



# SPEC® CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.

(Test Sponsor: Intel Corporation)

ASUS A88X-PRO Motherboard (AMD A6 PRO-7400B with Radeon R5 Graphics)

SPECint®2006 = 22.2

SPECint\_base2006 = 21.3

CPU2006 license: 13

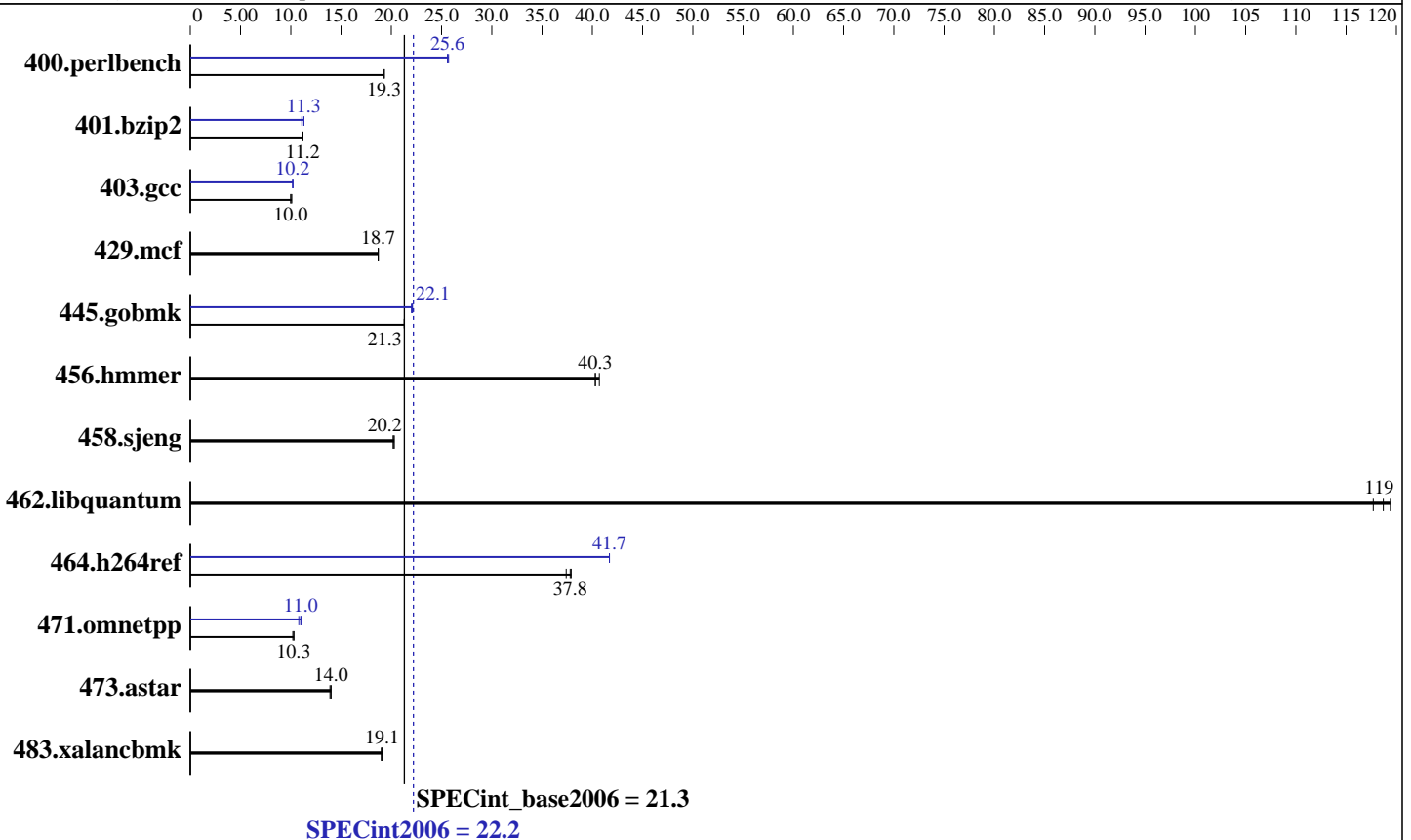
Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Nov-2014

