



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## NEC Corporation

Express5800/120Li  
(Intel Xeon processor 5110)

**SPECint®2006 = 12.3**

**SPECint\_base2006 = 11.1**

CPU2006 license: 9006

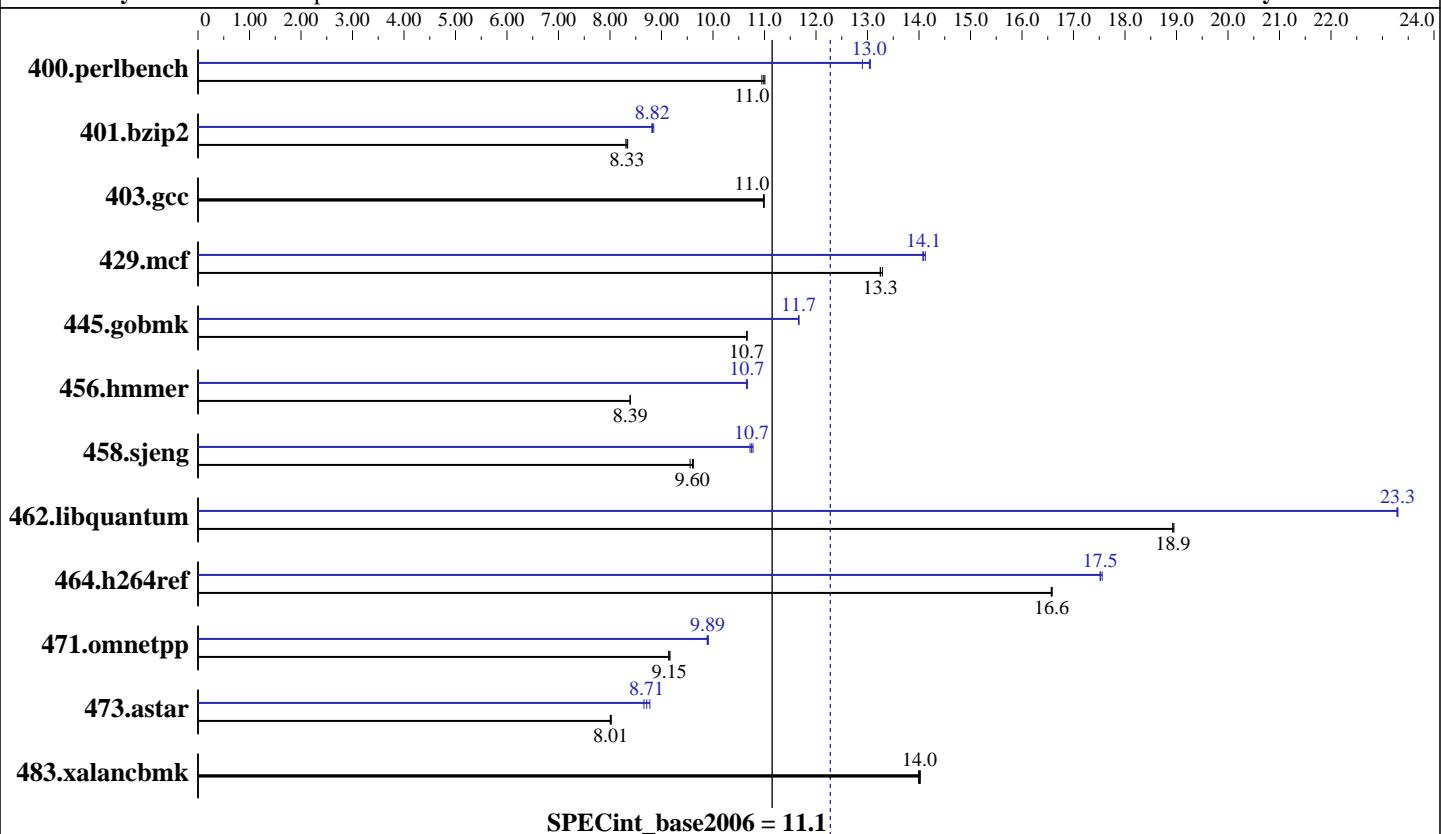
Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Oct-2007

Hardware Availability: May-2007

Software Availability: Jun-2007



### Hardware

CPU Name: Intel Xeon 5110  
CPU Characteristics: 1.60 GHz, 4 MB L2, 1066 MHz bus  
CPU MHz: 1600  
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 (8x1 GB PC2-5300F, 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

Express5800/120Li  
(Intel Xeon processor 5110)

