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

Hewlett-Packard Company

ProLiant DL160 G5p
(3.20 GHz, Intel Xeon X5482)

SPECint®_rate2006 = 156
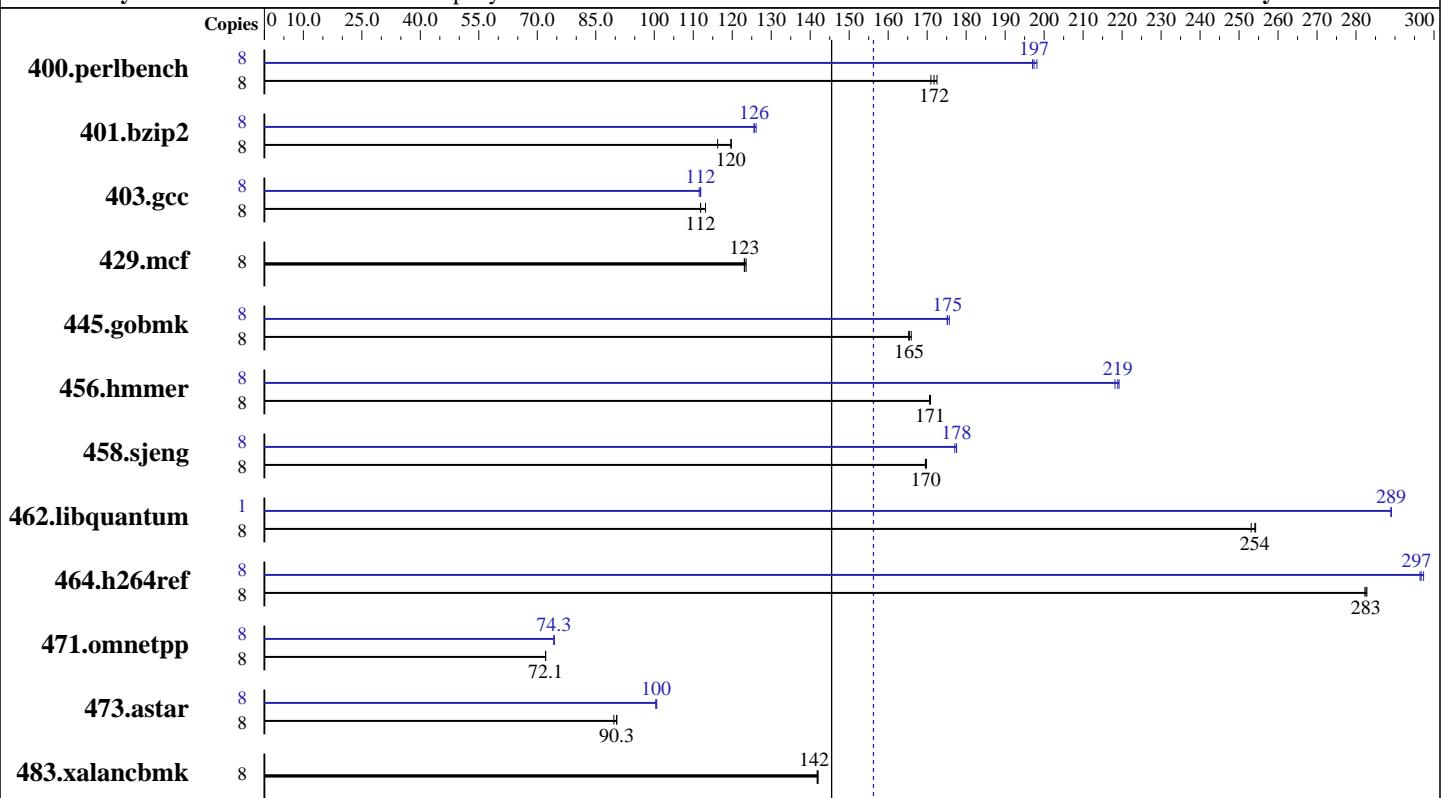
SPECint_rate_base2006 = 145

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

Test date: Aug-2008
Hardware Availability: Sep-2008
Software Availability: Nov-2008

Copies

- 400.perlbench — 8: 197; 8: 172
- 401.bzip2 — 8: 126; 8: 120
- 403.gcc — 8: 112; 8: 112
- 429.mcf — 8: 123
- 445.gobmk — 8: 175; 8: 165
- 456.hmmer — 8: 219; 8: 171
- 458.sjeng — 8: 178; 8: 170
- 462.libquantum — 1: 289; 8: 254
- 464.h264ref — 8: 297; 8: 283
- 471.omnetpp — 8: 74.3; 8: 72.1
- 473.astar — 8: 100; 8: 90.3
- 483.xalancbmk — 8: 142

SPECint_rate_base2006 = 145

SPECint_rate2006 = 156

Hardware

CPU Name:	Intel Xeon X5482
CPU Characteristics:	3.20 GHz, 2x6 MB L2 Shared, 1600 MHz system bus
CPU MHz:	3200
FPU:	Integrated
CPU(s) enabled:	8 cores, 2 chips, 4 cores/chip
CPU(s) orderable:	1,2 chips
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	12 MB I+D on chip per chip, 6 MB shared / 2 cores
L3 Cache:	None
Other Cache:	None
Memory:	16 GB (8x2 GB PC2-6400F CL5)
Disk Subsystem:	1x72 GB 15 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 11.0 for Linux Build 20080730 Package ID: l_cproc_b_11.0.042
Auto Parallel:	Yes
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 2.18.50.0.7.20080502

