



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## NEC Corporation

Express5800/120Ri-2  
(Intel Xeon processor 5160)

SPECint®2006 = 21.0

SPECint\_base2006 = 19.1

CPU2006 license: 9006

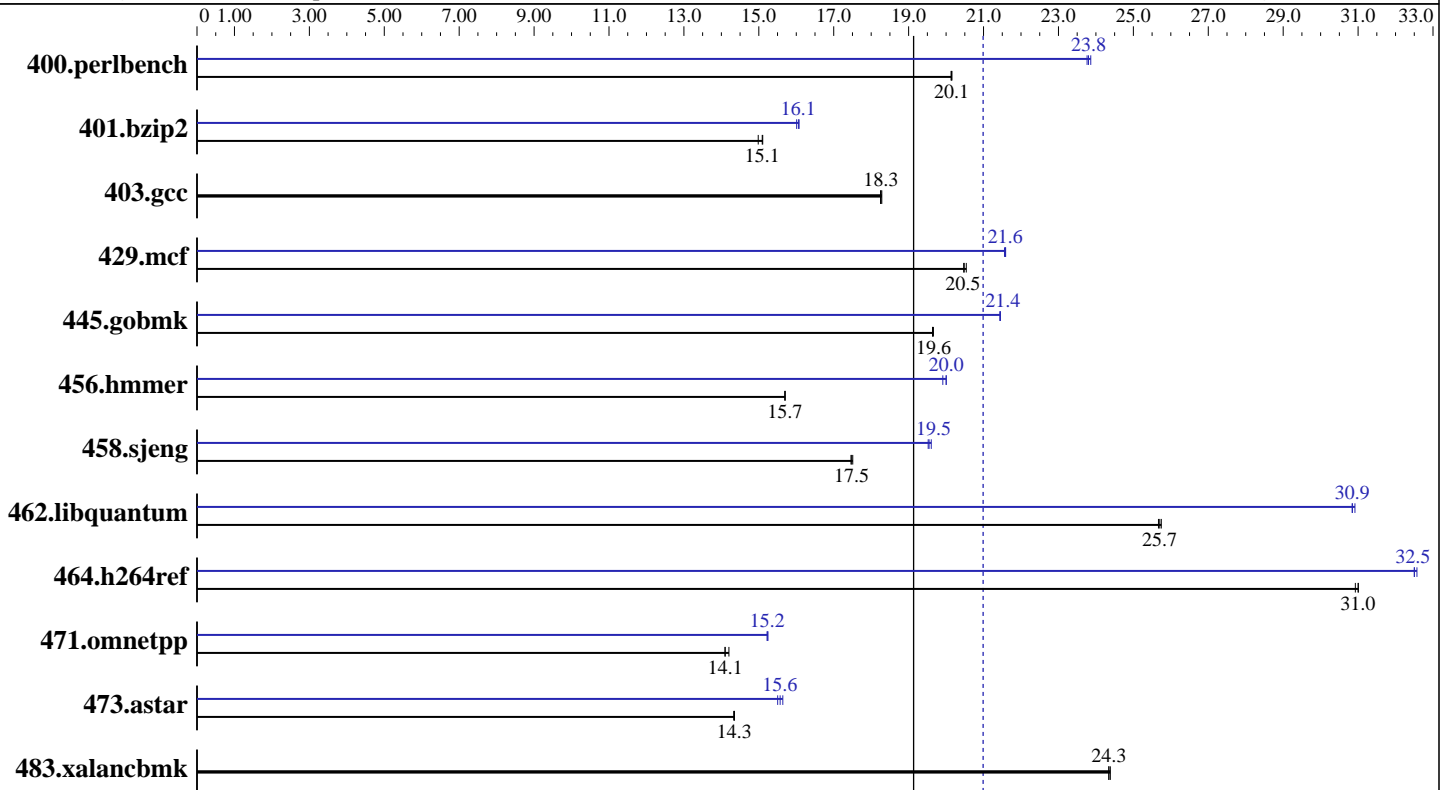
Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Jun-2007

