SPEC® CINT2006 Result

Hewlett-Packard Company

ProLiant SL170z G6
(2.93 GHz, Intel Xeon X5570)

SPECint®_rate2006 = 259

SPECint_rate_base2006 = 246

CPU2006 license: 3　　　　　　　　　　　　　　　　　　　　　　　　　**Test date:** Oct-2009
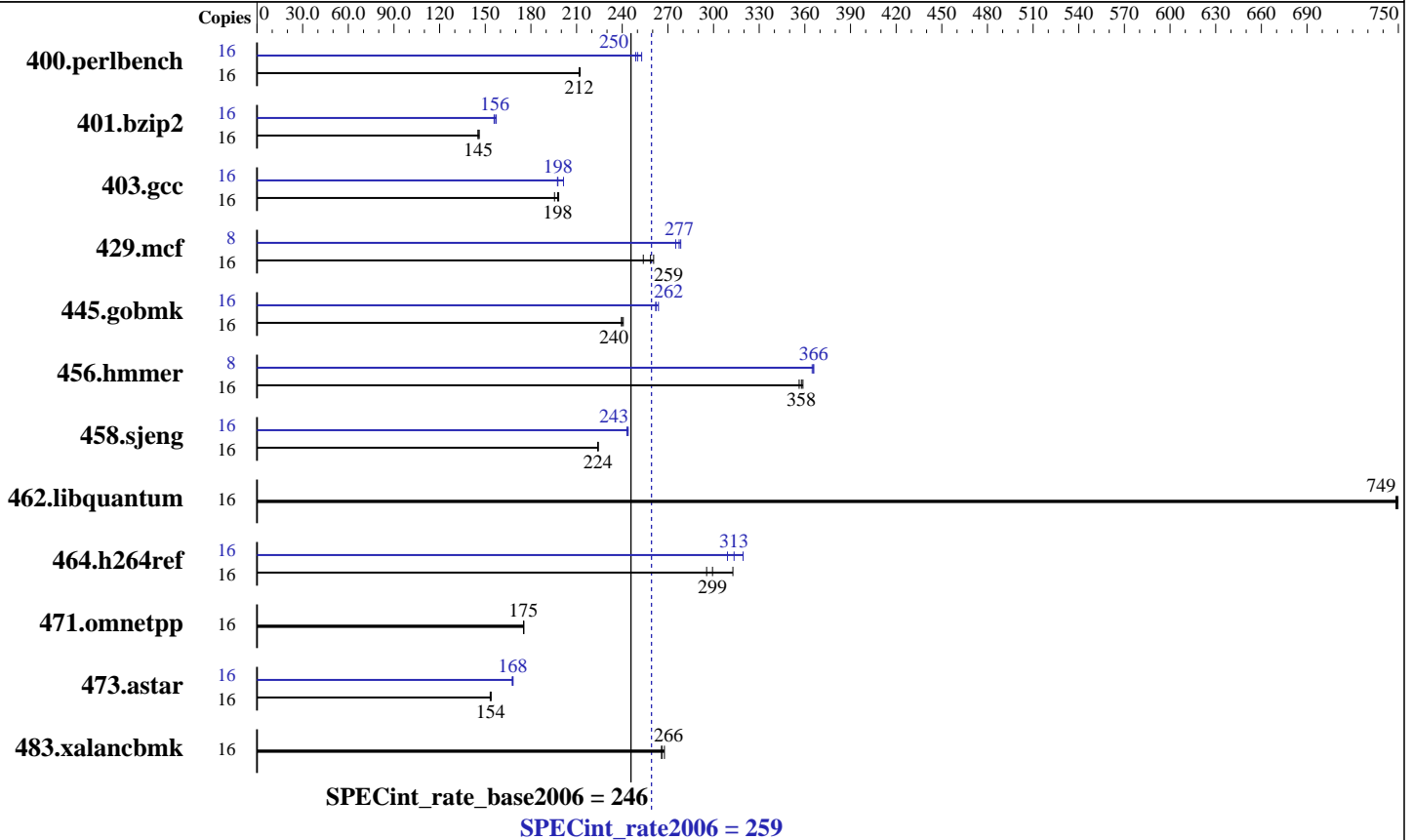
Test sponsor: Hewlett-Packard Company　　　　　　　　　　　　　**Hardware Availability:** Sep-2009

