



# SPEC<sup>®</sup> CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Intel Corporation

Supermicro X7DB+ (Intel Xeon processor E5310, 1.60 GHz)

SPECint<sup>®</sup>2006 = **12.6**

SPECint\_base2006 = **11.5**

CPU2006 license: 13

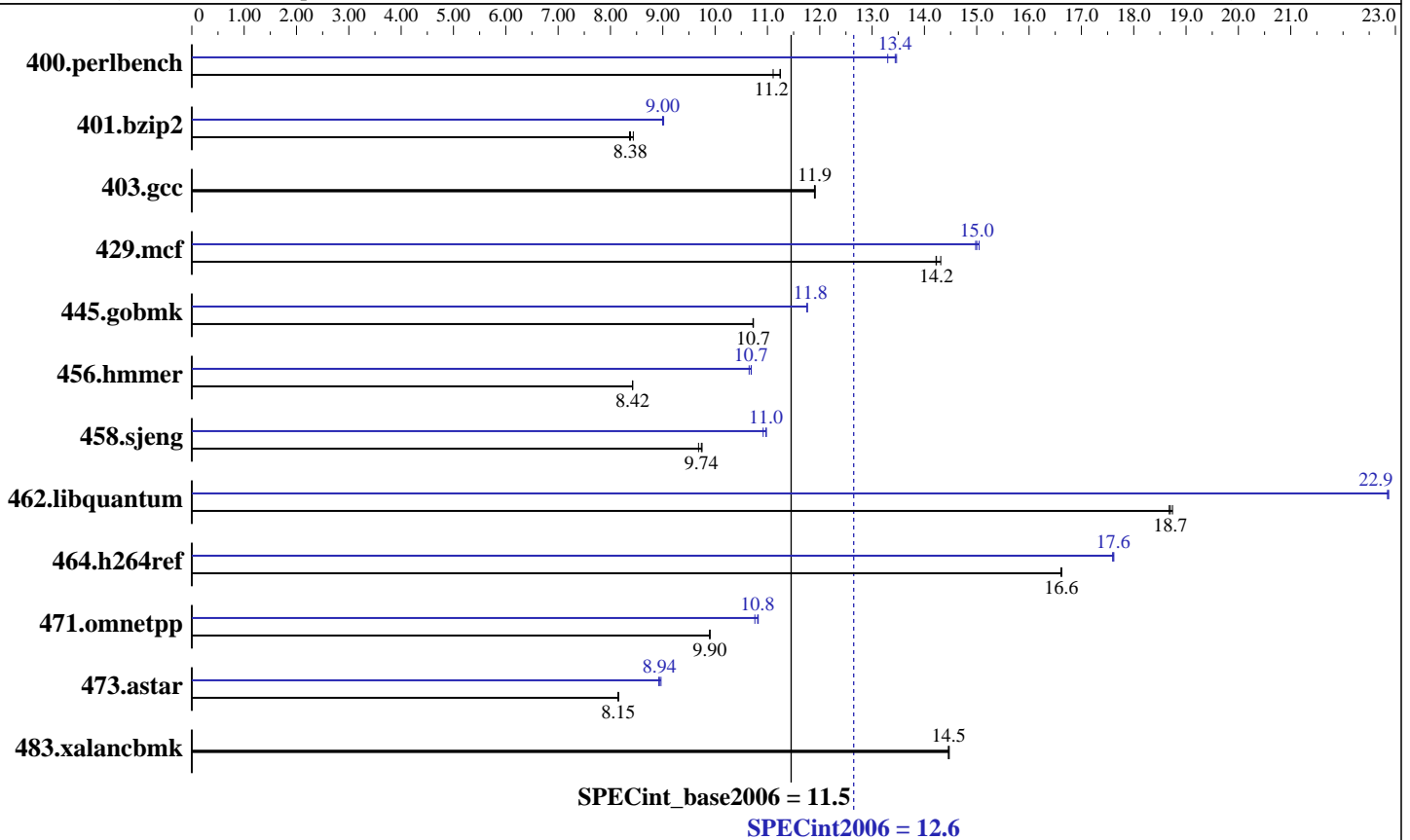
Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: May-2007

Hardware Availability: Sep-2007

Software Availability: Jun-2007



### Hardware

CPU Name: Intel Xeon E5310  
 CPU Characteristics: Quad Core, 1.60 GHz  
 CPU MHz: 1600  
 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 (8 \* 2GB Samsung DDR2 4200F, 2 rank, CL4-4-4, ECC)  
 Disk Subsystem: Seagate, SCSI, 73GB, 10Krpm, 1 disk only  
 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 Linux32 version 10.0 Build 20070426 Package ID: l\_cc\_p\_10.0.023  
 Auto Parallel: No  
 File System: ReiserFS  
 System State: Multi-user, run level 3  
 Base Pointers: 32-bit  
 Peak Pointers: 32/64-bit  
 Other Software: SmartHeap library V8.1 Binutils 2.17.50.0.15



