Acer Incorporated

Acer AR380 F1 (Intel Xeon E5603)

**SPECint\_rate2006 = 125**

**SPECint\_rate\_base2006 = 118**

**CPU2006 license:** 97

**Test date:** May-2011

**Test sponsor:** Acer Incorporated

**Hardware Availability:** Feb-2011

**Tested by:** Acer Incorporated

**Software Availability:** Jan-2011

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**SPECint\_rate2006 = 125**

**SPECint\_rate\_base2006 = 118**

### Hardware

- **CPU Name:** Intel Xeon E5603
- **CPU Characteristics:**
  - CPU MHz: 1600
  - FPU: Integrated
  - CPU(s) enabled: 8 cores, 2 chips, 4 cores/chip
  - Primary Cache: 32 KB I + 32 KB D on chip per core
  - Secondary Cache: 256 KB I+D on chip per core
  - L3 Cache: 4 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 300 GB SATA, 10000 RPM
- **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
### SPEC CINT2006 Result

**Acer Incorporated**

Acer AR380 F1 (Intel Xeon E5603)

**SPECint_rate2006 = 125**

**SPECint_rate_base2006 = 118**

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

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### Results Table

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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 RHEL 5.5**

This result was measured on the Gateway GR380 F1.

The Acer AR380 F1, AR360 F1, Gateway GR360 F1 are electronically equivalent.

### Base Compiler Invocation

C benchmarks:

- `icc  -m32`

Continued on next page
## SPEC CINT2006 Result

**Acer Incorporated**  
**Acer AR380 F1 (Intel Xeon E5603)**

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<td>Software Availability:</td>
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**SPECint_rate2006 = 125**  
**SPECint_rate_base2006 = 118**

### 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
Acer Incorporated

Acer AR380 F1 (Intel Xeon E5603)

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\text{SPECint\_rate2006} = 125
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CPU2006 license: 97
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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) -O3(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) -O3(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) -O3(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) -O3(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

C++ benchmarks:

471.omnetpp: --xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(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

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.20110608.xml

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