



# SPEC<sup>®</sup> CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Hewlett-Packard Company

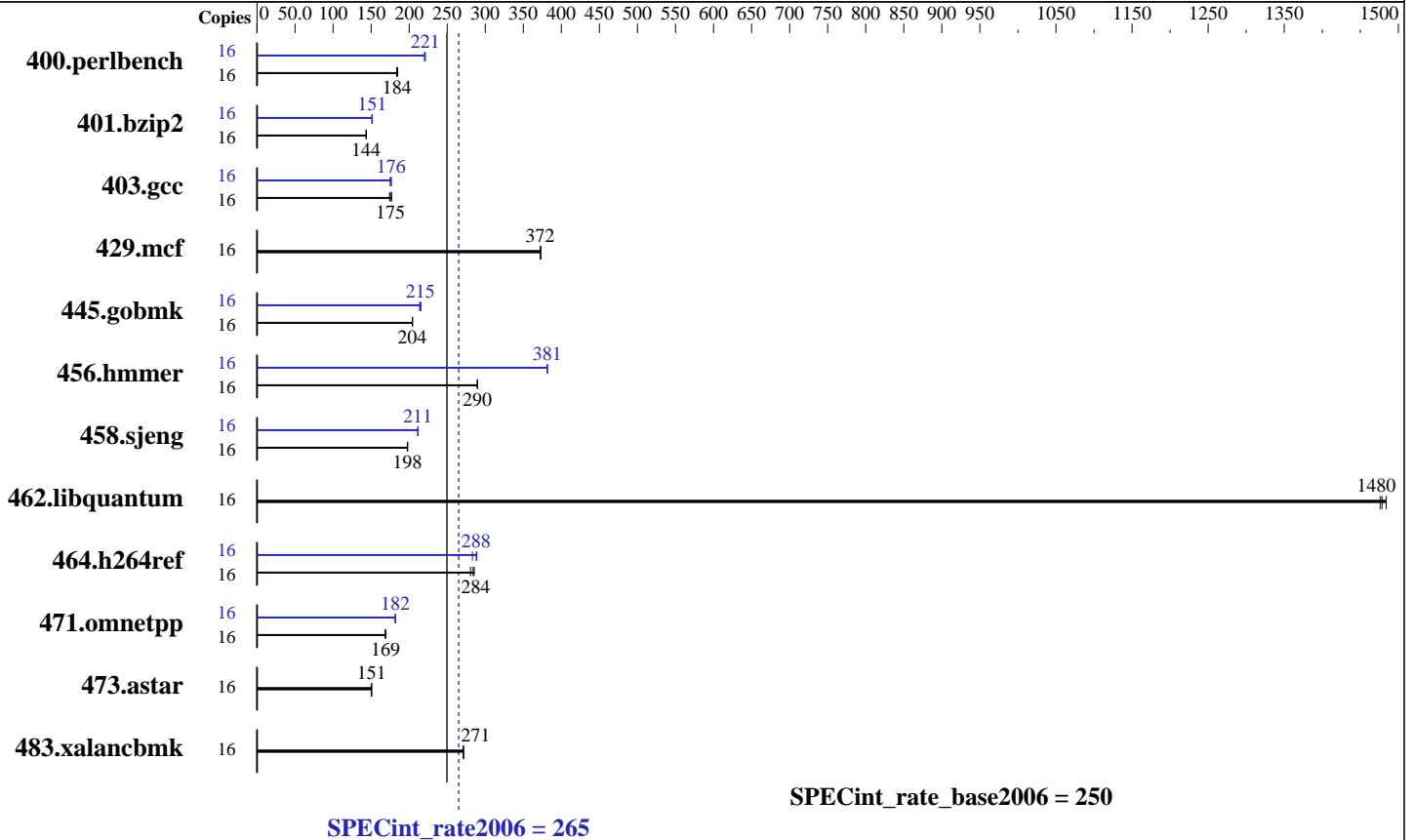
SPECint<sup>®</sup>\_rate2006 = 265

ProLiant DL380 G7  
(2.53 GHz, Intel Xeon E5630)

SPECint\_rate\_base2006 = 250

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

Test date: Oct-2011  
Hardware Availability: Mar-2010  
Software Availability: Sep-2011



**Hardware**

CPU Name: Intel Xeon E5630  
 CPU Characteristics: Intel Turbo Boost Technology up to 2.80 GHz  
 CPU MHz: 2533  
 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: 12 MB I+D on chip per chip  
 Other Cache: None  
 Memory: 48 GB (12 x 4 GB 2Rx4 PC3-10600R-9, ECC)  
 Disk Subsystem: 1 x 146 GB 15 K SAS  
 Other Hardware: None

**Software**

Operating System: Red Hat Enterprise Linux Server release 6.1, Kernel 2.6.32-131.0.15.el6.x86\_64  
 Compiler: C/C++: Version 12.1.0.225 of Intel Compiler XE Build 20110803  
 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 V9.01



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Hewlett-Packard Company

SPECint\_rate2006 = 265

ProLiant DL380 G7  
(2.53 GHz, Intel Xeon E5630)

