



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NTT System S. A.  
NTT Tytan S8 Series

SPECint®2006 = 19.5  
SPECint\_base2006 = 17.3

CPU2006 license: 9013

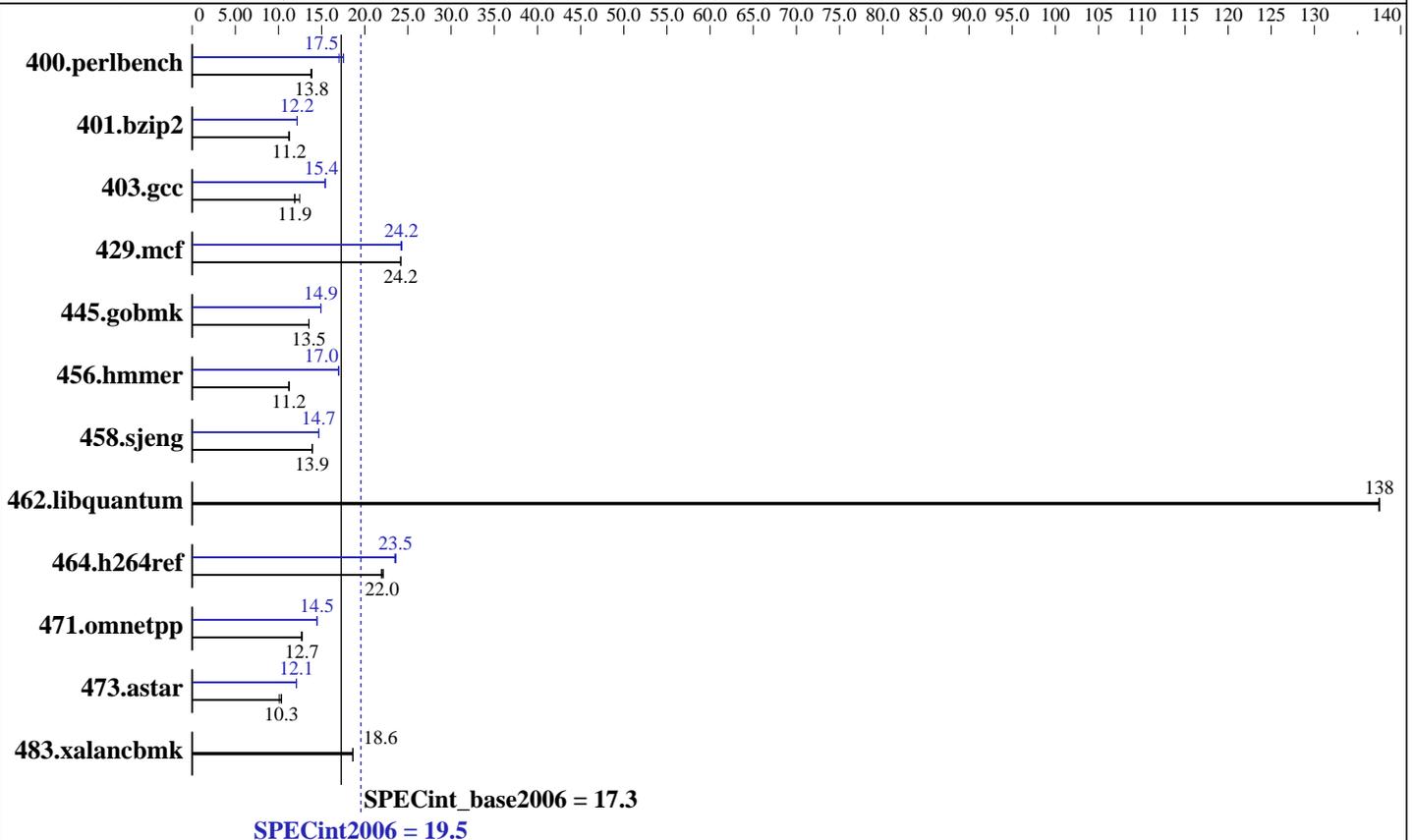
Test sponsor: NTT System S. A.

Tested by: NTT System S. A.

Test date: Dec-2008

Hardware Availability: Dec-2008

Software Availability: Dec-2008



## Hardware

CPU Name: Intel Xeon E5405  
 CPU Characteristics: 2 GHz, 2x6 MB L2 shared, 1333 MHz System Bus  
 CPU MHz: 2000  
 FPU: Integrated  
 CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip  
 CPU(s) orderable: 2 chips  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 12 MB I+D on chip per chip, 6 MB shared / 2 cores  
 L3 Cache: None  
 Other Cache: None  
 Memory: 16 GB (4x4GB)  
 Disk Subsystem: 300 GB SATA, 7200RPM  
 Other Hardware: None

## Software

Operating System: SuSe Linux SLES10 SP1, Kernel 2.6.16.60-0.21-smp  
 Compiler: Intel C++ Compiler 11.0 for Linux  
 Build 20080930 Package ID: l\_cproc\_p\_11.0.066  
 Auto Parallel: Yes  
 File System: ReiserFS  
 System State: Run level 3 (multi-user)  
 Base Pointers: 32-bit  
 Peak Pointers: 32/64-bit  
 Other Software: Microquill SmartHeap V8.1  
 Binutils 2.18.50.0.7.20080502



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NTT System S. A.  
NTT Tytan S8 Series

SPECint2006 = 19.5  
SPECint\_base2006 = 17.3

CPU2006 license: 9013  
Test sponsor: NTT System S. A.  
Tested by: NTT System S. A.

