**SPEC® CFP2006 Result**

ASUSTeK Computer Inc.  
(Test Sponsor: Intel Corporation)  
ASUS A88X-PRO Motherboard (AMD A10-8750 with Radeon R7 Graphics)  

| SPECfp_rate2006 | 68.2 |
| SPECfp_rate_base2006 | 67.5 |

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

| Test date: | Aug-2016 |
| Hardware Availability: | Dec-2015 |
| Software Availability: | Aug-2015 |

### Hardware

| **CPU Name:** | AMD A10-8750 |
| **CPU Characteristics:** | AMD Turbo CORE technology up to 4.00 GHz |
| **CPU MHz:** | 3600 |
| **FPU:** | Integrated |
| **CPU(s) enabled:** | 4 cores, 1 chip, 4 cores/chip |
| **CPU(s) orderable:** | 1 chip |
| **Primary Cache:** | 192 KB I on chip per chip, 96 KB I shared / 2 cores; 16 KB D on chip per core |
| **Secondary Cache:** | 4 MB I+D on chip per chip, 2 MB I shared / 2 cores |

### 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; Libraries: Version 18.00.30723 of Microsoft Visual Studio 2013 |
| **Auto Parallel:** | No |

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### Results Table

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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 Clt1C872C5DF572 Wed Aug 3 17:09:47 2016

This section contains SUT (System Under Test) info as seen by some common utilities. To remove or add to this section, see:

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**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 ~3600 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 : 3600  
Name : AMD A10-8750 Radeon R7, 12 Compute Cores 4C+8G  
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

**General Notes**

450.soplex (peak): "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.

Binaries compiled on a system with 1x Intel Xeon E5-2699 v3 CPU  
+ 64GB memory using Windows 8.1 Enterprise 64-bit

**Base Compiler Invocation**

C benchmarks:  
icl -Qvc12 -Qstd=c99
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Hardware Availability: Dec-2015
Software Availability: Aug-2015

Base Compiler Invocation (Continued)

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.game5: -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.mlsh3d: -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
450.soplex: -DSPEC_CPU_P64 -DSPEC_GETLINE_TEST
453.povray: -DSPEC_CPU_P64
454.calculix: -DSPEC_CPU_P64 -DSPEC_CPU_NOZMODIFIER /names:lowercase
459.GemsFD: -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-1lp32 /F100000000000 -link /FORCE:MULTIPLE

C++ benchmarks:
/arch:AVX -Qipo -O3 -Qprec-div -Qansi-alias -Qopt-prefetch
-Qcxx-features -Qauto-1lp32 /F100000000000 shlW64M.lib
-link /FORCE:MULTIPLE

Fortran benchmarks:
/arch:AVX -Qipo -O3 -Qprec-div -Qansi-alias -Qopt-prefetch
/F100000000000 -link /FORCE:MULTIPLE

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Base Optimization Flags (Continued)

Benchmarks using both Fortran and C:
/arch:AVX -Qipo -O3 -Qprec-div -Qansi-alias -Qopt-prefetch
-Qauto-ilp32 /F1000000000 -link /FORCE:MULTIPLE

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 -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)
    -Qipo -O3 -Qauto-ilp32 /F1000000000 sh1W64M.lib
    -link /FORCE:MULTIPLE

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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 -Qopt-prefetch -Qauto-ilp32  
/F1000000000 shlw64M.lib -link /FORCE:MULTIPLE

Fortran benchmarks:
410.bwaves: basepeak = yes  
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 other inquiries, please contact webmaster@spec.org.