SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

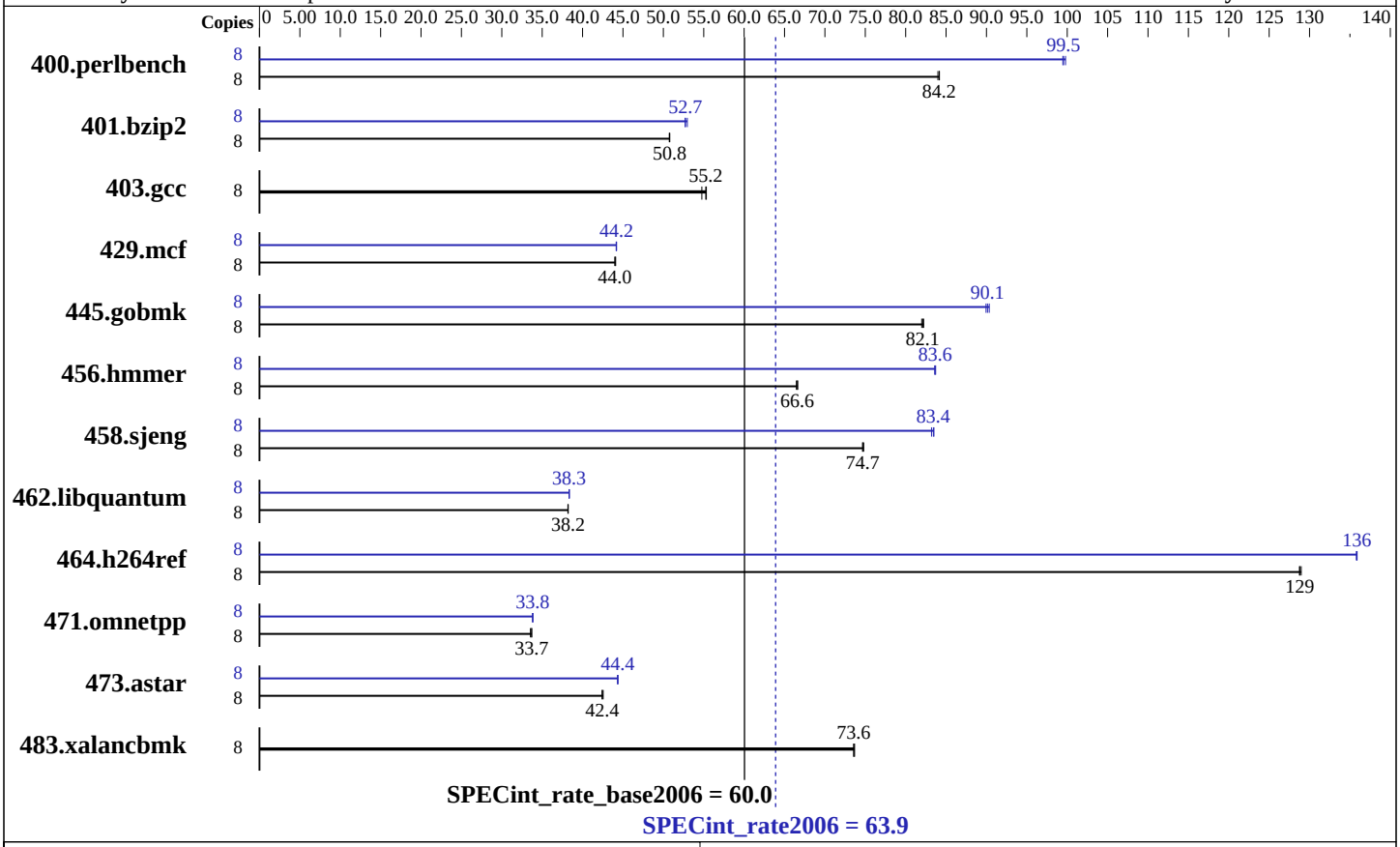
Express5800/i120Rg-1
(Intel Xeon processor L5310)

SPECint®_rate2006 = 63.9

SPECint_rate_base2006 = 60.0

CPU2006 license: 9006
Test sponsor: NEC Corporation
Tested by: NEC Corporation

Test date: Aug-2007
Hardware Availability: Aug-2007
Software Availability: Jun-2007



Hardware

CPU Name:	Intel Xeon L5310
CPU Characteristics:	1.60 GHz, 2x4 MB L2 shared, 1066 MHz bus
CPU MHz:	1600
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:	8 MB I+D on chip per chip, 4 MB shared / 2 cores
L3 Cache:	None
Other Cache:	None
Memory:	16 GB (8x2 GB DDR2 5300F, 2 rank, CL5-5-5, ECC)
Disk Subsystem:	1x73.2 GB SAS, 15000RPM
Other Hardware:	None