**SPECint2006 = 12.3**

**SPECint\_base2006 = 11.1**

CPU2006 license: 9006

Test date: Oct-2007

Test sponsor: NEC Corporation

Hardware Availability: May-2007

Tested by: NEC Corporation

Software Availability: Jun-2007

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio										
400.perlbench	892	10.9	<b>889</b>	<b>11.0</b>	888	11.0	<b>749</b>	<b>13.0</b>	748	13.1	757	12.9
401.bzip2	<b>1158</b>	<b>8.33</b>	1157	8.34	1162	8.31	<b>1094</b>	<b>8.82</b>	1090	8.85	1095	8.81
403.gcc	<b>733</b>	<b>11.0</b>	732	11.0	733	11.0	<b>733</b>	<b>11.0</b>	732	11.0	733	11.0
429.mcf	688	13.2	686	13.3	<b>688</b>	<b>13.3</b>	646	14.1	648	14.1	<b>647</b>	<b>14.1</b>
445.gobmk	985	10.7	<b>984</b>	<b>10.7</b>	984	10.7	899	11.7	<b>899</b>	<b>11.7</b>	899	11.7
456.hmmer	1112	8.39	1111	8.39	<b>1112</b>	<b>8.39</b>	<b>875</b>	<b>10.7</b>	876	10.6	875	10.7
458.sjeng	1258	9.62	1266	9.56	<b>1260</b>	<b>9.60</b>	1123	10.8	<b>1126</b>	<b>10.7</b>	1129	10.7
462.libquantum	1095	18.9	<b>1095</b>	<b>18.9</b>	1093	19.0	890	23.3	889	23.3	<b>890</b>	<b>23.3</b>
464.h264ref	1336	16.6	1334	16.6	<b>1335</b>	<b>16.6</b>	1260	17.6	1263	17.5	<b>1263</b>	<b>17.5</b>
471.omnetpp	<b>683</b>	<b>9.15</b>	684	9.14	682	9.17	<b>632</b>	<b>9.89</b>	632	9.89	631	9.91
473.astar	<b>876</b>	<b>8.01</b>	877	8.00	875	8.03	<b>806</b>	<b>8.71</b>	800	8.77	811	8.66
483.xalancbmk	492	14.0	493	14.0	<b>493</b>	<b>14.0</b>	492	14.0	493	14.0	<b>493</b>	<b>14.0</b>

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

## General Notes

All benchmarks compiled in 32-bit mode except 401.bzip2 and 456.hmmer, for peak, are compiled in 64-bit mode

## 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



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## NEC Corporation

Express5800/120Li  
(Intel Xeon processor 5110)

**SPECint2006 = 12.3**

**SPECint\_base2006 = 11.1**

**CPU2006 license:** 9006

**Test sponsor:** NEC Corporation

**Tested by:** NEC Corporation

**Test date:** Oct-2007

**Hardware Availability:** May-2007

**Software Availability:** Jun-2007

## 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  
-L/opt/intel/cce/10.0.023/lib  
-I/opt/intel/cce/10.0.023/include

456.hmmr: /opt/intel/cce/10.0.023/bin/icc  
-L/opt/intel/cce/10.0.023/lib  
-I/opt/intel/cce/10.0.023/include

C++ benchmarks:  
icpc

## Peak Portability Flags

400.perlbench: -DSPEC\_CPU\_LINUX\_IA32

401.bzip2: -DSPEC\_CPU\_LP64

456.hmmr: -DSPEC\_CPU\_LP64

462.libquantum: -DSPEC\_CPU\_LINUX

483.xalancbmk: -DSPEC\_CPU\_LINUX

## Peak Optimization Flags

C benchmarks:

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## NEC Corporation

Express5800/120Li  
(Intel Xeon processor 5110)

**SPECint2006 = 12.3**

**SPECint\_base2006 = 11.1**

**CPU2006 license:** 9006

**Test sponsor:** NEC Corporation

**Tested by:** NEC Corporation

**Test date:** Oct-2007

**Hardware Availability:** May-2007

**Software Availability:** Jun-2007

## Peak Optimization Flags (Continued)

400.perlbench: -prof-gen(pass 1) -prof-use(pass 2) -fast -ansi-alias  
-prefetch

401.bzip2: -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.hmmr: -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 -Obo  
-prefetch -opt-streaming-stores always

464.h264ref: Same as 456.hmmr

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-INT-ia32-intel64-linux-flags.html>

You can also download the XML flags source by saving the following link:

<http://www.spec.org/cpu2006/flags/NEC-ic10-INT-ia32-intel64-linux-flags.xml>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## NEC Corporation

Express5800/120Li  
(Intel Xeon processor 5110)

**SPECint2006 =** 12.3

**SPECint\_base2006 =** 11.1

**CPU2006 license:** 9006

**Test sponsor:** NEC Corporation

**Tested by:** NEC Corporation

**Test date:** Oct-2007

**Hardware Availability:** May-2007

**Software Availability:** Jun-2007

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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.0.

Report generated on Tue Jul 22 14:21:49 2014 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 27 November 2007.