



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)

SPECint®_rate2006 = 57.1

ASUSTek M4A89GTD PRO/USB3 (Phenom II X3 720)

SPECint_rate_base2006 = 52.9

CPU2006 license: 13

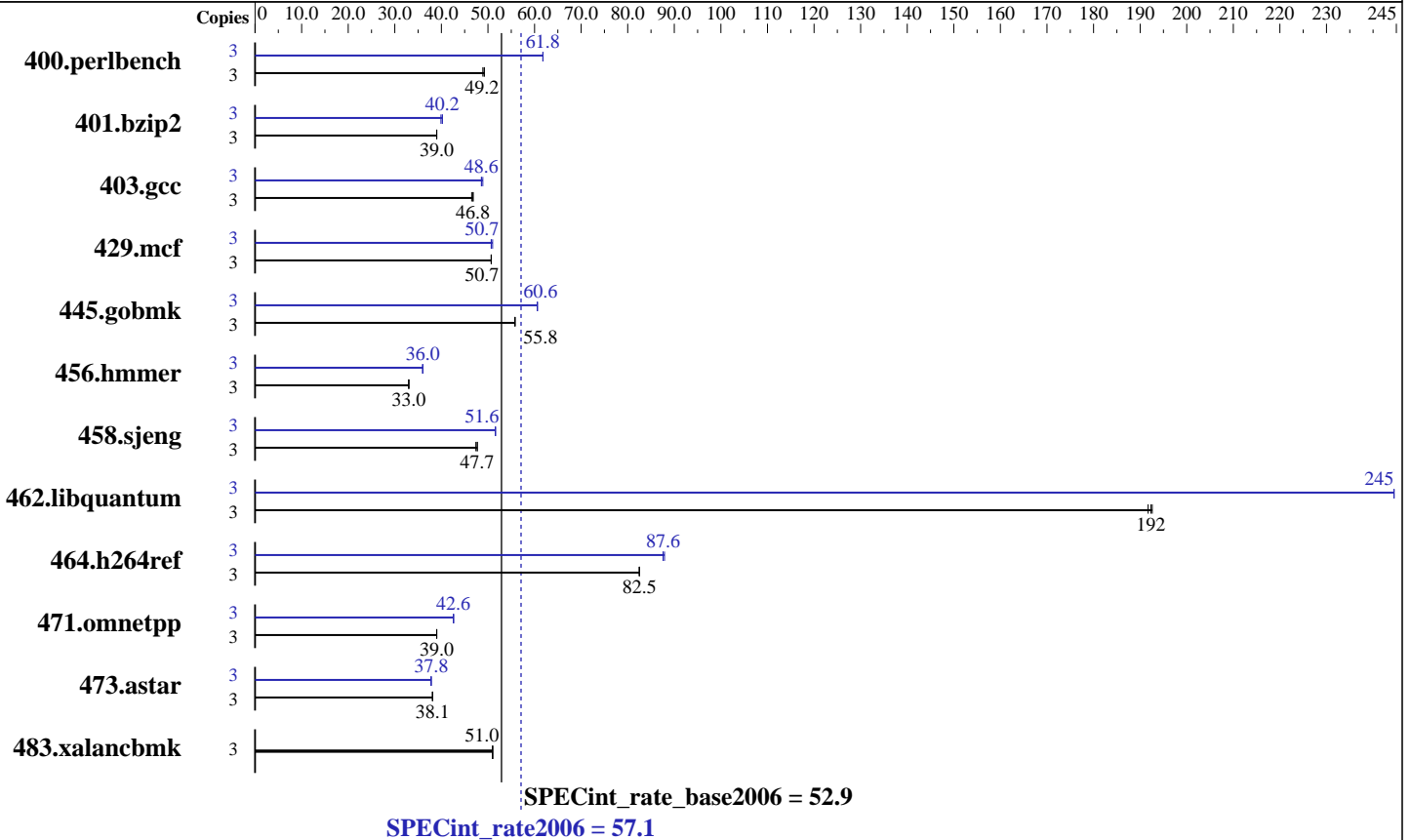
Test date: Jun-2011

Test sponsor: Intel Corporation

Hardware Availability: Feb-2011

Tested by: Intel Corporation

Software Availability: Apr-2011



Hardware

CPU Name: AMD Phenom II X3 720
 CPU Characteristics:
 CPU MHz: 2800
 FPU: Integrated
 CPU(s) enabled: 3 cores, 1 chip, 3 cores/chip
 CPU(s) orderable: 1 chip
 Primary Cache: 64 KB I + 64 KB D on chip per core
 Secondary Cache: 512 KB I+D on chip per core
 L3 Cache: 6 MB I+D on chip per chip
 Other Cache: None
 Memory: 4 GB (2 x 2 GB 2Rx4 PC3-10600U-9)
 Disk Subsystem: 1 TB Seagate SATA, 7200 RPM
 Other Hardware: None

