# SPEC® CFP2006 Result

## ASUSZ97M-PLUS Motherboard (Intel Core i7-5775C)

**SPECfp®2006 = 88.8**

**SPECfp_base2006 = 87.0**

<table>
<thead>
<tr>
<th>Test Sponsor: Intel Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASUS Computer Inc.</td>
</tr>
<tr>
<td>(Hardware Availability: Jun-2015)</td>
</tr>
<tr>
<td>Test date: Oct-2015</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Software Availability: Aug-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU2006 license: 13</td>
</tr>
<tr>
<td>Tested by: Intel Corporation</td>
</tr>
</tbody>
</table>

### Hardware

- **CPU Name:** Intel Core i7-5775C
- **CPU Characteristics:** Intel Turbo Boost Technology up to 3.70 GHz
- **CPU MHz:** 3300
- **FPU:** Integrated
- **CPU(s) enabled:** 4 cores, 1 chip, 4 cores/chip, 2 threads/core
- **CPU(s) orderable:** 1 chip
- **Primary Cache:** 32 KB I + 32 KB D on chip per core
- **Secondary Cache:** 256 KB I+D on chip per core

### Software

- **Operating System:** Microsoft Windows 10 Pro 10.0.10240 N/A Build 10240
- **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

**continued on next page**
SPEC CFP2006 Result

ASUSTeK Computer Inc.
(Test Sponsor: Intel Corporation)

ASUS Z97M-PLUS Motherboard (Intel Core i7-5775C)

SPECfp2006 = 88.8
SPECfp_base2006 = 87.0

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

L3 Cache: 6 MB I+D on chip per chip
Other Cache: None
Memory: 8 GB (2 x 4 GB 2Rx4 PC3-14900U-10, running at 1600MHz)
Disk Subsystem: 1 TB Seagate SATA HDD, 7200 RPM
Other Hardware: None

File System: NTFS
System State: Default
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other Software: SmartHeap Library Version 11.0 from http://www.microquill.com/

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>410.bwaves</td>
<td>110</td>
<td>124</td>
<td>109</td>
<td>125</td>
<td>109</td>
<td>125</td>
<td>110</td>
<td>124</td>
<td>109</td>
<td>125</td>
</tr>
<tr>
<td>416.gamess</td>
<td>447</td>
<td>43.8</td>
<td>445</td>
<td>44.0</td>
<td>446</td>
<td>43.9</td>
<td>415</td>
<td>47.1</td>
<td>416</td>
<td>47.0</td>
</tr>
<tr>
<td>433.milc</td>
<td>107</td>
<td>85.5</td>
<td>108</td>
<td>85.2</td>
<td>108</td>
<td>85.4</td>
<td>107</td>
<td>85.5</td>
<td>108</td>
<td>85.2</td>
</tr>
<tr>
<td>434.zeusmp</td>
<td>48.2</td>
<td>189</td>
<td>48.0</td>
<td>190</td>
<td>47.7</td>
<td>191</td>
<td>48.2</td>
<td>189</td>
<td>48.0</td>
<td>190</td>
</tr>
<tr>
<td>435.gromacs</td>
<td>114</td>
<td>62.8</td>
<td>114</td>
<td>62.8</td>
<td>116</td>
<td>61.8</td>
<td>114</td>
<td>62.8</td>
<td>116</td>
<td>61.8</td>
</tr>
<tr>
<td>436.cactusADM</td>
<td>39.2</td>
<td>305</td>
<td>58.7</td>
<td>204</td>
<td>39.4</td>
<td>303</td>
<td>39.2</td>
<td>305</td>
<td>58.7</td>
<td>204</td>
</tr>
<tr>
<td>437.leslie3d</td>
<td>54.5</td>
<td>173</td>
<td>54.5</td>
<td>173</td>
<td>54.3</td>
<td>173</td>
<td>54.5</td>
<td>173</td>
<td>54.3</td>
<td>173</td>
</tr>
<tr>
<td>444.namd</td>
<td>245</td>
<td>32.7</td>
<td>245</td>
<td>32.7</td>
<td>245</td>
<td>32.7</td>
<td>245</td>
<td>32.7</td>
<td>245</td>
<td>32.7</td>
</tr>
<tr>
<td>447.dealII</td>
<td>171</td>
<td>66.9</td>
<td>171</td>
<td>66.9</td>
<td>171</td>
<td>66.9</td>
<td>171</td>
<td>66.9</td>
<td>171</td>
<td>66.9</td>
</tr>
<tr>
<td>450.soplex</td>
<td>164</td>
<td>50.9</td>
<td>164</td>
<td>50.9</td>
<td>164</td>
<td>50.9</td>
<td>164</td>
<td>50.9</td>
<td>164</td>
<td>50.9</td>
</tr>
<tr>
<td>453.povray</td>
<td>85.5</td>
<td>62.2</td>
<td>87.6</td>
<td>60.7</td>
<td>88.0</td>
<td>60.5</td>
<td>71.4</td>
<td>74.5</td>
<td>71.4</td>
<td>74.5</td>
</tr>
<tr>
<td>454.calculix</td>
<td>123</td>
<td>67.2</td>
<td>123</td>
<td>67.1</td>
<td>122</td>
<td>67.4</td>
<td>123</td>
<td>67.2</td>
<td>123</td>
<td>67.1</td>
</tr>
<tr>
<td>459.GemsFDTD</td>
<td>144</td>
<td>73.8</td>
<td>144</td>
<td>73.8</td>
<td>144</td>
<td>73.8</td>
<td>144</td>
<td>73.8</td>
<td>144</td>
<td>73.8</td>
</tr>
<tr>
<td>465.tonto</td>
<td>194</td>
<td>50.8</td>
<td>196</td>
<td>50.3</td>
<td>191</td>
<td>51.5</td>
<td>180</td>
<td>54.7</td>
<td>181</td>
<td>54.2</td>
</tr>
<tr>
<td>470.lbm</td>
<td>93.9</td>
<td>146</td>
<td>93.0</td>
<td>148</td>
<td>93.1</td>
<td>148</td>
<td>93.9</td>
<td>146</td>
<td>93.0</td>
<td>148</td>
</tr>
<tr>
<td>481.wrf</td>
<td>79.3</td>
<td>141</td>
<td>78.8</td>
<td>142</td>
<td>79.0</td>
<td>141</td>
<td>79.3</td>
<td>141</td>
<td>78.8</td>
<td>142</td>
</tr>
<tr>
<td>482.sphinx3</td>
<td>217</td>
<td>89.9</td>
<td>217</td>
<td>89.9</td>
<td>220</td>
<td>88.4</td>
<td>217</td>
<td>89.9</td>
<td>217</td>
<td>89.9</td>
</tr>
</tbody>
</table>