Hardware Availability: Jul-2014

Software Availability: Oct-2013



## Hardware

CPU Name: AMD A6 PRO-7400B  
 CPU Characteristics: AMD Turbo CORE technology up to 3.90 GHz  
 CPU MHz: 3500  
 FPU: Integrated  
 CPU(s) enabled: 2 cores, 1 chip, 2 cores/chip  
 CPU(s) orderable: 1 chip  
 Primary Cache: 96 KB I on chip per chip; 16 KB D on chip per core  
 Secondary Cache: 1 MB I+D on chip per chip  
 L3 Cache: None  
 Other Cache: None  
 Memory: 8 GB (2 x 4 GB 2Rx4 PC3-14900U-13)  
 Disk Subsystem: 160 GB Western Digital SATA HDD, 7200 RPM  
 Other Hardware: None

## Software

Operating System: Microsoft Windows 8.1 Pro  
 6.3.9600 N/A Build 9600  
 Compiler: C/C++: Version 14.0.1.139 of Intel C++ Studio XE for Windows;  
 Libraries: Version 16.00.30319.01 of Microsoft Visual Studio 2010 Professional SP1  
 Auto Parallel: Yes  
 File System: NTFS  
 System State: Default  
 Base Pointers: 32/64-bit  
 Peak Pointers: 32/64-bit  
 Other Software: Microquill SmartHeap V10.0



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.

(Test Sponsor: Intel Corporation)

ASUS A88X-PRO Motherboard (AMD A6 PRO-7400B with Radeon R5 Graphics)

SPECint2006 = 22.2

SPECint\_base2006 = 21.3

CPU2006 license: 13

Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Nov-2014

Hardware Availability: Jul-2014

Software Availability: Oct-2013

## Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	508	19.2	<u>507</u>	<u>19.3</u>	506	19.3	382	25.6	381	25.7	<u>381</u>	<u>25.6</u>
401.bzip2	<u>859</u>	<u>11.2</u>	858	11.2	864	11.2	855	11.3	869	11.1	<u>855</u>	<u>11.3</u>
403.gcc	<u>805</u>	<u>10.0</u>	807	10.0	800	10.1	790	10.2	788	10.2	<u>789</u>	<u>10.2</u>
429.mcf	<u>488</u>	<u>18.7</u>	489	18.7	488	18.7	<u>488</u>	<u>18.7</u>	489	18.7	488	18.7
445.gobmk	<u>492</u>	<u>21.3</u>	494	21.3	491	21.3	475	22.1	477	22.0	<u>476</u>	<u>22.1</u>
456.hammer	<u>231</u>	<u>40.3</u>	229	40.7	232	40.3	<u>231</u>	<u>40.3</u>	229	40.7	232	40.3
458.sjeng	596	20.3	599	20.2	<u>598</u>	<u>20.2</u>	596	20.3	599	20.2	<u>598</u>	<u>20.2</u>
462.libquantum	176	118	174	119	<u>175</u>	<u>119</u>	176	118	174	119	<u>175</u>	<u>119</u>
464.h264ref	<u>586</u>	<u>37.8</u>	591	37.4	584	37.9	<u>531</u>	<u>41.7</u>	531	41.7	530	41.7
471.omnetpp	610	10.2	608	10.3	<u>609</u>	<u>10.3</u>	570	11.0	576	10.8	<u>570</u>	<u>11.0</u>
473.astar	502	14.0	503	13.9	<u>503</u>	<u>14.0</u>	502	14.0	503	13.9	<u>503</u>	<u>14.0</u>
483.xalancbmk	364	19.0	361	19.1	<u>362</u>	<u>19.1</u>	364	19.0	361	19.1	<u>362</u>	<u>19.1</u>

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

## Compiler Invocation Notes

To compile these binaries, the Intel Compiler 14.0 was set up to generate 64-bit binaries with the command:  
"ipsxe-comp-vars.bat intel64 vs2010" (shortcut provided in the Intel(r) Parallel Studio XE 2013 program folder)

## Platform Notes

Sysinfo program C:\SPEC14.0\Docs\sysinfo  
\$Rev: 6775 \$ \$Date: 2011-08-16 # \$ \8787f7622badcf24e01c368b1db4377c  
running on CltE03F49B01B77 Wed Nov 5 22:28:22 2014

This section contains SUT (System Under Test) info as seen by some common utilities. To remove or add to this section, see:  
<http://www.spec.org/cpu2006/Docs/config.html#sysinfo>

```
Trying 'systeminfo'
OS Name       : Microsoft Windows 8.1 Pro
OS Version    : 6.3.9600 N/A Build 9600
System Manufacturer: System manufacturer
System Model   : System Product Name
Processor(s)  : 1 Processor(s) Installed.
               [01]: AMD64 Family 21 Model 48 Stepping 1 AuthenticAMD ~3500 Mhz
BIOS Version  : American Megatrends Inc. 1301, 6/24/2014
Total Physical Memory: 7,105 MB
```

```
Trying 'wmic cpu get /value'
DeviceID     : CPU0
```

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.

