SPEC® CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120a-2
(Intel Xeon L5520)

SPECint®_rate2006 =   103

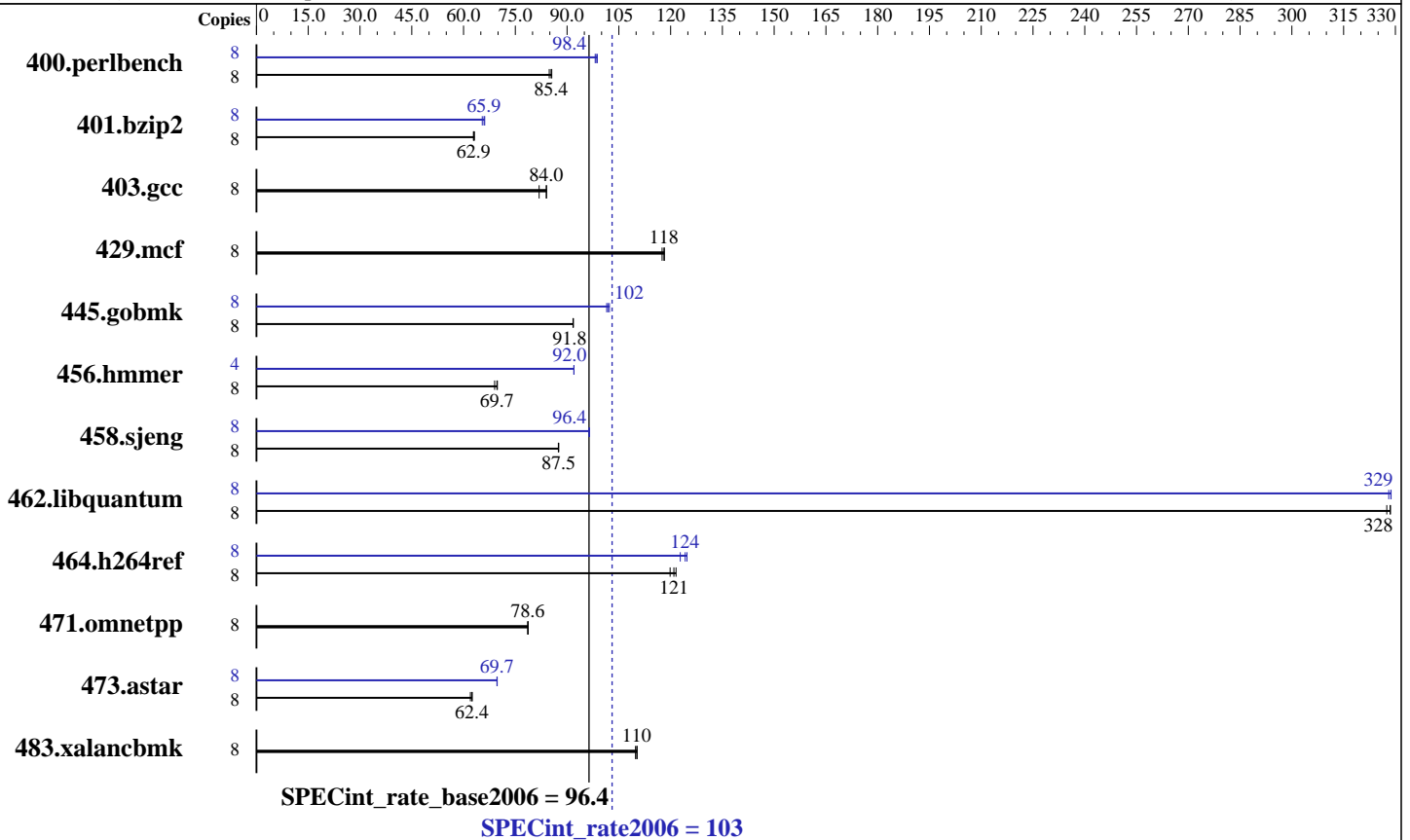SPECint_rate_base2006 = 96.4

CPU2006 license: 9006

Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Aug-2009

Hardware Availability: Jul-2009

Software Availability: Feb-2009

SPECint_rate_base2006 = 96.4

SPECint_rate2006 = 103

Hardware

CPU Name:	Intel Xeon L5520
CPU Characteristics:	Intel Turbo Boost Technology up to 2.53 GHz
CPU MHz:	2267
FPU:	Integrated
CPU(s) enabled:	4 cores, 1 chip, 4 cores/chip, 2 threads/core
CPU(s) orderable:	1,2 chips
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	256 KB I+D on chip per core
L3 Cache:	8 MB I+D on chip per chip
Other Cache:	None
Memory:	24 GB (6 X 4 GB PC3-8500R, 2 rank, CL7, ECC)
Disk Subsystem:	1x146.5 GB SAS, 15000 RPM
Other Hardware:	None

Software

Operating System:	SUSE Linux Enterprise Server 10 (x86_64) SP2 with patch Linux kernel 20090119, Kernel 2.6.16.60-0.34-smp
Compiler:	Intel C++ Compiler Professional 11.0 for Linux Build 20090131 Package ID: l_cproc_p_11.0.081
Auto Parallel:	No
File System:	ReiserFS
System State:	Run level 3 (multi-user)
Base Pointers:	32-bit
Peak Pointers:	32/64-bit
Other Software:	MicroQuill SmartHeap Library 8.1 Binutils 2.18.50.0.7.20080502

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120a-2
(Intel Xeon L5520)

SPECint_rate2006 =   103

SPECint_rate_base2006 = 96.4

Results Table

Benchmark	Base						Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	8	914	85.6	**916**	**85.4**	921	84.8	8	791	98.8	796	98.2	**794**	**98.4**