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 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 DESKTOP-K1NMJC0 Tue Oct 13 18:48:43 2015

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
ASUSTeK Computer Inc.  
(Test Sponsor: Intel Corporation)

ASUS Z97M-PLUS Motherboard (Intel Core i7-5775C)

SPECfp2006 = 88.8
SPECfp_base2006 = 87.0

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 10 Pro
OS Version    : 10.0.10240 N/A Build 10240
System Manufacturer: ASUS
System Model  : All Series
Processor(s)  : 1 Processor(s) Installed.
   [01]: Intel64 Family 6 Model 71 Stepping 1 GenuineIntel ~3300 Mhz
BIOS Version  : American Megatrends Inc. 2802, 5/19/2015
Total Physical Memory: 8,063 MB

Trying 'wmic cpu get /value'
DeviceID      : CPU0
L2CacheSize   : 1024
L3CacheSize   : 6144
MaxClockSpeed : 3301
Name          : Intel(R) Core(TM) i7-5775C CPU @ 3.30GHz
NumberOfCores : 4
NumberOfLogicalProcessors: 8

(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
SPEC CFP2006 Result

ASUSTeK Computer Inc. (Test Sponsor: Intel Corporation)
ASUS Z97M-PLUS Motherboard (Intel Core i7-5775C)

SPECfp2006 = 88.8
SPECfp_base2006 = 87.0

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

Test date: Oct-2015
Hardware Availability: Jun-2015
Software Availability: Aug-2015

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.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
-DSPEC_CPU_BOOST_CONFIG_MSC_VER -DSPEC_NEED_ALGORITHM
450.soplex: -DSPEC_CPU_P64 -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:
-QxCORE-AVX2 -Qipo -O3 -Qprec-div -Qparallel -Qansi-alias
-Opt-prefetch /F1000000000

C++ benchmarks:
-QxCORE-AVX2 -Qipo -O3 -Qprec-div -Qparallel -Qansi-alias
-Opt-prefetch -Qcxx-features /F1000000000 shlW64M.lib
-Link /FORCE:MULTIPLE

Fortran benchmarks:
-QxCORE-AVX2 -Qipo -O3 -Qprec-div -Qparallel -Qansi-alias
-Opt-prefetch /F1000000000

Continued on next page
SPEC CFP2006 Result

ASUSTeK Computer Inc.  
(Test Sponsor: Intel Corporation)
ASUS Z97M-PLUS Motherboard (Intel Core i7-5775C)

SPECfp2006 = 88.8
SPECfp_base2006 = 87.0

CPU2006 license: 13
Test sponsor: Intel Corporation
Test date: Oct-2015
Tested by: Intel Corporation
Hardware Availability: Jun-2015
Software Availability: Aug-2015

Base Optimization Flags (Continued)

Benchmarks using both Fortran and C:
- -QxCORE-AVX2 -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: -QxCORE-AVX2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)
-Qipo -O3 -Qprec-div -Oa /F1000000000 shrW64M.lib
-link /FORCE:MULTIPLE

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

Continued on next page
ASUSTeK Computer Inc.  
(Test Sponsor: Intel Corporation)  
ASUS Z97M-PLUS Motherboard (Intel Core i7-5775C)  

SPEC CFP2006 Result  

SPECfp2006 = 88.8  
SPECfp_base2006 = 87.0  

CPU2006 license: 13  
Test sponsor: Intel Corporation  
Tested by: Intel Corporation  
Test date: Oct-2015  
Hardware Availability: Jun-2015  
Software Availability: Aug-2015

Peak Optimization Flags (Continued)

- 453.povray: -QxCORE-AVX2(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: -QxCORE-AVX2(pass 2) -Qprof_gen(pass 1) -Qprof_use(pass 2)  
  -Qipo -O3 -Qprec-div -Qunroll14 -Qansi-alias /F1000000000
- 434.zeusmp: basepeak = yes
- 437.leslie3d: basepeak = yes
- 459.GemsFDTD: basepeak = yes
- 465.tonto: -QxCORE-AVX2(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:  

SPEC and SPECfp 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 v1.2.  
Report generated on Tue Dec  1 17:42:28 2015 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 1 December 2015.