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

NEC Corporation

Express5800/R120d-1M (Intel Xeon E5-2630L)

SPECint®_rate2006 = 394
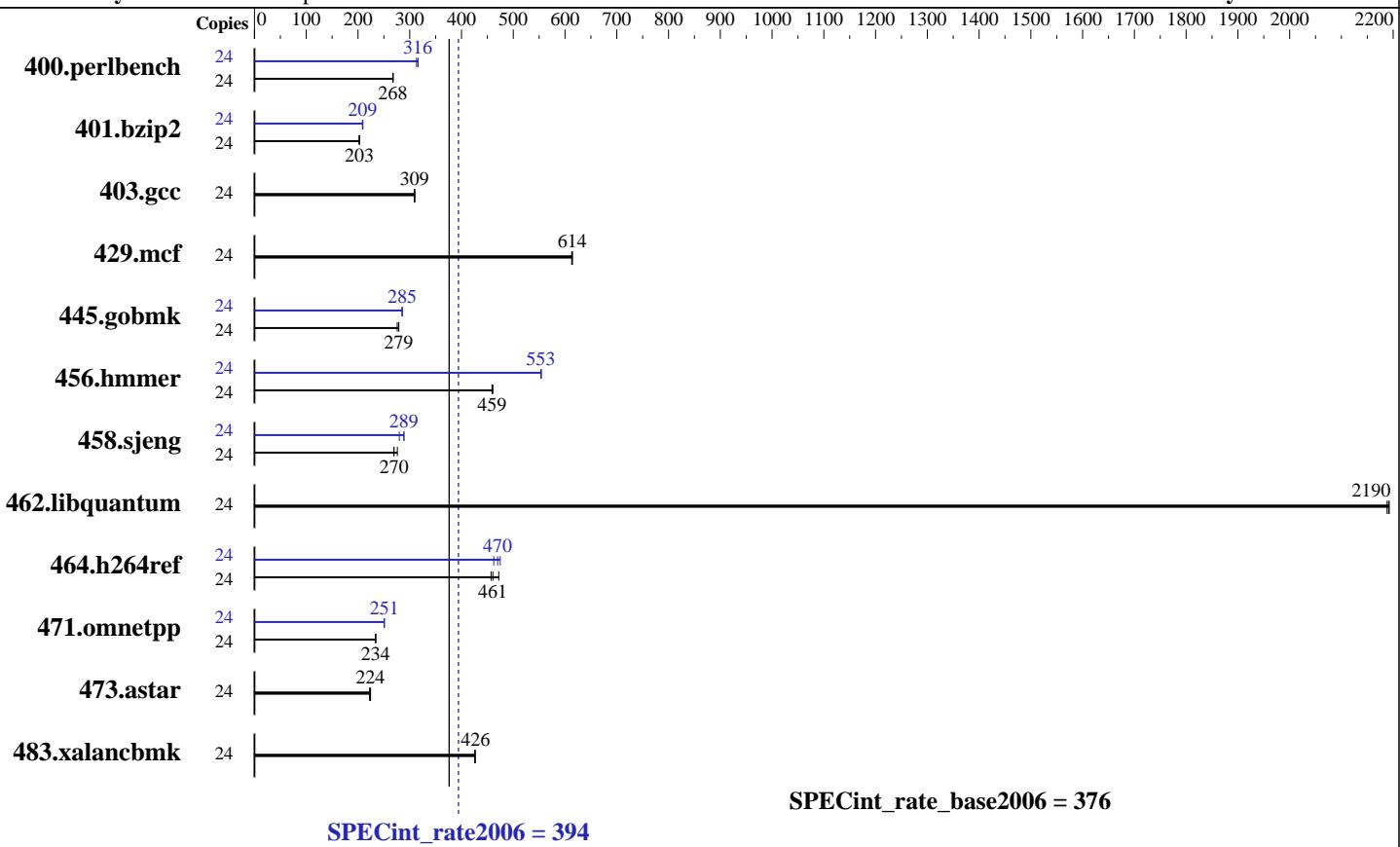
SPECint_rate_base2006 = 376

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

Test date: Apr-2012
Hardware Availability: Apr-2012
Software Availability: Dec-2011

SPECint_rate_base2006 = 376

SPECint_rate2006 = 394

Hardware

CPU Name:	Intel Xeon E5-2630L
CPU Characteristics:	Intel Turbo Boost Technology up to 2.50 GHz
CPU MHz:	2000
FPU:	Integrated
CPU(s) enabled:	12 cores, 2 chips, 6 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:	15 MB I+D on chip per chip
Other Cache:	None
Memory:	128 GB (16 x 8 GB 2Rx4 PC3L-12800R-11, ECC, running at 1333 MHz and CL9)
Disk Subsystem:	1 x 250 GB SATA, 7200 RPM
Other Hardware:	None

Software

Operating System:	Red Hat Enterprise Linux Server release 6.2 (Santiago) Kernel 2.6.32-220.el6.x86_64
Compiler:	C/C++: Version 12.1.2.273 of Intel C++ Studio XE for Linux;
Auto Parallel:	No
File System:	ext4
System State:	Run level 3 (multi-user)
Base Pointers:	32-bit
Peak Pointers:	32/64-bit
Other Software:	Microquill SmartHeap V8.1

