SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant DL380 G5
(3.0 GHz, Intel Xeon processor 5160)

$SPECint®\_rate2006 =$ 68.8

$SPECint\_rate\_base2006 =$ 60.1

CPU2006 license: 3

Test sponsor: Hewlett-Packard Company

Tested by: Hewlett-Packard Company

Test date: Aug-2007

Hardware Availability: Jun-2006

Software Availability: Nov-2007

SPECint_rate_base2006 = 60.1

SPECint_rate2006 = 68.8

Benchmark	Copies	Rate
400.perlbench	4	89.4
	4	76.9
401.bzip2	4	46.7
	4	44.4
403.gcc	4	56.1
	4	56.1
429.mcf	4	51.8
	4	49.8
445.gobmk	4	80.7
	4	74.4
456.hmmer	4	105
	4	62.9
458.sjeng	4	76.5
	4	70.2
462.libquantum	1	79.3
	4	47.6
464.h264ref	4	126
	4	119
471.omnetpp	4	40.2
	4	38.2
473.astar	4	47.6
	4	44.4
483.xalancbmk	4	74.2

Hardware

CPU Name: Intel Xeon 5160

CPU Characteristics: 3.0 GHz, 2x4 MB L2 shared, 1333 MHz system bus

CPU MHz: 3000

FPU: Integrated

CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip

CPU(s) orderable: 1 or 2 chips

Primary Cache: 32 KB I + 32 KB D on chip per core

Secondary Cache: 4 MB I+D on chip per chip

L3 Cache: None

Other Cache: None

Memory: 8 GB (8x1 GB PC2-5300F CL5)

Disk Subsystem: 1x72 GB 10 K SAS

Other Hardware: None

Software

Operating System: SuSE Linux Enterprise Server 10 (x86_64) SP1 kernel 2.6.16.46-0.12-smp

Compiler: Intel C++ Compiler for Linux32 and Linux64 version 10.1 Build 20070725

Auto Parallel: Yes

File System: ext2

System State: Multi-user run level 3

Base Pointers: 32-bit

Peak Pointers: 32/64-bit

Other Software: MicroQuill SmartHeap Library 8.1 binutils-2.17.50

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant DL380 G5
(3.0 GHz, Intel Xeon processor 5160)

