



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## NEC Corporation

Express5800/120Rg-1  
(Intel Xeon processor E5345)

SPECint®\_rate2006 = 88.7

SPECint\_rate\_base2006 = 83.1

CPU2006 license: 9006

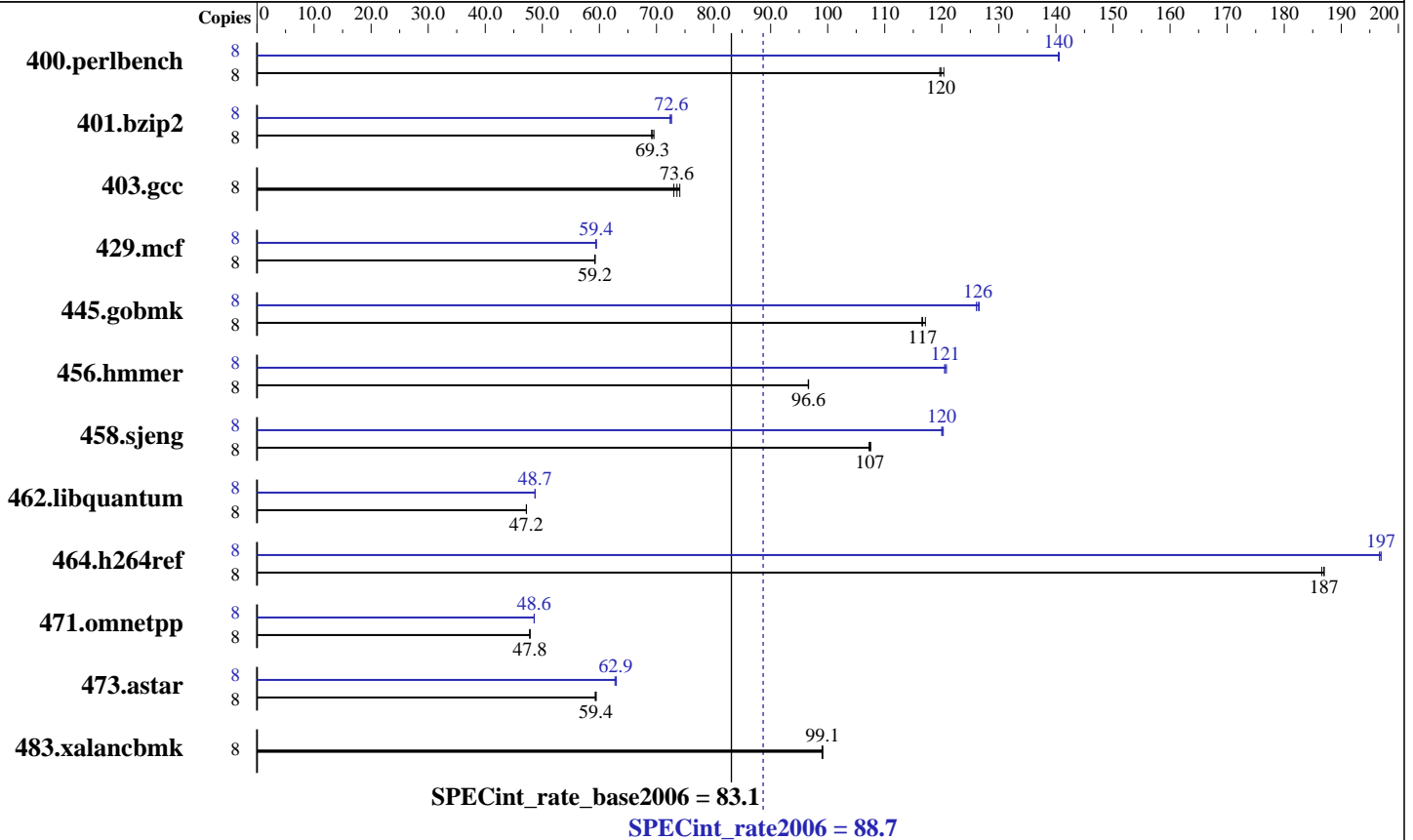
Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Jun-2007