401.bzip2	8	1228	62.9	**1227**	**62.9**	1222	63.2	8	**1171**	**65.9**	1167	66.1	1180	65.4
403.gcc	8	**767**	**84.0**	766	84.1	786	81.9	8	**767**	**84.0**	766	84.1	786	81.9
429.mcf	8	617	118	**618**	**118**	621	118	8	617	118	**618**	**118**	621	118
445.gobmk	8	**914**	**91.8**	914	91.8	915	91.7	8	**824**	**102**	827	101	821	102
456.hmmer	8	**1071**	**69.7**	1069	69.8	1082	69.0	4	406	92.0	406	92.0	**406**	**92.0**
458.sjeng	8	**1106**	**87.5**	1105	87.6	1107	87.5	8	1003	96.5	**1004**	**96.4**	1005	96.4
462.libquantum	8	506	328	504	329	**505**	**328**	8	**504**	**329**	505	328	504	329
464.h264ref	8	1456	122	**1464**	**121**	1477	120	8	1442	123	1419	125	**1425**	**124**
471.omnetpp	8	636	78.6	635	78.7	**636**	**78.6**	8	636	78.6	635	78.7	**636**	**78.6**
473.astar	8	906	62.0	899	62.5	**899**	**62.4**	8	806	69.7	805	69.8	**806**	**69.7**
483.xalancbmk	8	503	110	**501**	**110**	500	110	8	503	110	**501**	**110**	500	110

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

Submit Notes

    The config file option 'submit' was used.
     numactl was used to bind copies to the cores

Operating System Notes

     'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run

Platform Notes

    Default BIOS settings were used.

General Notes

    The NEC Express5800/R120a-1(Intel Xeon L5520),
    the NEC Express5800/R120a-2(Intel Xeon L5520),
    the Bull NovaScale R440 E2 (Intel Xeon L5520, 2.26 GHz) and
    the Bull NovaScale R460 E2 (Intel Xeon L5520, 2.26 GHz) models are electronically equivalent.
    The results have been measured on a NEC Express5800/R120a-1(Intel Xeon L5520) model.

