



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Hewlett-Packard Company

**SPECint®2006 = 12.5**

HP Integrity rx4640  
(1.6GHz/24MB Dual-Core Intel Itanium 2)

**SPECint\_base2006 = 11.8**

CPU2006 license: 03

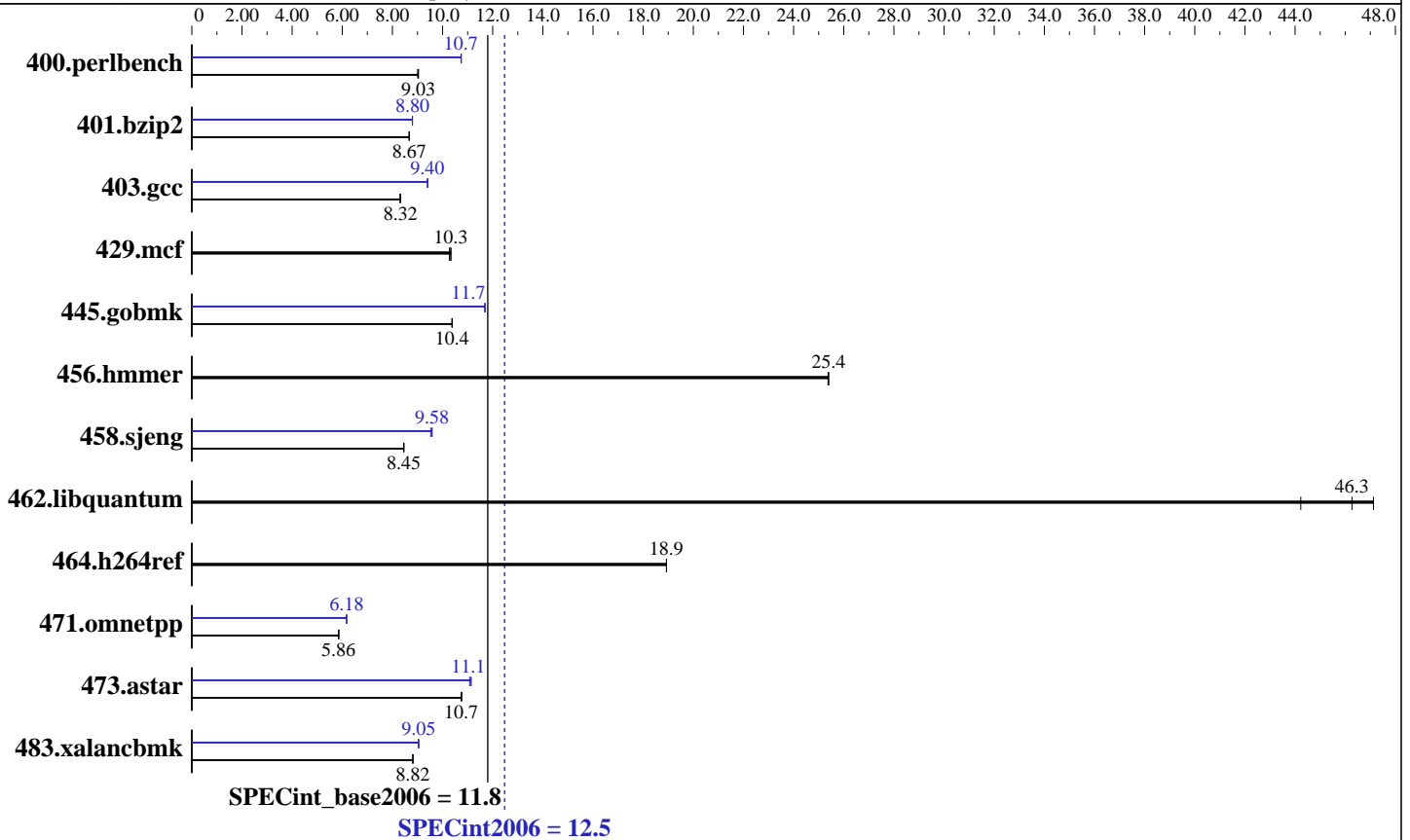
Test date: Oct-2006

Test sponsor: Hewlett-Packard Company

Hardware Availability: Sep-2006

Tested by: Hewlett-Packard Company

Software Availability: Nov-2006



### Hardware

CPU Name: Dual-Core Intel Itanium 2 9050  
 CPU Characteristics: 1.6GHz/24MB, 400MHz FSB  
 CPU MHz: 1600  
 FPU: Integrated  
 CPU(s) enabled: 1 core, 1 chip, 2 cores/chip  
 CPU(s) orderable: 1-4 chips  
 Primary Cache: 16 KB I + 16 KB D on chip per core  
 Secondary Cache: 1 MB I + 256 KB D on chip per core  
 L3 Cache: 12 MB I+D on chip per core  
 Other Cache: None  
 Memory: 32 GB (16x2GB DIMMs)  
 Disk Subsystem: 36GB 15K RPM SCSI  
 Other Hardware: None

### Software

Operating System: Red Hat Enterprise Linux AS release 4 (Update 4)  
 Compiler: Intel C++ Compiler for Itanium version 9.1 (Build 20060818)  
 Auto Parallel: No  
 File System: ext3  
 System State: Multi-user  
 Base Pointers: 64-bit  
 Peak Pointers: 64-bit  
 Other Software: MicroQuill Smartheap 8.0



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Hewlett-Packard Company

SPECint2006 = 12.5

HP Integrity rx4640  
(1.6GHz/24MB Dual-Core Intel Itanium 2)

