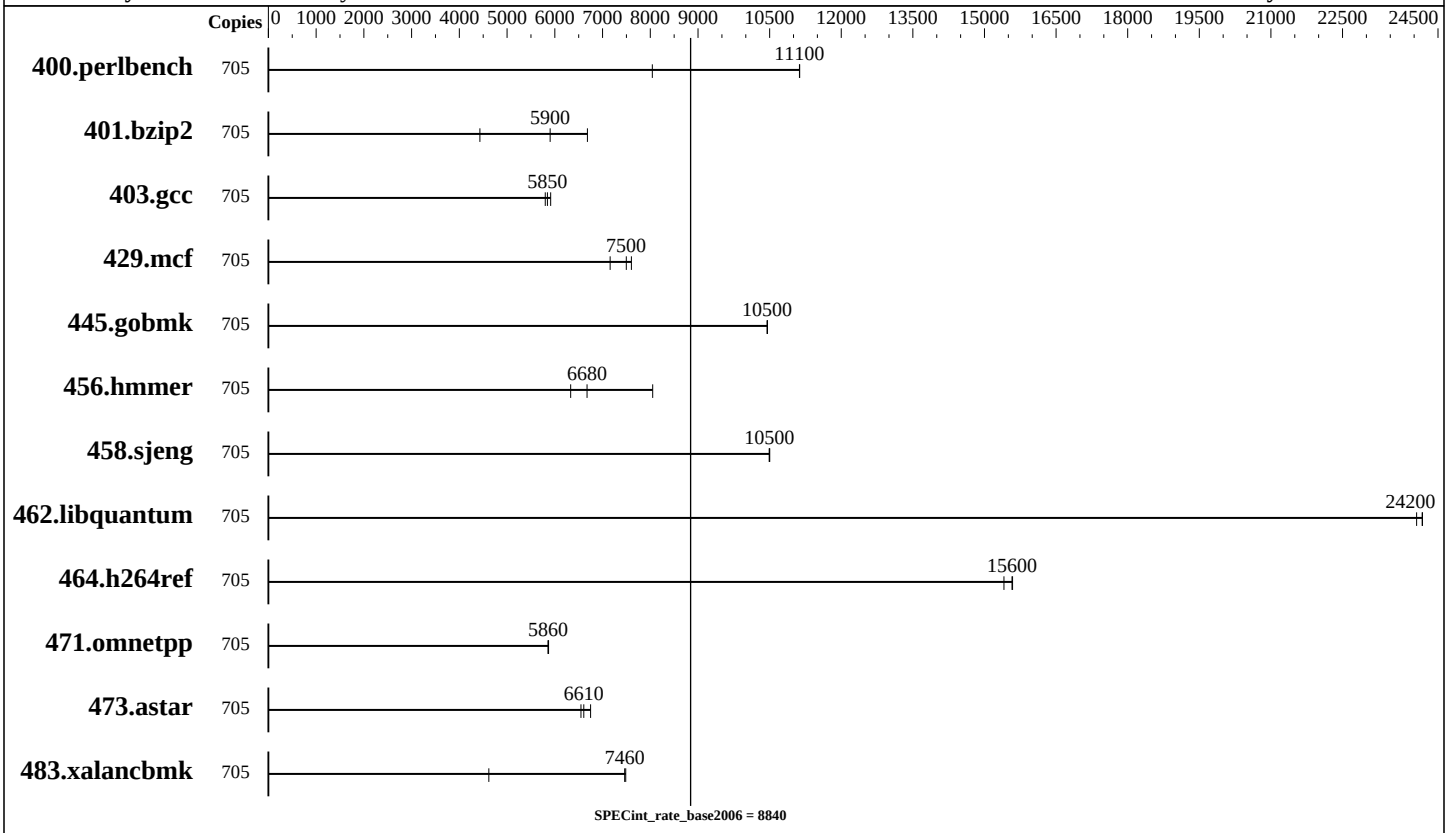
Sun Blade 6048 Chassis (48 x X6440 Blades)

SPECint®_rate2006 = Not Run

SPECint_rate_base2006 = 8840

CPU2006 license: 6
Test sponsor: Sun Microsystems
Tested by: Sun Microsystems

Test date: Jun-2009
Hardware Availability: Jan-2009
Software Availability: Jun-2009