SPECint_rate2006 = 68.8

SPECint_rate_base2006 = 60.1

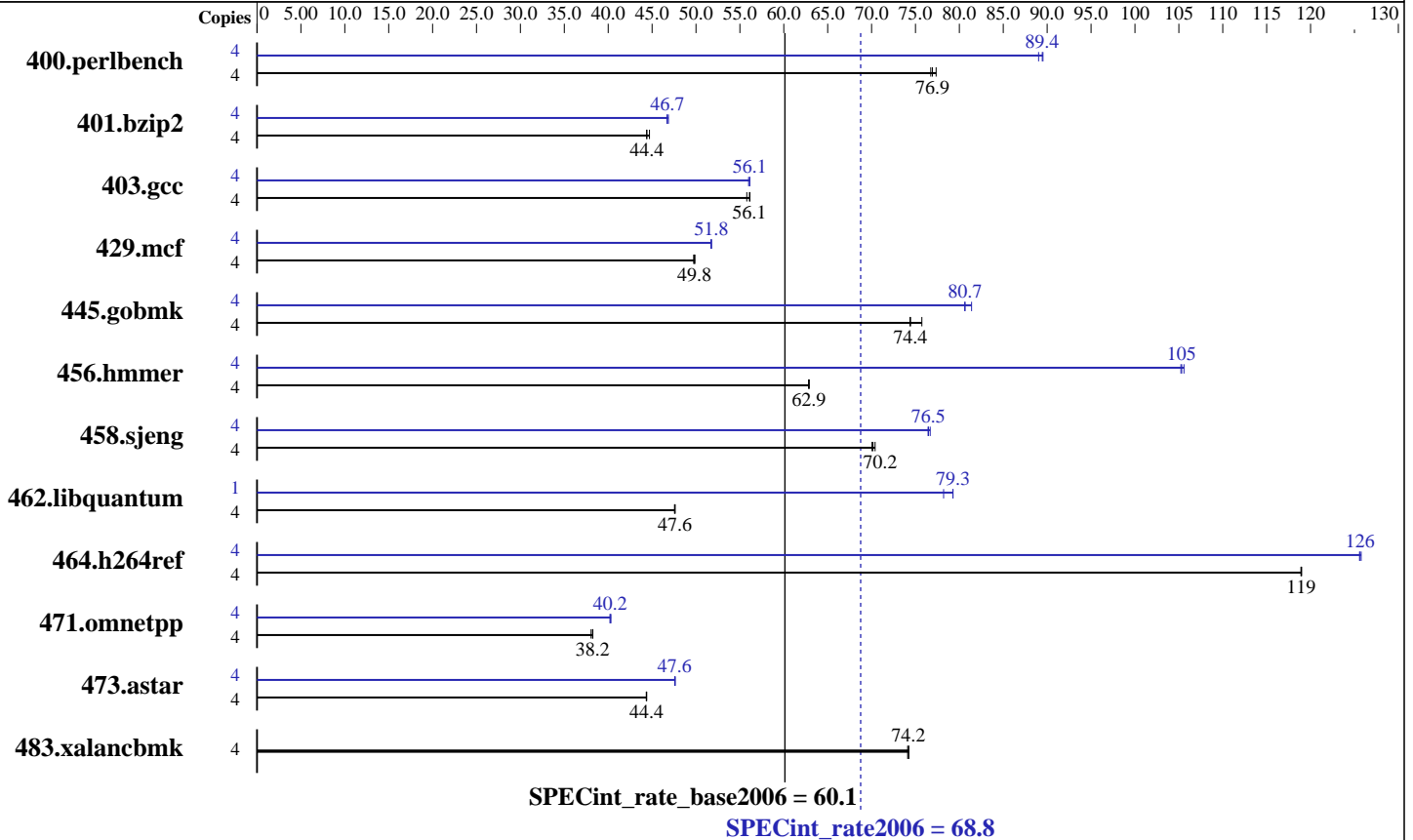|	
CPU2006 license: 3	**Test date:** Aug-2007
Test sponsor: Hewlett-Packard Company	**Hardware Availability:** Jun-2006
Tested by: Hewlett-Packard Company	**Software Availability:** Nov-2007

Results Table

Benchmark	Base						Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	509	76.7	**508**	**76.9**	505	77.3	4	439	89.0	**437**	**89.4**	437	89.5
401.bzip2	4	870	44.4	864	44.7	**869**	**44.4**	4	824	46.9	827	46.7	**826**	**46.7**
403.gcc	4	**574**	**56.1**	573	56.1	577	55.8	4	**574**	**56.1**	575	56.0	574	56.1
429.mcf	4	731	49.9	734	49.7	**732**	**49.8**	4	705	51.8	**705**	**51.8**	706	51.7
445.gobmk	4	**564**	**74.4**	554	75.7	564	74.4	4	521	80.6	516	81.4	**520**	**80.7**
456.hmmer	4	593	62.9	**594**	**62.9**	594	62.8	4	**354**	**105**	353	106	355	105
458.sjeng	4	**690**	**70.2**	687	70.4	691	70.1	4	631	76.7	633	76.4	**633**	**76.5**
462.libquantum	4	1741	47.6	1743	47.6	**1741**	**47.6**	1	261	79.3	**261**	**79.3**	265	78.2
464.h264ref	4	744	119	744	119	**744**	**119**	4	**705**	**126**	705	126	704	126
471.omnetpp	4	**654**	**38.2**	654	38.3	657	38.1	4	620	40.3	**621**	**40.2**	622	40.2
473.astar	4	633	44.4	633	44.3	**633**	**44.4**	4	589	47.6	**590**	**47.6**	590	47.6
483.xalancbmk	4	372	74.2	**372**	**74.2**	372	74.1	4	372	74.2	**372**	**74.2**	372	74.1

