Acer Incorporated

Gateway GT350 F1 (Intel Xeon E5607)

SPECint®_rate2006 = 170
SPECint_rate_base2006 = 160

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

Test date: May-2011
Hardware Availability: Feb-2011
Software Availability: Jan-2011

### Hardware

- **CPU Name:** Intel Xeon E5607
- **CPU Characteristics:**
  - FPU: Integrated
  - CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip
  - 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: 8 MB I+D on chip per chip
  - Other Cache: None
  - Memory: 48 GB (12 x 4 GB 2Rx8 PC3-10600R-9, ECC, running at 1066 MHz)
- **Disk Subsystem:** 1 x 500 GB SATA, 7200 RPM SATA HDD
- **Other Hardware:** None

### Software

- **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:** ext3
- **System State:** Run level 3 (multi-user)
- **Base Pointers:** 32-bit
- **Peak Pointers:** 32/64-bit
- **Other Software:** Microquill SmartHeap V9.01

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### SPECint_rates

<table>
<thead>
<tr>
<th>Test Case</th>
<th>SPECint_rate2006</th>
<th>SPECint_rate_base2006</th>
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<tbody>
<tr>
<td>400.perlbench</td>
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<tr>
<td>401.bzip2</td>
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<tr>
<td>445.gobmk</td>
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<tr>
<td>462.libquantum</td>
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<tr>
<td>471.omnetpp</td>
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<td>473.astar</td>
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</table>
### Acer Incorporated

**Gateway GT350 F1 (Intel Xeon E5607)**

<table>
<thead>
<tr>
<th>Benchmark</th>
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<th>Base Seconds</th>
<th>Base Ratio</th>
<th>Peak Copies</th>
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<td>338</td>
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</tr>
</tbody>
</table>

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

### Submit Notes

The config file option 'submit' was used.

`numactl` was used to bind copies to the cores

### Operating System Notes

'ulimit -s unlimited' was used to set environment stack size

Large pages were disabled for this run

### Platform Notes

BIOS settings:

- Fan speed = full speed (Default = Balanced)
- Data Reuse = Disabled (Default = Enabled)

### General Notes

Binaries compiled on RHEL5.5

This result was measured on Gateway GT350 F1

Acer AT350 F1 is electronically equivalent

### Base Compiler Invocation

C benchmarks:

```
icc  -m32
```

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**SPEC CINT2006 Result**

**Acer Incorporated**

Gateway GT350 F1 (Intel Xeon E5607)

<table>
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<tr>
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**CPU2006 license:** 97  
**Test sponsor:** Acer Incorporated  
**Tested by:** Acer Incorporated  
**Test date:** May-2011  
**Hardware Availability:** Feb-2011  
**Software Availability:** Jan-2011

### 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 -03 -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 -03 -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 file that was 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/Intel-ic12.0-linux64-revB.html)

You can also download the XML flags source by saving the following link:  