SPECint\_rate\_base2006 = 250

CPU2006 license: 3

Test date: Oct-2011

Test sponsor: Hewlett-Packard Company

Hardware Availability: Mar-2010

Tested by: Hewlett-Packard Company

Software Availability: Sep-2011

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	16	845	185	850	184	<b>850</b>	<b>184</b>	16	710	220	707	221	<b>707</b>	<b>221</b>
401.bzip2	16	<b>1076</b>	<b>144</b>	1077	143	1074	144	16	<b>1020</b>	<b>151</b>	1020	151	1023	151
403.gcc	16	<b>735</b>	<b>175</b>	728	177	739	174	16	736	175	730	177	<b>731</b>	<b>176</b>
429.mcf	16	392	372	<b>392</b>	<b>372</b>	391	373	16	392	372	<b>392</b>	<b>372</b>	391	373
445.gobmk	16	<b>822</b>	<b>204</b>	823	204	821	204	16	<b>782</b>	<b>215</b>	779	216	786	214
456.hammer	16	515	290	<b>515</b>	<b>290</b>	515	290	16	391	382	<b>391</b>	<b>381</b>	391	381
458.sjeng	16	977	198	980	198	<b>979</b>	<b>198</b>	16	916	211	<b>915</b>	<b>211</b>	915	212
462.libquantum	16	225	1480	223	1480	<b>224</b>	<b>1480</b>	16	225	1480	223	1480	<b>224</b>	<b>1480</b>
464.h264ref	16	1262	281	1240	286	<b>1247</b>	<b>284</b>	16	1251	283	<b>1229</b>	<b>288</b>	1225	289
471.omnetpp	16	592	169	<b>592</b>	<b>169</b>	592	169	16	551	181	549	182	<b>550</b>	<b>182</b>
473.astar	16	748	150	<b>746</b>	<b>151</b>	746	151	16	748	150	<b>746</b>	<b>151</b>	746	151
483.xalancbmk	16	<b>407</b>	<b>271</b>	407	271	407	271	16	<b>407</b>	<b>271</b>	407	271	407	271

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

Stack size set to unlimited using "ulimit -s unlimited"  
Transparent Huge Pages enabled with:  
echo always > /sys/kernel/mm/redhat\_transparent\_hugepage/enabled  
Filesystem page cache cleared with:  
echo 1> /proc/sys/vm/drop\_caches  
runspec command invoked through numactl i.e.:  
numactl --interleave=all runspec <etc>

## Platform Notes

BIOS configuration:  
HP Power Profile set to Maximum Performance  
Thermal Configuration set to Increased Cooling  
Data Reuse set to Disabled

## General Notes

Environment variables set by runspec before the start of the run:  
LD\_LIBRARY\_PATH = "/cpu2006/smartheap/cpu2006/ic12.1-libs/ia32:/cpu2006/ic12.1-libs/intel64"



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Hewlett-Packard Company**

**SPECint\_rate2006 = 265**

ProLiant DL380 G7  
(2.53 GHz, Intel Xeon E5630)

**SPECint\_rate\_base2006 = 250**

**CPU2006 license:** 3

**Test date:** Oct-2011

**Test sponsor:** Hewlett-Packard Company

**Hardware Availability:** Mar-2010

**Tested by:** Hewlett-Packard Company

**Software Availability:** Sep-2011

## Base Compiler Invocation

C benchmarks:

`icc -m32`

C++ benchmarks:

`icpc -m32`

## 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 -opt-prefetch -opt-mem-layout-trans=3`

C++ benchmarks:

`-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3  
-Wl,-z,muldefs -L/smartheap -lsmartheap`

## Base Other Flags

C benchmarks:

403.gcc: `-Dalloca=_alloca`

## Peak Compiler Invocation

C benchmarks (except as noted below):

`icc -m32`

400.perlbench: `icc -m64`

401.bzip2: `icc -m64`

456.hmmer: `icc -m64`

458.sjeng: `icc -m64`

C++ benchmarks:

`icpc -m32`



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Hewlett-Packard Company**

**SPECint\_rate2006 = 265**

ProLiant DL380 G7  
(2.53 GHz, Intel Xeon E5630)

**SPECint\_rate\_base2006 = 250**

**CPU2006 license:** 3

**Test date:** Oct-2011

**Test sponsor:** Hewlett-Packard Company

**Hardware Availability:** Mar-2010

**Tested by:** Hewlett-Packard Company

**Software Availability:** Sep-2011

## Peak Portability Flags

400.perlbench: -DSPEC\_CPU\_LP64 -DSPEC\_CPU\_LINUX\_X64  
 401.bzip2: -DSPEC\_CPU\_LP64  
 456.hmmer: -DSPEC\_CPU\_LP64  
 458.sjeng: -DSPEC\_CPU\_LP64  
 462.libquantum: -DSPEC\_CPU\_LINUX  
 483.xalanbmk: -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) -prof-use(pass 2)  
 -auto-ilp32

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

403.gcc: -xSSE4.2 -ipo -O3 -no-prec-div

429.mcf: basepeak = yes

445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)  
 -ansi-alias -opt-mem-layout-trans=3

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

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

C++ benchmarks:

471.omnetpp: -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=block -Wl,-z,muldefs  
 -L/smartheap -lsmartheap

473.astar: basepeak = yes

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Hewlett-Packard Company**

**SPECint\_rate2006 = 265**

ProLiant DL380 G7  
(2.53 GHz, Intel Xeon E5630)

**SPECint\_rate\_base2006 = 250**

**CPU2006 license:** 3

**Test date:** Oct-2011

**Test sponsor:** Hewlett-Packard Company

**Hardware Availability:** Mar-2010

**Tested by:** Hewlett-Packard Company

**Software Availability:** Sep-2011

## Peak Optimization Flags (Continued)

483.xalanbmk: 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.20111122.html>

<http://www.spec.org/cpu2006/flags/Intel-ic12.1-linux64.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.20111122.xml>

<http://www.spec.org/cpu2006/flags/Intel-ic12.1-linux64.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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.1.

Report generated on Thu Jul 24 01:01:54 2014 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 12 December 2011.