Hardware Availability: Jan-2007

Software Availability: Jun-2007



### Hardware

CPU Name: Intel Xeon E5345  
 CPU Characteristics: 2.33 GHz, 2x4 MB L2 shared, 1333 MHz bus  
 CPU MHz: 2333  
 FPU: Integrated  
 CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip  
 CPU(s) orderable: 1,2 chips  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 8 MB I+D on chip per chip, 4 MB shared / 2 cores  
 L3 Cache: None  
 Other Cache: None  
 Memory: 16 GB (8x2 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

Express5800/120Rg-1  
(Intel Xeon processor E5345)

SPECint\_rate2006 = 88.7

SPECint\_rate\_base2006 = 83.1

CPU2006 license: 9006

Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Jun-2007

Hardware Availability: Jan-2007

Software Availability: Jun-2007

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	8	<b>652</b>	<b>120</b>	653	120	649	120	8	556	141	557	140	<b>556</b>	<b>140</b>
401.bzip2	8	<b>1114</b>	<b>69.3</b>	1117	69.1	1110	69.6	8	<b>1064</b>	<b>72.6</b>	1067	72.4	1063	72.6
403.gcc	8	869	74.1	882	73.0	<b>875</b>	<b>73.6</b>	8	869	74.1	882	73.0	<b>875</b>	<b>73.6</b>
429.mcf	8	1231	59.3	<b>1232</b>	<b>59.2</b>	1233	59.2	8	1227	59.5	1229	59.4	<b>1228</b>	<b>59.4</b>
445.gobmk	8	720	117	717	117	<b>720</b>	<b>117</b>	8	666	126	<b>664</b>	<b>126</b>	663	127
456.hmmmer	8	772	96.7	773	96.6	<b>772</b>	<b>96.6</b>	8	618	121	<b>619</b>	<b>121</b>	620	120
458.sjeng	8	900	108	903	107	<b>901</b>	<b>107</b>	8	805	120	<b>807</b>	<b>120</b>	807	120
462.libquantum	8	3510	47.2	<b>3512</b>	<b>47.2</b>	3512	47.2	8	<b>3401</b>	<b>48.7</b>	3401	48.7	3402	48.7
464.h264ref	8	949	187	<b>947</b>	<b>187</b>	947	187	8	899	197	<b>899</b>	<b>197</b>	900	197
471.omnetpp	8	<b>1046</b>	<b>47.8</b>	1045	47.8	1046	47.8	8	<b>1029</b>	<b>48.6</b>	1029	48.6	1030	48.6
473.astar	8	948	59.3	945	59.4	<b>945</b>	<b>59.4</b>	8	892	63.0	895	62.7	<b>893</b>	<b>62.9</b>
483.xalancbmk	8	557	99.1	558	99.0	<b>557</b>	<b>99.1</b>	8	557	99.1	558	99.0	<b>557</b>	<b>99.1</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  
'/usr/bin/taskset' used to bind processes to CPUs

## General Notes

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

The Express5800/120Rg-1(Intel Xeon processor E5345) and the Express5800/120Ri-2(Intel Xeon processor E5345) models are electronically equivalent. The results have been measured on a Express5800/120Ri-2(Intel Xeon processor E5345) model.

## Base Compiler Invocation

C benchmarks:  
icc

C++ benchmarks:  
icpc



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**NEC Corporation**

Express5800/120Rg-1  
(Intel Xeon processor E5345)

**SPECint\_rate2006 = 88.7**

**SPECint\_rate\_base2006 = 83.1**

**CPU2006 license:** 9006

**Test sponsor:** NEC Corporation

**Tested by:** NEC Corporation

**Test date:** Jun-2007

**Hardware Availability:** Jan-2007

**Software Availability:** Jun-2007

## Base Portability Flags

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

Express5800/120Rg-1  
(Intel Xeon processor E5345)

**SPECint\_rate2006 = 88.7**

**SPECint\_rate\_base2006 = 83.1**

**CPU2006 license:** 9006

**Test sponsor:** NEC Corporation

**Tested by:** NEC Corporation

**Test date:** Jun-2007

**Hardware Availability:** Jan-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.hmmcr: -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.html>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**NEC Corporation**

Express5800/120Rg-1  
(Intel Xeon processor E5345)

**SPECint\_rate2006 = 88.7**

**SPECint\_rate\_base2006 = 83.1**

**CPU2006 license:** 9006

**Test sponsor:** NEC Corporation

**Tested by:** NEC Corporation

**Test date:** Jun-2007

**Hardware Availability:** Jan-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.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 13:23:21 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 24 July 2007.