



SPEC® CINT2006 Result

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Fujitsu Siemens Computers

SPECint®2006 = 24.1

CELSIUS M460, Intel Core 2 Extreme QX9650

SPECint_base2006 = 21.5

CPU2006 license: 22

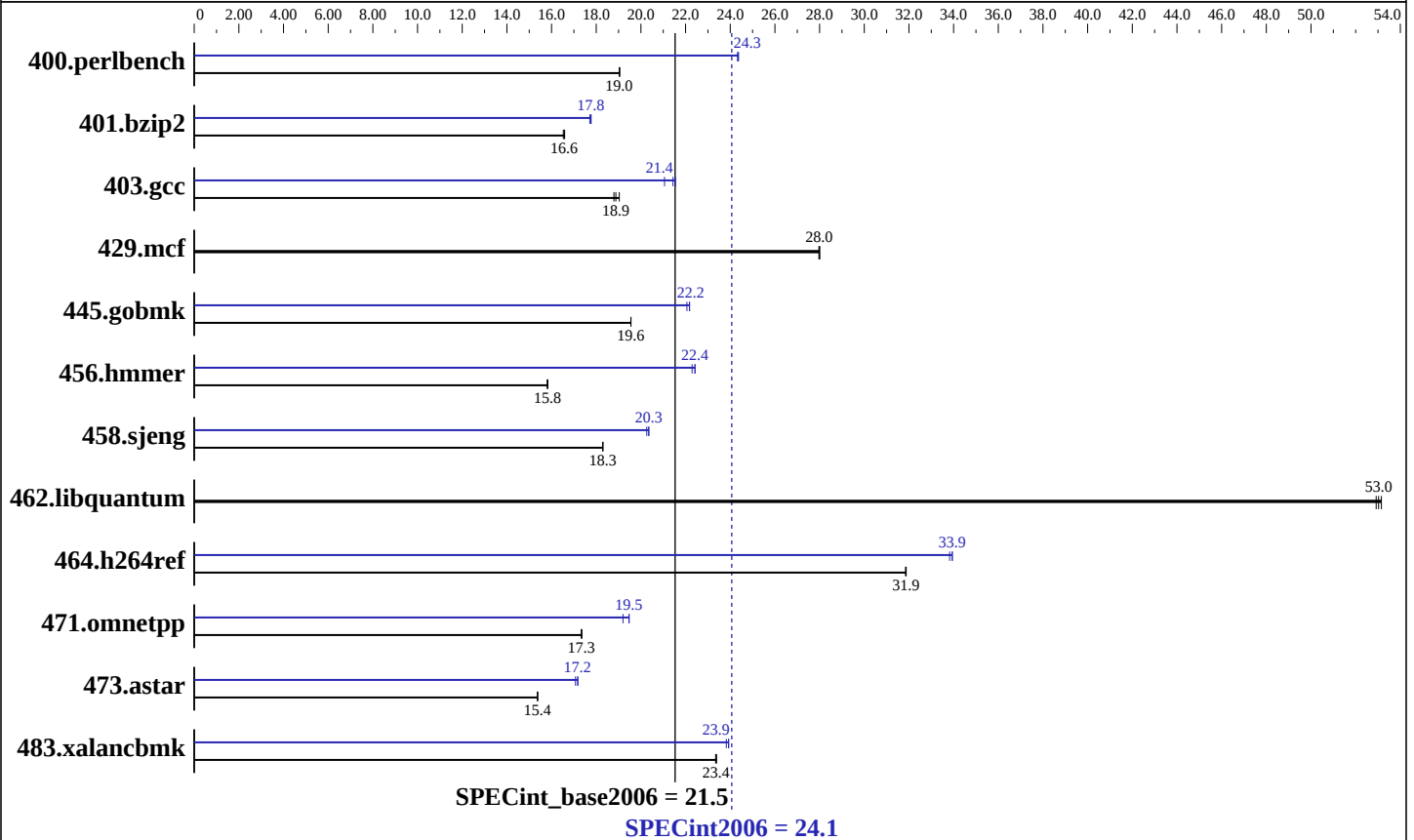
Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Feb-2008