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant DL160 G5p
(3.20 GHz, Intel Xeon X5482)

SPECint_rate2006 =   156

SPECint_rate_base2006 =   145

CPU2006 license: 3

Test sponsor: Hewlett-Packard Company

Tested by: Hewlett-Packard Company

Test date: Aug-2008

Hardware Availability: Sep-2008

Software Availability: Nov-2008

Results Table

Benchmark	Base						Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	8	**455**	**172**	453	173	457	171	8	394	198	**396**	**197**	397	197
401.bzip2	8	664	116	644	120	**645**	**120**	8	615	126	612	126	**614**	**126**
403.gcc	8	569	113	**575**	**112**	576	112	8	**576**	**112**	575	112	577	112
429.mcf	8	593	123	**592**	**123**	590	124	8	593	123	**592**	**123**	590	124
445.gobmk	8	508	165	506	166	**507**	**165**	8	**479**	**175**	478	176	479	175
456.hmmer	8	437	171	437	171	**437**	**171**	8	340	219	**341**	**219**	342	218
458.sjeng	8	571	170	570	170	**571**	**170**	8	545	178	547	177	**545**	**178**
462.libquantum	8	655	253	**652**	**254**	652	254	1	**71.7**	**289**	71.7	289	71.7	289
464.h264ref	8	**627**	**283**	626	283	627	282	8	595	297	597	296	**597**	**297**
471.omnetpp	8	693	72.1	**693**	**72.1**	693	72.1	8	**673**	**74.3**	673	74.3	673	74.3
473.astar	8	**622**	**90.3**	621	90.4	627	89.6	8	558	101	559	100	**559**	**100**
483.xalancbmk	8	**389**	**142**	389	142	389	142	8	**389**	**142**	389	142	389	142

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.
     taskset was used to bind processes to cores except
     for 462.libquantum peak
```

Operating System Notes

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

Platform Notes

```
     BIOS configuration:
     Adjacent Cache Line Prefetch Disabled
```

Base Compiler Invocation

```
  C benchmarks:
        icc
```

```
  C++ benchmarks:
        icpc
```

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant DL160 G5p
(3.20 GHz, Intel Xeon X5482)

SPECint_rate2006 =   156

SPECint_rate_base2006 = 145

CPU2006 license: 3

Test sponsor: Hewlett-Packard Company

Tested by: Hewlett-Packard Company

Test date: Aug-2008

Hardware Availability: Sep-2008

Software Availability: Nov-2008

Base Portability Flags

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

Base Optimization Flags

C benchmarks:

```
-xSSE4.1 -ipo -O3 -no-prec-div -static -inline-calloc
-opt-malloc-options=3 -opt-prefetch
```

C++ benchmarks:

```
-xSSE4.1 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs
-L/spec/cpu2006.1.1/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/11.0/042/bin/intel64/icc
       -L/opt/intel/Compiler/11.0/042/ipp/em64t/lib
       -I/opt/intel/Compiler/11.0/042/ipp/em64t/include
```

```
456.hmmer: /opt/intel/Compiler/11.0/042/bin/intel64/icc
       -L/opt/intel/Compiler/11.0/042/ipp/em64t/lib
       -I/opt/intel/Compiler/11.0/042/ipp/em64t/include
```

C++ benchmarks:
```
icpc
```

Peak Portability Flags

```
400.perlbench: -DSPEC_CPU_LINUX_IA32
401.bzip2: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
```

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

ProLiant DL160 G5p
(3.20 GHz, Intel Xeon X5482)

SPECint_rate2006 =   156

SPECint_rate_base2006 =   145

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

Test date: Aug-2008
Hardware Availability: Sep-2008
Software Availability: Nov-2008

Peak Portability Flags (Continued)

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

Peak Optimization Flags

C benchmarks:

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

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

      403.gcc: -xSSE4.1 -ipo -O3 -no-prec-div -static -inline-calloc
               -opt-malloc-options=3

      429.mcf: basepeak = yes

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

    456.hmmer: -xSSE4.1 -ipo -O3 -no-prec-div -static -unroll2
               -ansi-alias

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

462.libquantum: -xSSE4.1 -ipo -O3 -no-prec-div -static
               -opt-malloc-options=3 -parallel -par-runtime-control
               -opt-prefetch

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

C++ benchmarks:

```
   471.omnetpp: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3
               -no-prec-div -ansi-alias -opt-ra-region-strategy=block
               -Wl,-z,muldefs -L/spec/cpu2006.1.1/lib -lsmartheap

     473.astar: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3
               -no-prec-div -ansi-alias -opt-ra-region-strategy=routine
               -Wl,-z,muldefs -L/spec/cpu2006.1.1/lib -lsmartheap

 483.xalancbmk: basepeak = yes
```

SPEC CINT2006 Result

Hewlett-Packard Company

ProLiant DL160 G5p
(3.20 GHz, Intel Xeon X5482)

SPECint_rate2006 =   156

SPECint_rate_base2006 =   145

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

Test date: Aug-2008
Hardware Availability: Sep-2008
Software Availability: Nov-2008

Peak Other Flags

C benchmarks:

   403.gcc: -Dalloca=_alloca

The flags file that was used to format this result can be browsed at
`http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revD.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revD.xml`

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 Tue Jul 22 20:47:24 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 29 October 2008.