Base Compiler Invocation

C benchmarks:
     icc

NEC Corporation

Express5800/R120a-2
(Intel Xeon L5520)

SPECint_rate2006 = 103

SPECint_rate_base2006 = 96.4

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

Test date: Aug-2009
Hardware Availability: Jul-2009
Software Availability: Feb-2009

Base Compiler Invocation (Continued)

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:
    `-xSSE4.2 -ipo -O3 -no-prec-div -static -inline-calloc`
    `-opt-malloc-options=3 -opt-prefetch`

C++ benchmarks:
    `-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -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/Compiler/11.0/081/bin/intel64/icc`

    456.hmmer: `/opt/intel/Compiler/11.0/081/bin/intel64/icc`

    458.sjeng: `/opt/intel/Compiler/11.0/081/bin/intel64/icc`

C++ benchmarks (except as noted below):
    icpc

    473.astar: `/opt/intel/Compiler/11.0/081/bin/intel64/icpc`

SPEC CINT2006 Result

NEC Corporation

Express5800/R120a-2
(Intel Xeon L5520)

SPECint_rate2006 =   103

SPECint_rate_base2006 = 96.4

CPU2006 license: 9006	**Test date:**	Aug-2009
Test sponsor: NEC Corporation	**Hardware Availability:**	Jul-2009
Tested by: NEC Corporation	**Software Availability:**	Feb-2009

Peak Portability Flags

```
        400.perlbench: -DSPEC_CPU_LINUX_IA32
           401.bzip2: -DSPEC_CPU_LP64
           456.hmmer: -DSPEC_CPU_LP64
           458.sjeng: -DSPEC_CPU_LP64
       462.libquantum: -DSPEC_CPU_LINUX
            473.astar: -DSPEC_CPU_LP64
        483.xalancbmk: -DSPEC_CPU_LINUX
```

Peak Optimization Flags

C benchmarks:

```
    400.perlbench: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
                   -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
                   -prof-use(pass 2) -ansi-alias -opt-prefetch

       401.bzip2: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
                  -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
                  -prof-use(pass 2) -opt-prefetch -ansi-alias -auto-ilp32

         403.gcc: basepeak = yes

         429.mcf: basepeak = yes

       445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2) -O2
                  -ipo -no-prec-div -ansi-alias

       456.hmmer: -xSSE4.2 -ipo -O3 -no-prec-div -static -unroll2
                  -ansi-alias -auto-ilp32

       458.sjeng: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
                  -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
                  -prof-use(pass 2) -unroll4 -auto-ilp32

   462.libquantum: -xSSE4.2 -ipo -O3 -no-prec-div -static
                   -opt-malloc-options=3 -opt-prefetch

     464.h264ref: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
                  -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
                  -prof-use(pass 2) -unroll2 -ansi-alias
```

C++ benchmarks:

```
     471.omnetpp: basepeak = yes

        473.astar: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
                   -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
                   -ansi-alias -opt-ra-region-strategy=routine -auto-ilp32
                   -Wl,-z,muldefs -L/opt/SmartHeap_8.1/lib64 -lsmartheap64
```

SPEC CINT2006 Result

NEC Corporation

Express5800/R120a-2
(Intel Xeon L5520)

SPECint_rate2006 = 103

SPECint_rate_base2006 = 96.4

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

Test date: Aug-2009
Hardware Availability: Jul-2009
Software Availability: Feb-2009

Peak Optimization Flags (Continued)

483.xalancbmk: basepeak = yes

Peak Other Flags

C benchmarks:

403.gcc: -Dalloca=_alloca

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revG.html
http://www.spec.org/cpu2006/flags/NEC-Intel-Linux-Settings-flags-revE.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revG.xml
http://www.spec.org/cpu2006/flags/NEC-Intel-Linux-Settings-flags-revE.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 v1.1.
Report generated on Wed Jul 23 04:17:45 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 28 October 2009.