Software

Operating System:	64-Bit SUSE LINUX Enterprise Server 10, Kernel 2.6.16.21-0.8-smp for x86_64
Compiler:	Intel C++ Compiler for IA32/EM64T application, Version 10.0 - Build 20070426 Package ID: l_cc_p_10.0.023
Auto Parallel:	No
File System:	ext2
System State:	Multiuser, Runlevel 3
Base Pointers:	32-bit
Peak Pointers:	32/64-bit
Other Software:	MicroQuill SmartHeap library 8.1 binutils-2.17.tar.gz, Version 2.17

SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/i120Rg-1
(Intel Xeon processor L5310)

SPECint_rate2006 = 63.9

SPECint_rate_base2006 = 60.0

CPU2006 license: 9006
Test sponsor: NEC Corporation
Tested by: NEC Corporation

Test date: Aug-2007
Hardware Availability: Aug-2007
Software Availability: Jun-2007

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	8	**929**	**84.2**	931	84.0	929	84.2	8	786	99.5	**785**	**99.5**	783	99.8
401.bzip2	8	1522	50.7	**1521**	**50.8**	1520	50.8	8	**1464**	**52.7**	1457	53.0	1465	52.7
403.gcc	8	**1166**	**55.2**	1176	54.8	1164	55.3	8	**1166**	**55.2**	1176	54.8	1164	55.3
429.mcf	8	1655	44.1	1658	44.0	**1658**	**44.0**	8	**1651**	**44.2**	1650	44.2	1652	44.2
445.gobmk	8	**1022**	**82.1**	1021	82.2	1024	82.0	8	933	89.9	**931**	**90.1**	929	90.3
456.hmmer	8	1120	66.6	**1121**	**66.6**	1123	66.5	8	892	83.7	**892**	**83.6**	893	83.6
458.sjeng	8	**1296**	**74.7**	1294	74.8	1296	74.7	8	1159	83.5	**1160**	**83.4**	1164	83.2
462.libquantum	8	4341	38.2	**4339**	**38.2**	4336	38.2	8	4320	38.4	**4325**	**38.3**	4325	38.3
464.h264ref	8	1373	129	1375	129	**1375**	**129**	8	**1303**	**136**	1304	136	1303	136
471.omnetpp	8	1484	33.7	**1484**	**33.7**	1491	33.5	8	**1478**	**33.8**	1478	33.8	1479	33.8
473.astar	8	1324	42.4	1320	42.6	**1323**	**42.4**	8	**1266**	**44.4**	1267	44.3	1266	44.4
483.xalancbmk	8	750	73.6	749	73.7	**750**	**73.6**	8	750	73.6	749	73.7	**750**	**73.6**

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

Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
'/usr/bin/taskset' used to bind processes to CPUs

General Notes

All benchmarks compiled in 32-bit mode except 401.bzip2 and 456.hmmer,
for peak, are compiled in 64-bit mode

Base Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

Base Portability Flags

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

Base Optimization Flags

C benchmarks:
`-fast`

C++ benchmarks:
`-xT -ipo -O3 -no-prec-div -Wl,-z,muldefs`
`-L/opt/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/cce/10.0.023/bin/icc`

456.hmmer: `/opt/intel/cce/10.0.023/bin/icc`

C++ benchmarks:
`icpc`

Peak Portability Flags

400.perlbench: `-DSPEC_CPU_LINUX_IA32`
401.bzip2: `-DSPEC_CPU_LP64`
456.hmmer: `-DSPEC_CPU_LP64`
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) `-fast -ansi-alias`
`-prefetch`

401.bzip2: `-L/opt/intel/cce/10.0.023/lib -I/opt/intel/cce/10.0.023/include`
`-prof-gen`(pass 1) `-prof-use`(pass 2) `-fast`

Continued on next page

Peak Optimization Flags (Continued)

403.gcc: `basepeak = yes`

429.mcf: `-fast -prefetch`

445.gobmk: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-xT -O2 -ipo -no-prec_div -ansi-alias`

456.hmmer: `-L/opt/intel/cce/10.0.023/lib -I/opt/intel/cce/10.0.023/include -prof-gen`(pass 1) `-prof-use`(pass 2) `-fast -unroll2 -ansi-alias`

458.sjeng: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-fast -unroll4`

462.libquantum: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-fast -unroll4 -Ob0 -prefetch -opt-streaming-stores always`

464.h264ref: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-fast -unroll2 -ansi-alias`

C++ benchmarks:

471.omnetpp: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-xT -O3 -ipo -no-prec_div -ansi-alias -Wl,-z,muldefs -L/opt/SmartHeap_8.1/lib -lsmartheap`

473.astar: `Same as 471.omnetpp`

483.xalancbmk: `basepeak = yes`

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/NEC-ic10-linux-flags.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/NEC-ic10-linux-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.

Tested with SPEC CPU2006 v1.0.
Report generated on Tue Jul 22 13:54:34 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 2 October 2007.