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

Hewlett-Packard Company

ProLiant DL385 G2
(3.0 GHz AMD Opteron 2222)

SPECint®2006 =   15.3

SPECint_base2006 =   14.4

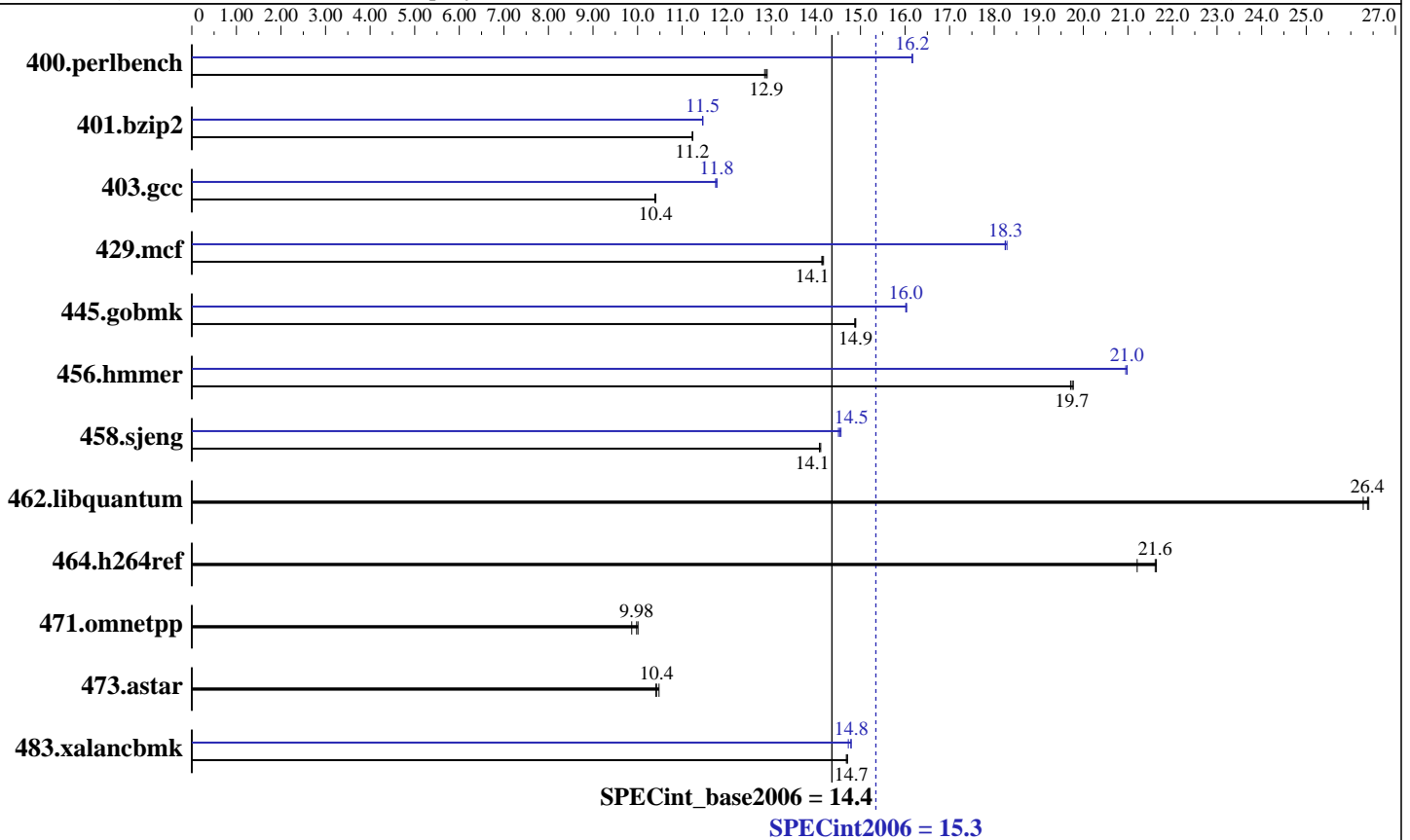**CPU2006 license:** 3　　　　　　　　　　　　　　　　　**Test date:** Aug-2007
Test sponsor: Hewlett-Packard Company　　　　　　　**Hardware Availability:** Sep-2007
Tested by: Hewlett-Packard Company　　　　　　　　**Software Availability:** Oct-2007