Software

Operating System: Windows 7 Ultimate (64-bit)
 Compiler: Intel C++ Compiler XE for IA32 and Intel 64 Version 12.0.3.176 Build 20110309
 Microsoft Visual Studio 2008 Professional SP1 (for libraries)
 Auto Parallel: No
 File System: NTFS
 System State: Default
 Base Pointers: 32-bit
 Peak Pointers: 32/64-bit
 Other Software: SmartHeap Library Version 9.01 from <http://www.microquill.com/>



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)

SPECint_rate2006 = 57.1

ASUSTek M4A89GTD PRO/USB3 (Phenom II X3 720)

SPECint_rate_base2006 = 52.9

CPU2006 license: 13

Test date: Jun-2011

Test sponsor: Intel Corporation

Hardware Availability: Feb-2011

Tested by: Intel Corporation

Software Availability: Apr-2011

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	3	600	48.9	597	49.2	<u>597</u>	<u>49.2</u>	3	<u>473</u>	<u>61.8</u>	474	61.8	473	61.8
401.bzip2	3	742	39.0	<u>740</u>	<u>39.0</u>	740	39.0	3	725	39.9	722	40.2	<u>723</u>	<u>40.2</u>
403.gcc	3	<u>517</u>	<u>46.8</u>	521	46.5	516	46.8	3	495	48.9	496	48.6	<u>496</u>	<u>48.6</u>
429.mcf	3	540	50.7	<u>539</u>	<u>50.7</u>	539	50.7	3	538	51.0	<u>539</u>	<u>50.7</u>	539	50.7
445.gobmk	3	565	55.8	565	55.8	<u>565</u>	<u>55.8</u>	3	520	60.6	520	60.6	<u>520</u>	<u>60.6</u>
456.hammer	3	847	33.0	848	33.0	<u>847</u>	<u>33.0</u>	3	775	36.0	<u>775</u>	<u>36.0</u>	775	36.0
458.sjeng	3	764	47.4	763	47.7	<u>763</u>	<u>47.7</u>	3	<u>703</u>	<u>51.6</u>	702	51.6	703	51.6
462.libquantum	3	323	193	324	192	<u>323</u>	<u>192</u>	3	254	245	254	245	<u>254</u>	<u>245</u>
464.h264ref	3	804	82.5	804	82.5	<u>804</u>	<u>82.5</u>	3	757	87.6	757	87.9	<u>757</u>	<u>87.6</u>
471.omnetpp	3	481	39.0	<u>481</u>	<u>39.0</u>	482	39.0	3	<u>440</u>	<u>42.6</u>	440	42.6	440	42.6
473.astar	3	552	38.1	553	38.1	<u>552</u>	<u>38.1</u>	3	<u>556</u>	<u>37.8</u>	557	37.8	556	37.8
483.xalancbmk	3	<u>405</u>	<u>51.0</u>	405	51.0	405	51.0	3	<u>405</u>	<u>51.0</u>	405	51.0	405	51.0

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

Submit Notes

The config file option 'submit' was used.

The start command with the /affinity switch was used to bind processes to cores

General Notes

Tested systems can be used with Shin-G ATX case,
PC Power and Cooling 1200W power supply

Base Compiler Invocation

C benchmarks:

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

C++ benchmarks:

```
icl -Qvc9
```

Base Portability Flags

```
403.gcc: -DSPEC_CPU_WIN32
```

```
464.h264ref: -DWIN32 -DSPEC_CPU_NO_INTTYPES
```

```
483.xalancbmk: -Qoption,cpp,--no_wchar_t_keyword
```



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)

SPECint_rate2006 = 57.1

ASUSTek M4A89GTD PRO/USB3 (Phenom II X3 720)

SPECint_rate_base2006 = 52.9

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

Test date: Jun-2011
Hardware Availability: Feb-2011
Software Availability: Apr-2011

Base Optimization Flags

C benchmarks:

```
/arch:SSE3 -Qipo -O3 -Qprec-div- -Qopt-prefetch /F512000000
```

C++ benchmarks:

```
/arch:SSE3 -Qipo -O3 -Qprec-div- -Qopt-prefetch -Qcxx-features  
/F512000000 shlw32M.lib -link /FORCE:MULTIPLE
```

Base Other Flags

C benchmarks:

```
403.gcc: -Dalloca=_alloca
```

Peak Compiler Invocation

C benchmarks (except as noted below):

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

```
456.hmmr: C:/Program Files (x86)/Intel/ComposerXE-2011/bin/intel64/icl.exe
```

```
458.sjeng: C:/Program Files (x86)/Intel/ComposerXE-2011/bin/intel64/icl.exe
```

```
462.libquantum: C:/Program Files (x86)/Intel/ComposerXE-2011/bin/intel64/icl.exe  
-Qstd=c99
```

C++ benchmarks (except as noted below):

```
icl -Qvc9
```

```
473.astar: C:/Program Files (x86)/Intel/ComposerXE-2011/bin/intel64/icl.exe
```

