



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Supermicro Motherboard X7DWT

SPECint®\_rate2006 = 129  
SPECint\_rate\_base2006 = 106

CPU2006 license: 001176

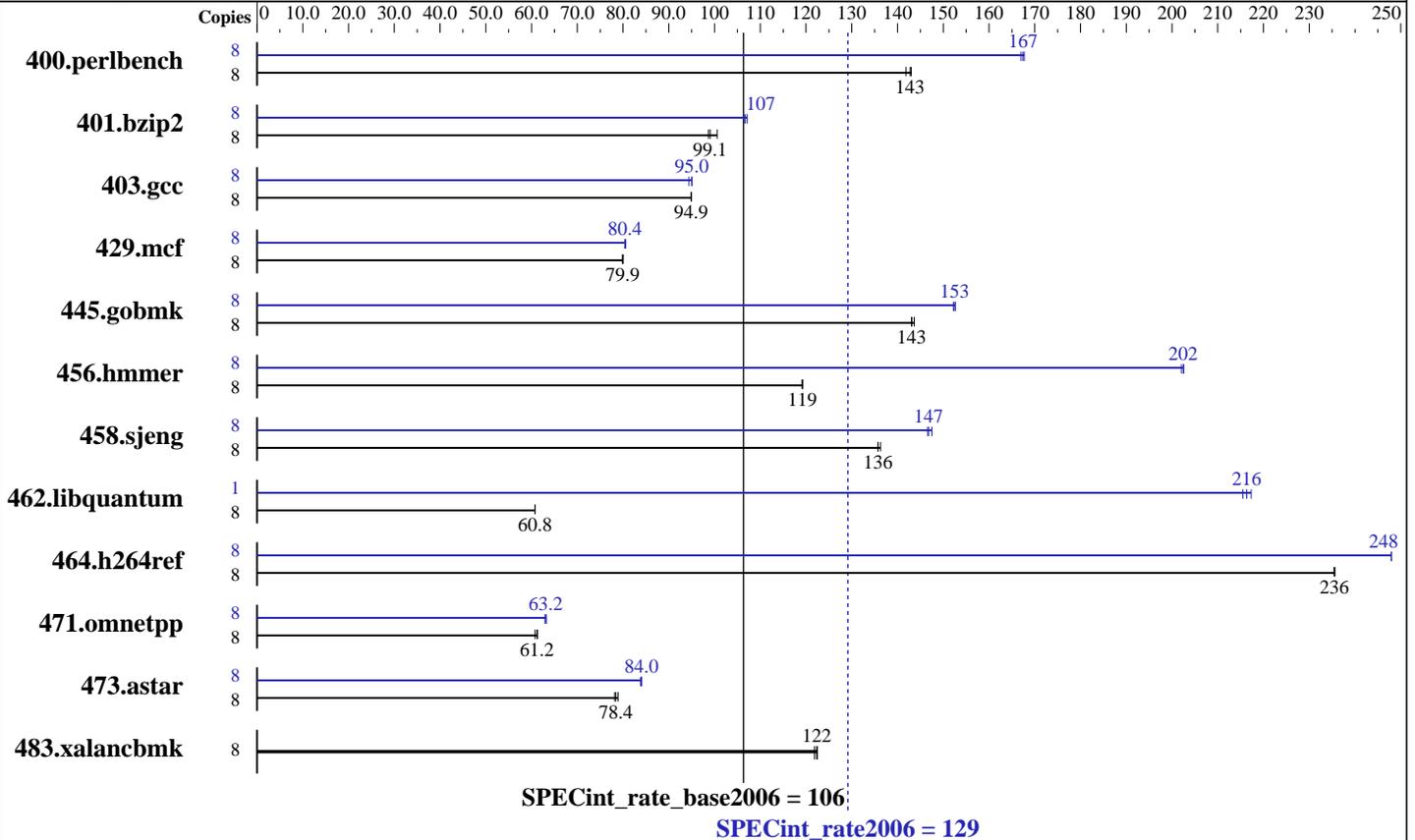
Test sponsor: Supermicro

Tested by: Supermicro

Test date: Mar-2008

Hardware Availability: Nov-2007

Software Availability: Nov-2007



### Hardware

CPU Name: Intel Xeon E5440  
 CPU Characteristics: Quad Core, 2.83 GHz, 1333 MHz System Bus  
 CPU MHz: 2833  
 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: 12 MB I+D on chip per chip, 6 MB shared / 2 cores  
 L3 Cache: None  
 Other Cache: None  
 Memory: 16 GB (8 X 2 GB ECC PC2-5300, CL5, FBDIMM)  
 Disk Subsystem: SAMSUNG HD501LJ 500 GB SATA II, 7200 RPM  
 Other Hardware: None

### Software

Operating System: 64-Bit SUSE Linux Enterprise Server 10 SP1  
 Compiler: Intel C++ and Fortran Compiler for Linux32 and Linux64 version 10.1 Build 20070725  
 Auto Parallel: Yes  
 File System: ReiserFS  
 System State: Multi-user, run level 3  
 Base Pointers: 32-bit  
 Peak Pointers: 32/64-bit  
 Other Software: MicroQuill SmartHeap Library 8.1 Binutils 2.17.50.0.15



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Supermicro Motherboard X7DWT

SPECint\_rate2006 = 129  
SPECint\_rate\_base2006 = 106

CPU2006 license: 001176  
Test sponsor: Supermicro  
Tested by: Supermicro

Test date: Mar-2008  
Hardware Availability: Nov-2007  
Software Availability: Nov-2007

