SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

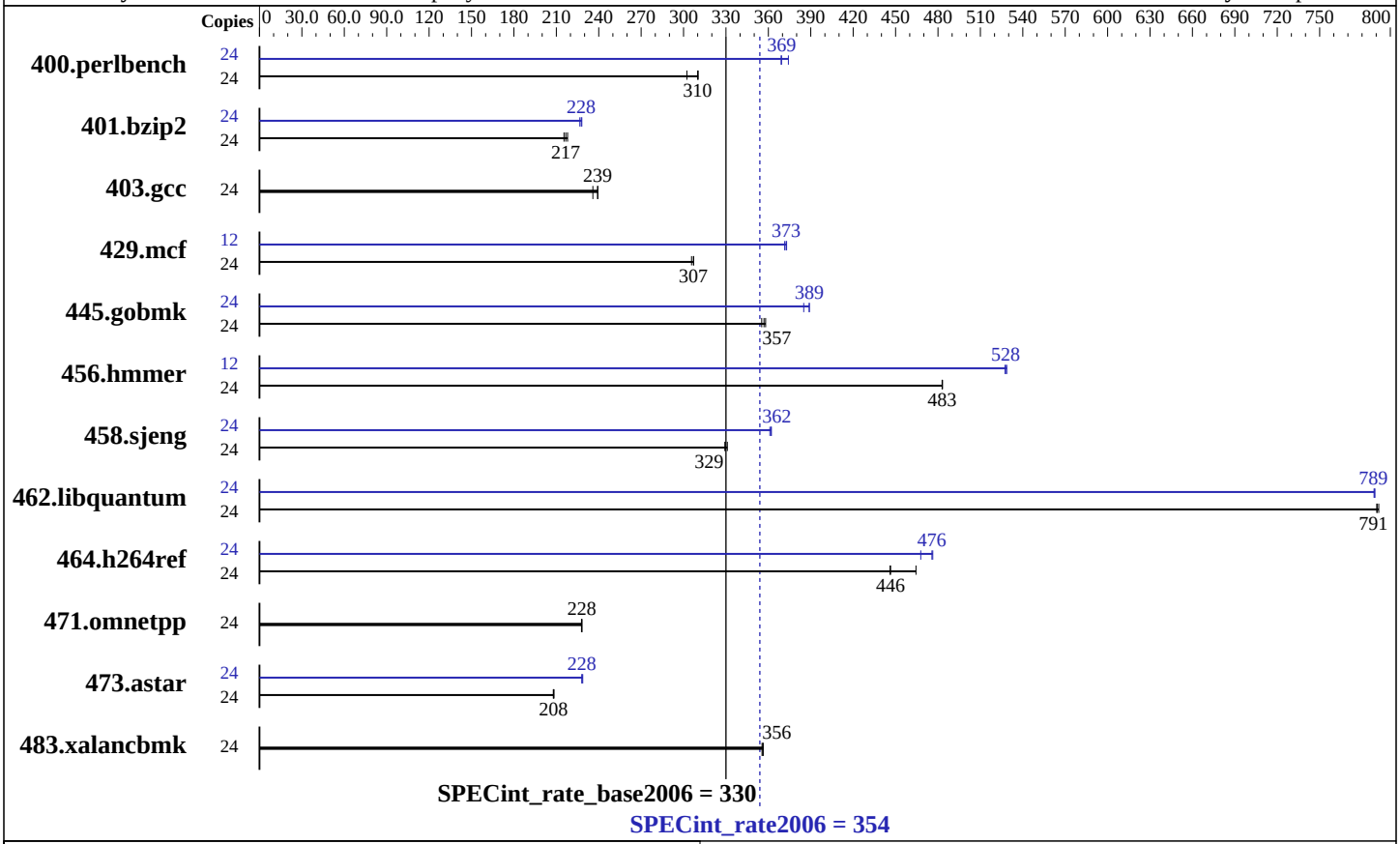
ProLiant DL180 G6
(2.93 GHz, Intel Xeon X5670)

SPECint®_rate2006 = 354

SPECint_rate_base2006 = 330

CPU2006 license: 3
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Mar-2010
Hardware Availability: Mar-2010
Software Availability: Sep-2009



Hardware

CPU Name:	Intel Xeon X5670
CPU Characteristics:	Intel Turbo Boost Technology up to 3.33 GHz
CPU MHz:	2933
FPU:	Integrated
CPU(s) enabled:	12 cores, 2 chips, 6 cores/chip, 2 threads/core
CPU(s) orderable:	1,2 chips
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	256 KB I+D on chip per core
L3 Cache:	12 MB I+D on chip per chip
Other Cache:	None
Memory:	48 GB (12x4 GB PC3-10600R CL9)
Disk Subsystem:	2 x 146 GB 10 K SAS
Other Hardware:	None

