NEC Corporation
Express5800/120Rg-1
(Intel Xeon processor 5160)

SPECint®2006 = 21.0
SPECint_base2006 = 19.1

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

NEC Corporation
Express5800/120Rg-1
(Intel Xeon processor 5160)

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

NEC Corporation

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CPU2006 license: 9006
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Test date: Jun-2007
Hardware Availability: May-2007
Software Availability: Jun-2007

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## Results Table

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<td>483.xalancbmk</td>
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<td>24.3</td>
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</tbody>
</table>

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

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## Operating System Notes

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

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## 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.

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## Base Compiler Invocation

C benchmarks:
- icc

C++ benchmarks:
- icpc

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## Base Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32

Continued on next page
SPEC CINT2006 Result

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Base Portability Flags (Continued)
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 -02 -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 -03 -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.20090714.00.html
## NEC Corporation

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<th>Specification</th>
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You can also download the XML flags source by saving the following link:

http://www.spec.org/cpu2006/flags/NEC-ic10-linux-flags.20090714.00.xml

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

Tested with SPEC CPU2006 v1.0.  