SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

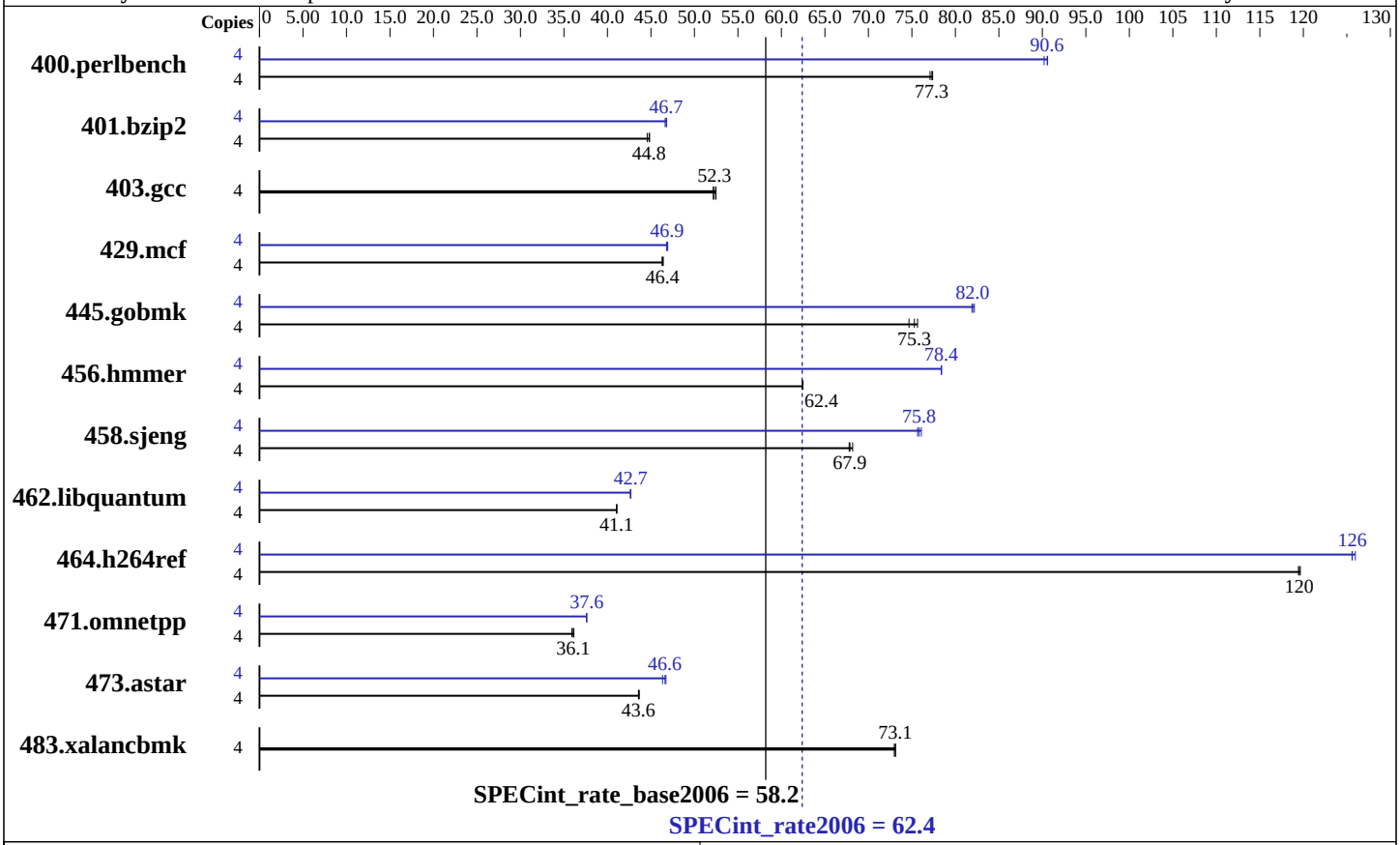
Express5800/120Ri-2
(Intel Xeon processor 5160)

SPECint®_rate2006 = 62.4

SPECint_rate_base2006 = 58.2

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

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



Hardware

CPU Name:	Intel Xeon 5160
CPU Characteristics:	3.00 GHz, 4MB L2, 1333MHz bus
CPU MHz:	3000
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip
CPU(s) orderable:	1,2 chips
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	4 MB I+D on chip per chip
L3 Cache:	None
Other Cache:	None
Memory:	8 GB (4x2 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

Express5800/120Ri-2
(Intel Xeon processor 5160)

SPECint_rate2006 = 62.4

SPECint_rate_base2006 = 58.2

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

Test date: Jun-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	4	507	77.1	**506**	**77.3**	505	77.4	4	**432**	**90.6**	433	90.2	431	90.6
401.bzip2	4	**862**	**44.8**	861	44.8	866	44.6	4	**826**	**46.7**	828	46.6	825	46.8
403.gcc	4	617	52.2	**616**	**52.3**	614	52.5	4	617	52.2	**616**	**52.3**	614	52.5
429.mcf	4	788	46.3	786	46.4	**787**	**46.4**	4	777	46.9	780	46.8	**778**	**46.9**
445.gobmk	4	562	74.7	**557**	**75.3**	555	75.6	4	512	81.9	511	82.2	**512**	**82.0**
456.hmmer	4	**598**	**62.4**	597	62.5	598	62.4	4	**476**	**78.4**	476	78.4	476	78.4
458.sjeng	4	714	67.8	710	68.2	**713**	**67.9**	4	640	75.7	636	76.1	**638**	**75.8**
462.libquantum	4	2019	41.1	**2018**	**41.1**	2018	41.1	4	1941	42.7	**1942**	**42.7**	1944	42.6
464.h264ref	4	**740**	**120**	741	119	740	120	4	**705**	**126**	705	126	703	126
471.omnetpp	4	696	35.9	692	36.1	**693**	**36.1**	4	665	37.6	**665**	**37.6**	664	37.6
473.astar	4	644	43.6	643	43.7	**644**	**43.6**	4	601	46.7	606	46.3	**602**	**46.6**
483.xalancbmk	4	378	73.1	**378**	**73.1**	378	73.0	4	378	73.1	**378**	**73.1**	378	73.0

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

The Express5800/120Rg-1(Intel Xeon processor 5160) and
the Express5800/120Ri-2(Intel Xeon processor 5160) models are electronically equivalent.
The results have been measured on a Express5800/120Ri-2(Intel Xeon processor 5160) model.

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`

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 13:19:12 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 24 July 2007.