SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

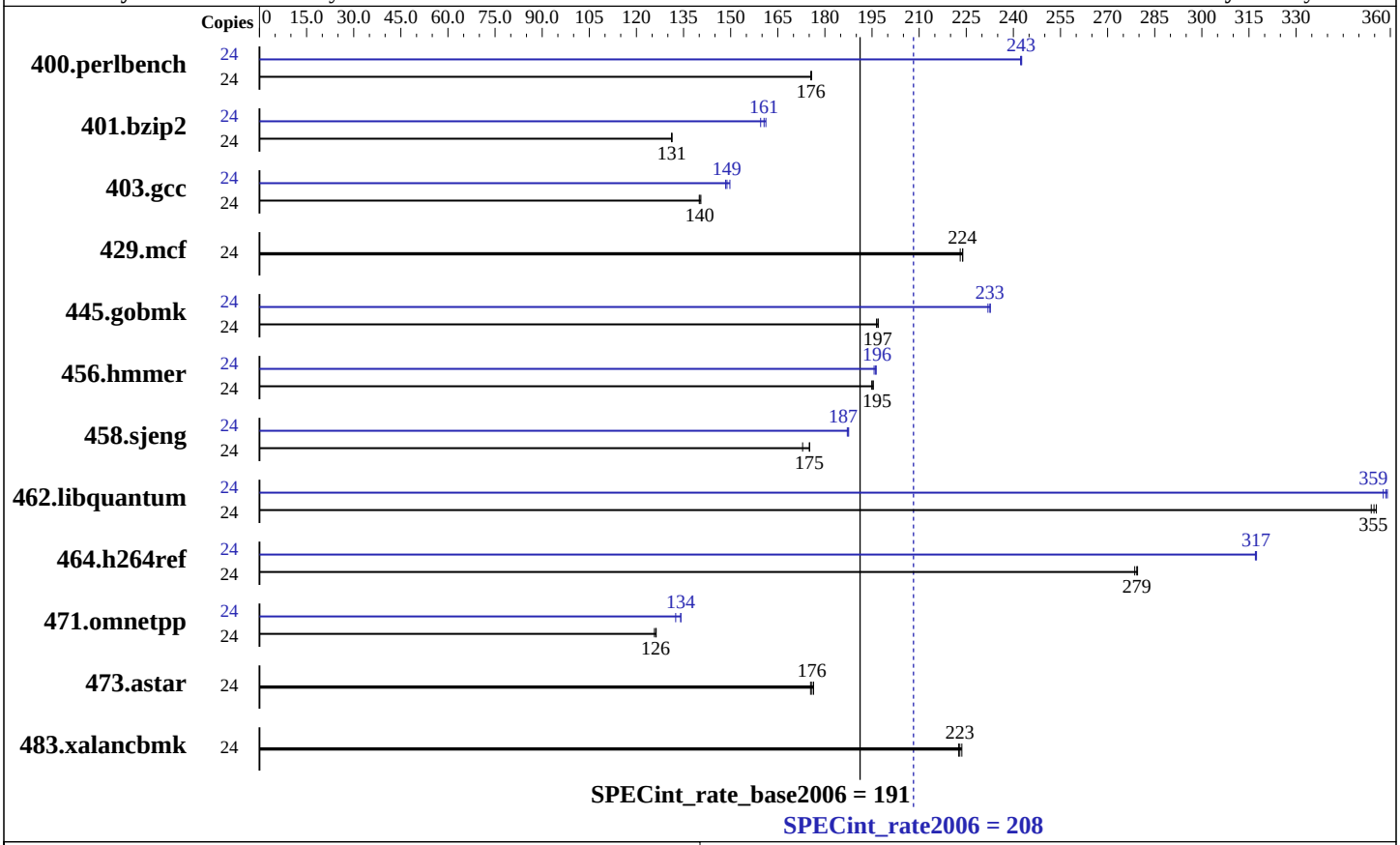
Sun Microsystems
Sun Fire E2900

SPECint®_rate2006 = 208

SPECint_rate_base2006 = 191

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

Test date: Feb-2007
Hardware Availability: Apr-2007
Software Availability: May-2007



Hardware

CPU Name:	UltraSPARC IV+
CPU Characteristics:	
CPU MHz:	1950
FPU:	Integrated
CPU(s) enabled:	24 cores, 12 chips, 2 cores/chip
CPU(s) orderable:	4, 8, or 12 chips
Primary Cache:	64 KB I + 64 KB D on chip per core
Secondary Cache:	2 MB I+D on chip per chip
L3 Cache:	32 MB I+D off chip per chip
Other Cache:	None
Memory:	96 GB, 16-way interleaved (96 x 1 GB)
Disk Subsystem:	2xSCSI 73GB 10k RPM MAP3735N
Other Hardware:	None

Software

Operating System:	Solaris 10 6/06
Compiler:	Sun Studio 12 (pre-release build 40)
Auto Parallel:	No
File System:	ufs
System State:	Default
Base Pointers:	32-bit
Peak Pointers:	32-bit
Other Software:	None

SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire E2900

SPECint_rate2006 = 208

SPECint_rate_base2006 = 191

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

Test date: Feb-2007
Hardware Availability: Apr-2007
Software Availability: May-2007