(Test Sponsor: Intel Corporation)

ASUS A88X-PRO Motherboard (AMD A6 PRO-7400B with Radeon R5 Graphics)

SPECint2006 = 22.2

SPECint\_base2006 = 21.3

CPU2006 license: 13

Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Nov-2014

Hardware Availability: Jul-2014

Software Availability: Oct-2013

## Platform Notes (Continued)

L2CacheSize : 25359  
L3CacheSize : 0  
MaxClockSpeed : 3500  
Name : AMD A6 PRO-7400B R5, 6 Compute Cores 2C+4G  
NumberOfCores : 1  
NumberOfLogicalProcessors: 2

(End of data from sysinfo program)

## Component Notes

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

## General Notes

OMP\_NUM\_THREADS set to number of processors cores  
KMP\_AFFINITY set to granularity=fine,scatter  
Binaries compiled on a system with 1x Intel Core i7-860 CPU  
+ 8GB memory using Windows 7 Enterprise 64-bit

## Base Compiler Invocation

C benchmarks:

icl -Qvc10 -Qstd=c99

C++ benchmarks:

icl -Qvc10

## 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  
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



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

ASUSTeK Computer Inc.

(Test Sponsor: Intel Corporation)

ASUS A88X-PRO Motherboard (AMD A6 PRO-7400B with Radeon R5 Graphics)

SPECint2006 = 22.2

SPECint\_base2006 = 21.3

CPU2006 license: 13

Test sponsor: Intel Corporation

Tested by: Intel Corporation

Test date: Nov-2014

Hardware Availability: Jul-2014

Software Availability: Oct-2013

## Base Optimization Flags

C benchmarks:

```
/arch:AVX -Qipo -O3 -Qprec-div- -Qopt-prefetch -Qparallel
-Qauto-ilp32 /F512000000
```

C++ benchmarks:

```
/arch:AVX -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 -Qvc10 -Qstd=c99
```

C++ benchmarks:

```
icl -Qvc10
```

## Peak Portability Flags

Same as Base Portability Flags

## Peak Optimization Flags

C benchmarks:

```
400.perlbench: /arch:AVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div- -Qansi-alias -Qopt-prefetch
-Qauto-ilp32 /F512000000 shlw64M.lib
-link /FORCE:MULTIPLE
```

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

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

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

**ASUSTeK Computer Inc.**

(Test Sponsor: Intel Corporation)

ASUS A88X-PRO Motherboard (AMD A6 PRO-7400B with Radeon R5 Graphics)

**SPECint2006 = 22.2**

**SPECint\_base2006 = 21.3**

**CPU2006 license:** 13

**Test sponsor:** Intel Corporation

**Tested by:** Intel Corporation

**Test date:** Nov-2014

**Hardware Availability:** Jul-2014

**Software Availability:** Oct-2013

## Peak Optimization Flags (Continued)

429.mcf: basepeak = yes

445.gobmk: /arch:AVX(pass 2) -Qprof\_gen(pass 1) -Qprof\_use(pass 2)  
-Qipo -O2 -Qprec-div- -Qansi-alias -Qauto-ilp32  
/F512000000

456.hmmr: basepeak = yes

458.sjeng: basepeak = yes

462.libquantum: basepeak = yes

464.h264ref: /arch:AVX(pass 2) -Qprof\_gen(pass 1) -Qprof\_use(pass 2)  
-Qipo -O3 -Qprec-div- -Qunroll2 -Qansi-alias  
-Qauto-ilp32 /F512000000

C++ benchmarks:

471.omnetpp: /arch:AVX(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: basepeak = yes

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-ic14.0-official-windows.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-windows.xml>



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

**ASUSTeK Computer Inc.**

(Test Sponsor: Intel Corporation)

ASUS A88X-PRO Motherboard (AMD A6 PRO-7400B with  
Radeon R5 Graphics)

**SPECint2006 = 22.2**

**SPECint\_base2006 = 21.3**

**CPU2006 license:** 13

**Test sponsor:** Intel Corporation

**Tested by:** Intel Corporation

**Test date:** Nov-2014

**Hardware Availability:** Jul-2014

**Software Availability:** Oct-2013

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 v1.2.  
Report generated on Tue Jan 27 13:35:13 2015 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 27 January 2015.