Peak Portability Flags

```
403.gcc: -DSPEC_CPU_WIN32  
456.hmmr: -DSPEC_CPU_P64  
458.sjeng: -DSPEC_CPU_P64  
462.libquantum: -DSPEC_CPU_P64  
464.h264ref: -DWIN32 -DSPEC_CPU_NO_INTTYPES  
473.astar: -DSPEC_CPU_P64  
483.xalancbmk: -Qoption,cpp,--no_wchar_t_keyword
```



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)

SPECint_rate2006 = 57.1

ASUSTek M4A89GTD PRO/USB3 (Phenom II X3 720)

SPECint_rate_base2006 = 52.9

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

Test date: Jun-2011
Hardware Availability: Feb-2011
Software Availability: Apr-2011

Peak Optimization Flags

C benchmarks:

400.perlbench: /arch:SSE3(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qansi-alias -Qopt-prefetch
/F512000000 shlW32M.lib -link /FORCE:MULTIPLE

401.bzip2: /arch:SSE3(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qopt-prefetch -Qansi-alias
/F512000000

403.gcc: /arch:SSE3(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qopt-prefetch /F512000000

429.mcf: /arch:SSE3 -Qipo -O3 -Qprec-div- -Qopt-prefetch
/F512000000

445.gobmk: /arch:SSE3(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O2 -Qprec-div- -Qansi-alias /F512000000

456.hmmer: -Qauto-ilp32 /arch:SSE3(pass 2) -Qprof_gen(pass 1)
-Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qopt-prefetch
/F512000000

458.sjeng: -Qauto-ilp32 /arch:SSE3(pass 2) -Qprof_gen(pass 1)
-Qprof_use(pass 2) -Qipo -O3 -Qprec-div- -Qunroll4
/F512000000

462.libquantum: -Qauto-ilp32 /arch:SSE3 -Qipo -O3 -Qprec-div-
-Qopt-prefetch /F512000000

464.h264ref: /arch:SSE3(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qunroll2 -Qansi-alias /F512000000

C++ benchmarks:

471.omnetpp: /arch:SSE3(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qansi-alias
-Qopt-ra-region-strategy=block /F512000000 shlW32M.lib
-link /FORCE:MULTIPLE

473.astar: -Qauto-ilp32 /arch:SSE3 -Qipo -O3 -Qprec-div-
-Qopt-prefetch /F512000000 shlW64M.lib
-link /FORCE:MULTIPLE

483.xalancbmk: basepeak = yes



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)

SPECint_rate2006 = 57.1

ASUSTek M4A89GTD PRO/USB3 (Phenom II X3 720)

SPECint_rate_base2006 = 52.9

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

Test date: Jun-2011
Hardware Availability: Feb-2011
Software Availability: Apr-2011

Peak Other Flags

C benchmarks:

403.gcc: -Dalloca=_alloca

456.hmmcr: -link -LIBPATH:C:/Program Files (x86)/Intel/ComposerXE-2011/compiler/lib/intel64
-link -LIBPATH:C:/Program Files (x86)/Microsoft Visual Studio 9.0/VC/lib/AMD64
-link -LIBPATH:C:/Program Files (x86)/Microsoft Visual Studio 9.0/VC/lib
-link -LIBPATH:C:/Program Files (x86)/Microsoft SDKs/Windows/v7.0A/lib/x64

458.sjeng: -link -LIBPATH:C:/Program Files (x86)/Intel/ComposerXE-2011/compiler/lib/intel64
-link -LIBPATH:C:/Program Files (x86)/Microsoft Visual Studio 9.0/VC/lib/AMD64
-link -LIBPATH:C:/Program Files (x86)/Microsoft Visual Studio 9.0/VC/lib
-link -LIBPATH:C:/Program Files (x86)/Microsoft SDKs/Windows/v7.0A/lib/x64

462.libquantum: -link -LIBPATH:C:/Program Files (x86)/Intel/ComposerXE-2011/compiler/lib/intel64
-link -LIBPATH:C:/Program Files (x86)/Microsoft Visual Studio 9.0/VC/lib/AMD64
-link -LIBPATH:C:/Program Files (x86)/Microsoft Visual Studio 9.0/VC/lib
-link -LIBPATH:C:/Program Files (x86)/Microsoft SDKs/Windows/v7.0A/lib/x64

C++ benchmarks:

473.astar: -link -LIBPATH:C:/Program Files (x86)/Intel/ComposerXE-2011/compiler/lib/intel64
-link -LIBPATH:C:/Program Files (x86)/Microsoft Visual Studio 9.0/VC/lib/AMD64
-link -LIBPATH:C:/Program Files (x86)/Microsoft Visual Studio 9.0/VC/lib
-link -LIBPATH:C:/Program Files (x86)/Microsoft SDKs/Windows/v7.0A/lib/x64

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2006/flags/Intel-ic12-win32-revC.html>
<http://www.spec.org/cpu2006/flags/Intel-Windows-Platform-Settings.20110719.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic12-win32-revC.xml>
<http://www.spec.org/cpu2006/flags/Intel-Windows-Platform-Settings.20110719.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.

Tested with SPEC CPU2006 v1.1.
Report generated on Wed Jul 23 22:25:14 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 20 September 2011.