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Intel Corporation

Supermicro X7DB8+ (Intel Xeon processor E5310, 1.60 GHz)

SPECint2006 = 12.6

SPECint\_base2006 = 11.5

CPU2006 license: 13

Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: May-2007

Hardware Availability: Sep-2007

Software Availability: Jun-2007

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	868	11.2	<b>869</b>	<b>11.2</b>	879	11.1	<u>727</u>	<u>13.4</u>	725	13.5	735	13.3
401.bzip2	1154	8.36	1144	8.44	<b>1151</b>	<b>8.38</b>	<u>1072</u>	<u>9.00</u>	1070	9.02	1073	9.00
403.gcc	<b>676</b>	<b>11.9</b>	677	11.9	676	11.9	<u>676</u>	<u>11.9</u>	677	11.9	676	11.9
429.mcf	641	14.2	<b>641</b>	<b>14.2</b>	637	14.3	<u>608</u>	<u>15.0</u>	609	15.0	606	15.0
445.gobmk	<b>978</b>	<b>10.7</b>	978	10.7	978	10.7	892	11.8	892	11.8	<b>892</b>	<b>11.8</b>
456.hmmer	1107	8.43	<b>1108</b>	<b>8.42</b>	1108	8.42	873	10.7	<u>873</u>	<u>10.7</u>	876	10.7
458.sjeng	<b>1243</b>	<b>9.74</b>	1241	9.75	1250	9.68	<u>1103</u>	<u>11.0</u>	1108	10.9	1102	11.0
462.libquantum	1106	18.7	1109	18.7	<b>1108</b>	<b>18.7</b>	907	22.8	<u>906</u>	<u>22.9</u>	906	22.9
464.h264ref	1332	16.6	1331	16.6	<b>1332</b>	<b>16.6</b>	<u>1257</u>	<u>17.6</u>	1256	17.6	1258	17.6
471.omnetpp	<b>631</b>	<b>9.90</b>	632	9.89	631	9.90	<u>577</u>	10.8	<u>578</u>	<u>10.8</u>	581	10.8
473.astar	862	8.14	861	8.15	<b>861</b>	<b>8.15</b>	787	8.92	783	8.97	<b>786</b>	<b>8.94</b>
483.xalancbmk	477	14.5	<b>477</b>	<b>14.5</b>	477	14.5	<u>477</u>	14.5	<u>477</u>	<u>14.5</u>	477	14.5

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

## General Notes

Bios settings:  
Hardware Prefetcher: Enabled  
Adjacent Sector Prefetch: Enabled  
ulimit -s unlimited used to set stack size to unlimited  
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

**Intel Corporation**

Supermicro X7DB8+ (Intel Xeon processor E5310, 1.60 GHz)

**SPECint2006 = 12.6**

**SPECint\_base2006 = 11.5**

**CPU2006 license:** 13

**Test sponsor:** Intel Corporation

**Tested by:** Intel Corporation

**Test date:** May-2007

**Hardware Availability:** Sep-2007

**Software Availability:** Jun-2007

## Base Optimization Flags

C benchmarks:

-fast

C++ benchmarks:

-xT -ipo -O3 -no-prec-div -Wl,-z,muldefs  
-L/spec/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: /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.hmmer: /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.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

**Intel Corporation**

Supermicro X7DB8+ (Intel Xeon processor E5310, 1.60 GHz)

**SPECint2006 = 12.6**

**SPECint\_base2006 = 11.5**

**CPU2006 license:** 13

**Test sponsor:** Intel Corporation

**Tested by:** Intel Corporation

**Test date:** May-2007

**Hardware Availability:** Sep-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.hmmer: -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: Same as 456.hmmer

C++ benchmarks:

471.omnetpp: -prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo -no-prec\_div -ansi-alias -Wl,-z,muldefs -L/spec/cpu2006.1.0/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/Intel-ic10-ia32-intel64-linux-flags.20090715.00.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090715.00.xml>



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Intel Corporation

Supermicro X7DB8+ (Intel Xeon processor E5310, 1.60 GHz)

**SPECint2006 = 12.6**

**SPECint\_base2006 = 11.5**

**CPU2006 license:** 13  
**Test sponsor:** Intel Corporation  
**Tested by:** Intel Corporation

**Test date:** May-2007  
**Hardware Availability:** Sep-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 11:16:17 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 26 June 2007.