Hardware

CPU Name:	AMD Opteron 8384
CPU Characteristics:	
CPU MHz:	2700
FPU:	Integrated
CPU(s) enabled:	768 cores, 192 chips, 4 cores/chip
CPU(s) orderable:	4 to 192 chips
Primary Cache:	64 KB I + 64 KB D on chip per core
Secondary Cache:	512 KB I+D on chip per core
L3 Cache:	6 MB I+D on chip per chip
Other Cache:	None
Memory:	1536 GB (16*2GB DDR2-667 CL5 ECC Reg per blade)
Disk Subsystem:	48 x 250GB 7200RPM SATA via NFS
Other Hardware:	See additional details below

Software

Operating System:	OpenSolaris 2008.11
Compiler:	Sun Studio 12 Update 1
Auto Parallel:	No
File System:	NFSv3
System State:	Default
Base Pointers:	32-bit
Peak Pointers:	Not Applicable
Other Software:	MicroQuill SmartHeap Library 9.01 for x64

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Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	705	856	8040	619	11100	**619**	**11100**							
401.bzip2	705	1535	4430	**1153**	**5900**	1018	6680							
403.gcc	705	**971**	**5850**	960	5910	979	5800							
429.mcf	705	**858**	**7500**	846	7600	898	7160							
445.gobmk	705	707	10500	708	10400	**708**	**10500**							
456.hmmer	705	**985**	**6680**	1039	6330	817	8050							
458.sjeng	705	**813**	**10500**	813	10500	812	10500							
462.libquantum	705	607	24100	**604**	**24200**	604	24200							
464.h264ref	705	1013	15400	**1002**	**15600**	1001	15600							
471.omnetpp	705	752	5860	751	5870	**752**	**5860**							
473.astar	705	756	6550	**749**	**6610**	733	6750							
483.xalancbmk	705	1053	4620	**652**	**7460**	650	7490							

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

Submit Notes

```
The config file option 'submit' was used, along with submit.pl to
distribute jobs to all Sun Blade X6440 server modules.
It also uses 'pbind' to bind processes to cores.
```

Operating System Notes

```
ulimit -s 131072  (shell): increases stack
/etc/system parameters on all nodes
    tune_t_fsflushr=10
    autoup=900
    set lpg_alloc_prefer=1
  The following /etc/system settings were changed on the node that was running runspec:
    set maxusers=2048
    set rlim_fd_cur=1000
```

Platform Notes

```
Sun Blade 6048 Chassis may be ordered with up to 48 Sun Blade server modules.
Test configuration contains 48 Sun Blade X6440 server modules. Each
Sun Blade X6440 server modules has 4 chips.
Default BIOS settings used.
```

General Notes

```
The NFS server used was a Sun Fire X4540 containing 48 x 250GB 7200RPM SATA disks.
Connections to the clients were via gigabit ethernet.
```

Base Compiler Invocation

C benchmarks:
```
cc
```

C++ benchmarks:
```
CC
```

Base Portability Flags

400.perlbench: `-DSPEC_CPU_SOLARIS_IA32`
403.gcc: `-DSPEC_CPU_SOLARIS`
462.libquantum: `-DSPEC_CPU_SOLARIS`
483.xalancbmk: `-DSPEC_CPU_SOLARIS`

Base Optimization Flags

C benchmarks:
```
-fast -xipo=2 -xpagesize=2M -M /usr/lib/ld/map.bssalign
```

C++ benchmarks:
```
-fast -xipo=2 -xpagesize=2M -xvector=simd -xalias_level=compatible
-L/data1/SmartHeap_9/lib -R/data1/SmartHeap_9/lib -lsmartheap
-library=stlport4
```

Base Other Flags

C benchmarks:
```
-V -# -xjobs=16
```

C++ benchmarks:
```
-verbose=diags,version -xjobs=16
```

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Sun-OpenSolaris-Studio-x86_64.html
http://www.spec.org/cpu2006/flags/Sun-Blade-6048.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Sun-OpenSolaris-Studio-x86_64.xml
http://www.spec.org/cpu2006/flags/Sun-Blade-6048.xml

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

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