Acer Incorporated
Gateway GW2000ht-GW170ht F1 (Intel Xeon X5650, 2.66GHz)

CPU2006 license: 97
Test sponsor: Acer Incorporated
Tested by: Acer Incorporated

CPU Name: Intel Xeon X5650
CPU Characteristics: Intel Turbo Boost Technology up to 3.06 GHz
CPU MHz: 2667
FPU: Integrated
CPU(s) enabled: 12 cores, 2 chips, 6 cores/chip, 2 threads/core
CPU(s) orderable: 1, 2 chips
Primary Cache: 32 KB I + 32 KB D on chip per core
Secondary Cache: 256 KB I+D on chip per core
L3 Cache: 12 MB I+D on chip per chip
Other Cache: None
Memory: 48 GB (12 x 4 GB 2Rx8 PC3-10600R-9, ECC)
Disk Subsystem: 1 x 1000 GB SATA 7200RPM
Other Hardware: None

Operating System: SUSE Linux Enterprise Server 11 (x86_64) SP1, Kernel 2.6.32.12-0.7-default
Compiler: Intel C++ Compiler XE for applications running on IA-32
Version 12.0.1.116 Build 20101116
Auto Parallel: No
File System: ReiserFS
System State: Run level 3 (multi-user)
Base Pointers: 32-bit
Peak Pointers: 32/64-bit
Other Software: Microquill SmartHeap V9.01

SPECint®_rate2006 = 366
SPECint_rate_base2006 = 343

Test date: Aug-2011
Hardware Availability: Aug-2010
Software Availability: Jan-2011
## SPEC CINT2006 Result

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**SPECint_rate2006 = 366**  
**SPECint_rate_base2006 = 343**

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**Results Table**

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<thead>
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<th>Seconds</th>
<th>Ratio</th>
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<td></td>
<td>Peak</td>
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<td>400.perlbench</td>
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<tr>
<td>456.hmmer</td>
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<td>458.sjeng</td>
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<td>490</td>
<td>338</td>
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<td></td>
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</tbody>
</table>

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

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**Submit Notes**

The config file option 'submit' was used. numactl was used to bind copies to the cores.

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**Operating System Notes**

'ulimit -s unlimited' was used to set environment stack size  
Large pages were disabled for this run.

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**Platform Notes**

BIOS Settings:  
Fan speed = full speed (Default = Balanced)  
Data Reuse = Disabled (Default = Enabled)

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**General Notes**

Binaries compiled on RHEL5.5  
The Acer AW2000h-AW170h F1, Gateway GW2000h-GW170h F1, Acer AW2000ht-AW170ht F1 and Gateway GW2000ht-GW170ht F1 are electronically equivalent. This result was measured on Gateway GW2000ht-GW170ht F1.

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**Base Compiler Invocation**

C benchmarks:  
```
icc -m32
```

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Base Compiler Invocation (Continued)

C++ benchmarks:
  icpc -m32

Base Portability Flags

  400.perlbench: -DSPEC_CPU_LINUX_IA32
  462.libquantum: -DSPEC_CPU_LINUX
  483.xalancbmk: -DSPEC_CPU_LINUX

Base Optimization Flags

  C benchmarks:
    -xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch
    -B /usr/share/libhugetlbfs/ -Wl,-hugetlbfs-link=BDT
  C++ benchmarks:
    -xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs
    -L/smartheap -lsmartheap
    -B /usr/share/libhugetlbfs/ -Wl,-hugetlbfs-link=BDT

Base Other Flags

  C benchmarks:
    403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

  C benchmarks (except as noted below):
    icc -m32

    400.perlbench: icc -m64
    401.bzip2: icc -m64
    456.hmmer: icc -m64
    458.sjeng: icc -m64
  C++ benchmarks:
    icpc -m32
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**Peak Portability Flags**

- 400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
- 401.bzip2: -DSPEC_CPU_LP64
- 456.hmmer: -DSPEC_CPU_LP64
- 458.sjeng: -DSPEC_CPU_LP64
- 462.libquantum: -DSPEC_CPU_LINUX
- 483.xalancbmk: -DSPEC_CPU_LINUX

**Peak Optimization Flags**

**C benchmarks:**

- 400.perlbench: -xSSE4.2 (pass 2) -prof-gen (pass 1) -ipo (pass 2)
  -03 (pass 2) -no-prec-div (pass 2) -prof-use (pass 2)
  -B/usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

- 401.bzip2: -xSSE4.2 (pass 2) -prof-gen (pass 1) -ipo (pass 2)
  -03 (pass 2) -no-prec-div (pass 2) -prof-use (pass 2)
  -opt-prefetch -auto-ilp32 -ansi-alias
  -B/usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

- 403.gcc: -xSSE4.2 -ipo -O3 -no-prec-div
  -B/usr/share/libhugetlbfs/ -Wl,-hugetlbfs-link=BDT

- 429.mcf: -xSSE4.2 (pass 2) -prof-gen (pass 1) -ipo (pass 2)
  -03 (pass 2) -no-prec-div (pass 2) -prof-use (pass 2)
  -ansi-alias -auto-ilp32

- 445.gobmk: -xSSE4.2 (pass 2) -prof-gen (pass 1) -prof-use (pass 2)
  -ansi-alias -auto-ilp32

- 456.hmmer: -xSSE4.2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32
  -B/usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

- 458.sjeng: -xSSE4.2 (pass 2) -prof-gen (pass 1) -ipo (pass 2)
  -03 (pass 2) -no-prec-div (pass 2) -prof-use (pass 2)
  -unroll14 -auto-ilp32
  -B/usr/share/libhugetlbfs/ -Wl,-melf_x86_64 -Wl,-hugetlbfs-link=BDT

- 462.libquantum: basepeak = yes

- 464.h264ref: -xSSE4.2 (pass 2) -prof-gen (pass 1) -ipo (pass 2)
  -03 (pass 2) -no-prec-div (pass 2) -prof-use (pass 2)
  -unroll2 -ansi-alias

**C++ benchmarks:**

- 471.omnetpp: -xSSE4.2 (pass 2) -prof-gen (pass 1) -ipo (pass 2)
  -03 (pass 2) -no-prec-div (pass 2) -prof-use (pass 2)
  -ansi-alias -opt-ra-region-strategy=block -Wl,-z,muldefs

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#### Peak Optimization Flags (Continued)

471.omnetpp (continued):
- `-L/smartheap -lsmartheap`

473.astar: basepeak = yes

483.xalancbmk: basepeak = yes

#### Peak Other Flags

C benchmarks:

403.gcc: `-Dalloca=_alloca`

The flags files that were used to format this result can be browsed at

http://www.spec.org/cpu2006/flags/Intel-ic12.0-linux64-revB.html
http://www.spec.org/cpu2006/flags/Acer-Intel-Linux-Settings-flags.html

You can also download the XML flags sources by saving the following links:

http://www.spec.org/cpu2006/flags/Intel-ic12.0-linux64-revB.xml
http://www.spec.org/cpu2006/flags/Acer-Intel-Linux-Settings-flags.xml

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For other inquiries, please contact webmaster@spec.org.

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