SPEC® CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire X2200 M2

SPECint®_rate2006 = 51.1
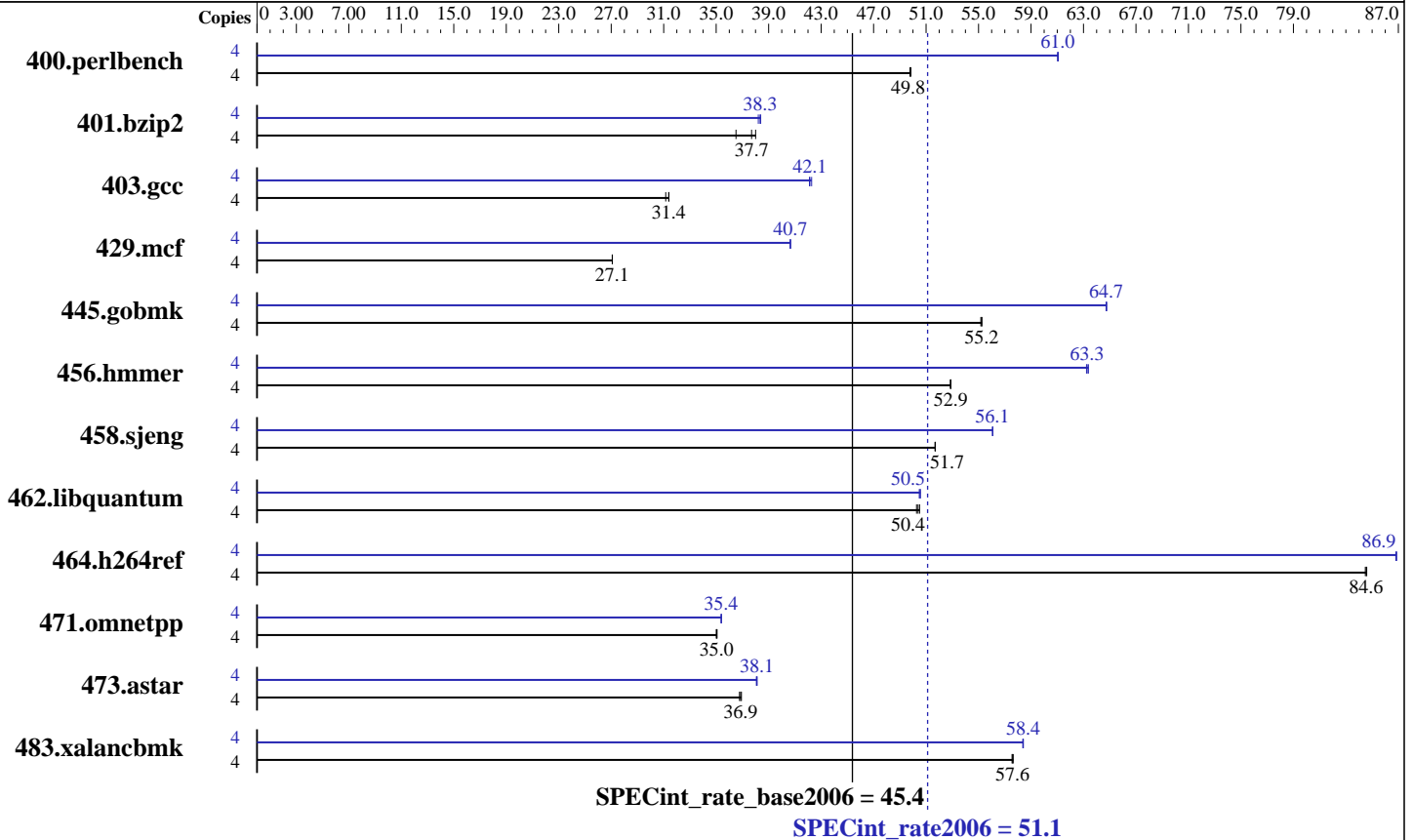
SPECint_rate_base2006 = 45.4