Test date: Dec-2008  
Hardware Availability: Dec-2008  
Software Availability: Dec-2008

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	705	13.9	711	13.7	<b>706</b>	<b>13.8</b>	<u>558</u>	<u>17.5</u>	557	17.5	575	17.0
401.bzip2	<b>858</b>	<b>11.2</b>	855	11.3	862	11.2	794	12.2	<b>793</b>	<b>12.2</b>	793	12.2
403.gcc	646	12.5	<b>677</b>	<b>11.9</b>	678	11.9	<u>522</u>	<u>15.4</u>	522	15.4	522	15.4
429.mcf	<b>377</b>	<b>24.2</b>	378	24.2	377	24.2	375	24.3	377	24.2	<b>376</b>	<b>24.2</b>
445.gobmk	775	13.5	776	13.5	<b>776</b>	<b>13.5</b>	704	14.9	704	14.9	<b>704</b>	<b>14.9</b>
456.hammer	831	11.2	832	11.2	<b>832</b>	<b>11.2</b>	<u>550</u>	<u>17.0</u>	551	16.9	550	17.0
458.sjeng	<b>870</b>	<b>13.9</b>	871	13.9	869	13.9	824	14.7	<b>825</b>	<b>14.7</b>	826	14.6
462.libquantum	151	137	151	138	<b>151</b>	<b>138</b>	151	137	151	138	<b>151</b>	<b>138</b>
464.h264ref	<b>1006</b>	<b>22.0</b>	1010	21.9	999	22.2	943	23.5	<b>940</b>	<b>23.5</b>	938	23.6
471.omnetpp	490	12.8	<b>491</b>	<b>12.7</b>	494	12.7	433	14.4	<b>432</b>	<b>14.5</b>	432	14.5
473.astar	696	10.1	679	10.3	<b>679</b>	<b>10.3</b>	<u>582</u>	<u>12.1</u>	582	12.1	580	12.1
483.xalancbmk	370	18.6	371	18.6	<b>370</b>	<b>18.6</b>	370	18.6	371	18.6	<b>370</b>	<b>18.6</b>

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

## 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

## Base Optimization Flags

C benchmarks:  
-xSSSE3 -ipo -O3 -no-prec-div -static -parallel  
-par-runtime-control -opt-prefetch

C++ benchmarks:  
-xSSSE3 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs  
-L/spec/cpu2006.1.1/lib -lsmartheap



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NTT System S. A.  
NTT Tytan S8 Series

SPECint2006 = 19.5  
SPECint\_base2006 = 17.3

CPU2006 license: 9013  
Test sponsor: NTT System S. A.  
Tested by: NTT System S. A.

Test date: Dec-2008  
Hardware Availability: Dec-2008  
Software Availability: Dec-2008

## Base Other Flags

C benchmarks:

403.gcc: -Dalloca=\_alloca

## Peak Compiler Invocation

C benchmarks (except as noted below):

icc

401.bzip2: /opt/intel/Compiler/11.0/066/bin/intel64/icc

456.hmmmer: /opt/intel/Compiler/11.0/066/bin/intel64/icc

C++ benchmarks:

icpc

## Peak Portability Flags

400.perlbench: -DSPEC\_CPU\_LINUX\_IA32  
401.bzip2: -DSPEC\_CPU\_LP64  
456.hmmmer: -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) -xSSSE3 -ipo -O3  
-no-prec-div -static -ansi-alias -opt-prefetch

401.bzip2: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3  
-no-prec-div -static -auto-ilp32 -opt-prefetch  
-ansi-alias

403.gcc: -xSSSE3 -ipo -O3 -no-prec-div -static -inline-calloc  
-opt-malloc-options=3

429.mcf: -xSSSE3 -ipo -O3 -no-prec-div -static -opt-prefetch

445.gobmk: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -O2 -ipo  
-no-prec-div -ansi-alias

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NTT System S. A.  
NTT Tytan S8 Series

SPECint2006 = 19.5  
SPECint\_base2006 = 17.3

CPU2006 license: 9013  
Test sponsor: NTT System S. A.  
Tested by: NTT System S. A.

Test date: Dec-2008  
Hardware Availability: Dec-2008  
Software Availability: Dec-2008

## Peak Optimization Flags (Continued)

456.hmmcr: -xSSSE3 -ipo -O3 -no-prec-div -static -unroll2  
-ansi-alias -auto-ilp32

458.sjeng: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3  
-no-prec-div -static -unroll4

462.libquantum: basepeak = yes

464.h264ref: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3  
-no-prec-div -static -unroll2 -ansi-alias

C++ benchmarks:

471.omnetpp: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3  
-no-prec-div -ansi-alias -opt-ra-region-strategy=block  
-Wl,-z,muldefs -L/spec/cpu2006.1.1/lib -lsmartheap

473.astar: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3  
-no-prec-div -ansi-alias -opt-ra-region-strategy=routine  
-Wl,-z,muldefs -L/spec/cpu2006.1.1/lib -lsmartheap

483.xalancbmk: basepeak = yes

## 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-Linux64-Platform.20090710.html>  
<http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revA.20090710.01.html>

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

<http://www.spec.org/cpu2006/flags/Intel-Linux64-Platform.20090710.xml>  
<http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revA.20090710.01.xml>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NTT System S. A.  
NTT Tytan S8 Series

SPECint2006 =	19.5
SPECint_base2006 =	17.3

**CPU2006 license:** 9013  
**Test sponsor:** NTT System S. A.  
**Tested by:** NTT System S. A.

**Test date:** Dec-2008  
**Hardware Availability:** Dec-2008  
**Software Availability:** Dec-2008

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 v1.1.  
 Report generated on Tue Jul 22 22:47:17 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
 Originally published on 12 January 2009.