# SPEC® CFP2006 Result



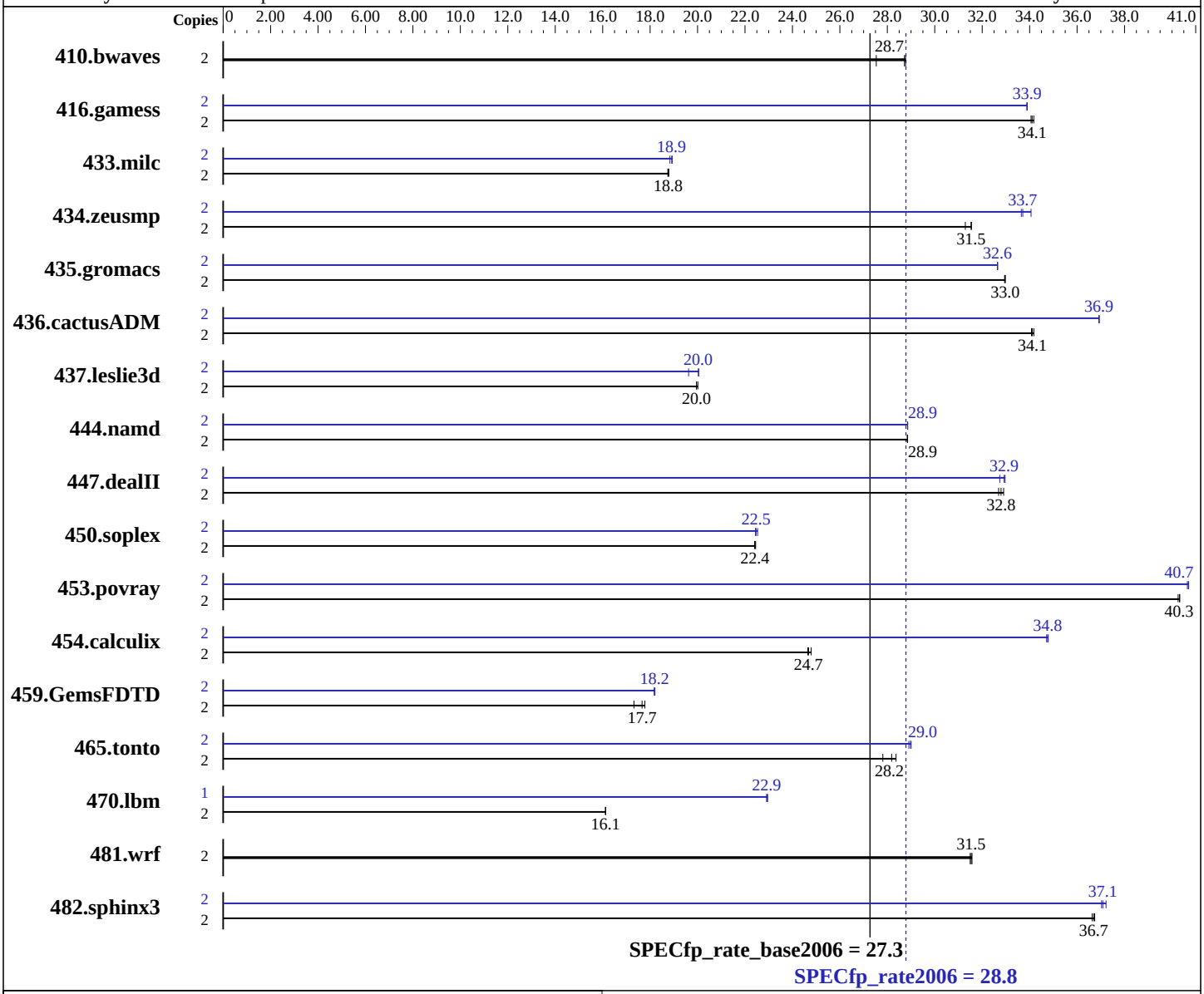
## Intel Corporation
## Lenovo Thinkpad T400

SPECfp®_rate2006 = 28.8

SPECfp_rate_base2006 = 27.3

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

**Test date:** Aug-2008
**Hardware Availability:** Sep-2008
**Software Availability:** Nov-2007




### Hardware

| | |
|---|---|
| CPU Name: | Intel Core 2 Duo T9600 |
| CPU Characteristics: | |
| CPU MHz: | 2800 |
| FPU: | Integrated |
| CPU(s) enabled: | 2 cores, 1 chip, 2 cores/chip |
| CPU(s) orderable: | 1 chip |
| Primary Cache: | 32 KB I + 32 KB D on chip per core |
| Secondary Cache: | 6 MB I+D on chip per chip |

Continued on next page

### Software

| | |
|---|---|
| Operating System: | Windows XP Professional SP2 |
| Compiler: | Intel C++ Compiler for IA32 version 10.1<br>Build 20070913 Package ID: w_cc_p_10.1.011<br>Intel Fortran Compiler for IA32 version 10.1<br>Build 20070913 Package ID: w_fc_p_10.1.011<br>Microsoft Visual Studio 2005 SP1 (for libraries) |
| Auto Parallel: | No |
| File System: | NTFS |
| System State: | Default |

