Acer Incorporated

Gateway GW2000h-GW170h F1 (Intel Xeon L5609, 1.86 GHz)

| SPECint®2006 | = 22.7 |
| SPECint_base2006 | = 21.3 |

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

Test date: Jul-2010
Hardware Availability: Aug-2010
Software Availability: Jan-2010

CPU Name: Intel Xeon L5609
CPU Characteristics:
CPU MHZ: 1866
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: 12 MB I+D on chip per chip
Other Cache: None
Memory: 48 GB (12 x 4 GB 2Rx8 PC3-10600R-9, ECC, memory runs at 1066 MHz)
Disk Subsystem: 1 x 1000 GB SATA II, 7200 RPM
Other Hardware: None

Operating System: SUSE Linux Enterprise Server 11 (x86_64)
Kernel 2.6.27.19-5-default
Compiler: Intel C++ Professional Compiler for IA32 and Intel 64, Version 11.1
Build 20091130 Package ID: l_cproc_p_11.1.064
Auto Parallel: Yes
File System: ReiserFS
System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: 32/64-bit
Other Software: Microquill SmartHeap V8.1
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SPECint2006 = 22.7
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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>
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<td>331</td>
<td>20.8</td>
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<td>20.9</td>
<td></td>
</tr>
</tbody>
</table>

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

Operating System Notes

'ulimit -s unlimited' was used to set the stack size to unlimited prior to run
OMP_NUM_THREADS set to number of cores
KMP_AFFINITY set to granularity=fine,scatter

General Notes

Binaries were compiled on SLES 10 with Binutils 2.18.50.0.7.20080502

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 GW2000ht-GW170ht F1.

Base Compiler Invocation

C benchmarks:
  icc -m64

C++ benchmarks:
icpc -m64

Results Table

Benchmark | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
---        | ---     | ---   | ---     | ---   | ---     | ---   | ---     | ---   | ---     | ---   | ---     | ---   |
400.perlbench | 677    | 14.4  | 666     | 14.7  | 666     | 14.7  | ---     | ---   | ---     | ---   | ---     | ---   |
401.bzip2   | 873     | 11.1  | 872     | 11.1  | 871     | 11.1  | ---     | ---   | ---     | ---   | ---     | ---   |
403.gcc     | 556     | 14.5  | 556     | 14.5  | 555     | 14.5  | ---     | ---   | ---     | ---   | ---     | ---   |
429.mcf     | 338     | 27.0  | 338     | 27.0  | 337     | 27.0  | ---     | ---   | ---     | ---   | ---     | ---   |
445.gobmk   | 752     | 13.9  | 751     | 14.0  | 751     | 14.0  | ---     | ---   | ---     | ---   | ---     | ---   |
456.hmmer   | 354     | 26.3  | 356     | 26.2  | 357     | 26.1  | ---     | ---   | ---     | ---   | ---     | ---   |
458.sjeng   | 837     | 14.5  | 836     | 14.5  | 837     | 14.5  | ---     | ---   | ---     | ---   | ---     | ---   |
462.libquantum | 62.0  | 334   | 61.6    | 336   | 61.6    | 336   | ---     | ---   | ---     | ---   | ---     | ---   |
464.h264ref | 1022    | 21.6  | 1028    | 21.5  | 1036    | 21.4  | ---     | ---   | ---     | ---   | ---     | ---   |
471.omnetpp | 440     | 14.2  | 439     | 14.2  | 441     | 14.2  | ---     | ---   | ---     | ---   | ---     | ---   |
473.astar   | 614     | 11.4  | 606     | 11.6  | 605     | 11.6  | ---     | ---   | ---     | ---   | ---     | ---   |
483.xalancbmk | 324    | 21.3  | 324     | 21.3  | 325     | 21.3  | ---     | ---   | ---     | ---   | ---     | ---   |
SPEC CINT2006 Result

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Test date: Jul-2010
Hardware Availability: Aug-2010
Software Availability: Jan-2010

Base Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
429.mcf: -DSPEC_CPU_LP64
445.gobmk: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
471.omnetpp: -DSPEC_CPU_LP64
473.astar: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:
-xSSE4.2 -ipo -03 -no-prec-div -static -parallel -opt-prefetch

C++ benchmarks:
-xSSE4.2 -ipo -03 -no-prec-div -opt-prefetch -Wl,-z,muldefs

Base Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

C benchmarks (except as noted below):
icc -m64
400.perlbench: icc -m32
429.mcf: icc -m32
445.gobmk: icc -m32
464.h264ref: icc -m32

C++ benchmarks (except as noted below):
icpc -m32

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Peak Compiler Invocation (Continued)

473.astar: icpc -m64

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
416.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
473.astar: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:

400.perlbench: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
 -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
 -prof-use(pass 2) -ansi-alias -opt-prefetch

401.bzip2: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
 -O3(pass 2) -no-prec-div -static(pass 2) -prof-use(pass 2)
 -auto-ilp32 -opt-prefetch -ansi-alias

403.gcc: -xSSE4.2 -ipo -O3 -no-prec-div -static -inline-calloc
 -opt-malloc-options=3 -auto-ilp32

429.mcf: -xSSE4.2 -ipo -O3 -no-prec-div -static -opt-prefetch

445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2) -O2
 -ipo -no-prec-div -ansi-alias

456.hmmer: -xSSE4.2 -ipo -O3 -no-prec-div -static -unroll12
 -ansi-alias -auto-ilp32

458.sjeng: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
 -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
 -prof-use(pass 2) -unroll14

462.libquantum: -xSSE4.2 -ipo -O3 -no-prec-div -static -parallel
 -opt-prefetch -par-schedule-static=32768 -ansi-alias

464.h264ref: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
 -O3(pass 2) -no-prec-div(pass 2) -static(pass 2)
 -prof-use(pass 2) -unroll12 -ansi-alias

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| Tested by: | Acer Incorporated |

CPU2006 license: 97

Peak Optimization Flags (Continued)

```plaintext
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

473.astar: -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=routine -Wl,-z,muldefs

483.xalancbmk: -xSSE4.2 -ipo -03 -no-prec-div -opt-prefetch
-Wl,-z,muldefs
```

Peak Other Flags

```plaintext
C benchmarks:

403.gcc: -Dalloca=_alloca
```

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:

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

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