



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

SPECint®2006 = 37.2

Intel DX58SO motherboard (Intel Core i7-980X)

SPECint_base2006 = 35.5

CPU2006 license: 13

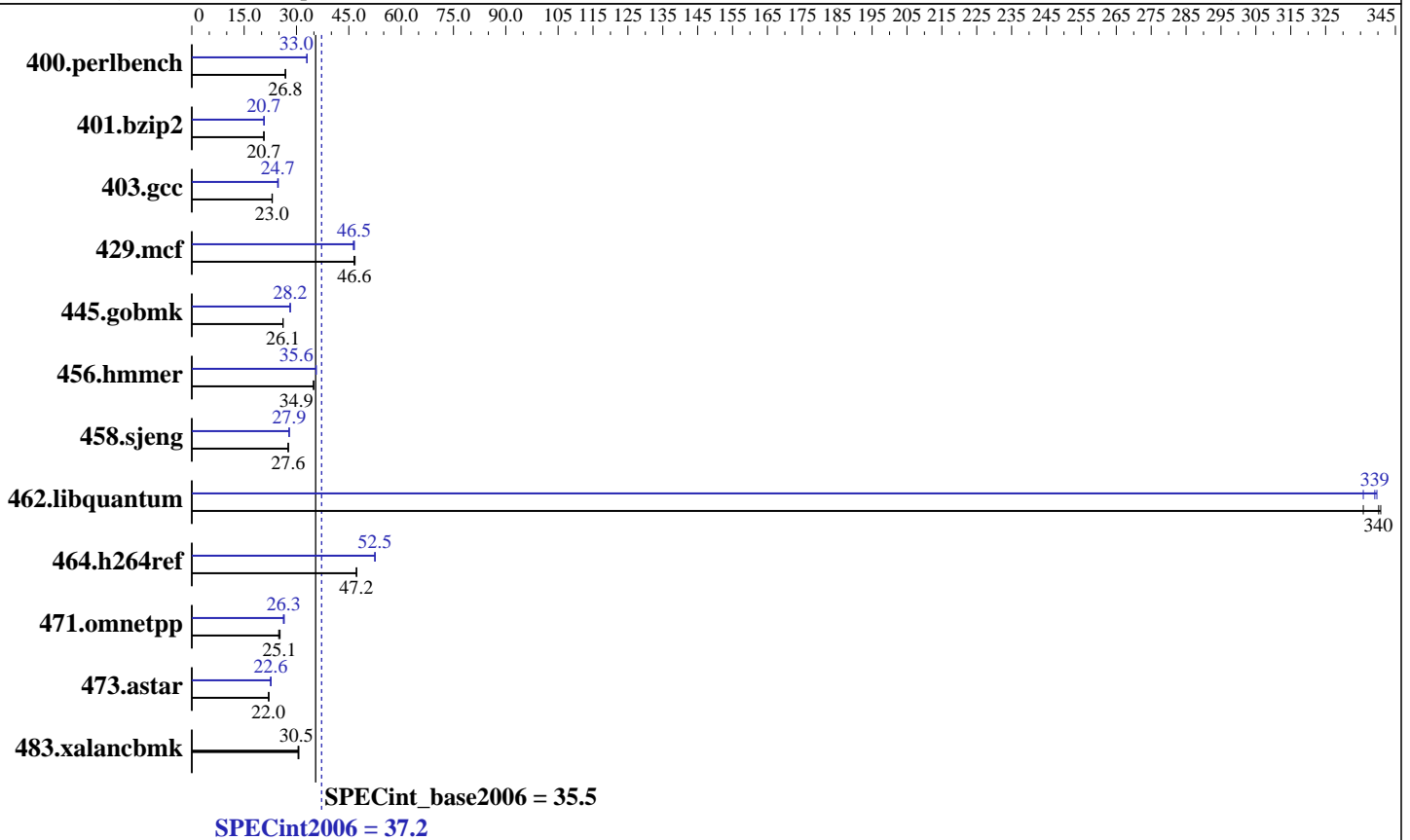
Test date: Mar-2010

Test sponsor: Intel Corporation

Hardware Availability: Mar-2010

Tested by: Intel Corporation

Software Availability: Oct-2009



Hardware

CPU Name: Intel Core i7-980X
 CPU Characteristics: Intel Turbo Boost Technology up to 3.60 GHz
 CPU MHz: 3333
 FPU: Integrated
 CPU(s) enabled: 6 cores, 1 chip, 6 cores/chip, 2 threads/core
 CPU(s) orderable: 1 chip
 Primary Cache: 32 KB I + 32 KB D on chip per core
 Secondary Cache: 256 KB I+D on chip per core
 L3 Cache: 12 MB I+D on chip per chip
 Other Cache: None
 Memory: 12 GB (3x4GB Samsung M378B5273BH1-CF8 DDR3-1066 CL7)
 Disk Subsystem: Intel X25-M 160GB SSD
 Other Hardware: None

Software

Operating System: Windows 7 Ultimate (64-bit)
 Compiler: Intel C++ Compiler Professional 11.1 for Intel 64 Build 20090903 Package ID: w_cproc_p_11.1.045 Microsoft Visual Studio 2008 Professional SP1 (for libraries)
 Auto Parallel: Yes
 File System: NTFS
 System State: Default
 Base Pointers: 64-bit
 Peak Pointers: 64-bit
 Other Software: None
 SmartHeap Library Version 8.1 from <http://www.microquill.com/>