Continued on next page

# SPEC CFP2006 Result



## Intel Corporation
## Lenovo Thinkpad T400

SPECfp_rate2006 = 28.8

SPECfp_rate_base2006 = 27.3

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

**Test date:** Aug-2008
**Hardware Availability:** Sep-2008
**Software Availability:** Nov-2007

L3 Cache: None
Other Cache: None
Memory: 2 GB (2x1GB Micron PC3-8500 DDR3-1066 CL7)
Disk Subsystem: Hitachi Travelstar HTS722020K9SA00 SATA 200GB 7200RPM
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

| Benchmark | Base | | | | | | | Peak | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 410.bwaves | 2 | 987 | 27.5 | **946** | **28.7** | 945 | 28.8 | 2 | 987 | 27.5 | **946** | **28.7** | 945 | 28.8 |
| 416.gamess | 2 | 1150 | 34.1 | 1146 | 34.2 | **1148** | **34.1** | 2 | 1156 | 33.9 | 1155 | 33.9 | **1155** | **33.9** |
| 433.milc | 2 | 977 | 18.8 | **979** | **18.8** | 979 | 18.7 | 2 | **971** | **18.9** | 975 | 18.8 | 970 | 18.9 |
| 434.zeusmp | 2 | **577** | **31.5** | 577 | 31.5 | 582 | 31.3 | 2 | 541 | 33.6 | 534 | 34.1 | **540** | **33.7** |
| 435.gromacs | 2 | **433** | **33.0** | 433 | 32.9 | 433 | 33.0 | 2 | 437 | 32.6 | 437 | 32.6 | **437** | **32.6** |
| 436.cactusADM | 2 | 699 | 34.2 | **701** | **34.1** | 701 | 34.1 | 2 | 647 | 36.9 | 647 | 36.9 | **647** | **36.9** |
| 437.leslie3d | 2 | 939 | 20.0 | 942 | 20.0 | **942** | **20.0** | 2 | 938 | 20.0 | 958 | 19.6 | **939** | **20.0** |
| 444.namd | 2 | 556 | 28.9 | 556 | 28.8 | **556** | **28.9** | 2 | 556 | 28.9 | **556** | **28.9** | 556 | 28.9 |
| 447.dealII | 2 | 700 | 32.7 | 695 | 32.9 | **698** | **32.8** | 2 | 699 | 32.7 | 694 | 33.0 | **695** | **32.9** |
| 450.soplex | 2 | **744** | **22.4** | 743 | 22.4 | 744 | 22.4 | 2 | 743 | 22.4 | 740 | 22.5 | **742** | **22.5** |
| 453.povray | 2 | 264 | 40.3 | **264** | **40.3** | 264 | 40.3 | 2 | 262 | 40.6 | 261 | 40.7 | **262** | **40.7** |
| 454.calculix | 2 | 666 | 24.8 | 669 | 24.6 | **669** | **24.7** | 2 | **475** | **34.8** | 474 | 34.8 | 475 | 34.7 |
| 459.GemsFDTD | 2 | 1193 | 17.8 | **1202** | **17.7** | 1225 | 17.3 | 2 | 1168 | 18.2 | 1166 | 18.2 | **1166** | **18.2** |
| 465.tonto | 2 | 694 | 28.4 | **698** | **28.2** | 708 | 27.8 | 2 | 679 | 29.0 | 681 | 28.9 | **679** | **29.0** |
| 470.lbm | 2 | 1705 | 16.1 | 1704 | 16.1 | **1705** | **16.1** | 1 | **600** | **22.9** | 600 | 22.9 | 599 | 23.0 |
| 481.wrf | 2 | 708 | 31.6 | **708** | **31.5** | 709 | 31.5 | 2 | 708 | 31.6 | **708** | **31.5** | 709 | 31.5 |
| 482.sphinx3 | 2 | 1061 | 36.7 | **1062** | **36.7** | 1064 | 36.6 | 2 | 1047 | 37.2 | **1051** | **37.1** | 1053 | 37.0 |

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

## General Notes

```
Binaries were built on Windows Vista32
The following VS 2005 SP1 updates were applied: KB926601 and KB932232
```

## Base Compiler Invocation

C benchmarks:

```
icl -Qvc8 -Qc99
```

C++ benchmarks:

```
icl -Qvc8
```

Continued on next page

## Base Compiler Invocation (Continued)

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

Fortran benchmarks:
ifort

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

## Peak 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

## Peak Optimization Flags

C benchmarks:

433.milc: -fast -Qunroll2 -Oa /F1000000000

470.lbm: -fast -Qunroll2 -Qscalar-rep- -Qprefetch /F1000000000

482.sphinx3: -fast -Qunroll2 /F1000000000

C++ benchmarks:

444.namd: -fast -Oa -Qcxx_features /F1000000000 shlw32m.lib
-link /FORCE:MULTIPLE

447.dealII: -fast -Qunroll2 -Qprefetch -Qcxx_features /F1000000000
shlw32m.lib -link /FORCE:MULTIPLE

450.soplex: -fast -Qcxx_features /F1000000000 shlw32m.lib
-link /FORCE:MULTIPLE

453.povray: -fast -Qunroll4 -Qansi-alias -Qcxx_features /F1000000000
shlw32m.lib -link /FORCE:MULTIPLE

Fortran benchmarks:

410.bwaves: basepeak = yes

416.gamess: -fast -Qunroll2 -Ob0 -Qansi-alias -Qscalar-rep-
/F1000000000

434.zeusmp: -QxT -O2 -Qprec-div- -Qunroll0 -Qscalar-rep- /F1000000000

437.leslie3d: -fast -Qprefetch /F1000000000

459.GemsFDTD: -fast -Qunroll2 -Ob0 -Qprefetch /F1000000000

465.tonto: -fast -Qunroll4 -Qauto /F1000000000

Benchmarks using both Fortran and C:

Continued on next page

## Peak Optimization Flags (Continued)

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
`http://www.spec.org/cpu2006/flags/Intel-ic10.1-win32-revC.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/Intel-ic10.1-win32-revC.xml`



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

Tested with SPEC CPU2006 v1.0.
Report generated on Tue Jul 22 18:42:53 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 30 September 2008.