400.perlbench 16.2 / 12.9
401.bzip2 11.5 / 11.2
403.gcc 11.8 / 10.4
429.mcf 18.3 / 14.1
445.gobmk 16.0 / 14.9
456.hmmer 21.0 / 19.7
458.sjeng 14.5 / 14.1
462.libquantum 26.4
464.h264ref 21.6
471.omnetpp 9.98
473.astar 10.4
483.xalancbmk 14.8 / 14.7

SPECint_base2006 = 14.4
SPECint2006 = 15.3

Hardware

CPU Name:	AMD Opteron 2222
CPU Characteristics:	
CPU MHz:	3000
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 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 (4x4 GB, PC2-5300P 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-default
Compiler:	The Portland Group (PGI) PGI pgcc 7.1-0 C Compiler PGI pgCC 7.1-0 C++ Compiler
Auto Parallel:	No
File System:	ext2
System State:	Multi-user, run level 3
Base Pointers:	32/64-bit
Peak Pointers:	32/64-bit
Other Software:	SmartHeap 8.0 32-bit Library for Linux

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant DL385 G2
(3.0 GHz AMD Opteron 2222)

SPECint2006 =   15.3

SPECint_base2006 =   14.4

CPU2006 license: 3	**Test date:** Aug-2007
Test sponsor: Hewlett-Packard Company	**Hardware Availability:** Sep-2007
Tested by: Hewlett-Packard Company	**Software Availability:** Oct-2007

Results Table

Benchmark	Base						Peak					
	Seconds	**Ratio**	**Seconds**	**Ratio**	**Seconds**	**Ratio**	**Seconds**	**Ratio**	**Seconds**	**Ratio**	**Seconds**	**Ratio**
400.perlbench	760	12.9	757	12.9	**758**	**12.9**	604	16.2	605	16.2	**604**	**16.2**
401.bzip2	859	11.2	**859**	**11.2**	859	11.2	842	11.5	**842**	**11.5**	842	11.5
403.gcc	774	10.4	775	10.4	**774**	**10.4**	**684**	**11.8**	685	11.7	683	11.8
429.mcf	645	14.1	644	14.2	**645**	**14.1**	499	18.3	**500**	**18.3**	500	18.2
445.gobmk	**705**	**14.9**	704	14.9	705	14.9	654	16.0	**655**	**16.0**	655	16.0
456.hmmer	473	19.7	**472**	**19.7**	472	19.8	**445**	**21.0**	445	21.0	445	21.0
458.sjeng	858	14.1	859	14.1	**859**	**14.1**	**833**	**14.5**	834	14.5	831	14.6
462.libquantum	788	26.3	785	26.4	**786**	**26.4**	788	26.3	785	26.4	**786**	**26.4**
464.h264ref	1023	21.6	**1024**	**21.6**	1044	21.2	1023	21.6	**1024**	**21.6**	1044	21.2
471.omnetpp	624	10.0	**626**	**9.98**	633	9.87	624	10.0	**626**	**9.98**	633	9.87
473.astar	670	10.5	674	10.4	**673**	**10.4**	670	10.5	674	10.4	**673**	**10.4**
483.xalancbmk	469	14.7	470	14.7	**469**	**14.7**	**467**	**14.8**	466	14.8	469	14.7

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

Operating System Notes

```
Environment stack size set to 'unlimited'
ulimit -l set to 1048576
Set vm/nr_hugepages=1024 in /etc/sysctl.conf
mount -t hugetlbfs nodev /mnt/hugepagesi
Single-processor kernel used
```

Base Compiler Invocation

C benchmarks:
```
pgcc
```

C++ benchmarks:
```
pgcpp
```

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
```

Hewlett-Packard Company

SPECint2006 =   15.3

ProLiant DL385 G2
(3.0 GHz AMD Opteron 2222)

SPECint_base2006 =   14.4

CPU2006 license: 3

Test sponsor: Hewlett-Packard Company

Tested by: Hewlett-Packard Company

Test date: Aug-2007

Hardware Availability: Sep-2007

Software Availability: Oct-2007

Base Portability Flags (Continued)