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Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	364	26.9	<u>365</u>	<u>26.8</u>	365	26.8	296	33.0	296	33.0	<u>296</u>	<u>33.0</u>
401.bzip2	467	20.7	<u>467</u>	<u>20.7</u>	468	20.6	<u>466</u>	<u>20.7</u>	466	20.7	465	20.7
403.gcc	348	23.1	<u>350</u>	<u>23.0</u>	350	23.0	324	24.8	328	24.6	<u>326</u>	<u>24.7</u>
429.mcf	195	46.8	<u>196</u>	<u>46.6</u>	196	46.5	197	46.3	<u>196</u>	<u>46.5</u>	196	46.6
445.gobmk	401	26.2	<u>401</u>	<u>26.1</u>	402	26.1	372	28.2	<u>372</u>	<u>28.2</u>	372	28.2
456.hmmer	<u>268</u>	<u>34.9</u>	268	34.9	267	34.9	<u>262</u>	<u>35.6</u>	262	35.7	262	35.6
458.sjeng	438	27.6	<u>438</u>	<u>27.6</u>	438	27.7	<u>434</u>	<u>27.9</u>	434	27.9	434	27.9
462.libquantum	61.7	336	<u>60.9</u>	<u>340</u>	60.8	341	61.7	336	61.0	340	<u>61.1</u>	<u>339</u>
464.h264ref	469	47.2	<u>469</u>	<u>47.2</u>	469	47.2	422	52.5	422	52.5	<u>422</u>	<u>52.5</u>
471.omnetpp	<u>249</u>	<u>25.1</u>	251	24.9	247	25.3	236	26.5	237	26.3	<u>237</u>	<u>26.3</u>
473.astar	319	22.0	318	22.1	<u>319</u>	<u>22.0</u>	310	22.7	311	22.6	<u>311</u>	<u>22.6</u>
483.xalancbmk	225	30.7	226	30.5	<u>226</u>	<u>30.5</u>	225	30.7	226	30.5	<u>226</u>	<u>30.5</u>

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

General Notes

Tested systems can be used with Shin-G ATX case,
PC Power and Cooling 1200W power supply
OMP_NUM_THREADS set to number of processors cores
KMP_AFFINITY set to granularity=fine,scatter

Base Compiler Invocation

C benchmarks:

```
icl -Qvc9 -Qstd=c99
```

C++ benchmarks:

```
icl -Qvc9
```

Base Portability Flags

```

400.perlbench: -DSPEC_CPU_P64 -DSPEC_CPU_WIN64_X64
               -DSPEC_CPU_NO_NEED_VA_COPY
401.bzip2: -DSPEC_CPU_P64
403.gcc: -DSPEC_CPU_P64 -DSPEC_CPU_WIN64
429.mcf: -DSPEC_CPU_P64
445.gobmk: -DSPEC_CPU_P64
456.hmmer: -DSPEC_CPU_P64
458.sjeng: -DSPEC_CPU_P64

```

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Base Portability Flags (Continued)

```

462.libquantum: -DSPEC_CPU_P64
464.h264ref: -DSPEC_CPU_P64 -DWIN32 -DSPEC_CPU_NO_INTTYPES
471.omnetpp: -DSPEC_CPU_P64 -DSPEC_CPU_WIN64
473.astar: -DSPEC_CPU_P64
483.xalancbmk: -DSPEC_CPU_P64 -Qoption, cpp, --no_wchar_t_keyword

```

Base Optimization Flags

C benchmarks:

```

-QxSSE4.2 -Qipo -O3 -Qprec-div- -Qopt-prefetch -Qparallel
-Qauto-ilp32 /F512000000

```

C++ benchmarks:

```

-QxSSE4.2 -Qipo -O3 -Qprec-div- -Qopt-prefetch -Qcxx-features
-Qauto-ilp32 /F512000000 shlw64M.lib -link /FORCE:MULTIPLE

```

Base Other Flags

C benchmarks:

```

403.gcc: -Dalloca=_alloca

```

Peak Compiler Invocation

C benchmarks:

```

icl -Qvc9 -Qstd=c99

```

C++ benchmarks:

```

icl -Qvc9

```

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

```

400.perlbench: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qansi-alias -Qopt-prefetch
-Qauto-ilp32 /F512000000 shlw64M.lib

```

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Peak Optimization Flags (Continued)

400.perlbench (continued):

-link /FORCE:MULTIPLE

401.bzip2: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qopt-prefetch -Qansi-alias
-Qauto-ilp32 /F512000000

403.gcc: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qauto-ilp32 /F512000000

429.mcf: -QxSSE4.2 -Qipo -O3 -Qprec-div- -Qopt-prefetch
-Qauto-ilp32 /F512000000

445.gobmk: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O2 -Qprec-div- -Qansi-alias -Qauto-ilp32
/F512000000

456.hmmer: -QxSSE4.2 -Qipo -O3 -Qprec-div- -Qunroll2 -Qansi-alias
-Qauto-ilp32 /F512000000

458.sjeng: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qunroll4 -Qauto-ilp32 /F512000000

462.libquantum: -QxSSE4.2 -Qipo -O3 -Qprec-div- -Qopt-prefetch
-Qparallel -Qpar-schedule-static:32768 -Qansi-alias
-Qauto-ilp32 /F512000000

464.h264ref: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qunroll2 -Qansi-alias
-Qauto-ilp32 /F512000000

C++ benchmarks:

471.omnetpp: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qansi-alias
-Qopt-ra-region-strategy=block -Qauto-ilp32 /F512000000
shlW64M.lib -link /FORCE:MULTIPLE

473.astar: -QxSSE4.2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qansi-alias
-Qopt-ra-region-strategy=routine -Qauto-ilp32 /F512000000
shlW64M.lib -link /FORCE:MULTIPLE

483.xalancbmk: basepeak = yes



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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-ic11.0-winx64-revA.20100302.01.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic11.0-winx64-revA.20100302.01.xml>

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For other inquiries, please contact webmaster@spec.org.

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