Hardware Availability: Mar-2008

Software Availability: Nov-2007



Hardware

CPU Name: Intel Core 2 Extreme QX9650
CPU Characteristics: 3000
CPU MHz: Integrated
FPU: 4 cores, 1 chip, 4 cores/chip
CPU(s) enabled: 1 chip
CPU(s) orderable: 32 KB I + 32 KB D on chip per core
Primary Cache: 12 MB I+D on chip per chip, 6 MB shared / 2 cores
Secondary Cache: None
L3 Cache: None
Other Cache: None
Memory: 4 GB (4x1 GB PC2-6400 CL6 SDRAM)
Disk Subsystem: 1 x 400 GB SATA 7200 RPM
Other Hardware: None

Software

Operating System: Windows Vista Ultimate, 64 bit Version
Compiler: Intel C++ Compiler for applications running on IA-32, Version 10.1, Build 20070913
Intel C++ Compiler for applications running on Intel 64, Version 10.1, Build 20070913
Microsoft Visual Studio 2005 with SP1 (for libraries)
Auto Parallel: Yes
File System: NTFS
System State: Default
Base Pointers: 32-bit
Peak Pointers: 32/64-bit
Other Software: MicroQuill SmartHeap Library 8.1



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Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	513	19.0	<u>513</u>	<u>19.0</u>	513	19.1	<u>402</u>	<u>24.3</u>	<u>401</u>	<u>24.3</u>	401	24.4
401.bzip2	584	16.5	<u>583</u>	<u>16.6</u>	582	16.6	<u>543</u>	<u>17.8</u>	543	17.8	545	17.7
403.gcc	423	19.0	428	18.8	<u>426</u>	<u>18.9</u>	374	21.5	<u>376</u>	<u>21.4</u>	382	21.1
429.mcf	326	28.0	<u>326</u>	<u>28.0</u>	326	28.0	326	28.0	<u>326</u>	<u>28.0</u>	326	28.0
445.gobmk	536	19.6	<u>536</u>	<u>19.6</u>	537	19.5	473	22.2	<u>473</u>	<u>22.2</u>	476	22.1
456.hmmer	590	15.8	590	15.8	<u>590</u>	<u>15.8</u>	<u>416</u>	<u>22.4</u>	416	22.4	419	22.3
458.sjeng	661	18.3	<u>661</u>	<u>18.3</u>	661	18.3	594	20.4	<u>595</u>	<u>20.3</u>	597	20.3
462.libquantum	<u>391</u>	<u>53.0</u>	392	52.9	390	53.2	<u>391</u>	<u>53.0</u>	392	52.9	390	53.2
464.h264ref	695	31.8	694	31.9	<u>694</u>	<u>31.9</u>	<u>652</u>	<u>33.9</u>	652	33.9	654	33.8
471.omnetpp	<u>360</u>	<u>17.3</u>	361	17.3	360	17.4	<u>321</u>	<u>19.5</u>	321	19.5	326	19.2
473.astar	457	15.4	457	15.4	<u>457</u>	<u>15.4</u>	409	17.2	<u>409</u>	<u>17.2</u>	411	17.1
483.xalancbmk	295	23.4	<u>295</u>	<u>23.4</u>	296	23.3	<u>288</u>	<u>23.9</u>	<u>288</u>	<u>23.9</u>	290	23.8

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

Platform Notes

BIOS default settings have been used.