### Results Table

| Benchmark      | Base   |             |             |            |             |            |            | Peak   |            |            |             |             |            |             |
|----------------|--------|-------------|-------------|------------|-------------|------------|------------|--------|------------|------------|-------------|-------------|------------|-------------|
|                | Copies | Seconds     | Ratio       | Seconds    | Ratio       | Seconds    | Ratio      | Copies | Seconds    | Ratio      | Seconds     | Ratio       | Seconds    | Ratio       |
| 400.perlbench  | 8      | 551         | 142         | 547        | 143         | <b>548</b> | <b>143</b> | 8      | 466        | 168        | 468         | 167         | <b>467</b> | <b>167</b>  |
| 401.bzip2      | 8      | <b>779</b>  | <b>99.1</b> | 783        | 98.7        | 768        | 101        | 8      | 721        | 107        | <b>723</b>  | <b>107</b>  | 725        | 107         |
| 403.gcc        | 8      | <b>678</b>  | <b>94.9</b> | 678        | 95.0        | 679        | 94.9       | 8      | 682        | 94.4       | <b>678</b>  | <b>95.0</b> | 678        | 95.0        |
| 429.mcf        | 8      | <b>913</b>  | <b>79.9</b> | 913        | 79.9        | 912        | 80.0       | 8      | 906        | 80.6       | 907         | 80.4        | <b>907</b> | <b>80.4</b> |
| 445.gobmk      | 8      | 587         | 143         | 584        | 144         | <b>586</b> | <b>143</b> | 8      | 551        | 152        | 550         | 153         | <b>550</b> | <b>153</b>  |
| 456.hammer     | 8      | 626         | 119         | <b>626</b> | <b>119</b>  | 626        | 119        | 8      | <b>369</b> | <b>202</b> | 368         | 203         | 369        | 202         |
| 458.sjeng      | 8      | 713         | 136         | <b>713</b> | <b>136</b>  | 710        | 136        | 8      | <b>659</b> | <b>147</b> | 656         | 148         | 660        | 147         |
| 462.libquantum | 8      | <b>2729</b> | <b>60.8</b> | 2729       | 60.7        | 2728       | 60.8       | 1      | 95.3       | 217        | <b>95.8</b> | <b>216</b>  | 96.1       | 216         |
| 464.h264ref    | 8      | <b>752</b>  | <b>236</b>  | 751        | 236         | 752        | 235        | 8      | <b>714</b> | <b>248</b> | 714         | 248         | 714        | 248         |
| 471.omnetpp    | 8      | 816         | 61.3        | <b>817</b> | <b>61.2</b> | 823        | 60.8       | 8      | 794        | 62.9       | <b>792</b>  | <b>63.2</b> | 791        | 63.2        |
| 473.astar      | 8      | <b>716</b>  | <b>78.4</b> | 712        | 78.9        | 718        | 78.2       | 8      | 670        | 83.8       | <b>668</b>  | <b>84.0</b> | 668        | 84.1        |
| 483.xalancbmk  | 8      | 453         | 122         | 451        | 122         | <b>451</b> | <b>122</b> | 8      | 453        | 122        | 451         | 122         | <b>451</b> | <b>122</b>  |

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

### General Notes

All benchmarks compiled in 32-bit mode except 401.bzip2 and 456.hammer, for peak, which are compiled in 64-bit mode  
OMP\_NUM\_THREADS set to number of processors  
KMP\_AFFINITY set to "physical,0"

### 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

**Supermicro  
Motherboard X7DWT**

**SPECint\_rate2006 = 129**  
**SPECint\_rate\_base2006 = 106**

**CPU2006 license:** 001176  
**Test sponsor:** Supermicro  
**Tested by:** Supermicro

**Test date:** Mar-2008  
**Hardware Availability:** Nov-2007  
**Software Availability:** Nov-2007

## Base Optimization Flags

C benchmarks:  
-fast -inline-calloc -opt-malloc-options=3  
C++ benchmarks:  
-xT -ipo -O3 -no-prec-div -Wl,-z,muldefs  
-L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap

## Base Other Flags

C benchmarks:  
403.gcc: -Dalloca=\_alloca

## Peak Compiler Invocation

C benchmarks (except as noted below):  
icc  
401.bzip2: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/bin/icc  
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/lib  
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/include  
456.hmmer: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/bin/icc  
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/lib  
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/include  
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:

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro  
Motherboard X7DWT

SPECint\_rate2006 = 129  
SPECint\_rate\_base2006 = 106

CPU2006 license: 001176  
Test sponsor: Supermicro  
Tested by: Supermicro

Test date: Mar-2008  
Hardware Availability: Nov-2007  
Software Availability: Nov-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 -prefetch

403.gcc: -fast -inline-calloc -opt-malloc-options=3

429.mcf: -fast -prefetch

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

456.hmmer: -fast -unroll2 -ansi-alias -opt-multi-version-aggressive

458.sjeng: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4

462.libquantum: -fast -unroll4 -Ob0 -prefetch  
-opt-streaming-stores always -vec-guard-write  
-opt-malloc-options=3 -parallel -par-runtime-control

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 -opt-ra-region-strategy=block  
-Wl,-z,muldefs  
-L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap

473.astar: -prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo  
-no-prec-div -ansi-alias -opt-ra-region-strategy=routine  
-Wl,-z,muldefs  
-L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap

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/Intel-ic10.1-INT-ia32-linux-flags.20090713.00.html>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro  
Motherboard X7DWT

SPECint\_rate2006 = 129

SPECint\_rate\_base2006 = 106

CPU2006 license: 001176

Test sponsor: Supermicro

Tested by: Supermicro

Test date: Mar-2008

Hardware Availability: Nov-2007

Software Availability: Nov-2007

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

<http://www.spec.org/cpu2006/flags/Intel-ic10.1-INT-ia32-linux-flags.20090713.00.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 v1.0.1.  
Report generated on Tue Jul 22 17:02:51 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 27 May 2008.