```
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
   464.h264ref: -DSPEC_CPU_LP64
 483.xalancbmk: -DSPEC_CPU_LINUX
```

Base Optimization Flags

C benchmarks:
```
-fast -Mipa=fast -Mipa=inline -Mipa=noarg -Mfprelaxed
-Msmartalloc=huge:64 -tp k8-64 -Bstatic_pgi
```

C++ benchmarks:
```
-fastsse -Mipa=fast -Mipa=inline -Mfprelaxed -Msmartalloc --zc_eh
-tp k8-32 -Bstatic_pgi -lsmartheap
```

Base Other Flags

C benchmarks:
```
-w
```

C++ benchmarks:
```
-w -L/proj/qa/smartheap/SmartHeap_8/lib
```

Peak Compiler Invocation

C benchmarks:
```
pgcc
```

C++ benchmarks:
```
pgcpp
```

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
```

Hewlett-Packard Company

ProLiant DL385 G2
(3.0 GHz AMD Opteron 2222)

SPECint2006 =   15.3

SPECint_base2006 =   14.4

CPU2006 license: 3

Test sponsor: Hewlett-Packard Company

Tested by: Hewlett-Packard Company

Test date: Aug-2007

Hardware Availability: Sep-2007

Software Availability: Oct-2007

Peak Optimization Flags

C benchmarks:

```
    400.perlbench: -Mpfi(pass 1) -Mpfo(pass 2) -Mipa=inline(pass 2) -fast
                   -O4 -Mfprelaxed -Msmartalloc=huge:8 -Mnounroll -tp k8-64
                   -Bstatic_pgi

        401.bzip2: -Mpfi(pass 1) -Mpfo(pass 2) -fast -O4
                   -Msmartalloc=huge:64 -tp k8-64 -Bstatic_pgi

          403.gcc: -fastsse -Mfprelaxed -Msmartalloc=huge:32 -Mipa=fast
                   -Mipa=inline -tp k8-32 -Bstatic_pgi

          429.mcf: -fastsse -Mipa=fast -Mipa=inline -Msmartalloc=huge:16
                   -tp k8-32 -Bstatic_pgi

        445.gobmk: -Mpfi(pass 1) -Mpfo(pass 2) -Mipa=fast(pass 2) -fast -O4
                   -Msmartalloc=huge:32 -Mfprelaxed -Mnovect -tp k8-64
                   -Bstatic_pgi

        456.hmmer: -fast -Msmartalloc=huge:32 -Mfprelaxed -Msafeptr
                   -Mipa=const -Mipa=ptr -Mipa=arg -tp k8-64 -Bstatic_pgi

        458.sjeng: -Mpfi(pass 1) -Mipa=fast(pass 2) -Mipa=inline(pass 2)
                   -Mipa=noarg(pass 2) -Mpfo(pass 2) -fast
                   -Msmartalloc=huge:32 -Mfprelaxed -tp k8-64 -Bstatic_pgi

   462.libquantum: basepeak = yes

      464.h264ref: basepeak = yes
```

C++ benchmarks:

```
      471.omnetpp: basepeak = yes

        473.astar: basepeak = yes

    483.xalancbmk: -fastsse -O4 -Mipa=fast -Mipa=inline -Mfprelaxed
                   -Msmartalloc --zc_eh -tp k8-32 -Bstatic_pgi -lsmartheap
```

Peak Other Flags

C benchmarks:
```
    -w
```

C++ benchmarks:
```
    -w -L/proj/qa/smartheap/SmartHeap_8/lib
```

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant DL385 G2
(3.0 GHz AMD Opteron 2222)

SPECint2006 =	15.3
SPECint_base2006 =	14.4

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

Test date: Aug-2007
Hardware Availability: Sep-2007
Software Availability: Oct-2007

The flags file that was used to format this result can be browsed at

http://www.spec.org/cpu2006/flags/hp-pgi710_flags.html

You can also download the XML flags source by saving the following link:

http://www.spec.org/cpu2006/flags/hp-pgi710_flags.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.
Report generated on Tue Jul 22 13:31:46 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 19 September 2007.