Fujitsu Siemens Computers

SPECint.rate2006 = 37.2
SPECint_rate_base2006 = 35.4

CPU2006 license: 22
Test date: May-2007
Test sponsor: Fujitsu Siemens Computers
Hardware Availability: Jul-2006
Tested by: Fujitsu Siemens Computers
Software Availability: Feb-2007

CPU Name: Intel Xeon 5110
CPU Characteristics: 1067 MHz system bus
CPU MHz: 1600
FPU: Integrated
CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip
CPU(s) orderable: 1.2 chips
Primary Cache: 32 KB I + 32 KB D on chip per core
Secondary Cache: 4 MB I+D on chip per chip
L3 Cache: None
Other Cache: None
Memory: 8 GB (8x1 GB DDR2 PC2-5300F, 2 rank, CAS 5-5-5, with ECC)
Disk Subsystem: SAS (73GB 15400 rpm)
Other Hardware: None

Operating System: 64-Bit SUSE LINUX Enterprise Server 10, Kernel 2.6.16.21-0.8-smp on an x86_64
Auto Parallel: No
File System: ext2
System State: Multiuser, Runlevel 3
Base Pointers: 32-bit
Peak Pointers: 32/64-bit
Other Software: Smart Heap Library, Version 8.1

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Results Table

<table>
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<th>Seconds</th>
<th>Ratio</th>
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<td>590</td>
<td>46.8</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 stacksize to unlimited prior to run
'/usr/bin/taskset' used to bind processes to CPUs

General Notes

The system bus runs at 1067 MHz

All binaries were built with 32-bit Intel compiler except:
401.bzip2, 456.hmmer and 462.libquantum in peak were built with
64-bit Intel compiler by changing the path for include and library files.

BIOS configuration:
Adjacent Sector Prefetch = Disable

The PRIMERGY RX300 S3 and the PRIMERGY TX300 S3 are electronically equivalent.

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http://www.fujitsu-siemens.com/countries

Base Compiler Invocation

C benchmarks:
	icc

Continued on next page
### Fujitsu Siemens Computers

**PRIMERGY RX300 S3, Intel Xeon processor 5110, 1.60 GHz**

| SPECint_rate2006 | 37.2 |
| SPECint_rate_base2006 | 35.4 |

- **CPU2006 license:** 22
- **Test date:** May-2007
- **Test sponsor:** Fujitsu Siemens Computers
- **Tested by:** Fujitsu Siemens Computers
- **Hardware Availability:** Jul-2006
- **Software Availability:** Feb-2007

## Base Compiler Invocation (Continued)

**C++ benchmarks:**

- icpc

## Base Portability Flags

- 400.perlbench: `-DSPEC_CPU_LINUX_X64`
- 462.libquantum: `-DSPEC_CPU_LINUX`
- 483.xalancbmk: `-DSPEC_CPU_LINUX`

## Base Optimization Flags

**C benchmarks:**

- `-fast`

**C++ benchmarks:**

- `-xP -O3 -ipo -no-prec-div -L/opt/SmartHeap_8_1/lib -lsmartheap`

## Peak Compiler Invocation

**C benchmarks (except as noted below):**

- icc
  - 401.bzip2: `/opt/intel/cce/9.1.047/bin/icc`
  - `-I/opt/intel/cce/9.1.047/include`
  - `-L/opt/intel/cce/9.1.047/lib`
  - 456.hmmer: `/opt/intel/cce/9.1.047/bin/icc`
  - `-I/opt/intel/cce/9.1.047/include`
  - `-L/opt/intel/cce/9.1.047/lib`
  - 462.libquantum: `/opt/intel/cce/9.1.047/bin/icc`
  - `-I/opt/intel/cce/9.1.047/include`
  - `-L/opt/intel/cce/9.1.047/lib`

**C++ benchmarks:**

- icpc

## Peak Portability Flags

- 400.perlbench: `-DSPEC_CPU_LINUX_X64`
- 401.bzip2: `-DSPEC_CPU_LP64`

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Fujitsu Siemens Computers
PRIMERGY RX300 S3, Intel Xeon processor 5110, 1.60 GHz

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Peak Portability Flags (Continued)

456.hmmer: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:
400.perlbench: -prof_gen(pass 1) -prof_use(pass 2) -fast
401.bzip2: -fast
403.gcc: basepeak = yes
429.mcf: -prof_gen(pass 1) -prof_use(pass 2) -fast
-L/opt/SmartHeap_8.1/lib -lsmartheap
445.gobmk: Same as 429.mcf
456.hmmer: Same as 400.perlbench
458.sjeng: Same as 429.mcf
462.libquantum: Same as 400.perlbench
464.h264ref: Same as 429.mcf

C++ benchmarks:
471.omnetpp: -prof_gen(pass 1) -prof_use(pass 2) -xP -O3 -ipo
-no-prec-div -L/opt/SmartHeap_8.1/lib -lsmartheap
473.astar: -prof_gen(pass 1) -prof_use(pass 2) -fast
-L/opt/SmartHeap_8.1/lib -lsmartheap
483.xalancbmk: basepeak = yes

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:
http://www.spec.org/cpu2006/flags/CPU2006_flags.20090714.09.xml
Fujitsu Siemens Computers
PRIMERGY RX300 S3, Intel Xeon processor 5110, 1.60 GHz

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Tested with SPEC CPU2006 v1.0.
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