## SPEC® CFP2006 Result

**ASUSTeK Computer Inc.**
(Test Sponsor: Intel Corporation)

**ASUS F2A85-M PRO motherboard (AMD A10-6800K APU with Radeon HD Graphics)**

**SPECfp®_rate2006 = 63.7**

**SPECfp_rate_base2006 = 62.8**

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**Hardware**

- **CPU Name:** AMD A10-6800K
- **CPU Characteristics:** AMD Turbo CORE technology up to 4.40 GHz
- **CPU MHz:** 4100
- **FPU:** Integrated
- **CPU(s) enabled:** 4 cores, 1 chip, 4 cores/chip
- **CPU(s) orderable:** 1 chip
- **Primary Cache:** 128 KB I on chip per chip, 64 KB I shared / 2 cores; 16 KB D on chip per core
- **Secondary Cache:** 4 MB I+D on chip per chip, 2 MB shared / 2 cores

**Software**

- **Operating System:** Microsoft Windows 7 Ultimate 6.1.7601 Service Pack 1 Build 7601
- **Compiler:** C/C++: Version 13.1.1.171 of Intel C++ Studio XE for Windows; Fortran: Version 13.1.1.171 of Intel Fortran Studio XE for Windows; Libraries: Version 16.00.30319.01 of Microsoft Visual Studio 2010 Professional SP1
- **Auto Parallel:** No

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Standard Performance Evaluation Corporation
info@spec.org
http://www.spec.org/
## SPEC CFP2006 Result

**ASUSTeK Computer Inc.**
(Test Sponsor: Intel Corporation)

ASUS F2A85-M PRO motherboard (AMD A10-6800K APU with Radeon HD Graphics)

| SPECf_rate2006 | 63.7 |
| SPECf_rate_base2006 | 62.8 |

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

L3 Cache: None
Other Cache: None
Memory: 4 GB (2 x 2 GB 1Rx8 PC3-12800U-11)
Disk Subsystem: 250 GB Seagate SATA HDD, 7200 RPM
Other Hardware: None

File System: NTFS
System State: Default
Base Pointers: 32/64-bit
Peak Pointers: 32/64-bit
Other Software: SmartHeap Library Version 10.0 from http://www.microquill.com/

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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 13.1 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)

### Submit Notes

Processes were bound to specific processors using the start command with the /affinity switch. The config file option 'submit' was used to generate the affinity mask for each process.
SPEC CFP2006 Result

ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)
ASUS F2A85-M PRO motherboard (AMD A10-6800K APU with Radeon HD Graphics)

SPECfp_rate2006 = 63.7
SPECfp_rate_base2006 = 62.8

Platform Notes
Sysinfo program C:\SPEC13.1/Docs/sysinfo
$Rev: 6775 $ $Date:: 2011-08-16 #$ \8787f7622badcf24e01c368b1db4377c
running on Clt14DAE908A2BC Fri Sep 20 01:10:55 2013

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 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 19 Stepping 1 AuthenticAMD ~4100 Mhz
BIOS Version : American Megatrends Inc. 6105, 5/8/2013
Total Physical Memory: 3,111 MB

Trying 'wmic cpu get /value'
DeviceID : CPU0
L2CacheSize : 4096
L3CacheSize : 0
MaxClockSpeed : 4100
Name : AMD A10-6800K APU with Radeon(tm) HD Graphics
NumberOfCores : 2
NumberOfLogicalProcessors: 4

(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
Micron MT8JTF25664AZ-1G6 Series Memory DIMMs

General Notes
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

Continued on next page
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ASUS F2A85-M PRO motherboard (AMD A10-6800K APU with Radeon HD Graphics)

SPEC CFP2006 Result

SPECfp_rate2006 = 63.7
SPECfp_rate_base2006 = 62.8

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

Test date: Sep-2013
Hardware Availability: Jun-2013
Software Availability: Apr-2013

Base Compiler Invocation (Continued)

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc10 -Qstd=c99 ifort

Base Portability Flags

410.bwaves: -DSPEC_CPU_P64
416.gamess: -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
-Qoption,cpp,--ms_incompat_treatment_of_commas_in_macros
450.soplex: -DSPEC_CPU_P64
453.povray: -DSPEC_CPU_P64 -DSPEC_CPU_NEED_INVHYP -DNEED_INVHYP
454.calculix: -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 -O3 -Qprec-div -Qansi-alias -Qopt-prefetch
-Qauto-ilp32 /F1000000000 -link /FORCE:MULTIPLE

C++ benchmarks:
/arch:AVX -Qipo -O3 -Qprec-div -Qansi-alias -Qopt-prefetch
-Qcxx-features -Qauto-ilp32 /F1000000000 shlw64M.lib
-link /FORCE:MULTIPLE

Fortran benchmarks:
/arch:AVX -Qipo -O3 -Qprec-div -Qansi-alias -Qopt-prefetch
/F1000000000 -link /FORCE:MULTIPLE

Benchmarks using both Fortran and C:
/ARCH:AVX -Qipo -O3 -Qprec-div -Qansi-alias -Qopt-prefetch
-Qauto-ilp32 /F1000000000 -link /FORCE:MULTIPLE
ASUSTeK Computer Inc.  
(Test Sponsor: Intel Corporation)
ASUS F2A85-M PRO motherboard (AMD A10-6800K APU with Radeon HD Graphics)

SPEC CFP2006 Result

SPECfp_rate2006 = 63.7
SPECfp_rate_base2006 = 62.8

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

Test date: Sep-2013
Hardware Availability: Jun-2013
Software Availability: Apr-2013

Peak Compiler Invocation

C benchmarks:
  icl -Qvc10 -Qstd=c99

C++ benchmarks:
  icl -Qvc10

Fortran benchmarks:
  ifort

Benchmarks using both Fortran and C:
  icl -Qvc10 -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) -O3 -Qprec-div -Oa -Qauto-ilp32 /F1000000000 sh1W64M.lib -link /FORCE:MULTIPLE
  447.dealII: basepeak = yes
  450.soplex: /arch:AVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -O3 -Qauto-ilp32 /F1000000000 sh1W64M.lib -link /FORCE:MULTIPLE
  453.povray: /arch:AVX(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2) -O3 -Qprec-div -Oopt-prefetch -Qauto-ilp32 /F1000000000 sh1W64M.lib -link /FORCE:MULTIPLE

Fortran benchmarks:
  410.bwaves: basepeak = yes

Continued on next page
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Peak Optimization Flags (Continued)

416.games: basepeak = yes
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 -Qunroll4 -Qauto /F1000000000
-link /FORCE:MULTIPLE

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 questions about this result, please contact the tester.
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