Software

Operating System:	Red Hat Enterprise Linux Server release 5.4 Kernel 2.6.18-164.el5
Compiler:	Intel C++ Compiler 11.1 for Linux Build 20090827 Package ID: l_cproc_p_11.1.056
Auto Parallel:	No
File System:	ext3
System State:	Run level 3 (multi-user)
Base Pointers:	32-bit
Peak Pointers:	32/64-bit
Other Software:	Microquill SmartHeap V8.1 Binutils 2.17.50.0.18

SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant DL180 G6
(2.93 GHz, Intel Xeon X5670)

SPECint_rate2006 = 354

SPECint_rate_base2006 = 330

CPU2006 license: 3
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Mar-2010
Hardware Availability: Mar-2010
Software Availability: Sep-2009

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	24	**757**	**310**	775	302	755	310	24	627	374	635	369	**635**	**369**
401.bzip2	24	**1069**	**217**	1075	215	1063	218	24	1016	228	1022	227	**1018**	**228**
403.gcc	24	807	239	819	236	**808**	**239**	24	807	239	819	236	**808**	**239**
429.mcf	24	716	306	**713**	**307**	713	307	12	293	373	295	372	**294**	**373**
445.gobmk	24	703	358	709	355	**705**	**357**	24	**647**	**389**	647	389	654	385
456.hmmer	24	464	483	**464**	**483**	463	483	12	212	527	212	529	**212**	**528**
458.sjeng	24	877	331	882	329	**882**	**329**	24	802	362	**802**	**362**	804	361
462.libquantum	24	**629**	**791**	629	790	628	792	24	**630**	**789**	630	789	631	788
464.h264ref	24	**1190**	**446**	1144	464	1191	446	24	1115	476	**1116**	**476**	1135	468
471.omnetpp	24	658	228	**658**	**228**	658	228	24	658	228	**658**	**228**	658	228
473.astar	24	810	208	809	208	**810**	**208**	24	739	228	737	229	**738**	**228**
483.xalancbmk	24	465	356	**465**	**356**	466	356	24	465	356	**465**	**356**	466	356

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.
 numactl was used to bind copies to the cores
```

Operating System Notes

```
'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
```

Platform Notes

```
BIOS configuration:
 Power Efficiency set to Performance
 Data Reuse set to Disabled
 Memory Speed with 2DPC set to 1333MHz@1.5V
 SATA#1 Controller set to Compatible
```

Base Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

Base Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32
462.libquantum: -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:
-xSSE4.2 -ipo -O3 -no-prec-div -static -inline-calloc
-opt-malloc-options=3 -opt-prefetch

C++ benchmarks:
-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs
-L/cpu2006/SmartHeap_8.1/lib -lsmartheap

Base Other Flags

C benchmarks:

403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

C benchmarks (except as noted below):
icc

401.bzip2: /opt/intel/Compiler/11.1/056/bin/intel64/icc

456.hmmer: /opt/intel/Compiler/11.1/056/bin/intel64/icc

458.sjeng: /opt/intel/Compiler/11.1/056/bin/intel64/icc

C++ benchmarks:
icpc

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32
401.bzip2: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LINUX

Continued on next page

Peak Portability Flags (Continued)

483.xalancbmk: -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:

400.perlbench: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2) -ansi-alias -opt-prefetch

401.bzip2: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2) -opt-prefetch -ansi-alias -auto-ilp32

403.gcc: basepeak = yes

429.mcf: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2) -opt-prefetch

445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2) -O2 -ipo -no-prec-div -ansi-alias

456.hmmer: -xSSE4.2 -ipo -O3 -no-prec-div -static -unroll2 -ansi-alias -auto-ilp32

458.sjeng: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2) -unroll4 -auto-ilp32

462.libquantum: -xSSE4.2 -ipo -O3 -no-prec-div -static -opt-malloc-options=3 -opt-prefetch

464.h264ref: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2) -unroll2 -ansi-alias

C++ benchmarks:

471.omnetpp: basepeak = yes

473.astar: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2) -ansi-alias -opt-ra-region-strategy=routine -Wl,-z,muldefs -L/cpu2006/SmartHeap_8.1/lib -lsmartheap

483.xalancbmk: basepeak = yes

Peak Other Flags

C benchmarks:

403.gcc: `-Dalloca=_alloca`

The flags files that were used to format this result can be browsed at
`http://www.spec.org/cpu2006/flags/HP-Intel-Linux-Settings-flags.20100511.00.html`
`http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revA.20100511.html`

You can also download the XML flags sources by saving the following links:
`http://www.spec.org/cpu2006/flags/HP-Intel-Linux-Settings-flags.20100511.00.xml`
`http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revA.20100511.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 v1.1.
Report generated on Wed Jul 23 07:01:59 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 11 May 2010.