General Notes

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

For information about Fujitsu Siemens Computers please see:
<http://www.fujitsu-siemens.com/>

Base Compiler Invocation

C benchmarks:
icl -Qvc8 -Qc99

C++ benchmarks:
icl -Qvc8



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Base Portability Flags

403.gcc: -DSPEC_CPU_WIN32
464.h264ref: -DSPEC_CPU_NO_INTTYPES -DWIN32
473.astar: -DSPEC_CPU_LITTLE_ENDIAN
483.xalancbmk: -Qoption, cpp, --no_wchar_t_keyword

Base Optimization Flags

C benchmarks:
-fast -Qparallel -Qvec-guard-write -Qpar-runtime-control -F512000000
libguide40.lib

C++ benchmarks:
-fast -Qcxx-features -F512000000 libguide40.lib shlw32M.lib
-link -FORCE:MULTIPLE

Base Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

C benchmarks (except as noted below):
icl -Qvc8 -Qc99

401.bzip2: C:\\DevelTools\\Intel\\Compiler\\C++\\10.1.011\\EM64T\\Bin\\icl.exe
-IC:\\DevelTools\\Intel\\Compiler\\C++\\10.1.011\\EM64T\\Include
-link -LIBPATH:C:\\DevelTools\\Intel\\Compiler\\C++\\10.1.011\\EM64T\\Lib
-link -LIBPATH:"C:\\Program Files\\Microsoft Visual Studio 8\\vc\\lib"
-link -LIBPATH:"C:\\Program Files\\Microsoft Visual Studio 8\\vc\\lib\\amd64"

456.hmmer: C:\\DevelTools\\Intel\\Compiler\\C++\\10.1.011\\EM64T\\Bin\\icl.exe
-IC:\\DevelTools\\Intel\\Compiler\\C++\\10.1.011\\EM64T\\Include
-link -LIBPATH:C:\\DevelTools\\Intel\\Compiler\\C++\\10.1.011\\EM64T\\Lib
-link -LIBPATH:"C:\\Program Files\\Microsoft Visual Studio 8\\vc\\lib"
-link -LIBPATH:"C:\\Program Files\\Microsoft Visual Studio 8\\vc\\lib\\amd64"

C++ benchmarks:
icl -Qvc8



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Peak Portability Flags

401.bzip2: -DSPEC_CPU_P64
403.gcc: -DSPEC_CPU_WIN32
456.hmmmer: -DSPEC_CPU_P64
464.h264ref: -DSPEC_CPU_NO_INTTYPES -DWIN32
473.astar: -DSPEC_CPU_LITTLE_ENDIAN
483.xalancbmk: -Qoption, cpp, --no_wchar_t_keyword

Peak Optimization Flags

C benchmarks:

400.perlbench: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qparallel
-Qpar-runtime-control -Qansi-alias -Qprefetch -F512000000
libguide40.lib shlw32M.lib -link -FORCE:MULTIPLE
401.bzip2: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qprefetch
-F512000000 libguide40.lib
403.gcc: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -F512000000
libguide40.lib
429.mcf: basepeak = yes
445.gobmk: -Qprof_gen(pass 1) -Qprof_use(pass 2) -O2 -Qipo -QxT
-Qprec-div- -Qansi-alias -F512000000
456.hmmmer: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qunroll2
-Qansi-alias -Qopt-multi-version-aggressive -F512000000
libguide40.lib
458.sjeng: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qunroll4
-F512000000 libguide40.lib
462.libquantum: basepeak = yes
464.h264ref: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qunroll2
-Qansi-alias -F512000000 libguide40.lib

C++ benchmarks:

471.omnetpp: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qcxx-features
-Qansi-alias -Qopt-ra-region-strategy=block -F512000000
libguide40.lib shlw32M.lib -link -FORCE:MULTIPLE
473.astar: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qcxx-features
-Qansi-alias -Qopt-ra-region-strategy=routine -F512000000
libguide40.lib shlw32M.lib -link -FORCE:MULTIPLE

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Peak Optimization Flags (Continued)

483.xalancbmk: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qcxx-features
-Qansi-alias -F512000000 libguide40.lib shlw32M.lib
-link -FORCE:MULTIPLE

Peak Other Flags

Same as Base Other Flags

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/CPU2006_flags.20080124.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/CPU2006_flags.20080124.xml

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For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

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