SPEC® CINT2006 Result

Hewlett-Packard Company

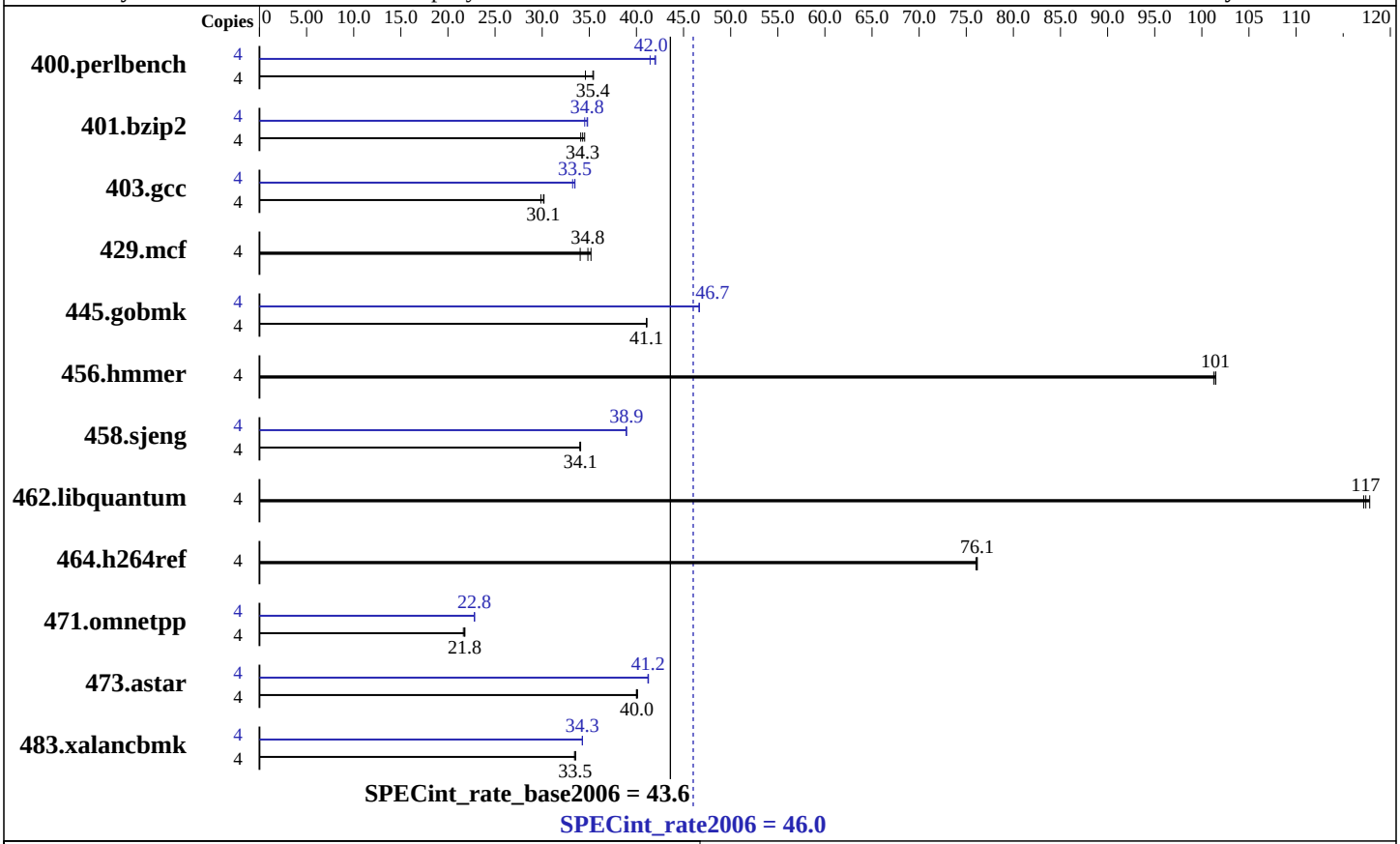
HP Integrity rx2660
(1.6GHz/18MB Dual-Core Intel Itanium 2)

SPECint®_rate2006 = 46.0

SPECint_rate_base2006 = 43.6

CPU2006 license: 03
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Jan-2007
Hardware Availability: Feb-2007
Software Availability: Nov-2006



Hardware

CPU Name:	Dual-Core Intel Itanium 2 9040
CPU Characteristics:	1.6GHz/18MB, 533MHz FSB
CPU MHz:	1600
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip
CPU(s) orderable:	1-2 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:	9 MB I+D on chip per core
Other Cache:	None
Memory:	8 GB (4x2GB DIMMs)
Disk Subsystem:	73GB 10K RPM SAS
Other Hardware:	None

Software

Operating System:	Red Hat Enterprise Linux AS release 4 (Update 4)
Compiler:	Intel C++ Compiler 9.1 for Linux (Build 20061105)
Auto Parallel:	No
File System:	ext3
System State:	Multi-user
Base Pointers:	64-bit
Peak Pointers:	64-bit
Other Software:	MicroQuill Smartheap 8.0

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	1130	34.6	**1105**	**35.4**	1102	35.4	4	**931**	**42.0**	943	41.5	930	42.0
401.bzip2	4	1119	34.5	1132	34.1	**1125**	**34.3**	4	1119	34.5	**1110**	**34.8**	1109	34.8
403.gcc	4	**1069**	**30.1**	1079	29.9	1066	30.2	4	969	33.2	**962**	**33.5**	962	33.5
429.mcf	4	**1047**	**34.8**	1072	34.0	1037	35.2	4	**1047**	**34.8**	1072	34.0	1037	35.2
445.gobmk	4	1021	41.1	**1022**	**41.1**	1022	41.1	4	899	46.7	**899**	**46.7**	899	46.7
456.hmmer	4	368	101	**368**	**101**	369	101	4	368	101	**368**	**101**	369	101
458.sjeng	4	**1421**	**34.1**	1420	34.1	1424	34.0	4	**1243**	**38.9**	1244	38.9	1243	38.9
462.libquantum	4	707	117	703	118	**706**	**117**	4	707	117	703	118	**706**	**117**
464.h264ref	4	**1162**	**76.1**	1162	76.2	1164	76.0	4	**1162**	**76.1**	1162	76.2	1164	76.0
471.omnetpp	4	1147	21.8	1155	21.6	**1148**	**21.8**	4	**1096**	**22.8**	1096	22.8	1096	22.8
473.astar	4	702	40.0	**702**	**40.0**	700	40.1	4	681	41.2	**681**	**41.2**	680	41.3
483.xalancbmk	4	823	33.6	826	33.4	**824**	**33.5**	4	805	34.3	806	34.3	**805**	**34.3**

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
```

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
464.h264ref: -DSPEC_CPU_LP64
471.omnetpp: -DSPEC_CPU_LP64

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Base Portability Flags (Continued)

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

456.hmmer: basepeak = yes

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Peak Optimization Flags (Continued)

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.20090715.00.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/IPF_intel91_flags.20090715.00.xml

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.0.
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