CPU2006 license: 6　　　　　　　　　　　　　　　　　　　　　**Test date:** Apr-2007
Test sponsor: Sun Microsystems　　　　　　　　　　　　**Hardware Availability:** Feb-2007
Tested by: Sun Microsystems　　　　　　　　　　　　　　**Software Availability:** Aug-2006

Copies		
400.perlbench	4	61.0
	4	49.8
401.bzip2	4	38.3
	4	37.7
403.gcc	4	42.1
	4	31.4
429.mcf	4	40.7
	4	27.1
445.gobmk	4	64.7
	4	55.2
456.hmmer	4	63.3
	4	52.9
458.sjeng	4	56.1
	4	51.7
462.libquantum	4	50.5
	4	50.4
464.h264ref	4	86.9
	4	84.6
471.omnetpp	4	35.4
	4	35.0
473.astar	4	38.1
	4	36.9
483.xalancbmk	4	58.4
	4	57.6

SPECint_rate_base2006 = 45.4

SPECint_rate2006 = 51.1

Hardware
CPU Name:	AMD Opteron 2220
CPU Characteristics:	
CPU MHz:	2800
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip
CPU(s) orderable:	1,2 chips
Primary Cache:	64 KB I + 64 KB D on chip per core
Secondary Cache:	1 MB I+D on chip per core
L3 Cache:	None
Other Cache:	None
Memory:	16 GB (8x2GB, DDR2-667 CL5 ECC Reg Dual Rank)
Disk Subsystem:	SATA, 250 GB,7200 RPM
Other Hardware:	None

Software
Operating System:	Red Hat Enterprise Linux AS release 4 Update 5
Compiler:	QLogic PathScale Compiler Suite, Release 2.5
Auto Parallel:	No
File System:	ext3
System State:	Multi-user, run level 3
Base Pointers:	32/64-bit
Peak Pointers:	32/64-bit
Other Software:	MicroQuill's SmartHeap 8.0 32-bit Library for Linux

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire X2200 M2

SPECint_rate2006 =   51.1

SPECint_rate_base2006 = 45.4

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

Test date: Apr-2007
Hardware Availability: Feb-2007
Software Availability: Aug-2006

Results Table

Benchmark	Base Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Peak Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	784	49.8	**785**	**49.8**	785	49.8	4	640	61.1	640	61.0	**640**	**61.0**
401.bzip2	4	1016	38.0	**1024**	**37.7**	1057	36.5	4	1010	38.2	**1007**	**38.3**	1005	38.4
403.gcc	4	1026	31.4	**1026**	**31.4**	1034	31.2	4	765	42.1	**764**	**42.1**	762	42.3
429.mcf	4	**1347**	**27.1**	1347	27.1	1347	27.1	4	897	40.7	898	40.6	**897**	**40.7**
445.gobmk	4	759	55.3	**760**	**55.2**	760	55.2	4	648	64.8	**648**	**64.7**	648	64.7
456.hmmer	4	706	52.9	**706**	**52.9**	706	52.9	4	589	63.4	**590**	**63.3**	590	63.2
458.sjeng	4	936	51.7	**936**	**51.7**	936	51.7	4	863	56.1	**863**	**56.1**	863	56.1
462.libquantum	4	1641	50.5	1649	50.3	**1645**	**50.4**	4	**1640**	**50.5**	1642	50.5	1639	50.6
464.h264ref	4	1046	84.6	**1047**	**84.6**	1048	84.5	4	1020	86.8	1019	86.9	**1019**	**86.9**
471.omnetpp	4	713	35.1	714	35.0	**714**	**35.0**	4	**706**	**35.4**	706	35.4	707	35.4
473.astar	4	764	36.8	**762**	**36.9**	760	36.9	4	737	38.1	**737**	**38.1**	738	38.1
483.xalancbmk	4	479	57.6	**479**	**57.6**	480	57.6	4	472	58.4	**473**	**58.4**	473	58.4

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

General Notes

    taskset utility used to bind CPU(s) to processes
    Default BIOS settings was used.