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120d-1M (Intel Xeon E5-2630L)

SPECint_rate2006 = 394

SPECint_rate_base2006 = 376

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

Test date: Apr-2012
Hardware Availability: Apr-2012
Software Availability: Dec-2011

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	24	875	268	**876**	**268**	877	267	24	742	316	749	313	**743**	**316**
401.bzip2	24	**1141**	**203**	1141	203	1146	202	24	1105	210	**1109**	**209**	1110	209
403.gcc	24	**624**	**309**	625	309	624	310	24	**624**	**309**	625	309	624	310
429.mcf	24	**357**	**614**	356	614	357	613	24	**357**	**614**	356	614	357	613
445.gobmk	24	903	279	**903**	**279**	913	276	24	882	285	**882**	**285**	882	285
456.hmmer	24	488	459	486	461	**488**	**459**	24	404	554	**405**	**553**	405	553
458.sjeng	24	1052	276	**1077**	**270**	1078	269	24	1006	289	**1006**	**289**	1038	280
462.libquantum	24	227	2190	**227**	**2190**	227	2190	24	227	2190	**227**	**2190**	227	2190
464.h264ref	24	**1153**	**461**	1162	457	1125	472	24	1119	475	**1130**	**470**	1149	462
471.omnetpp	24	641	234	641	234	**641**	**234**	24	598	251	**598**	**251**	599	251
473.astar	24	751	224	758	222	**752**	**224**	24	751	224	758	222	**752**	**224**
483.xalancbmk	24	389	426	388	427	**389**	**426**	24	389	426	388	427	**389**	**426**

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

Submit Notes

    The numactl mechanism was used to bind copies to processors. The config file option 'submit'
    was used to generate numactl commands to bind each copy to a specific processor.
    For details, please see the config file.

Operating System Notes

    Stack size set to unlimited using "ulimit -s unlimited"

Platform Notes

    BIOS Settings:
     Energy Performance: Performance

General Notes

    Environment variables set by runspec before the start of the run:
    LD_LIBRARY_PATH = "/home/cpu2006/libs/32:/home/cpu2006/libs/64"

     The Express5800/R120d-1M and
     the Express5800/R120d-2M models are electronically equivalent.
     The results have been measured on the Express5800/R120d-2M model.

     Added glibc-static-2.12-1.47.el6.x86_64.rpm
     to enable static linking

     Transparent Huge Pages enabled with:

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120d-1M (Intel Xeon E5-2630L)

SPECint_rate2006 =   394

SPECint_rate_base2006 = 376

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

Test date: Apr-2012
Hardware Availability: Apr-2012
Software Availability: Dec-2011

General Notes (Continued)

```
echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
Filesystem page cache cleared with:
echo 1>        /proc/sys/vm/drop_caches
runspec command invoked through numactl i.e.:
numactl --interleave=all runspec <etc>
```

Base Compiler Invocation

C benchmarks:
    icc -m32

C++ benchmarks:
    icpc -m32

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 -opt-prefetch -opt-mem-layout-trans=3

C++ benchmarks:
    -xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3
    -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 -m32

    400.perlbench: icc -m64

Continued on next page

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120d-1M (Intel Xeon E5-2630L)

SPECint_rate2006 = 394

SPECint_rate_base2006 = 376

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

Test date: Apr-2012
Hardware Availability: Apr-2012
Software Availability: Dec-2011

Peak Compiler Invocation (Continued)

401.bzip2: `icc -m64`

456.hmmer: `icc -m64`

458.sjeng: `icc -m64`

C++ benchmarks:
  `icpc -m32`

Peak Portability Flags

400.perlbench: `-DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64`
401.bzip2: `-DSPEC_CPU_LP64`
456.hmmer: `-DSPEC_CPU_LP64`
458.sjeng: `-DSPEC_CPU_LP64`
462.libquantum: `-DSPEC_CPU_LINUX`
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) -prof-use(pass 2)`
        `-auto-ilp32`

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

403.gcc: `basepeak = yes`

429.mcf: `basepeak = yes`

445.gobmk: `-xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)`
        `-ansi-alias -opt-mem-layout-trans=3`

456.hmmer: `-xSSE4.2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32`

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

462.libquantum: `basepeak = yes`

Continued on next page

NEC Corporation

Express5800/R120d-1M (Intel Xeon E5-2630L)

SPECint_rate2006 =　　394

SPECint_rate_base2006 =　376

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

Test date: Apr-2012
Hardware Availability: Apr-2012
Software Availability: Dec-2011

Peak Optimization Flags (Continued)

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

C++ benchmarks:

471.omnetpp: `-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=block -Wl,-z,muldefs`
`-L/opt/SmartHeap_8.1/lib -lsmartheap`

473.astar: basepeak = yes

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-ic12.1-official-linux64.20111122.html
http://www.spec.org/cpu2006/flags/NEC-Platform-Settings-V1.2-R120d-RevA.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.xml
http://www.spec.org/cpu2006/flags/NEC-Platform-Settings-V1.2-R120d-RevA.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 v1.2.
Report generated on Thu Jul 24 05:49:34 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 5 June 2012.