SPECint\_base2006 = 11.8

CPU2006 license: 03

Test date: Oct-2006

Test sponsor: Hewlett-Packard Company

Hardware Availability: Sep-2006

Tested by: Hewlett-Packard Company

Software Availability: Nov-2006

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	1081	9.04	1085	9.01	<b>1081</b>	<b>9.03</b>	910	10.7	909	10.7	<b>910</b>	<b>10.7</b>
401.bzip2	1113	8.67	<b>1113</b>	<b>8.67</b>	1113	8.67	1097	8.80	<b>1097</b>	<b>8.80</b>	1097	8.80
403.gcc	<b>967</b>	<b>8.32</b>	967	8.32	970	8.30	<b>856</b>	<b>9.40</b>	856	9.40	856	9.40
429.mcf	882	10.3	888	10.3	<b>883</b>	<b>10.3</b>	882	10.3	888	10.3	<b>883</b>	<b>10.3</b>
445.gobmk	1010	10.4	<b>1010</b>	<b>10.4</b>	1011	10.4	897	11.7	897	11.7	<b>897</b>	<b>11.7</b>
456.hmmer	367	25.4	368	25.4	<b>367</b>	<b>25.4</b>	367	25.4	368	25.4	<b>367</b>	<b>25.4</b>
458.sjeng	<b>1431</b>	<b>8.45</b>	1431	8.45	1431	8.45	1270	9.53	<b>1263</b>	<b>9.58</b>	1263	9.58
462.libquantum	<b>448</b>	<b>46.3</b>	440	47.1	469	44.2	<b>448</b>	<b>46.3</b>	440	47.1	469	44.2
464.h264ref	1169	18.9	<b>1169</b>	<b>18.9</b>	1169	18.9	1169	18.9	<b>1169</b>	<b>18.9</b>	1169	18.9
471.omnetpp	1066	5.86	<b>1067</b>	<b>5.86</b>	1068	5.85	<b>1012</b>	<b>6.18</b>	1012	6.18	1014	6.17
473.astar	653	10.7	652	10.8	<b>653</b>	<b>10.7</b>	634	11.1	630	11.1	<b>631</b>	<b>11.1</b>
483.xalancbmk	<b>782</b>	<b>8.82</b>	783	8.81	782	8.82	762	9.05	764	9.04	<b>763</b>	<b>9.05</b>

