NEC Corporation
Express5800/T110h-S (Intel Core i3-6300)

SPECint®2006 = 68.1
SPECint_base2006 = 65.9

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>SPECint2006</th>
<th>SPECint_base2006</th>
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<tbody>
<tr>
<td>400.perlbench</td>
<td>52.4</td>
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<tr>
<td>401.bzip2</td>
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<td>403.gcc</td>
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<tr>
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<td>483.xalancbmk</td>
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Hardware

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
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<tbody>
<tr>
<td>CPU Name</td>
<td>Intel Core i3-6300</td>
</tr>
<tr>
<td>CPU Characteristics</td>
<td>2 cores, 1 chip, 2 cores/chip</td>
</tr>
<tr>
<td>CPU MHz</td>
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<tr>
<td>FPU</td>
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<td>CPU(s) enabled</td>
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<td>CPU(s) orderable</td>
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</tr>
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<td>Primary Cache</td>
<td>32 KB I + 32 KB D on chip per core</td>
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<tr>
<td>Secondary Cache</td>
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<td>L3 Cache</td>
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<td>Other Hardware</td>
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Software

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Red Hat Enterprise Linux Server release 7.2 (Maipo)</th>
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<tbody>
<tr>
<td>Compiler</td>
<td>C/C++: Version 16.0.0.101 of Intel C++ Studio XE for Linux</td>
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<tr>
<td>Auto Parallel</td>
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<td>File System</td>
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<td>System State</td>
<td>Run level 3 (multi-user)</td>
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<td>Base Pointers</td>
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<td>Peak Pointers</td>
<td>32/64-bit</td>
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<tr>
<td>Other Software</td>
<td>Microquill SmartHeap V10.2</td>
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SPEC CINT2006 Result

NEC Corporation

Express5800/T110h-S (Intel Core i3-6300)

SPECint2006 = 68.1
SPECint_base2006 = 65.9

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

Test date: Dec-2015
Hardware Availability: Mar-2016
Software Availability: Nov-2015

Results Table

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<th>Seconds</th>
<th>Ratio</th>
<th>Peak</th>
<th>Seconds</th>
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</tbody>
</table>

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.

Operating System Notes

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

Platform Notes

BIOS Settings:
Power Management Policy: Custom
Energy Performance: Performance
Hyper-Threading: Disabled

General Notes

Environment variables set by runspec before the start of the run:
KMP_AFFINITY = "granularity=fine,scatter"
LD_LIBRARY_PATH = "/home/cpu2006/libs/32:/home/cpu2006/libs/64:/home/cpu2006/sh"
OMP_NUM_THREADS = "2"

Binaries compiled on a system with 1x Intel Core i5-4670K CPU + 32GB
memory using RedHat EL 7.1
Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/transparent_hugepage/enabled
NEC Corporation
Express5800/T110h-S (Intel Core i3-6300)

SPECint2006 = 68.1
SPECint_base2006 = 65.9

C benchmarks:
icc  -m64

C++ benchmarks:
icc  -m64
NEC Corporation
Express5800/T110h-S (Intel Core i3-6300)

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SPECint_base2006 = 65.9

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

Test date: Dec-2015
Hardware Availability: Mar-2016
Software Availability: Nov-2015

Peak Compiler Invocation (Continued)

400.perlbench: icc -m32 -L/opt/intel/compilers_and_libraries_2016/linux/compiler/lib/ia32_lin

C++ benchmarks (except as noted below):
icpc -m32 -L/opt/intel/compilers_and_libraries_2016/linux/compiler/lib/ia32_lin
473.astar: icpc -m64

Peak Portability Flags

400.perlbench: -D_FILE_OFFSET_BITS=64 -DSPEC_CPU_LINUX_IA32
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
429.mcf: -DSPEC_CPU_LP64
445.gobmk: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
471.omnetpp: -D_FILE_OFFSET_BITS=64
473.astar: -DSPEC_CPU_LP64
483.xalancbmk: -D_FILE_OFFSET_BITS=64 -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:

400.perlbench: -xCORE-AVX2(pass 2) -prof-gen:threadsafe(pass 1)
-ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2)
-par-num-threads=1(pass 1) -prof-use(pass 2) -opt-prefetch
-ansi-alias

401.bzip2: -xCORE-AVX2(pass 2) -prof-gen:threadsafe(pass 1)
-ipo(pass 2) -O3(pass 2) -no-prec-div
-par-num-threads=1(pass 1) -prof-use(pass 2) -auto-ilp32
-opt-prefetch -ansi-alias

403.gcc: -xCORE-AVX2 -ipo -O3 -no-prec-div -inline-calloc
-opt-malloc-options=3 -auto-ilp32
429.mcf: basepeak = yes
445.gobmk: basepeak = yes
456.hmmer: basepeak = yes

Continued on next page
NeC Corporation

Express5800/T110h-S (Intel Core i3-6300)

SPECint2006 = 68.1
SPECint_base2006 = 65.9

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

Test date: Dec-2015
Hardware Availability: Mar-2016
Software Availability: Nov-2015

Peak Optimization Flags (Continued)

458. sjeng: -xCORE-AVX2(pass 2) -prof-gen:threadsafepass 1)
-ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2)
-par-num-threads=1(pass 1) -prof-use(pass 2) -unroll4

462. libquantum: basepeak = yes
464. h264ref: basepeak = yes

C++ benchmarks:

471. omnetpp: -xCORE-AVX2(pass 2) -prof-gen:threadsafepass 1)
-ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2)
-par-num-threads=1(pass 1) -prof-use(pass 2)
-opt-ra-region-strategy=block -ansi-alias
-Wl,-z,muldefs -L/sh -lsmartheap

473. astart: basepeak = yes
483. xalancbmk: -xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch
-ansi-alias -Wl,-z,muldefs -L/sh -lsmartheap

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-ic16.0-official-linux64.html
http://www.spec.org/cpu2006/flags/NeC-Platform-Settings-V1.2-110h-RevA.html

You can also download the XML flags sources by saving the following links:

http://www.spec.org/cpu2006/flags/Intel-ic16.0-official-linux64.xml
http://www.spec.org/cpu2006/flags/NeC-Platform-Settings-V1.2-110h-RevA.xml

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For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

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