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	24	1336	176	**1335**	**176**	1334	176	24	**967**	**243**	968	242	966	243
401.bzip2	24	**1764**	**131**	1764	131	1766	131	24	1437	161	1452	160	**1442**	**161**
403.gcc	24	1380	140	1375	141	**1378**	**140**	24	1290	150	**1298**	**149**	1302	148
429.mcf	24	981	223	**978**	**224**	978	224	24	981	223	**978**	**224**	978	224
445.gobmk	24	1282	196	1278	197	**1279**	**197**	24	1086	232	**1083**	**233**	1082	233
456.hmmer	24	1146	195	**1147**	**195**	1149	195	24	1141	196	1144	196	**1142**	**196**
458.sjeng	24	**1659**	**175**	1658	175	1680	173	24	1552	187	**1550**	**187**	1548	188
462.libquantum	24	1399	356	**1402**	**355**	1405	354	24	1385	359	1390	358	**1387**	**359**
464.h264ref	24	1906	279	**1902**	**279**	1900	280	24	1673	317	1675	317	**1674**	**317**
471.omnetpp	24	**1189**	**126**	1193	126	1188	126	24	1132	132	1118	134	**1119**	**134**
473.astar	24	**958**	**176**	955	176	960	175	24	**958**	**176**	955	176	960	175
483.xalancbmk	24	744	223	741	224	**743**	**223**	24	744	223	741	224	**743**	**223**

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

Operating System Notes

```
Processes were bound to cores using "submit" and "pbind".

"ulimit -s 131072" was set
   Allows 131072K for the stack, remainder for heap

/etc/system parameters:
   tune_t_fsflushr=1
      Controls how many seconds elapse between runs of the
      page flush daemon, fsflush.
   autoup=900
      Causes pages older than the listed number of seconds to
      be written by fsflush.
```

Base Compiler Invocation

C benchmarks:
```
cc
```

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

Base Portability Flags

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

Base Optimization Flags

C benchmarks:
-g -fast -xipo=2 -xpagesize=4M -xprefetch_level=2 -xalias_level=std

C++ benchmarks:
-g0 -library=stlport4 -xdepend -fast -xipo=2 -xpagesize=4M
-xprefetch_level=1 -xalias_level=compatible -lfast

Base Other Flags

C benchmarks:
-xjobs=24 -V -#

C++ benchmarks:
-xjobs=24 -verbose=diags,version

Peak Compiler Invocation

C benchmarks:
cc

C++ benchmarks:
CC

Peak Portability Flags

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

Peak Optimization Flags

C benchmarks:

400.perlbench: `-g -xprofile=collect:./feedback`(pass 1)
`-xprofile=use:./feedback`(pass 2) `-fast -xpagesize=4M -xalias_level=std -Xc -xipo=2 -xrestrict -lfast`

401.bzip2: `-g -xprofile=collect:./feedback`(pass 1)
`-xprofile=use:./feedback`(pass 2) `-fast -xpagesize=4M -xalias_level=strong`

403.gcc: `-g -xprofile=collect:./feedback`(pass 1)
`-xprofile=use:./feedback`(pass 2) `-fast -xpagesize=4M -xipo=2 -xalias_level=std -xprefetch_level=2`

429.mcf: `basepeak = yes`

445.gobmk: `-g -xprofile=collect:./feedback`(pass 1)
`-xprofile=use:./feedback`(pass 2) `-fast -xpagesize=4M -xalias_level=std -xrestrict`

456.hmmer: `-g -xprofile=collect:./feedback`(pass 1)
`-xprofile=use:./feedback`(pass 2) `-fast -xpagesize=4M -xipo=2 -xalias_level=strong`

458.sjeng: `-g -xprofile=collect:./feedback`(pass 1)
`-xprofile=use:./feedback`(pass 2) `-fast -xpagesize=4M -xipo=2`

462.libquantum: `-g -xprofile=collect:./feedback`(pass 1)
`-xprofile=use:./feedback`(pass 2) `-fast -xpagesize=4M -xprefetch_level=2 -xipo=2`

464.h264ref: `-g -xprofile=collect:./feedback`(pass 1)
`-xprofile=use:./feedback`(pass 2) `-fast -xpagesize=4M -xipo=2 -xalias_level=std -ll2amm`

C++ benchmarks:

471.omnetpp: `-g0 -library=stlport4 -xdepend`
`-xprofile=collect:./feedback`(pass 1)
`-xprofile=use:./feedback`(pass 2) `-fast -xpagesize=4M -xipo=2 -Qoption cg -Qlp-av=0 -lfast`

473.astar: `basepeak = yes`

483.xalancbmk: `basepeak = yes`

Peak Other Flags

C benchmarks:
```
-xjobs=24 -V -#
```

C++ benchmarks:
```
-xjobs=24 -verbose=diags,version
```

The flags file that was used to format this result can be browsed at
`http://www.spec.org/cpu2006/flags/Sun-Solaris-Studio12.20090714.01.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/Sun-Solaris-Studio12.20090714.01.xml`

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 v1.0.1.
Report generated on Tue Jul 22 11:59:57 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 17 April 2007.