Fujitsu Siemens Computers

PRIMERGY RX300 S3, Intel Xeon processor 5160, 3.0 GHz

SPECint\textsuperscript{\textregistered} rate\textsubscript{2006} = 59.1
SPECint rate base\textsubscript{2006} = 56.3

CPU\textsubscript{2006} license: 22
Test date: May-2007
Test sponsor: Fujitsu Siemens Computers
Hardware Availability: Jul-2006
Tested by: Fujitsu Siemens Computers
Software Availability: Feb-2007

Hardware

- CPU Name: Intel Xeon 5160
- CPU Characteristics: 1333 MHz system bus
- CPU MHZ: 3000
- 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

Software

- 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
### Results Table

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<tr>
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<th>Ratio</th>
<th>Seconds</th>
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<td>72.7</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 1333 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:

```plaintext
icc
```

Continued on next page
SPEC CINT2006 Result

Fujitsu Siemens Computers
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SPECint_rate_base2006 = 56.3

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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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**Peak Portability Flags (Continued)**

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

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**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

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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
SPEC CINT2006 Result

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

Tested with SPEC CPU2006 v1.0.