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

## Operating System Notes

stacksize set to unlimited prior to run

system was booted uniprocessor by setting "maxcpus=0"  
kernel parameter in elilo.conf

## Base Compiler Invocation

C benchmarks:

icc

C++ benchmarks:

icpc

## Base Portability Flags

400.perlbench: -DSPEC\_CPU\_LP64 -DSPEC\_CPU\_LINUX\_IA64  
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  
462.libquantum: -DSPEC\_CPU\_LP64 -DSPEC\_CPU\_LINUX

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Hewlett-Packard Company**

**SPECint2006 = 12.5**

HP Integrity rx4640  
(1.6GHz/24MB Dual-Core Intel Itanium 2)

**SPECint\_base2006 = 11.8**

**CPU2006 license:** 03

**Test date:** Oct-2006

**Test sponsor:** Hewlett-Packard Company

**Hardware Availability:** Sep-2006

**Tested by:** Hewlett-Packard Company

**Software Availability:** Nov-2006

## Base Portability Flags (Continued)

464.h264ref: -DSPEC\_CPU\_LP64  
471.omnetpp: -DSPEC\_CPU\_LP64  
473.astar: -DSPEC\_CPU\_LP64  
483.xalancbmk: -DSPEC\_CPU\_LP64 -DSPEC\_CPU\_LINUX

## Base Optimization Flags

C benchmarks:  
-fast -IPF\_fp\_relaxed -ansi-alias

C++ benchmarks:  
-fast -IPF\_fp\_relaxed -ansi-alias -Wl,-z,muldefs  
/opt/SmartHeap\_8/lib/libsmartheapC64.a  
/opt/SmartHeap\_8/lib/libsmartheap64.a

## Peak Compiler Invocation

C benchmarks:  
icc

C++ benchmarks:  
icpc

## Peak Portability Flags

Same as Base Portability Flags

## Peak Optimization Flags

C benchmarks:

400.perlbench: -prof\_gen(pass 1) -prof\_use(pass 2) -fast -IPF\_fp\_relaxed  
-ansi-alias

401.bzip2: Same as 400.perlbench

403.gcc: Same as 400.perlbench

429.mcf: basepeak = yes

445.gobmk: Same as 400.perlbench

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Hewlett-Packard Company

**SPECint2006 = 12.5**

HP Integrity rx4640  
(1.6GHz/24MB Dual-Core Intel Itanium 2)

**SPECint\_base2006 = 11.8**

**CPU2006 license:** 03

**Test date:** Oct-2006

**Test sponsor:** Hewlett-Packard Company

**Hardware Availability:** Sep-2006

**Tested by:** Hewlett-Packard Company

**Software Availability:** Nov-2006

## Peak Optimization Flags (Continued)

456.hmmcr: basepeak = yes

458.sjeng: Same as 400.perlbench

462.libquantum: basepeak = yes

464.h264ref: basepeak = yes

C++ benchmarks:

471.omnetpp: -prof\_gen(pass 1) -prof\_use(pass 2) -fast -IPF\_fp\_relaxed  
-ansi-alias -Wl,-z,muldefs  
/opt/SmartHeap\_8/lib/libsmartheapC64.a  
/opt/SmartHeap\_8/lib/libsmartheap64.a

473.astar: -prof\_gen(pass 1) -prof\_use(pass 2) -fast -IPF\_fp\_relaxed  
-ansi-alias -inline-factor=150 -Wl,-z,muldefs  
/opt/SmartHeap\_8/lib/libsmartheapC64.a  
/opt/SmartHeap\_8/lib/libsmartheap64.a

483.xalancbmk: Same as 471.omnetpp

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

[http://www.spec.org/cpu2006/flags/IPF\\_intel91\\_flags.html](http://www.spec.org/cpu2006/flags/IPF_intel91_flags.html)

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

[http://www.spec.org/cpu2006/flags/IPF\\_intel91\\_flags.xml](http://www.spec.org/cpu2006/flags/IPF_intel91_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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.0.  
Report generated on Tue Jul 22 10:03:31 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 28 November 2006.