Fujitsu Siemens Computers
PRIMERGY TX600 S3, Intel Xeon processor 7140M, 3.40 GHz

CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers

SPECint\_rate2006 = 80.6
SPECint\_rate_base2006 = 75.5

Hardware

- CPU Name: Intel Xeon 7140M
- CPU Characteristics: 800 MHz system bus
- CPU MHz: 3400
- FPU: Integrated
- CPU(s) enabled: 8 cores, 4 chips, 2 cores/chip, 2 threads/core
- CPU(s) orderable: 1,2,4 chips
- Primary Cache: 12 K micro-ops I + 16 KB D on chip per core
- Secondary Cache: 1 MB I+D on chip per core
- L3 Cache: 16 MB I+D on chip per chip
- Other Cache: None
- Memory: 32 GB (16x2 GB DDR2 PC2-3200R, 1 rank, CAS 3-3-3, with ECC)
- Disk Subsystem: Fujitsu MAS3735NC (SCSI 73GB 15 krpms)
- 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: ReiserFS
- System State: Multiuser, Runlevel 3
- Base Pointers: 32-bit
- Peak Pointers: 32/64-bit
- Other Software: Smart Heap Library, Version 8.1

Hardware Availability: Dec-2006
Software Availability: Feb-2007
# Fujitsu Siemens Computers

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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.

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## Operating System Notes

'system -s unlimited' was used to set the stacksize to unlimited prior to run '/usr/bin/taskset' used to bind processes to CPUs

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## General Notes

The system bus runs at 800 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:**

Hardware Prefetch = Enable

This result was measured on the PRIMERGY RX600 S3. The PRIMERGY RX600 S3 and
the PRIMERGY TX600 S3 are electronically equivalent.

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

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## Base Compiler Invocation

C benchmarks:

`icc`

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info@spec.org
http://www.spec.org/
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Test date: Mar-2007
Hardware Availability: Dec-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

Continued on next page
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
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For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.0.