# SPEC® CFP2006 Result

**Test Sponsor:** Intel Corporation  
**ASUS A88X-PRO Motherboard (AMD A6 PRO-8550 with Radeon R5 Graphics)**

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>SPECfp&lt;sup&gt;®&lt;/sup&gt;2006</th>
<th>SPECfp&lt;sub&gt;base&lt;/sub&gt;2006</th>
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<tbody>
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<tr>
<td>416.gamess</td>
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<td>482.sphinx3</td>
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</tbody>
</table>

**Hardware**

- **CPU Name:** AMD A6 PRO-8550B  
- **CPU Characteristics:** AMD Turbo CORE technology up to 4.00 GHz  
- **CPU MHz:** 3700  
- **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

**Software**

- **Operating System:** Microsoft Windows 7 Ultimate  
  6.1.7601 Service Pack 1 Build 7601  
- **Compiler:** C/C++: Version 16.0.0.110 of Intel C++ Studio XE for Windows;  
  Fortran: Version 16.0.0.110 of Intel Fortran Studio XE for Windows;  
- **Auto Parallel:** Yes

**Test date:** Jul-2016  
**Hardware Availability:** Sep-2015  
**Software Availability:** Aug-2015
# SPEC CFP2006 Result

**ASUSTeK Computer Inc.**

(Several specifications are listed here, including CPU, memory, disk, and other hardware details.)

**SPECfp2006 =** 30.6

**SPECf_base2006 =** 29.9

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## Results Table

<table>
<thead>
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</table>

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

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## Compiler Invocation Notes

To compile these binaries, the Intel Compiler 16.0 was set up to generate 64-bit binaries with the command:
"psxevars.bat intel64" (shortcut provided in the Intel(r) Parallel Studio XE 2016 program folder)

---

## Platform Notes

Sysinfo program C:\SPEC16.0\Docs/sysinfo

$Rev: 6775 $ $Date:: 2011-08-16 $$ \8787f7622badcf24e01c368b1db4377c

running on CltE03P49ACBFDE Tue Jul 12 23:53:41 2016

This section contains SUT (System Under Test) info as seen by some common utilities. To remove or add to this section, see: Continued on next page
SPEC CFP2006 Result

ASUSTeK Computer Inc. (Test Sponsor: Intel Corporation)
ASUS A88X-PRO Motherboard (AMD A6 PRO-8550 with Radeon R5 Graphics)

SPECfp2006 = 30.6
SPECfp_base2006 = 29.9

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

Platform Notes (Continued)

http://www.spec.org/cpu2006/Docs/config.html#sysinfo

Trying 'systeminfo'
OS Name : Microsoft Windows 7 Ultimate
OS Version : 6.1.7601 Service Pack 1 Build 7601
System Manufacturer: System manufacturer
System Model : System Product Name
Processor(s) : 1 Processor(s) Installed.
   [01]: AMD64 Family 21 Model 56 Stepping 1 AuthenticAMD ~3700 Mhz
BIOS Version : American Megatrends Inc. 2502, 12/11/2015
Total Physical Memory: 7,108 MB

Trying 'wmic cpu get /value'
DeviceID : CPU0
L2CacheSize : 25359
L3CacheSize : 0
MaxClockSpeed : 3700
Name : AMD PRO A6-8550B 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

450.soplex (base): "getline_test" src.alt was used.
447.dealII (base): "max_prototype" src.alt was used.
447.dealII (base): "cxx11_make_pair" src.alt was used.
450.soplex (base): "getline_test" src.alt was used.
447.dealII (base): "max_prototype" src.alt was used.
447.dealII (base): "cxx11_make_pair" src.alt was used.

OMP_NUM_THREADS set to number of processors cores
KMP_AFFINITY set to granularity=fine,scatter
Binaries compiled on a system with 1x Intel Xeon E5-2699 v3 CPU
+ 64GB memory using Windows 8.1 Enterprise 64-bit
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Base Compiler Invocation

C benchmarks:
icl -Qvc12 -Qstd=c99

C++ benchmarks:
icl -Qvc12

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc12 -Qstd=c99 ifort

Base Portability Flags

410.bwaves: -DSPEC_CPU_P64
416.gameg: -DSPEC_CPU_P64
433.milc: -DSPEC_CPU_P64
434.zeusmp: -DSPEC_CPU_P64
435.gromacs: -DSPEC_CPU_P64
436.cactusADM: -DSPEC_CPU_P64 -names:lowercase /assume:underscore
437.leslie3d: -DSPEC_CPU_P64
444.namd: -DSPEC_CPU_P64 /TP
447.dealII: -DSPEC_CPU_P64 -DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG
-DSPEC_CPU_BOOST_CONFIG_MSC_VER -DSPEC_NEED_ALGORITHM -DSPEC_GETLINE_TEST
453.povray: -DSPEC_CPU_P64 -DSPEC_CPU_NOZMODIFIER -names:lowercase
459.GemsFDTD: -DSPEC_CPU_P64
465.tonto: -DSPEC_CPU_P64
470.lbm: -DSPEC_CPU_P64
481.wrf: -DSPEC_CPU_P64 -DSPEC_CPU_WINDOWS_ICL
482.sphinx3: -DSPEC_CPU_P64

Base Optimization Flags

C benchmarks:
/arch:AVX -Qipo -03 -Qprec-div- -Qparallel -Qansi-alias
-Qopt-prefetch /F1000000000

C++ benchmarks:
/arch:AVX -Qipo -03 -Qprec-div- -Qparallel -Qansi-alias
-Qopt-prefetch -Qcxx-features /F1000000000 shlW64M.lib
-link /FORCE:MULTIPLE

Fortran benchmarks:
/arch:AVX -Qipo -03 -Qprec-div- -Qparallel -Qansi-alias
-Qopt-prefetch /F1000000000
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Hardware Availability: Sep-2015
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Base Optimization Flags (Continued)

Benchmarks using both Fortran and C:
/arch:AVX -Qipo -O3 -Qprec-div -Qparallel -Qansi-alias
-Qopt-prefetch /F1000000000

Peak Compiler Invocation

C benchmarks:
icl -Qvc12 -Qstd=c99

C++ benchmarks:
icl -Qvc12

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc12 -Qstd=c99 ifort

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:
433.milc: basepeak = yes
470.lbm: basepeak = yes
482.sphinx3: basepeak = yes

C++ benchmarks:
444.namd: /arch:AVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div -Oa /F1000000000 shlw64M.lib
-link /FORCE:MULTIPLE

447.dealII: basepeak = yes
450.soplex: basepeak = yes

Continued on next page
SPEC CFP2006 Result

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Peak Optimization Flags (Continued)

453.povray: /arch:AVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)  
-Qipo -O3 -Qprec-div -Qunroll14 -Qansi-alias /F1000000000
shlw64M.lib -link /FORCE:MULTIPLE

Fortran benchmarks:

410.bwaves: basepeak = yes  
416.gamess: /arch:AVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)  
-Qipo -O3 -Qprec-div -Qunroll12 -Ob0 -Qansi-alias
-Qscalar-rep- /F1000000000

434.zeusmp: basepeak = yes  
437.leslie3d: basepeak = yes  
459.GemsFDTD: basepeak = yes  
465.tonto: /arch:AVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)  
-Qipo -O3 -Qprec-div -Qunroll14 -Qauto -Qinline-calloc
/F1000000000

Benchmarks using both Fortran and C:

435.gromacs: basepeak = yes  
436.cactusADM: basepeak = yes  
454.calculix: basepeak = yes  
481.wrf: basepeak = yes

The flags file that was used to format this result can be browsed at

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

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

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