## SPEC® CFP2006 Result

### Intel Corporation

**Asus P5E3 Deluxe (Intel Core 2 Extreme QX9650)**

**SPECfp®_rate2006 = 52.0**

**SPECfp_rate_base2006 = 49.9**

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Name: Intel Core 2 Extreme QX9650</td>
<td>Operating System: Windows Vista64 Ultimate</td>
</tr>
<tr>
<td>CPU Characteristics: 3.00 GHz 1333 MHz FSB</td>
<td>Compiler: Intel C++ Compiler for IA32 version 10.1</td>
</tr>
<tr>
<td>CPU MHz: 3000</td>
<td>Build 20070913 Package ID: w_cc_p_10.1.011</td>
</tr>
<tr>
<td>FPU: Integrated</td>
<td>Intel Fortran Compiler for IA32 version 10.1</td>
</tr>
<tr>
<td>CPU(s) enabled: 4 cores, 1 chip, 4 cores/chip</td>
<td>Build 20070913 Package ID: w_fc_p_10.1.011</td>
</tr>
<tr>
<td>CPU(s) orderable: 1 chip</td>
<td>Microsoft Visual Studio 2005 SP1 (for libraries)</td>
</tr>
<tr>
<td>Primary Cache: 32 KB I + 32 KB D on chip per core</td>
<td>Auto Parallel: No</td>
</tr>
<tr>
<td>Secondary Cache: 12 MB I+D on chip per chip, 6 MB shared / 2 cores</td>
<td>File System: NTFS</td>
</tr>
<tr>
<td></td>
<td>System State: Default</td>
</tr>
</tbody>
</table>

**Test date:** Nov-2007

**Hardware Availability:** Nov-2007

**Software Availability:** Nov-2007

**CPU2006 license:** 13

**Test sponsor:** Intel Corporation

**Tested by:** Intel Corporation

**Test date:** Nov-2007

**Hardware Availability:** Nov-2007

**Software Availability:** Nov-2007

| Copies | 3.00 | 7.00 | 11.0 | 15.0 | 19.0 | 23.0 | 27.0 | 31.0 | 35.0 | 39.0 | 43.0 | 47.0 | 51.0 | 55.0 | 59.0 | 63.0 | 67.0 | 71.0 | 75.0 | 79.0 | 83.0 | 87.0 | 91.0 | 95.0 | 99.0 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 410.bwaves | 4 | 40.0 | 40.7 | 40.9 | | | | | | | | | | | | | | | | | | | | | |
| 416.gamess | 4 | 4 | 25.9 | 25.9 | | | | | | | | | | | | | | | | | | | | | |
| 433.milc | 4 | 4 | 25.6 | 25.6 | | | | | | | | | | | | | | | | | | | | | |
| 434.zeusmp | 4 | 4 | | | | | | | | | | | | | | | | | | | | | |
| 435.gromacs | 4 | 4 | | | | | | | | | | | | | | | | | | | | | |
| 436.cactusADM | 4 | 4 | | | | | | | | | | | | | | | | | | | | | |
| 437.leslie3d | 4 | 4 | 28.5 | 28.5 | | | | | | | | | | | | | | | | | | | | |
| 444.namd | 4 | 4 | 28.8 | 28.8 | | | | | | | | | | | | | | | | | | | | |
| 447.dealII | 4 | 4 | | | | | | | | | | | | | | | | | | | | | |
| 450.soplex | 4 | 4 | 33.6 | 33.6 | | | | | | | | | | | | | | | | | | | | |
| 453.povray | 4 | 4 | 33.5 | 33.5 | | | | | | | | | | | | | | | | | | | | |
| 454.calculix | 4 | 4 | | | | | | | | | | | | | | | | | | | | | |
| 459.GemsFDTD | 4 | 4 | 26.0 | 26.0 | | | | | | | | | | | | | | | | | | | | |
| 465.tonto | 4 | 4 | 25.4 | 25.4 | | | | | | | | | | | | | | | | | | | | |
| 470.lbm | 1 | 1 | 29.2 | 29.2 | | | | | | | | | | | | | | | | | | | | |
| 481.wrf | 4 | 4 | 25.7 | 25.7 | | | | | | | | | | | | | | | | | | | | |
| 482.sphinx3 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | |

**SPECfp_rate_base2006 = 49.9**
Intel Corporation

Asus P5E3 Deluxe (Intel Core 2 Extreme QX9650)

**SPEC CFP2006 Result**

**Intel Corporation**  
Asus P5E3 Deluxe (Intel Core 2 Extreme QX9650)  

**SPECfp_rate2006 = 52.0**  
**SPECfp_rate_base2006 = 49.9**

CPU2006 license: 13  
Test sponsor: Intel Corporation  
Tested by: Intel Corporation  
Hardware Availability: Nov-2007  
Software Availability: Nov-2007

Test date: Nov-2007  

L3 Cache: None  
Other Cache: None  
Memory: 4 GB (4x1GB Corsair TWIN3X2048-1333C9DHX DDR3-1333 CL9)  
Disk Subsystem: Seagate 320GB NCQ SATA, 16MB cache, 7200 RPM  
Other Hardware: None  