Base Compiler Invocation

C benchmarks:
      pathcc

C++ benchmarks:
      pathCC

Base Portability Flags

      400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
          401.bzip2: -DSPEC_CPU_LP64
            403.gcc: -DSPEC_CPU_LP64
            429.mcf: -DSPEC_CPU_LP64
          445.gobmk: -DSPEC_CPU_LP64
          456.hmmer: -DSPEC_CPU_LP64
          458.sjeng: -DSPEC_CPU_LP64
      462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
        464.h264ref: -DSPEC_CPU_LP64
      483.xalancbmk: -DSPEC_CPU_LINUX

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire X2200 M2

SPECint_rate2006 =   51.1

SPECint_rate_base2006 = 45.4

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

Test date: Apr-2007
Hardware Availability: Feb-2007
Software Availability: Aug-2006

Base Optimization Flags

C benchmarks:
```
-Ofast
```

C++ benchmarks:
```
-Ofast -m32 -L/data1/SmartHeap_8smp/lib -lsmartheap_smp
```

Base Other Flags

C benchmarks:
```
-IPA:max_jobs=4
```

C++ benchmarks:
```
-IPA:max_jobs=4
```

Peak Compiler Invocation

C benchmarks:
```
pathcc
```

C++ benchmarks:
```
pathCC
```

Peak Portability Flags

```
400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
   401.bzip2: -DSPEC_CPU_LP64
   445.gobmk: -DSPEC_CPU_LP64
   456.hmmer: -DSPEC_CPU_LP64
    458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
  464.h264ref: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LINUX
```

Peak Optimization Flags

C benchmarks:

```
400.perlbench: -fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -Ofast
```

```
   401.bzip2: -O3 -LNO:ou_prod_max=10 -OPT:Ofast -OPT:alias=disjoint
```

Sun Microsystems

Sun Fire X2200 M2

SPECint_rate2006 =   51.1

SPECint_rate_base2006 = 45.4

CPU2006 license: 6

Test sponsor: Sun Microsystems

Tested by: Sun Microsystems

Test date: Apr-2007

Hardware Availability: Feb-2007

Software Availability: Aug-2006

Peak Optimization Flags (Continued)

403.gcc: `-fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -m32 -O3 -OPT:Ofast`

429.mcf: `-m32 -O2 -ipa -L/data1/SmartHeap_8smp/lib -lsmartheap_smp`

445.gobmk: `-fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3 -OPT:alias=disjoint -LNO:simd=0 -LNO:minvariant=off -WOPT:retype_expr=on`

456.hmmer: `-O2 -OPT:alias=disjoint -WOPT:aggstr=0 -CG:cflow=0`

458.sjeng: `-fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3 -IPA:plimit=50000 -IPA:pu_reorder=2`

462.libquantum: `-O3 -ipa -CG:local_fwd_sched=on -IPA:space=1000`

464.h264ref: `-fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -O3 -IPA:plimit=20000 -OPT:alias=disjoint -LNO:prefetch=0`

C++ benchmarks:

471.omnetpp: `-Ofast -IPA:pu_reorder=2 -CG:gcm=off -m32 -L/data1/SmartHeap_8smp/lib -lsmartheap_smp`

473.astar: `-fb_create fbdata(pass 1) -fb_opt fbdata(pass 2) -Ofast -m32 -L/data1/SmartHeap_8smp/lib -lsmartheap_smp`

483.xalancbmk: `-Ofast -m32 -OPT:unroll_times_max=8 -L/data1/SmartHeap_8smp/lib -lsmartheap_smp`

Peak Other Flags

C benchmarks:
`-IPA:max_jobs=4`

C++ benchmarks:
`-IPA:max_jobs=4`

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.27.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.27.xml

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems

Sun Fire X2200 M2

SPECint_rate2006 =   51.1

SPECint_rate_base2006 = 45.4

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

Test date: Apr-2007
Hardware Availability: Feb-2007
Software Availability: Aug-2006

SPEC and SPECint are registered trademarks of the Standard Performance
Evaluation Corporation. All other brand and product names appearing in
this result are trademarks or registered trademarks of their respective
holders.

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

Tested with SPEC CPU2006 v1.0.
Report generated on Tue Jul 22 11:34:30 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 1 May 2007.