SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

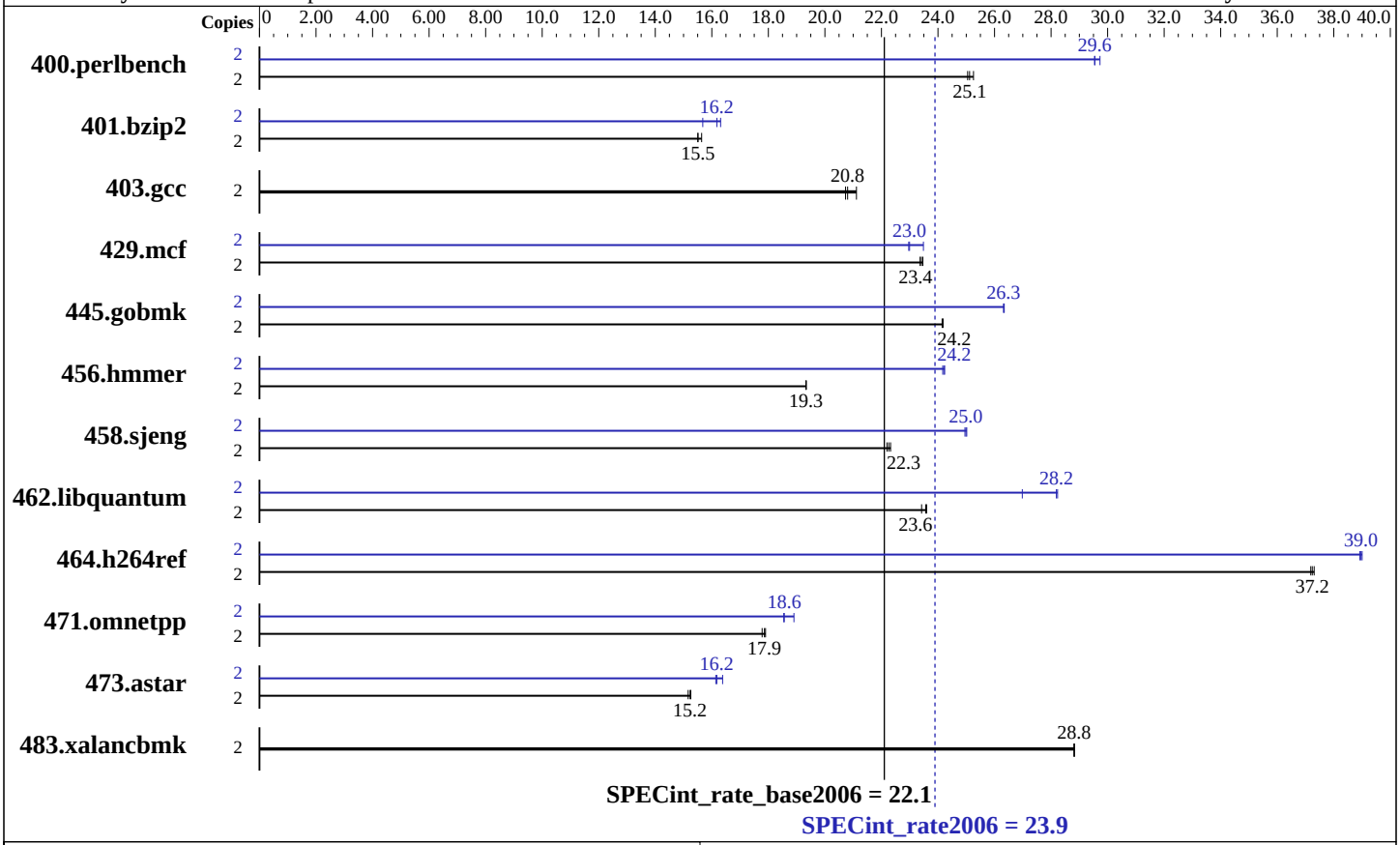
Express5800/i110Rh-1
(Intel Xeon processor 3040)