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

Operating System Notes

    'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
    OMP_NUM_THREADS set to number of cores
    KMP_AFFINITY set to physical,0
    KMP_STACKSIZE set to 64M

Platform Notes

    BIOS configuration:
      Power Regulator set to Static High Performance Mode
      Adjacent Sector Prefetch Disabled

Base Compiler Invocation

C benchmarks:
     icc

C++ benchmarks:
     icpc

Base Portability Flags

    400.perlbench: -DSPEC_CPU_LINUX_IA32

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant DL380 G5
(3.0 GHz, Intel Xeon processor 5160)

SPECint_rate2006 =   68.8

SPECint_rate_base2006 = 60.1

CPU2006 license: 3

Test sponsor: Hewlett-Packard Company

Tested by: Hewlett-Packard Company

Test date: Aug-2007

Hardware Availability: Jun-2006

Software Availability: Nov-2007

Base Portability Flags (Continued)

```
462.libquantum: -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX
```

Base Optimization Flags

C benchmarks:

```
-fast -inline-calloc -opt-malloc-options=3
```

C++ benchmarks:

```
-xT -ipo -O3 -no-prec-div -Wl,-z,muldefs
-L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap
```

Base Other Flags

C benchmarks:

```
403.gcc: -Dalloca=_alloca
```

Peak Compiler Invocation

C benchmarks (except as noted below):

```
icc
```

```
401.bzip2: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/bin/icc
           -L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/lib
           -I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/include
```

```
456.hmmer: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/bin/icc
           -L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/lib
           -I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/include
```

C++ benchmarks:

```
icpc
```

Peak Portability Flags

```
400.perlbench: -DSPEC_CPU_LINUX_IA32
   401.bzip2: -DSPEC_CPU_LP64
   456.hmmer: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX
```

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant DL380 G5
(3.0 GHz, Intel Xeon processor 5160)

SPECint_rate2006 =	68.8

SPECint_rate_base2006 =	60.1

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

Test date: Aug-2007
Hardware Availability: Jun-2006
Software Availability: Nov-2007

Peak Optimization Flags

C benchmarks:

> 400.perlbench: `-prof-gen(pass 1) -prof-use(pass 2) -fast -ansi-alias -prefetch`

> 401.bzip2: `-prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch`

> 403.gcc: `-fast -inline-calloc -opt-malloc-options=3`

> 429.mcf: `-fast -prefetch`

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

> 456.hmmer: `-fast -unroll2 -ansi-alias -opt-multi-version-aggressive`

> 458.sjeng: `-prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4`

> 462.libquantum: `-fast -unroll4 -Ob0 -prefetch -opt-streaming-stores always -vec-guard-write -opt-malloc-options=3 -parallel -par-runtime-control`

> 464.h264ref: `-prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -ansi-alias`

C++ benchmarks:

> 471.omnetpp: `-prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo -no-prec-div -ansi-alias -opt-ra-region-strategy=block -Wl,-z,muldefs -L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap`

> 473.astar: `-prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo -no-prec-div -ansi-alias -opt-ra-region-strategy=routine -Wl,-z,muldefs -L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap`

> 483.xalancbmk: `basepeak = yes`

Peak Other Flags

C benchmarks:

> 403.gcc: `-Dalloca=_alloca`

SPEC CINT2006 Result

Hewlett-Packard Company

ProLiant DL380 G5
(3.0 GHz, Intel Xeon processor 5160)

SPECint_rate2006 =   68.8

SPECint_rate_base2006 =   60.1

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

Test date: Aug-2007
Hardware Availability: Jun-2006
Software Availability: Nov-2007

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/HP-Intel-ic10.1-linux-flags.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/HP-Intel-ic10.1-linux-flags.xml

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 14:03:51 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 2 October 2007.