Tested by: Hewlett-Packard Company　　　　　　　　　　　　　　　**Software Availability:** Sep-2009

Copies		
400.perlbench	16	250
	16	212
401.bzip2	16	156
	16	145
403.gcc	16	198
	16	198
429.mcf	8	277
	16	259
445.gobmk	16	262
	16	240
456.hmmer	8	366
	16	358
458.sjeng	16	243
	16	224
462.libquantum	16	749
464.h264ref	16	313
	16	299
471.omnetpp	16	175
473.astar	16	168
	16	154
483.xalancbmk	16	266

SPECint_rate_base2006 = 246

SPECint_rate2006 = 259

Hardware

CPU Name:	Intel Xeon X5570
CPU Characteristics:	Intel Turbo Boost Technology up to 3.33 GHz
CPU MHz:	2933
FPU:	Integrated
CPU(s) enabled:	8 cores, 2 chips, 4 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:	8 MB I+D on chip per chip
Other Cache:	None
Memory:	24 GB (6x4 GB DDR3-10600R CL9)
Disk Subsystem:	1x160 GB 7.2 K 3.5" SATA
Other Hardware:	None

Software

Operating System:	Red Hat Enterprise Linux Server release 5.3 Kernel 2.6.18-128.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 SL170z G6
(2.93 GHz, Intel Xeon X5570)

SPECint_rate2006 =   259

SPECint_rate_base2006 = 246

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

Test date: Oct-2009
Hardware Availability: Sep-2009
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	16	739	212	736	212	**738**	**212**	16	618	253	628	249	**625**	**250**
401.bzip2	16	1063	145	1057	146	**1062**	**145**	16	991	156	982	157	**988**	**156**
403.gcc	16	**652**	**198**	650	198	659	196	16	639	201	652	197	**651**	**198**
429.mcf	16	575	254	**564**	**259**	560	261	8	265	275	262	278	**263**	**277**
445.gobmk	16	701	240	697	241	**701**	**240**	16	**640**	**262**	636	264	641	262
456.hmmer	16	419	356	416	359	**417**	**358**	8	205	365	204	366	**204**	**366**
458.sjeng	16	863	224	865	224	**864**	**224**	16	794	244	**795**	**243**	796	243
462.libquantum	16	442	750	**443**	**749**	443	748	16	442	750	**443**	**749**	443	748
464.h264ref	16	**1183**	**299**	1132	313	1198	295	16	**1129**	**313**	1108	319	1145	309
471.omnetpp	16	571	175	570	175	**571**	**175**	16	571	175	570	175	**571**	**175**
473.astar	16	733	153	**731**	**154**	730	154	16	668	168	670	168	**668**	**168**
483.xalancbmk	16	**415**	**266**	412	268	415	266	16	**415**	**266**	412	268	415	266

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 Mode set to Performance

General Notes

    The ProLiant SL2x170z G6 and ProLiant SL170z G6 models are electronically equivalent.
    The results have been measured on the ProLiant SL2x170z G6 model.

Base Compiler Invocation

  C benchmarks:
       icc

  C++ benchmarks:
       icpc

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant SL170z G6
(2.93 GHz, Intel Xeon X5570)

SPECint_rate2006 =   259

SPECint_rate_base2006 = 246

CPU2006 license: 3

Test sponsor: Hewlett-Packard Company

Tested by: Hewlett-Packard Company

Test date: Oct-2009

Hardware Availability: Sep-2009

Software Availability: Sep-2009

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
```

SPEC CINT2006 Result

Hewlett-Packard Company

ProLiant SL170z G6
(2.93 GHz, Intel Xeon X5570)

SPECint_rate2006 =   259

SPECint_rate_base2006 =   246

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

Test date: Oct-2009
Hardware Availability: Sep-2009
Software Availability: Sep-2009

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

       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: basepeak = yes

   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

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant SL170z G6
(2.93 GHz, Intel Xeon X5570)

SPECint_rate2006 =   259

SPECint_rate_base2006 = 246

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

Test date: Oct-2009
Hardware Availability: Sep-2009
Software Availability: Sep-2009

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.20091110.html
http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revA.20091110.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.20091110.xml
http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revA.20091110.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 04:53:50 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 10 November 2009.