SPECint®_rate2006 = 23.9

SPECint_rate_base2006 = 22.1

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

Test date: Nov-2007
Hardware Availability: May-2007
Software Availability: Jun-2007



Hardware

CPU Name:	Intel Xeon 3040
CPU Characteristics:	1.86 GHz, 2 MB L2, 1066 MHz bus
CPU MHz:	1866
FPU:	Integrated
CPU(s) enabled:	2 cores, 1 chip, 2 cores/chip
CPU(s) orderable:	1 chip
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	2 MB I+D on chip per chip
L3 Cache:	None
Other Cache:	None
Memory:	4 GB (4x1 GB PC2-5300E, 2 rank, CL5-5-5, ECC)
Disk Subsystem:	1x80 GB SATAII, 7200RPM
Other Hardware:	None

Software

Operating System:	SUSE Linux Enterprise Server 10 (x86_64), Kernel 2.6.16.21-0.8-smp
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/i110Rh-1
(Intel Xeon processor 3040)

SPECint_rate2006 = 23.9

SPECint_rate_base2006 = 22.1

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

Test date: Nov-2007
Hardware Availability: May-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	2	**778**	**25.1**	774	25.3	780	25.0	2	657	29.7	662	29.5	**661**	**29.6**
401.bzip2	2	**1244**	**15.5**	1245	15.5	1234	15.6	2	1231	15.7	1183	16.3	**1193**	**16.2**
403.gcc	2	**774**	**20.8**	777	20.7	762	21.1	2	**774**	**20.8**	777	20.7	762	21.1
429.mcf	2	**779**	**23.4**	781	23.4	777	23.5	2	777	23.5	**793**	**23.0**	794	23.0
445.gobmk	2	**868**	**24.2**	869	24.1	868	24.2	2	797	26.3	796	26.3	**797**	**26.3**
456.hmmer	2	**965**	**19.3**	965	19.3	965	19.3	2	770	24.2	**771**	**24.2**	772	24.2
458.sjeng	2	1084	22.3	**1087**	**22.3**	1090	22.2	2	**968**	**25.0**	970	25.0	967	25.0
462.libquantum	2	1769	23.4	1756	23.6	**1758**	**23.6**	2	1536	27.0	**1470**	**28.2**	1468	28.2
464.h264ref	2	1190	37.2	1186	37.3	**1189**	**37.2**	2	1135	39.0	**1136**	**39.0**	1137	38.9
471.omnetpp	2	703	17.8	698	17.9	**700**	**17.9**	2	661	18.9	674	18.5	**673**	**18.6**
473.astar	2	**922**	**15.2**	920	15.3	926	15.2	2	857	16.4	**868**	**16.2**	870	16.1
483.xalancbmk	2	479	28.8	479	28.8	**479**	**28.8**	2	479	28.8	479	28.8	**479**	**28.8**

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`
`-L/opt/intel/cce/10.0.023/lib`
`-I/opt/intel/cce/10.0.023/include`

456.hmmer: `/opt/intel/cce/10.0.023/bin/icc`
`-L/opt/intel/cce/10.0.023/lib`
`-I/opt/intel/cce/10.0.023/include`

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:

Continued on next page

Peak Optimization Flags (Continued)

400.perlbench: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-fast -ansi-alias -prefetch`

401.bzip2: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-fast`

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: `-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: `Same as 456.hmmer`

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-INT-ia32-intel64-linux-flags.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/NEC-ic10-INT-ia32-intel64-linux-flags.xml`

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/i110Rh-1
(Intel Xeon processor 3040)

SPECint_rate2006 = 23.9

SPECint_rate_base2006 = 22.1

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

Test date: Nov-2007
Hardware Availability: May-2007
Software Availability: Jun-2007

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 13:45:00 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 11 December 2007.