Base Pointers: 32-bit  
Peak Pointers: 32-bit  
Other Software: SmartHeap Library Version 8.1 from http://www.microquill.com/

Results Table

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</table>

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

**General Notes**

Tested systems can be used with Shin-G ATX case, Antec NeoPower 480W power supply  
The system bus runs at 1333 MHz  
System was configured with Asus EN8800GTX discrete graphics card  
Binaries were built on Windows Vista32  
The following VS 2005 SP1 updates were applied: KB926601 and KB932232  
The start command with the /affinity switch was used to bind processes to cores
**Intel Corporation**

**Asus P5E3 Deluxe (Intel Core 2 Extreme QX9650)**

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**CPU2006 license:** 13  
**Test date:** Nov-2007  
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**Hardware Availability:** Nov-2007  
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**Software Availability:** Nov-2007

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### Base Compiler Invocation

- **C benchmarks:**
  ```
  icl -Qvc8 -Qc99
  ```
- **C++ benchmarks:**
  ```
  icl -Qvc8
  ```
- **Fortran benchmarks:**
  ```
  ifort
  ```
- **Benchmarks using both Fortran and C:**
  ```
  icl -Qvc8 -Qc99 ifort
  ```

---

### Base Portability Flags

- 436.cactusADM: `-Qlowercase /assume:underscore`
- 444.namd: `-TP`
- 447.dealII: `-DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG`
- 453.povray: `-DSPEC_CPU_WINDOWS_ICL`
- 454.calculix: `-DSPEC_CPU_NOZMODIFIER -Qlowercase`
- 481.wrf: `-DSPEC_CPU_WINDOWS_ICL`

---

### Base Optimization Flags

- **C benchmarks:**
  ```
  -fast /F1000000000
  ```
- **C++ benchmarks:**
  ```
  -fast -Qcxx_features /F1000000000 shlw32m.lib
  -link /FORCE:MULTIPLE
  ```
- **Fortran benchmarks:**
  ```
  -fast /F1000000000
  ```
- **Benchmarks using both Fortran and C:**
  ```
  -fast /F1000000000
  ```

---

### Peak Compiler Invocation

- **C benchmarks:**
  ```
  icl -Qvc8 -Qc99
  ```
- **C++ benchmarks:**
  ```
  icl -Qvc8
  ```

---

Continued on next page
Intel Corporation

SPEC CFP2006 Result

Asus P5E3 Deluxe (Intel Core 2 Extreme QX9650) SPECfp_rate2006 = 52.0
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CPU2006 license: 13
Test sponsor: Intel Corporation
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Tested by: Intel Corporation
Hardware Availability: Nov-2007
Software Availability: Nov-2007

Peak Compiler Invocation (Continued)

Fortran benchmarks:
   ifort

Benchmarks using both Fortran and C:
   icl -Qvc8 -Qc99 ifort

Peak Portability Flags

436.cactusADM: -Qlowercase /assume:underscore
   -TP
444.namd: -DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG
453.povray: -DSPEC_CPU_WINDOWS_ICL
454.calculix: -DSPEC_CPU_NOZMODIFIER -Qlowercase
   481.wrf: -DSPEC_CPU_WINDOWS_ICL

Peak Optimization Flags

C benchmarks:
   433.milc: -fast -Qunroll12 -Oa /F1000000000
   470.lbm: -fast -Qunroll12 -Qscalar-rep -Qprefetch /F1000000000
   482.sphinx3: -fast -Qunroll12 /F1000000000

C++ benchmarks:
   444.namd: -fast -Oa -Qcxx_features /F1000000000 shlw32m.lib
      -link /FORCE:MULTIPLE
   447.dealII: -fast -Qunroll12 -Qprefetch -Qcxx_features /F1000000000
      shlw32m.lib -link /FORCE:MULTIPLE
   450.soplex: -fast -Qcxx_features /F1000000000 shlw32m.lib
      -link /FORCE:MULTIPLE
   453.povray: -fast -Qunroll14 -Qansi-alias -Qcxx_features /F1000000000
      shlw32m.lib -link /FORCE:MULTIPLE

Fortran benchmarks:
   410.bwaves: basepeak = yes
   416.gamess: -fast -Qunroll12 -Ob0 -Qansi-alias -Qscalar-rep/
      /F1000000000

Continued on next page
Intel Corporation

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Peak Optimization Flags (Continued)

434.zeusmp: -QxT -O2 -Qprec-div -Qunroll10 -Qscalar-rep /F1000000000
437.leslie3d: -fast -Qprefetch /F1000000000
459.GemsFDTD: -fast -Qunroll2 -Ob0 -Qprefetch /F1000000000
465.tonto: -fast -Qunroll14 -Qauto /F1000000000

Benchmarks using both Fortran and C:
435.gromacs: -fast -Oa -Qprefetch /F1000000000
436.cactusADM: -fast -Qunroll2 -Qprefetch /F1000000000
454.calculix: -fast -Qunroll-aggressive /F1000000000
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:
http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.09.xml

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For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

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