Hardware Availability: May-2007

Software Availability: Jun-2007



SPECint\_base2006 = 19.1

SPECint2006 = 21.0

### 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

Copyright 2006-2014 Standard Performance Evaluation Corporation

## NEC Corporation

Express5800/120Ri-2  
(Intel Xeon processor 5160)

SPECint2006 = **21.0**

SPECint\_base2006 = **19.1**

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

Test date: Jun-2007  
Hardware Availability: May-2007  
Software Availability: Jun-2007

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	485	20.2	485	20.1	<b>485</b>	<b>20.1</b>	409	23.9	<b>410</b>	<b>23.8</b>	411	23.8
401.bzip2	639	15.1	644	15.0	<b>639</b>	<b>15.1</b>	<b>601</b>	<b>16.1</b>	603	16.0	600	16.1
403.gcc	440	18.3	441	18.2	<b>441</b>	<b>18.3</b>	440	18.3	441	18.2	<b>441</b>	<b>18.3</b>
429.mcf	446	20.5	<b>445</b>	<b>20.5</b>	444	20.5	423	21.6	<b>423</b>	<b>21.6</b>	422	21.6
445.gobmk	534	19.7	534	19.6	<b>534</b>	<b>19.6</b>	489	21.5	<b>489</b>	<b>21.4</b>	489	21.4
456.hmmer	<b>594</b>	<b>15.7</b>	594	15.7	594	15.7	466	20.0	469	19.9	<b>466</b>	<b>20.0</b>
458.sjeng	691	17.5	<b>692</b>	<b>17.5</b>	693	17.5	617	19.6	<b>619</b>	<b>19.5</b>	620	19.5
462.libquantum	<b>806</b>	<b>25.7</b>	807	25.7	805	25.7	670	30.9	<b>672</b>	<b>30.9</b>	672	30.8
464.h264ref	716	30.9	<b>714</b>	<b>31.0</b>	714	31.0	681	32.5	<b>681</b>	<b>32.5</b>	679	32.6
471.omnetpp	440	14.2	<b>443</b>	<b>14.1</b>	443	14.1	<b>410</b>	<b>15.2</b>	410	15.2	411	15.2
473.astar	490	14.3	<b>489</b>	<b>14.3</b>	489	14.4	<b>451</b>	<b>15.6</b>	449	15.6	453	15.5
483.xalancbmk	<b>283</b>	<b>24.3</b>	283	24.4	283	24.3	<b>283</b>	<b>24.3</b>	283	24.4	283	24.3

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

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.

## Base Compiler Invocation

C benchmarks:  
icc

C++ benchmarks:  
icpc

## Base Portability Flags

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

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**NEC Corporation**

Express5800/120Ri-2  
(Intel Xeon processor 5160)

**SPECint2006 = 21.0**

**SPECint\_base2006 = 19.1**

**CPU2006 license:** 9006

**Test sponsor:** NEC Corporation

**Tested by:** NEC Corporation

**Test date:** Jun-2007

**Hardware Availability:** May-2007

**Software Availability:** Jun-2007

## 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



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**NEC Corporation**

Express5800/120Ri-2  
(Intel Xeon processor 5160)

**SPECint2006 = 21.0**

**SPECint\_base2006 = 19.1**

**CPU2006 license:** 9006

**Test sponsor:** NEC Corporation

**Tested by:** NEC Corporation

**Test date:** Jun-2007

**Hardware Availability:** May-2007

**Software Availability:** Jun-2007

## 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 -O2 -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 -O3 -ipo  
-no-prec\_div -ansi-alias -Wl,-z,muldefs  
-L/opt/SmartHeap\_8.1/lib -lsmarheap

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>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**NEC Corporation**

Express5800/120Ri-2  
(Intel Xeon processor 5160)

**SPECint2006 = 21.0**

**SPECint\_base2006 = 19.1**

**CPU2006 license:** 9006

**Test sponsor:** NEC Corporation

**Tested by:** NEC Corporation

**Test date:** Jun-2007

**Hardware Availability:** May-2007

**Software Availability:** Jun-2007

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>

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 13:21:57 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 24 July 2007.